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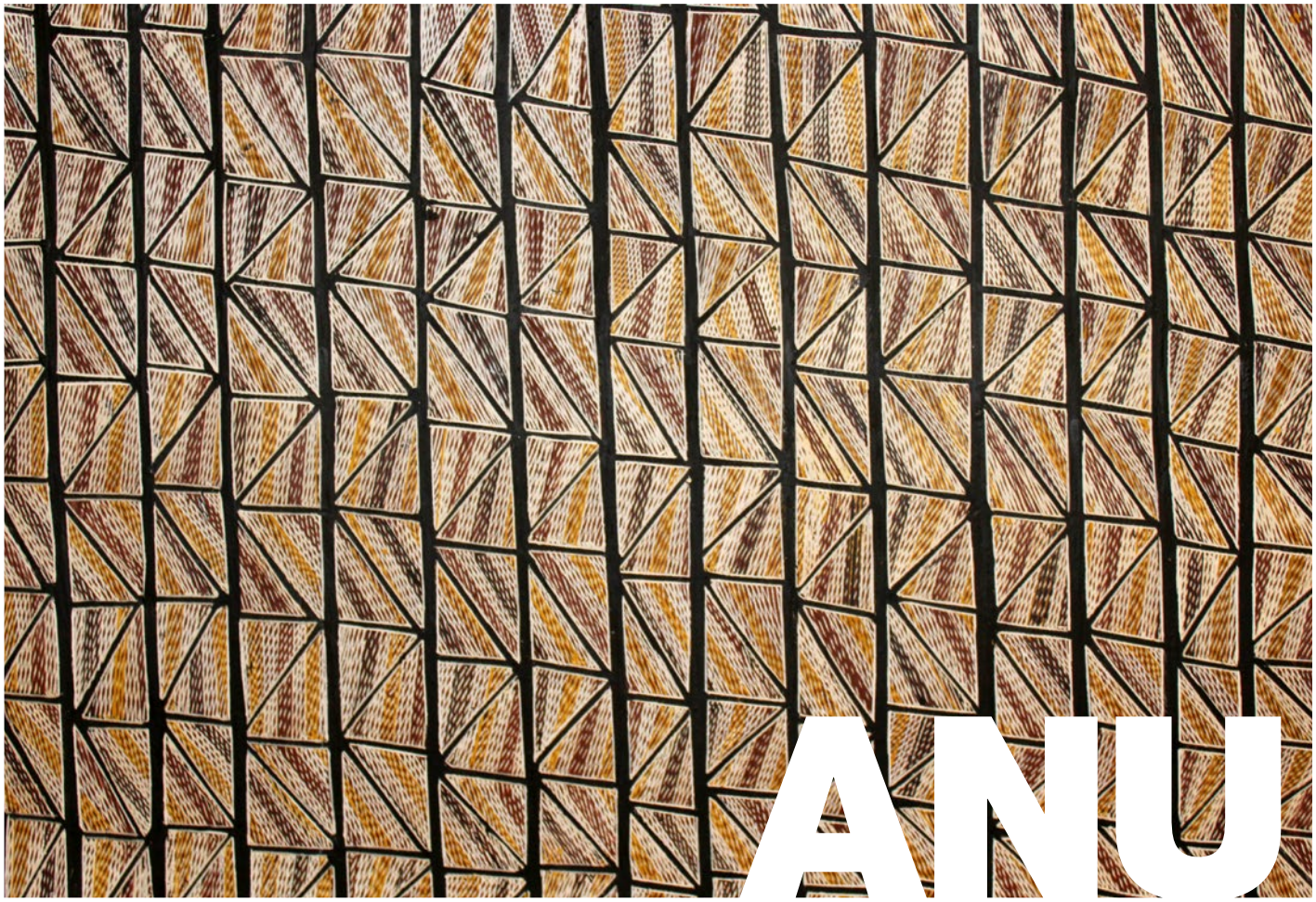

EMPLOYMENT OUTCOMES

D VENN AND N BIDDLE

2016 CENSUS PAPERS

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Dr RG (Jerry) Schwab
Director, CAEPR
Research School of Social Sciences
College of Arts & Social Sciences
The Australian National University
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D Venn and N Biddle

Danielle Venn is a Research Fellow at the Centre for Aboriginal Economic Policy Research (CAEPR), Research School of Social Sciences, College of Arts & Social Sciences, Australian National University. **Nicholas Biddle** is a Senior Fellow at CAEPR, and Deputy Director of the ANU Centre for Social Research & Methods.

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Abstract

This paper examines trends in the employment rate of Indigenous Australians and how these trends vary by demographic and geographic characteristics, with a particular focus on changes between 2011 and 2016. While overall growth in the employment rate was slow, there are wide disparities in employment performance by region. In nonremote areas of Australia, the gap between Indigenous and non-Indigenous employment rates fell slightly between 2011 and 2016. In remote areas, the gap widened. This was due to both the demise of the Community Development Employment Projects scheme and weak labour market conditions in remote areas over this period. In general, the growth of Indigenous women's employment rates has outperformed that of Indigenous men, partly because Indigenous women are more likely than men to work in occupations and industries where employment opportunities have been growing quickly and will continue to do so in the near future. Increasing education and skill levels among the Indigenous population will be the key to further improving employment performance in the future. For the Indigenous population, rapid increases in educational attainment between 2011 and 2016 helped to offset the effects of the weak labour market. However, the average education level of the Indigenous population remains low. This is particularly the case for the large cohort of the working-age population who are currently not employed, the bulk of whom have no formal qualifications.

Keywords: Indigenous employment, remote employment, occupational segregation, returns to education

Acknowledgments

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Acronyms

ANU	The Australian National University
ANZSCO	Australian and New Zealand Standard Classification of Occupations
ANZSIC	Australian and New Zealand Standard Industry Classification
CAEPR	Centre for Aboriginal Economic Policy Research
CDEP	Community Development Employment Projects

Contents

Tables and figures

Introduction

The experience of Aboriginal and Torres Strait Islander (Indigenous) Australians in the labour market is one of the main determinants of whether the outcomes of Indigenous people are improving through time; whether Indigenous children are likely to grow up in situations of financial hardship; and, more broadly, whether the Australian labour market is working efficiently and equitably. Nationally, Indigenous Australians are far less likely to be employed than their non-Indigenous counterparts. Around 47% of the Indigenous working-age population in the 2016 Census was employed, compared with 72% of the non-Indigenous working-age population, leaving a gap of 25 percentage points.

Not all adults (Indigenous or otherwise) want or need a job. There are times when people are studying full-time (and therefore investing in future productivity); times when people face important caring responsibilities or poor health; and times when cultural, social or environmental obligations take priority. However, there are few things more devastating for subjective wellbeing and financial security in the long term than wanting to work, and not being able to obtain and maintain employment (Frey 2008).

There is a very long history of academic and policy interest in the determinants and outcomes of Indigenous employment in Australia. The 1985 Miller report on Commonwealth employment and training programs (Committee of Review of Aboriginal Employment and Training Programs 1985) contained detailed analysis of the disparity faced by Indigenous Australians and a comprehensive package of recommendations.[1] Since then, a series of academic reports has essentially shown that employment outcomes are worse for Indigenous than for non-Indigenous Australians, even after controlling for observable characteristics such as age, gender, geography and education (Daly 1995, Hunter 2004, Biddle 2015). Consistent evidence also shows that, for the Indigenous population specifically, low levels of employment have a negative association with subjective wellbeing (Biddle 2014), although the type of employment also matters (Biddle & Jordan 2013).

In 2009, the Council of Australian Governments committed to 'halve the gap in employment outcomes between Indigenous and non-Indigenous Australians within a decade (by 2018)' (PM&C 2018:76). Data from the most recent Closing the Gap report suggest that this target is not on track to be met (PM&C 2018). Indeed, as will be shown in this paper, the gap has widened rather than narrowed over the past decade when measured using census data.

However, there are very different trends by gender, geography and education levels. Employment outcomes have improved more for those with relatively high levels of education, women and those living in nonremote areas. Some of the explanation for Indigenous employment trends undoubtedly lies with Australia's macroeconomic circumstances and secular trends in the labour market.[2] Measuring progress in achieving employment targets is also complicated by the demise of the Community Development Employment Projects (CDEP) scheme, the impact of which will be discussed in more detail in the next section.

This paper uses data from the Australian Census of Population and Housing to analyse changes and patterns in employment outcomes for Indigenous Australians, focusing first on longer-term trends and then on changes between 2011 and 2016. The overarching aim is to add an empirical base to policy discussion around why employment outcomes have not improved as targeted, as well as potential future policy responses and options.

We begin by outlining trends in employment rates over the past two decades and assessing progress towards closing the employment gap between Indigenous and non-Indigenous Australians. The remainder of the paper examines recent labour market successes and failures, to better understand future Indigenous employment prospects. In particular, it examines:

- employment trends in remote areas following the end of the CDEP scheme
- the extent to which rapidly increasing educational attainment among the Indigenous population is translating into better labour market outcomes
- how the concentration of Indigenous workers in particular occupations is likely to affect their future employment prospects
- prospects for increasing employment participation among those who are currently not employed.

Data and definitions

Data for this paper come from the five-yearly Australian Census of Population and Housing, and we use data from 2001 to 2016. In the 2016 Census, labour force status for each person aged 15 years or older is derived from

responses to three main questions on the household form.[3] An individual is classified as employed if they had a job of any kind for one hour or more in the week prior to the census. Individuals who were not employed in the week prior to the census were classified as unemployed if they looked for work in the last four weeks *and* were available to start work in the week prior to the census. If they were not working and either not looking for work or available to start work, or both, they were classified as being not in the labour force.

Data on labour force status are used to calculate the employment rate, or employment to population ratio. The employment rate is defined as the ratio of total employment to total population for each group of interest. Changes over time in the employment rate are generally expressed in percentage points (e.g. an increase from 50% to 60% is referred to as an increase of 10 percentage points). In several sections, we also examine trends in employment, which refer to changes in the total number of people employed. Changes over time in employment are generally expressed in absolute numbers or as a percentage (e.g. an increase in employment from 100 to 120 people is referred to as an increase of 20 people or 20% from the initial level).

Employment estimates and their trends over time are likely to have been affected by the demise of the CDEP scheme, which was phased out between 2007 and 2013. In censuses before 2016, CDEP participants were classified as employed. In the 2016 Census, previous CDEP participants who had not found ongoing paid work or new labour market entrants who may have otherwise participated in the CDEP scheme are likely to have been classified as unemployed or not in the labour force, rather than as employed.[4] This has had the likely effect of reducing measured Indigenous employment rates in 2016 compared with earlier years, particularly in remote areas where CDEP participation was relatively high.

CDEP participation was separately identified in the 2006 and 2011 censuses only for people who answered the interviewer household form, which was used in some Indigenous communities. For those who completed the census using the standard forms (estimated in 2011 at around half the working-age population in remote areas and all those in nonremote areas), no information on CDEP participation was collected. Therefore, it is not possible to estimate non-CDEP employment using census data. Estimates of non-CDEP employment from Gray et al. (2013) using a combination of census and administrative data will be shown in the next section.

Indigenous status is self-identified based on information from the household form. We define Indigenous people as those who identified as either Aboriginal, Torres Strait Islander or both Aboriginal and Torres Strait Islander, and non-Indigenous people as those who said they are neither Aboriginal nor Torres Strait Islander. We exclude from our analysis those who did not provide data for Indigenous status (see Markham & Biddle 2017 for a discussion of missing data on Indigenous status in the 2016 Census).

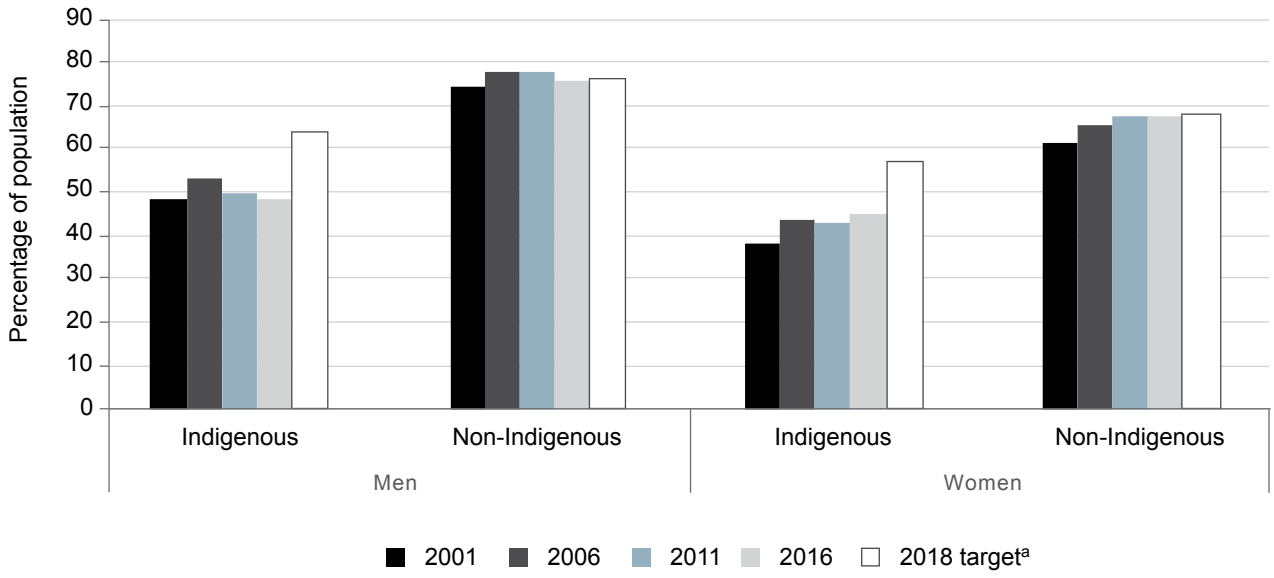
We also do not factor in changes in Indigenous identification in our analysis. Both the previous and current censuses provide strong evidence that the number and proportion of people who identify as being Indigenous have increased over time, and that the newly identified Indigenous population has better socioeconomic status than the previously identified population (Markham & Biddle 2018). This identification change will be the focus of a future CAEPR Census Paper. However, in this paper, we take the Indigenous population as revealed at each census as the relevant population of interest and compare repeated cross-sections of individuals. We cannot, therefore, make conclusions about the longitudinal outcomes of individuals.

When the analysis for this paper was done, remoteness areas for the 2016 Census had not been released by the Australian Bureau of Statistics. All statistics by remoteness in this paper are based on the 2011 remoteness areas. We do not expect that this will have a major influence on our results.

Long-term trends in the Indigenous employment rate

Fig. 1 shows the proportion of Indigenous and non-Indigenous people of working age (15–64 years) employed in each census year between 2001 and 2016. The employment rate of Indigenous men has fallen over the past decade and is currently 49%. The employment rate of non-Indigenous men also fell slightly between 2011 and 2016, leading to little change in the employment gap over this period. The Indigenous women's employment rate has risen from 38% in 2001 to 45% in 2016. Over the same period, the employment rate of non-Indigenous women also rose, resulting in little change in the employment gap, which is 23 percentage points in 2016. If the non-Indigenous employment rate remains unchanged, the Indigenous employment rate would

FIG. 1. Employment rate of people aged 15–64 years, 2001–16



a The 2018 target is the Indigenous employment rate required for the gap in employment rates between Indigenous and non-Indigenous people to be halved by 2018 (compared with 2006 levels). The 2018 target is calculated assuming that the employment rate of non-Indigenous people is unchanged between 2016 and 2018.
Note: Data are expressed as the ratio of employed persons to total population aged 15–64 years.
Source: Data from the 2001–16 censuses

need to increase by 15 percentage points for men and 12 percentage points for women to meet the Closing the Gap target of halving the employment gap by 2018.

Some of the slow growth or decline in the employment rate for Indigenous Australians over the past two decades can be explained by the gradual decline in participation in the CDEP scheme as it was phased out between 2007 and 2013. As detailed in the previous section, CDEP participation was classified as employment in censuses before 2016. Using administrative data on CDEP participation, Gray et al. (2013) estimated non-CDEP employment in each census year from 1996 to 2011. Their results are reproduced in Fig. 2, with the addition of employment rates from the 2016 Census (note that Fig. 2 differs from Fig. 1 because it shows the employment rate of Indigenous people aged 15 years and over, rather than those aged 15–64 years, who cannot be separately identified in the administrative data systems).

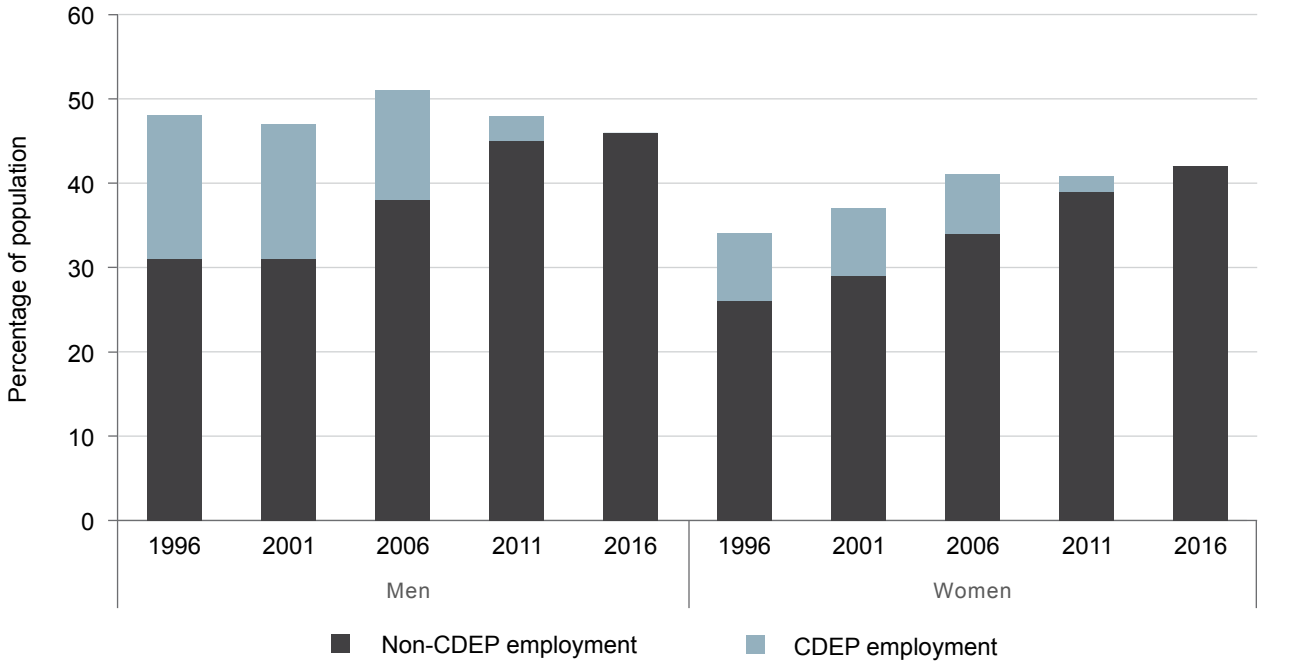
The non-CDEP employment rate increased steadily between 2001 and 2011 (Fig. 2). Growth in the non-CDEP employment rate slowed between 2011 and 2016, increasing from 45% to 46% for men and from 39% to 42% for women. It is notable that the relatively strong increase in non-CDEP employment since 2001 has not been enough to offset the decline in CDEP participation, resulting in declining total employment rates for men and stagnating rates for women between 2006 and 2016.

Regardless of whether CDEP participation is included in the definition of employment, it seems clear that the Closing the Gap target of halving the gap in employment rates between Indigenous and non-Indigenous Australians by 2018 is unlikely to be met. Although long-run employment rate trends look more positive when CDEP participation is excluded from employment, growth in the non-CDEP employment rate between 2011 and 2016 has slowed considerably compared with previous years. The remainder of this paper will examine changes in employment outcomes between 2011 and 2016 in more detail. We cannot reproduce estimates of non-CDEP employment from Fig. 2 at a detailed demographic, regional, industry or occupational level. To isolate the effects of the end of CDEP from other employment trends as much as possible, we present data separately for remote areas, where CDEP participation was concentrated in 2011, and nonremote areas.

Changes in Indigenous employment, 2011–16

Employment rates and recent patterns of growth vary considerably across regions. Fig. 3 shows the change in the employment rate (in percentage points) for Indigenous and non-Indigenous Australians between 2011 and 2016. Positive/negative values indicate that the employment rate is increasing/decreasing. Where the change in the

FIG. 2. Employment rate of Indigenous people aged 15+ years



CDEP = Community Development Employment Projects
Note: Data are expressed as the ratio of employed persons to total population aged 15+ years.
Sources: Gray et al. (2013) for 1996–2011 data; data from the 2016 Census

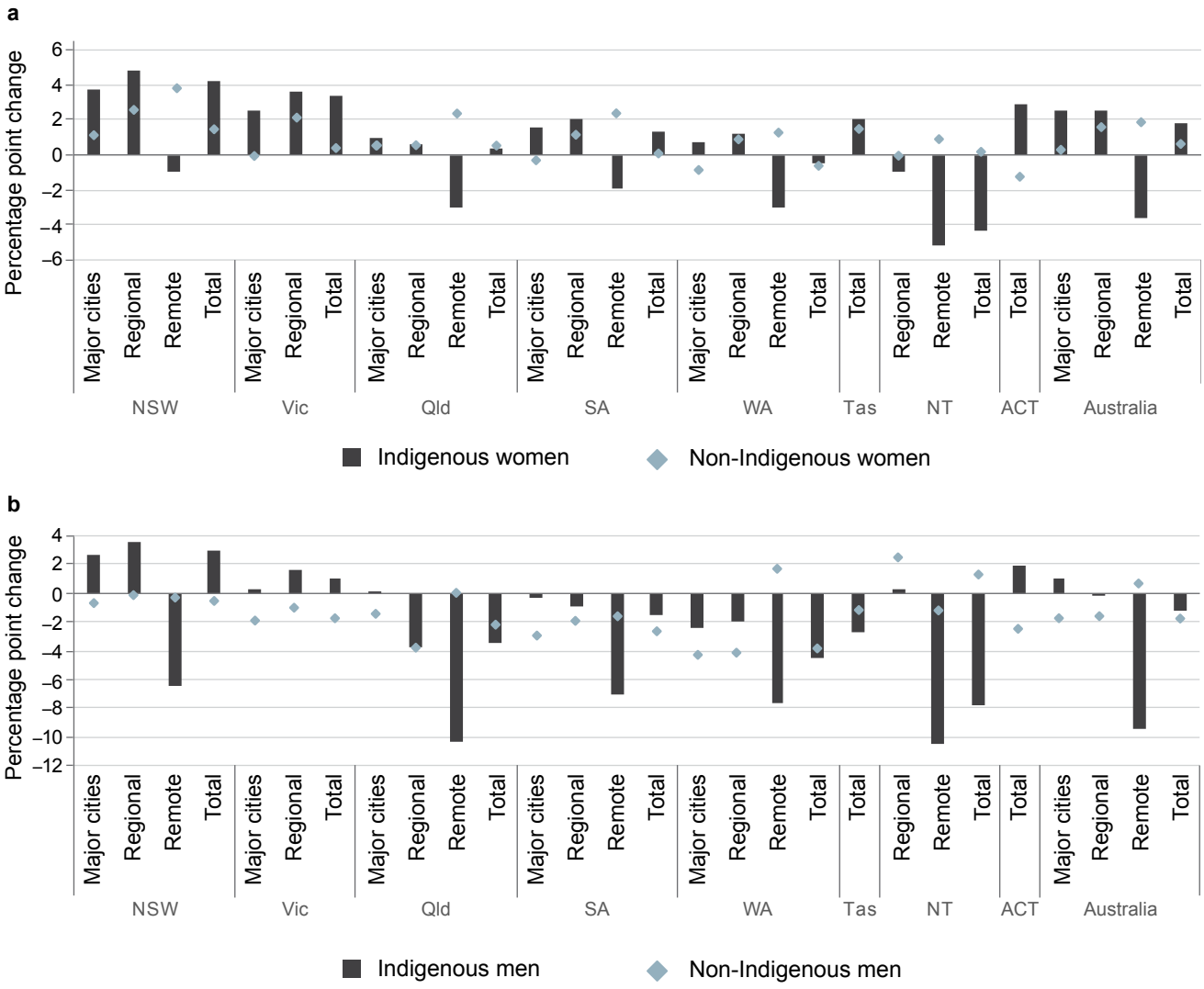
employment rate is larger for Indigenous than non-Indigenous people, the employment gap between the two groups is shrinking.

Indigenous employment rates in remote areas dropped substantially between 2011 and 2016: by 4 percentage points for women and 9 percentage points for men. As discussed above, this was partly due to the phasing out of the CDEP scheme. Employment performance was considerably worse for the Indigenous population than for the non-Indigenous population in remote areas, where the employment rate for the non-Indigenous population increased by 1 percentage point for men and 2 percentage points for women, resulting in a widening of the employment gap in remote areas by 10 percentage points for men and 6 percentage points for women.

By contrast, in most nonremote areas, growth in the Indigenous employment rate between 2011 and 2016 was considerably faster than for the non-Indigenous population. In most nonremote areas, the Indigenous women's employment rate increased, with the largest increases in New South Wales, Victoria and the Australian Capital Territory, followed by South Australia and Tasmania. The employment rate grew more slowly in Queensland and Western Australia, and fell in regional Northern Territory. In total, the employment rate of Indigenous women increased by around 3 percentage points in major cities and regional areas. This easily surpassed employment rate growth for non-Indigenous women in these areas and resulted in a reduction in the employment gap by 2–3 percentage points in major cities and 1 percentage point in regional areas.

The employment rate of Indigenous men was generally constant or fell in nonremote areas. The exception was in New South Wales, where the employment rate increased by 3 percentage points in major cities and 4 percentage points in regional areas. Nevertheless, except for the Northern Territory and Tasmania, the growth of the employment rate for Indigenous men exceeded that for non-Indigenous men in nonremote areas, resulting in a reduction in the employment gap. On average across Australia, the Indigenous men's employment rate increased by around 1 percentage point in major cities and was unchanged in regional areas between 2011 and 2016, at a time when the employment rate for non-Indigenous men fell by close to 2 percentage points.

FIG. 3. Change in employment rate of people aged 15–64 years by state/territory and remoteness, 2011–16: (a) women; (b) men



Notes:
1. Totals for Victoria include remote areas even though they are not shown separately because of the small sample size.
2. No subregional results are shown for Tasmania and the Australian Capital Territory because of the small sample size.

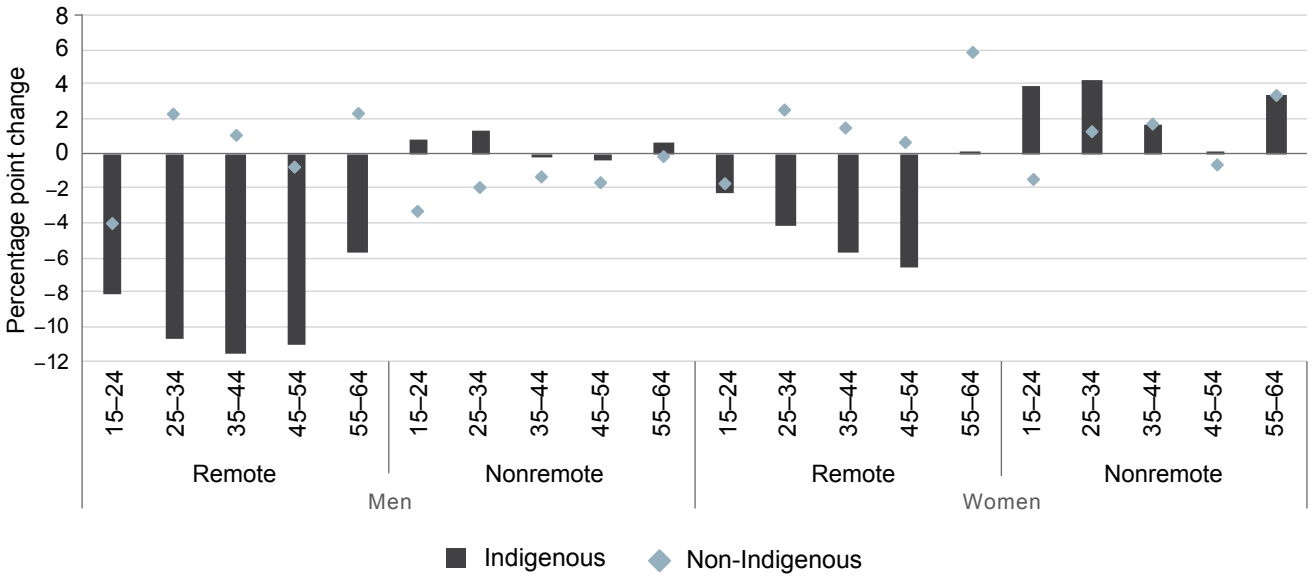
Source: Data from the 2011 and 2016 censuses

Employment performance by age group also differed considerably (Fig. 4). While Indigenous employment rates fell for almost all age groups in remote areas, the falls were biggest for those aged 25–54 years. The employment gap widened in remote areas for all age groups, but the increase in the gap was smallest for young people. In nonremote areas, growth in the Indigenous employment rate was strongest for those aged 15–34 years and for older women. The employment gap narrowed for most age groups, with the biggest falls for young people.

Employment in remote areas after CDEP

The previous section showed that, in remote areas, labour market outcomes for Indigenous people deteriorated compared with non-Indigenous people between 2011 and 2016. We cannot determine how much of this decline in Indigenous employment is directly attributable to the cessation of the CDEP scheme, nor how much can be attributed to changes in employment policies and programs in the years since the CDEP scheme was abolished. However, in this section we examine trends in employment and population for the Indigenous and non-Indigenous populations in remote areas to determine whether factors other than CDEP participation are likely to have influenced the Indigenous employment rate in these areas.

FIG. 4. Change in employment rate of people aged 15–64 years by age group, 2011–16

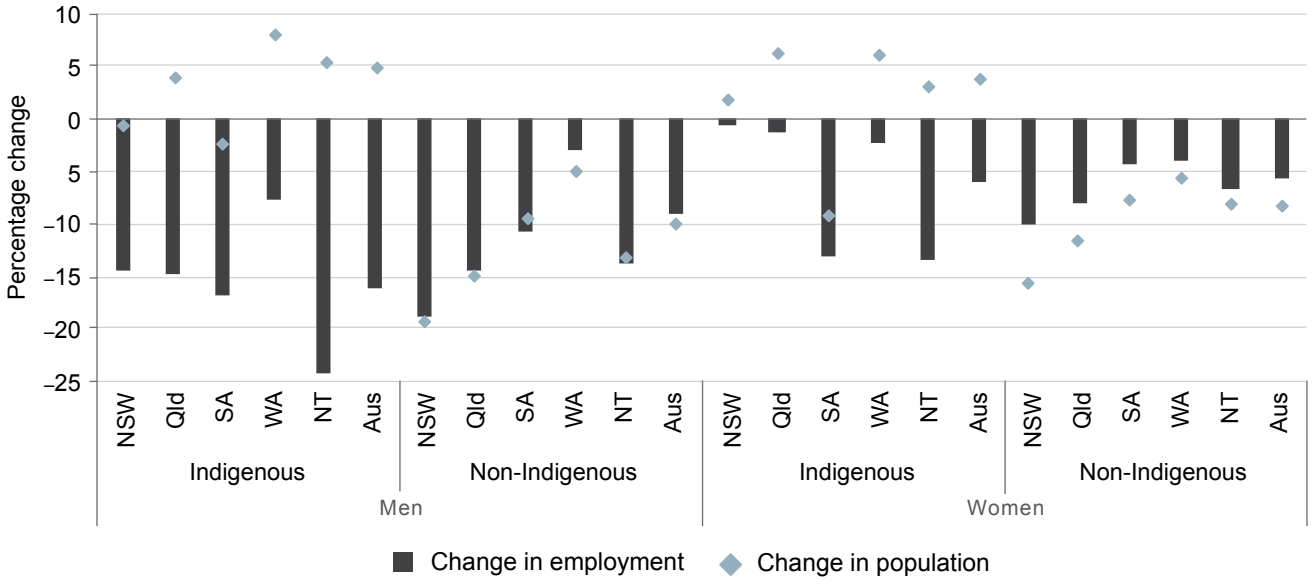


Source: Data from the 2011 and 2016 censuses

Total employment fell by around 15% for Indigenous men and 6% for Indigenous women between 2011 and 2016 (Fig. 5). At the same time, the Indigenous working-age population increased by around 6%, leading to a significant deterioration in the employment rate. The disparity between employment and population growth was largest in the Northern Territory, Queensland and Western Australia, and it was in these areas that the employment rate fell most sharply. Despite the overall poor employment performance in remote Australia, Indigenous employment grew in several areas between 2011 and 2016. For Indigenous women, employment grew in remote areas of the Indigenous regions of Cape York, Mt Isa, Broome, South Hedland and Alice Springs. Indigenous men's employment declined in every region except South Hedland.

At least some of the decline in Indigenous employment in remote areas between 2011 and 2016 was probably because the CDEP scheme ended. However, declining

FIG. 5. Change in total employment and population (aged 15–64 years) in remote areas, 2011–16



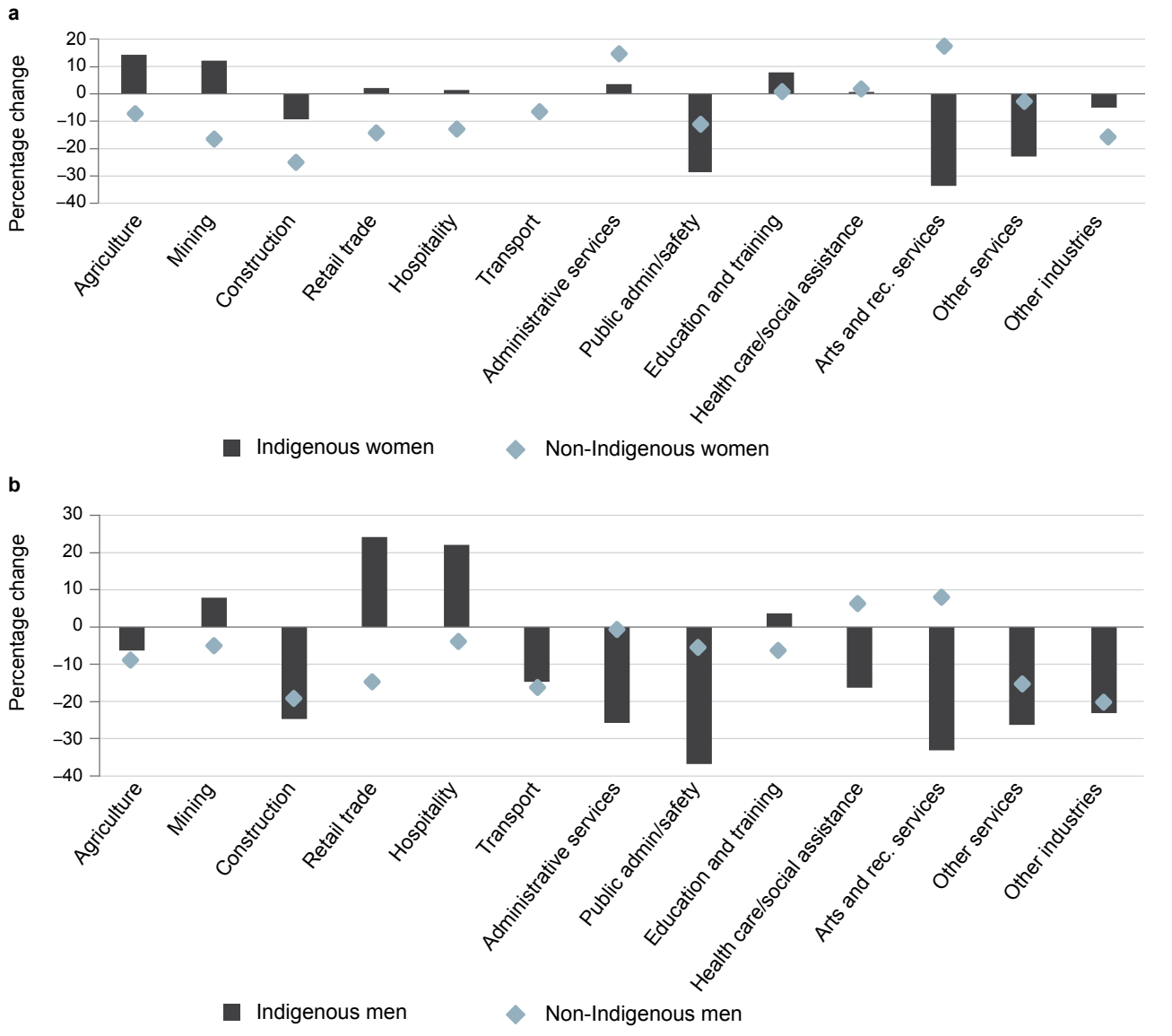
Note: 'Australia' includes remote areas in Victoria and Tasmania that are too small to show separately.
Source: Data from the 2011 and 2016 censuses

employment for non-Indigenous people in remote areas suggests that poor labour market conditions also contributed to the fall. In New South Wales and Queensland, the decline in employment in remote areas was larger for non-Indigenous people than for Indigenous people, while the opposite was true in South Australia and the Northern Territory (and for men in Western Australia), where Indigenous employment fell by more than non-Indigenous employment. Nevertheless, employment fell for non-Indigenous people in remote areas across all states and territories; this is unlikely to have been influenced by the CDEP scheme ending.

In contrast to the large falls in the Indigenous employment rate, the employment rate for non-Indigenous people in remote areas was stable for women and fell only slightly for men because the working-age population typically fell by as much as or more than employment. This is consistent with previous research that shows that non-Indigenous people living in remote areas were more likely to move to other areas (particularly cities and regional towns) than Indigenous people (Biddle & Markham 2013).

Employment growth in remote areas varied considerably across industries (Fig. 6). Indigenous employment growth was typically faster than non-Indigenous

FIG. 6. Change in employment (people aged 15–64 years) in remote areas by industry, 2011–16: (a) women; (b) men



Note: Excludes those for whom industry was not stated or inadequately described.
Source: Data from the 2011 and 2016 censuses

employment growth in industries where CDEP jobs were not prominent. Particularly strong employment growth for Indigenous people (compared with non-Indigenous people) was seen in the mining, retail and hospitality industries. It is notable that the slowdown in the mining sector (e.g. ABS 2016) did not result in a fall in Indigenous employment. It may be that the winding back of fly-in fly-out arrangements provided more opportunities for local Indigenous people to be hired; this is an interesting area for further research. Modest growth in remote Indigenous employment in education and training occurred, while employment in health care and social assistance was stable for women and fell for men. By contrast, remote Indigenous employment fell significantly in industries where CDEP jobs were formerly concentrated: public administration and safety, arts and recreation services, and construction (for men).

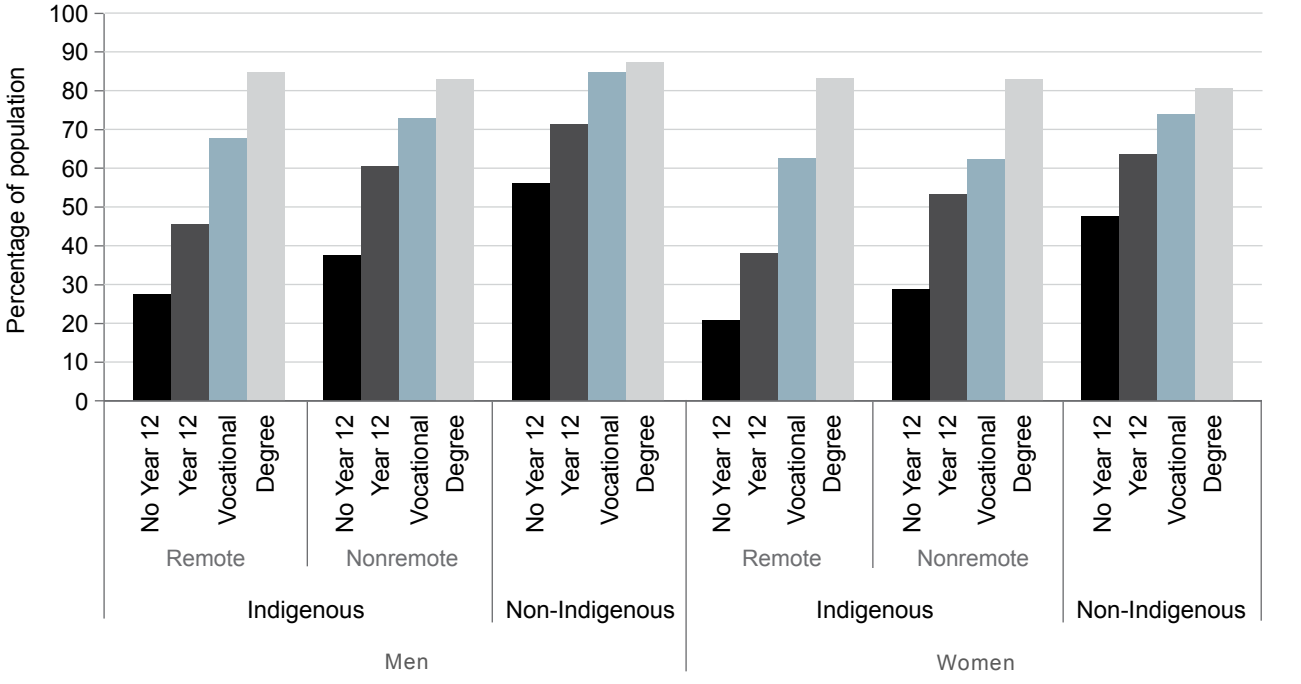
Hunter and Gray (2012) showed that CDEP employment was concentrated in low-skilled occupations, so it seems likely that this is where most of the fall in employment in remote areas due to the end of the CDEP scheme would be apparent. Indeed, employment of Indigenous labourers fell by 43% between 2011 and 2016. However, Indigenous professional employment also fell by around 6% in remote areas, adding further evidence that poor labour market performance in remote areas was not entirely due to the impact of the CDEP scheme.

Educational attainment and employment

Education is one of the key drivers of labour market success for Indigenous Australians, as highlighted in many previous studies (e.g. Gray et al. 2002, Stephens 2010, Biddle & Cameron 2012, Thapa et al. 2012). Educational attainment among the Indigenous population has increased rapidly in recent years. For example, between 2011 and 2016, the proportion of Indigenous Australians aged 15–64 years who had completed either Year 12 or a vocational or tertiary qualification increased from 45% to 54%.[5] However, this paper has shown that employment rates have either fallen or risen only modestly over the same period. This raises the question of why increasing educational attainment has failed to translate into substantially higher employment rates for the Indigenous population.

Data from the 2016 Census highlight several facts about the relationship between education and employment (Fig. 7). First, educational attainment is clearly correlated with employment outcomes, with Indigenous Australians with degrees typically 2–4 times more likely to be employed than those without Year 12 qualifications, and those with vocational qualifications 2–3 times more likely to be employed than those without Year 12 qualifications. Second, Indigenous men with lower levels of education have a higher employment rate than women with similar

FIG. 7. Employment rate of people aged 15–64 years by highest educational attainment, 2016



Note: 'No Year 12' includes those who have not completed Year 12 or a post-school qualification; 'Year 12' includes those who have completed Year 12 but do not have a post-school qualification; 'Vocational' includes those with a certificate or a diploma, but do not have a bachelor's degree, regardless of Year 12 attainment; and 'Degree' includes those with a bachelor's degree or higher, regardless of Year 12 attainment.
Source: Data from the 2016 Census

levels of education, but the gender gap is essentially zero at the upper end of the education distribution. Third, at the highest level of education, the gap between the employment rate of Indigenous and non-Indigenous Australians is negligible for men, and Indigenous women have a slightly higher employment rate than their non-Indigenous counterparts. However, it is worth noting that only a very small proportion of the Indigenous population has tertiary qualifications: 4% in 2016, compared with 22% of the non-Indigenous working-age population.

Between 2011 and 2016, the positive employment effects of increasing educational attainment in the Indigenous population appear to have been offset by declining employment rates for most education levels (Table 1). The share of the Indigenous population with post-school qualifications increased for men and women in remote and nonremote areas. As discussed in the previous section, employment rates fell substantially for Indigenous people in remote areas across the educational attainment spectrum, although the falls were small for those with tertiary qualifications. In nonremote areas, the

TABLE 1. Population share and employment rate by highest educational attainment, 2011–16

Gender	Indigenous status and remoteness	Education	Population share (%)			Employment rate (%)			Estimated change in total employment rate[a]
			2011	2016	Change[a]	2011	2016	Change[a]	
Men	Indigenous remote	No Year 12	67.8	60.8	–7.0	38.5	27.5	–11.1	
		Year 12	11.2	13.6	2.4	56.9	45.5	–11.4	
		Vocational	19.8	24.2	4.4	77.0	67.7	–9.4	
		Tertiary	1.2	1.4	0.2	85.2	84.8	–0.3	
		Total	100.0	100.0		48.8	40.5	–8.3	2.3
	Indigenous nonremote	No Year 12	52.5	44.8	–7.7	39.4	37.5	–1.9	
		Year 12	15.2	16.4	1.2	63.0	60.5	–2.4	
		Vocational	27.6	33.3	5.6	74.3	72.9	–1.3	
		Tertiary	4.7	5.5	0.9	85.6	83.0	–2.6	
		Total	100.0	100.0		54.8	55.6	0.8	2.6
	Non-Indigenous	No Year 12	25.6	21.7	–3.9	61.3	56.2	–5.2	
		Year 12	18.1	18.4	0.3	74.3	71.3	–3.0	
		Vocational	34.9	35.5	0.6	86.5	84.7	–1.8	
		Tertiary	21.4	24.3	2.9	89.0	87.2	–1.8	
		Total	100.0	100.0		78.4	76.6	–1.7	1.0
Women	Indigenous remote	No Year 12	67.4	60.1	–7.3	26.1	20.7	–5.4	
		Year 12	13.2	15.3	2.2	44.8	38.1	–6.6	
		Vocational	16.4	21.0	4.6	66.9	62.6	–4.3	
		Tertiary	3.1	3.6	0.5	83.8	83.1	–0.7	
		Total	100.0	100.0		37.0	34.4	–2.6	2.6
	Indigenous nonremote	No Year 12	50.3	40.9	–9.4	29.6	28.8	–0.8	
		Year 12	15.1	16.0	0.9	52.7	53.2	0.5	
		Vocational	26.7	33.5	6.7	63.4	62.2	–1.2	
		Tertiary	7.8	9.6	1.8	83.0	82.8	–0.1	
		Total	100.0	100.0		46.3	49.1	2.8	3.4
	Non-Indigenous	No Year 12	28.4	22.1	–6.3	50.6	47.7	–2.9	
		Year 12	19.2	18.6	–0.6	65.1	63.6	–1.5	
		Vocational	26.4	28.5	2.2	74.5	73.8	–0.7	
		Tertiary	26.0	30.8	4.7	81.0	80.5	–0.5	
		Total	100.0	100.0		67.6	68.2	0.6	1.9

a Assuming 2011 employment rates by education level. Change from 2011 to 2016 is in percentage points.
Source: Data from the 2011 and 2016 censuses

falls in employment rates were smaller than in remote areas, but still occurred across most educational levels. Non-Indigenous employment rates also fell, with the largest falls at the lowest levels of educational attainment.

The final column of Table 1 shows how employment rates would have changed between 2011 and 2016 if the employment rates at each level of education remained unchanged between 2011 and 2016, but the population share in each level of education followed its actual path. Under this scenario, employment rates for the Indigenous population would have increased by 2–3 percentage points for men and by 3 percentage points for women as a result of increasing educational attainment, if there had not been offsetting declines in employment rates at each level of education. These results show that increasing educational attainment among the Indigenous population did improve employment outcomes between 2011 and 2016, but that this was offset by declining employment rates within each level of education. As discussed in the previous section, the large decline in employment rates across education levels in remote areas is likely to be a combination of poor labour market conditions and the cessation of the CDEP scheme. Similar – if less extreme – patterns of declining employment rates across most education levels were also observed in nonremote areas and for the non-Indigenous population. The decline in employment rates across education levels (with falls generally bigger at the bottom end of the education distribution) could be explained by many factors, including deteriorating labour market conditions generally; skill-biased technological change; falls in the quality of schooling, post-school education or graduates; or new high-school graduates putting off entering the workforce to pursue post-school education.

Indigenous employment by occupation and industry

The previous sections have shown that the employment rate of Indigenous women grew faster (or declined more slowly) than that of Indigenous men between 2011 and 2016, albeit from a lower base. One of the main explanations is the types of occupations and industries that Indigenous women and men work in. This section will show that Indigenous women are much more likely than Indigenous men to be employed in occupations and industries that are growing in employment opportunities.

In general, Indigenous people in major cities tend to work in higher-skilled occupations than their remote counterparts, although considerable numbers are also working as professionals in remote areas (Table 2).

The gender distribution of Indigenous employment is also clear from Table 2. Women are most likely to be employed in community and personal service occupations, or as clerical and administrative workers. Close to 20% of employed women work in professional occupations, with this proportion highest in major cities and remote areas. Men are most likely to work as technicians and

TABLE 2. Indigenous employment by occupation, 2016

	Men (%)				Women (%)			
Occupation	Major cities	Regional	Remote	Total	Major cities	Regional	Remote	Total
Managers	8.6	7.6	6.6	7.9	7.5	6.1	6.0	6.7
Professionals	11.4	7.9	11.8	10.0	19.6	15.7	18.3	17.8
Technicians and trades	23.9	23.6	19.2	23.1	4.2	4.3	4.2	4.3
Community and personal service	9.9	9.9	12.0	10.2	22.2	26.6	31.2	25.3
Clerical and administration	7.2	4.5	4.6	5.7	23.6	19.0	17.7	20.9
Sales	6.2	5.6	2.7	5.5	13.5	13.3	7.3	12.6
Machinery operators and drivers	14.9	17.3	20.4	16.6	1.8	1.9	4.2	2.2
Labourers	18.0	23.7	22.6	21.0	7.5	13.1	11.1	10.4

Notes:
1. Excludes those who did not state or inadequately described their occupations.
2. Columns may not sum to 100% due to rounding.
Source: Data from the 2016 Census

trades workers, labourers, or machinery operators and drivers. Men are less likely than women to be employed in professional occupations, but slightly more likely to be employed as managers.

Using a more disaggregated measure of occupation (the three-digit level in the Australian and New Zealand Standard Classification of Occupations, or ANZSCO), Table 3 lists the top 20 detailed occupations (by employment) for Indigenous employment in 2016. Large numbers of women work in caring and education occupations, while men are more likely to work as labourers or plant operators and in trades occupations. Sales jobs are an important source of work for both men and women. Most women in skilled occupations work as professionals (e.g. teachers, nurses), while skilled men are more likely to work in trades occupations (e.g. building trades).

As is the case for the non-Indigenous population, men's and women's employment is concentrated in different industries (Table 4). Construction, public administration and manufacturing are the largest employers of Indigenous men, while women's employment is concentrated in health care and social assistance, education, and public administration. The pattern of employment by industry also varies with geographical location. The mining, education and public administration industries are relatively more important in remote areas, while retail trade, accommodation and food services, transport, and manufacturing industries are more important in major cities.

A more detailed industry breakdown of Indigenous employment (using the three-digit level in the Australian and New Zealand Standard Industry Classification, or ANZSIC) is shown in Table 5, which shows

TABLE 3. Top 20 occupations (three-digit ANZSCO) for Indigenous employment, 2016

Women		Men	
Occupation	Employment count	Occupation	Employment count
Sales assistants and salespersons	7881	Construction and mining labourers	4879
Personal carers and assistants	4748	Truck drivers	3840
Cleaners and laundry workers	4545	Sales assistants and salespersons	3612
Health and welfare support workers	4300	Stationary plant operators	3223
Education aides	3938	Mobile plant operators	2760
General clerks	3896	Farm, forestry and garden workers	2756
School teachers	3466	Miscellaneous labourers	2746
Hospitality workers	3440	Bricklayers, and carpenters and joiners	2421
Child carers	3145	Cleaners and laundry workers	2099
Receptionists	2766	Health and welfare support workers	2031
Midwifery and nursing professionals	2422	Mechanical engineering trades workers	1897
Social and welfare professionals	2405	Horticultural trades workers	1741
Checkout operators and office cashiers	1823	Automotive electricians and mechanics	1666
Food preparation assistants	1819	Construction, distribution and production managers	1575
Accounting clerks and bookkeepers	1712	Food trades workers	1556
Contract, program and project administrators	1434	Storepersons	1550
Miscellaneous clerical and administrative workers	1424	Food preparation assistants	1548
Call or contact centre information clerks	1415	Fabrication engineering trades workers	1543
Office and practice managers	1347	Electricians	1483
Food trades workers	1146	Defence force members, firefighters and police	1431

ANZSCO = Australian and New Zealand Standard Classification of Occupations

Notes:

1. Excludes those who did not state their occupations.
2. Employment counts are based on census counts and are not adjusted to take into account undercount in the census.

Source: Data from the 2016 Census

TABLE 4. Indigenous employment by industry, 2016

	Men (%)				Women (%)			
Industry	Major cities	Regional	Remote	Total	Major cities	Regional	Remote	Total
Agriculture, forestry and fishing	0.8	6.5	7.6	4.2	0.3	2.0	1.7	1.2
Mining	2.9	5.6	17.9	6.2	0.8	1.1	5.2	1.5
Manufacturing	7.9	9.5	1.7	7.7	2.5	2.5	0.6	2.3
Electricity, gas, water and waste	1.7	2.1	1.3	1.8	0.5	0.4	0.3	0.4
Construction	19.8	16.7	9.1	17.0	2.1	1.7	1.5	1.8
Wholesale trade	2.9	2.5	0.7	2.4	1.4	0.9	0.2	1.0
Retail trade	8.4	7.7	4.1	7.5	11.9	12.2	6.8	11.4
Accommodation and food services	6.3	6.1	3.0	5.7	9.7	11.9	5.2	10.0
Transport, postal and warehousing	8.2	6.6	3.1	6.8	2.7	1.9	1.3	2.2
Information media and telecommunications	1.6	0.9	0.4	1.1	1.2	0.6	0.5	0.9
Financial and insurance services	1.7	0.5	0.1	1.0	2.7	1.6	0.6	2.0
Rental, hiring and real estate	1.1	0.8	0.5	0.9	1.6	1.1	0.7	1.3
Professional, scientific and technical	3.6	2.1	1.3	2.7	4.3	2.6	1.9	3.3
Administrative and support services	3.9	3.6	3.5	3.7	4.0	4.8	4.3	4.4
Public administration and safety	11.2	10.6	17.2	11.8	12.2	9.8	14.6	11.5
Education and training	5.3	4.8	6.5	5.3	13.7	14.0	21.5	14.9
Health care and social assistance	6.0	6.9	8.6	6.8	22.5	25.7	22.7	23.9
Arts and recreation services	2.6	1.9	2.3	2.2	2.1	1.3	2.1	1.8
Other services	4.2	4.5	11.2	5.3	3.8	3.7	8.3	4.3

Notes:
1. Excludes those who did not state or inadequately described their industry of employment.
2. Columns may not sum to 100% due to rounding.
Source: Data from the 2016 Census

employment in the top 20 industries. Around 10% of women's employment is in the school education industry, with hospitality, hospitals, social assistance services, residential care services and supermarkets also significant employers of Indigenous women. For men, local government is the biggest employer, followed by hospitality, metal ore mining and school education. For both men and women, the public sector is likely to account for a considerable share of employment, either through direct employment in government at national, state or local level, or in industries where public sector employment is high, such as education, health care and public safety.

The biggest occupations and industries for Indigenous Australians make up a much greater share of the workforce than they do for non-Indigenous Australians. The top 20 industries accounted for 47% of Indigenous men's employment and 63% of Indigenous women's employment in 2016, while the top 20 occupations accounted for 52% of Indigenous men's employment and 68% of Indigenous women's employment (Table 6). The industry or occupation

TABLE 5. Top 20 industries (three-digit ANZSIC) for Indigenous employment, 2016

Women		Men	
Industry	Employment count	Industry	Employment count
School education	8515	Local government administration	3424
Cafes, restaurants and takeaway food services	5024	Cafes, restaurants and takeaway food services	2915
Hospitals	4394	Metal ore mining	2893
Other social assistance services	3764	School education	2660
Residential care services	3674	Public order and safety services	2480
Supermarket and grocery stores	3375	Building completion services	2367
Central government administration	2662	Building installation services	2280
State government administration	2656	Road freight transport	2259
Child care services	2372	Supermarket and grocery stores	2188
Local government administration	2087	Heavy and civil engineering construction	1875
Tertiary education	1924	Residential building construction	1718
Building cleaning, pest control and gardening	1877	Civic, professional and other interest groups	1709
Medical services	1668	Building cleaning, pest control and gardening	1632
Accommodation	1624	Automotive repair and maintenance	1572
Civic, professional and other interest groups	1612	Other social assistance services	1538
Allied health services	1518	Building structure services	1523
Public order and safety services	1355	State government administration	1519
Legal and accounting services	1315	Coalmining	1382
Pharmaceutical and other store-based retailing	1297	Other construction services	1370
Employment services	1227	Hospitals	1238

ANZSIC = Australian and New Zealand Standard Industry Classification

Notes:

1. Excludes those who did not state their industry of employment.
2. Employment counts are based on census counts and are not adjusted to take into account undercount in the census.

Source: Data from the 2016 Census

concentration of Indigenous women's employment has changed little over time. Indigenous men's employment has become substantially less concentrated by occupation since 2006. The share of Indigenous men's employment in the top 5 industries has also fallen, but this seems to have been offset by an increase in the share in the top 10 or top 20 industries, so that there has been little change over time in these measures.

The pattern of women's employment being more concentrated than men's is similar for Indigenous and non-Indigenous populations, and may be due, in part, to the level of detail for 'typically male' and 'typically female' occupations and industries in the ANZSCO/ANZSIC classifications. Indigenous women's employment is more concentrated in a smaller range of occupations and industries than non-Indigenous women's, but there has been some convergence in industry concentration over time as Indigenous women's employment has become less concentrated and non-Indigenous women's employment has become more concentrated.

TABLE 6. Concentration of employment by industry and occupation, 2006–16

Occupation/ industry level[b]	Indigenous status	Gender	Industries[a] (% of total employment)			Occupations[a] (% of total employment)		
			2006	2011	2016	2006	2011	2016
Top 5	Indigenous	Men	23.2	18.2	16.7	25.9	22.8	20.5
		Women	30.0	27.7	29.8	30.8	29.1	29.3
	Non-Indigenous	Men	13.5	14.3	14.8	15.1	15.0	15.1
		Women	24.1	25.3	27.5	27.1	27.0	26.2
Top 10	Indigenous	Men	31.9	30.5	29.5	39.9	36.2	33.9
		Women	46.0	44.7	45.3	48.3	47.5	48.6
	Non-Indigenous	Men	23.6	24.8	25.5	25.5	25.3	24.8
		Women	35.7	37.3	40.1	42.8	42.0	41.7
Top 20	Indigenous	Men	46.8	47.5	47.2	57.4	53.3	51.8
		Women	63.9	63.2	63.4	67.8	67.8	68.2
	Non-Indigenous	Men	38.0	39.5	40.7	42.2	42.5	41.6
		Women	51.7	54.4	57.7	60.2	59.5	58.9

a Three-digit Australian and New Zealand Standard Industry Classification, and Australian and New Zealand Standard Classification of Occupations
b Top 5, 10 and 20 occupations and industries are ranked by employment share for each demographic group.
Source: Data from the 2006–16 censuses

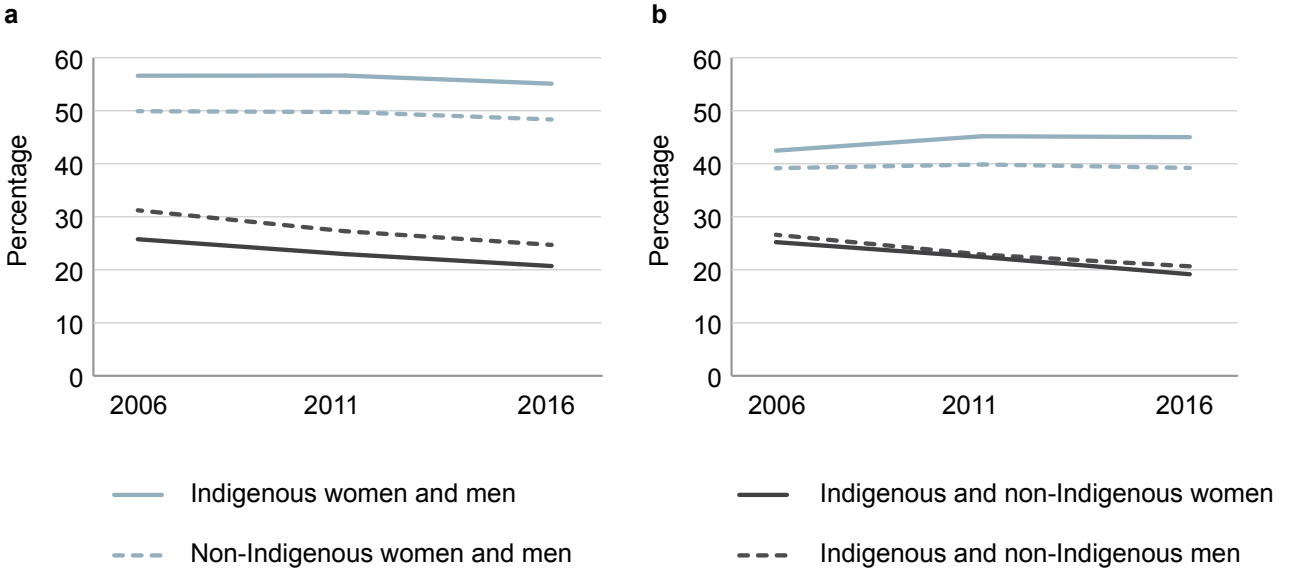
The types of industries and occupations that Indigenous people work in are also changing over time. A measure of occupation and industry segregation of employment by gender and Indigenous status, known as the dissimilarity index, is shown in Fig. 8. The index measures the proportion of employed people in one group who would have to change occupations or industries to have the same distribution of employment by occupation or industry as another group. For example, 55% of Indigenous men or women in 2016 would have to change occupations for their occupational distribution to be the same. A higher value of the dissimilarity index indicates that the occupation or industry distribution of employment for the two groups measured is more dissimilar.

The occupation and industry distribution of Indigenous and non-Indigenous employment is becoming more similar over time for both men and women (as measured by the dissimilarity index). In 2016, only around 20% of Indigenous or non-Indigenous women would have to change occupations or industries for their distribution to be the same, down from more than one-quarter in 2006. Indigenous and non-Indigenous men's employment distributions are also becoming more similar over time. However, for both Indigenous and non-Indigenous workers, the level of occupation and industry segregations between the genders is much higher and has not changed much in the past decade. Indigenous men's and women's employment by industry actually became more segregated between 2006 and 2011. Indigenous employment tends to be more gender segregated than non-Indigenous employment, and is more segregated by occupation than by industry.

These results show that, while Indigenous men's employment is becoming less concentrated in a small number of occupations and industries over time, there has been little change in the degree of occupation and industry segregation between Indigenous men and women. This can explain some of the superior employment performance of Indigenous women between 2011 and 2016, since Indigenous women's employment is much more concentrated than men's in occupations and industries that have been growing in employment opportunities and that are likely to continue to grow in the near future.

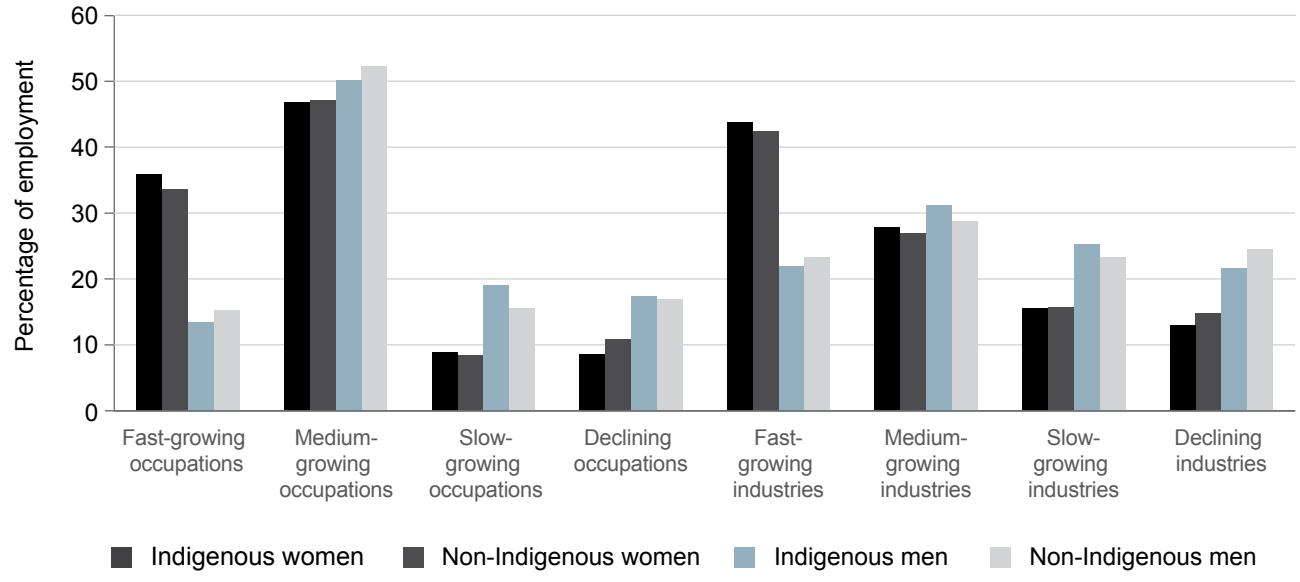
Analysis of Indigenous employment in occupations and industries that grew at various rates across the Australian workforce shows that around 36% of Indigenous women's employment is in occupations where national employment growth between 2006 and 2016 exceeded 40 000 (Fig. 9). These include personal carers, sales assistants, hospitality workers, teachers, nurses and child carers. A further 47% of Indigenous women's employment is in medium-growth occupations such as cleaners, social welfare professionals and food preparation workers. By contrast, more than one-third of Indigenous men's employment is concentrated in occupations that are growing slowly (such as horticultural trades workers, automatic mechanics and labourers) or declining (such as farm workers and engineering trades

FIG. 8. Occupation and industry segregation by Indigenous status and gender, 2006–16: (a) occupation; (b) industry



Note: Shows percentage of one group that would have to change occupations/industries for their distribution of occupations/industries to be the same as the other group. A higher value indicates that the two groups have more dissimilar occupation/industry distribution.
Source: Data from the 2006–16 censuses

FIG. 9. Share of employment in 2016 in growing and declining occupations and industries, as ranked by growth of total Australian employment, 2006–16



Note: Industries and occupations (three-digit) are ranked by national (Indigenous and non-Indigenous) employment growth for 2006–16 using the following thresholds: fast growing – 40 000 or more, medium growing – 10 000–39 999, slow growing – 0–9999, declining – less than 0.
Source: Data from the 2006 and 2016 censuses

workers). A similar pattern emerges when examining the concentration of employment by industry. Indigenous women's employment is heavily concentrated in fast-growing industries such as hospitality, school education, hospitals, residential care and allied health, while almost half of Indigenous men's employment is concentrated in industries where growth was slow or employment declined (such as manufacturing, repair and maintenance services, road freight transport, and residential construction).

A similar pattern emerges when occupations and industries are ranked based on future employment projections for 2017–22 produced by the Australian

Government Department of Jobs and Small Business (Fig. 10). Indigenous men are considerably less likely than Indigenous women to work in the fastest growing occupations (largely education and caring occupations) and industries (including education, health and hospitality). However, Indigenous men are far more likely than Indigenous women to work in medium-growth occupations, including as construction labourers and truck drivers, and in the food trades. In total, Indigenous men are slightly less likely than Indigenous women to work in occupations that are forecast to decline in the coming five years (such as clerical workers, checkout operators, machinery operators and factory process workers, and mechanical engineering trades workers), but far more likely to work in slow-growing industries (particularly manufacturing).

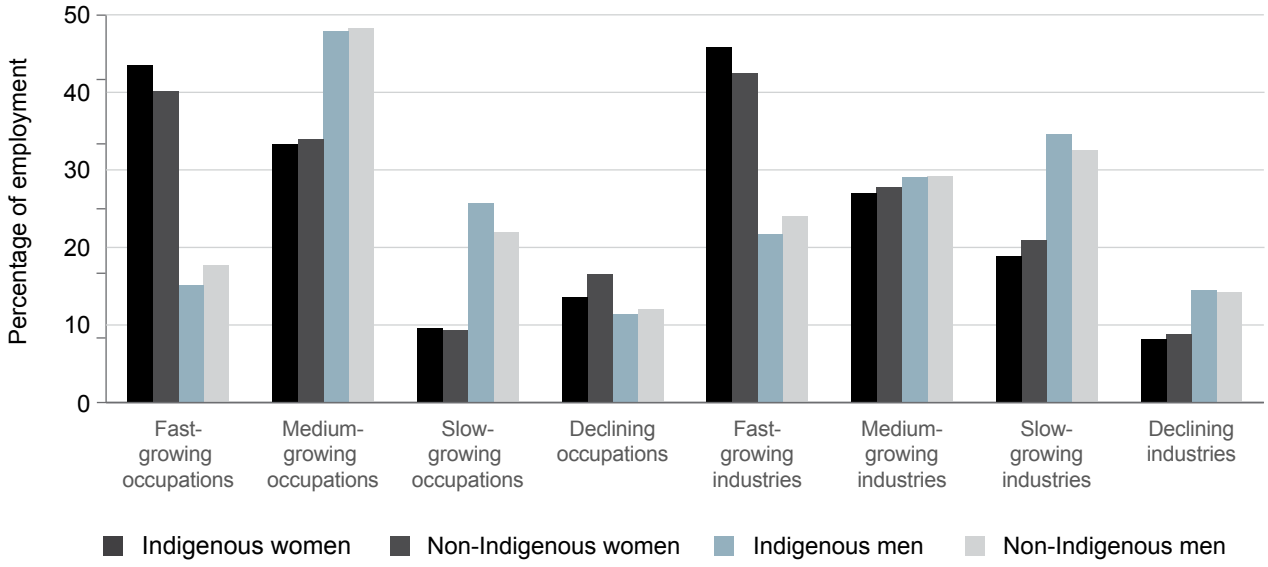
Comparing the situation of Indigenous and non-Indigenous workers, we see that Indigenous women tend to be more concentrated in the fastest growing occupations and industries than non-Indigenous women, while Indigenous men tend to be more concentrated in slow-growing and declining occupations and industries than non-Indigenous men. The occupational concentration of Indigenous employment – and its different patterns by gender – are likely to explain at least some of the superior employment performance of Indigenous women compared with men over the past 5–10 years. This employment advantage is likely to persist for the foreseeable future unless Indigenous men (and men in general) can move into the fast-growing education and caring occupations that are currently dominated by women.

It is important to note that many of the occupations and industries where Indigenous women are employed in large numbers (e.g. child care, residential care, retail, hospitality) are low paid and have high rates of part-time and casual employment. Women's concentration in these types of jobs, while improving their overall employment prospects, may have adverse effects on their income and financial security. Examining the impacts – both positive and negative – of the gender and racial segregation of employment by occupation and industry in Australia is an important area for further research.

Employment prospects of the non-employed

If the gap in employment rates between Indigenous and non-Indigenous Australians is to decline, many more Indigenous people who are currently unemployed or not in the labour force will have to move into work (Gray et al. 2014). The 2016 Census identifies almost 37 000 Indigenous Australians aged 15–64 years who are unemployed – not currently working but looking for work and available to start if they found work. A further 100 000 or so Indigenous people aged 15–64 years were not working or studying but were either not looking for work or unavailable to start a new job (or both). These people are classified as being 'not in the labour force',[6]

FIG. 10. Share of employment in 2016 in growing and declining occupations and industries, as ranked by projected growth of total Australian employment, 2017–22



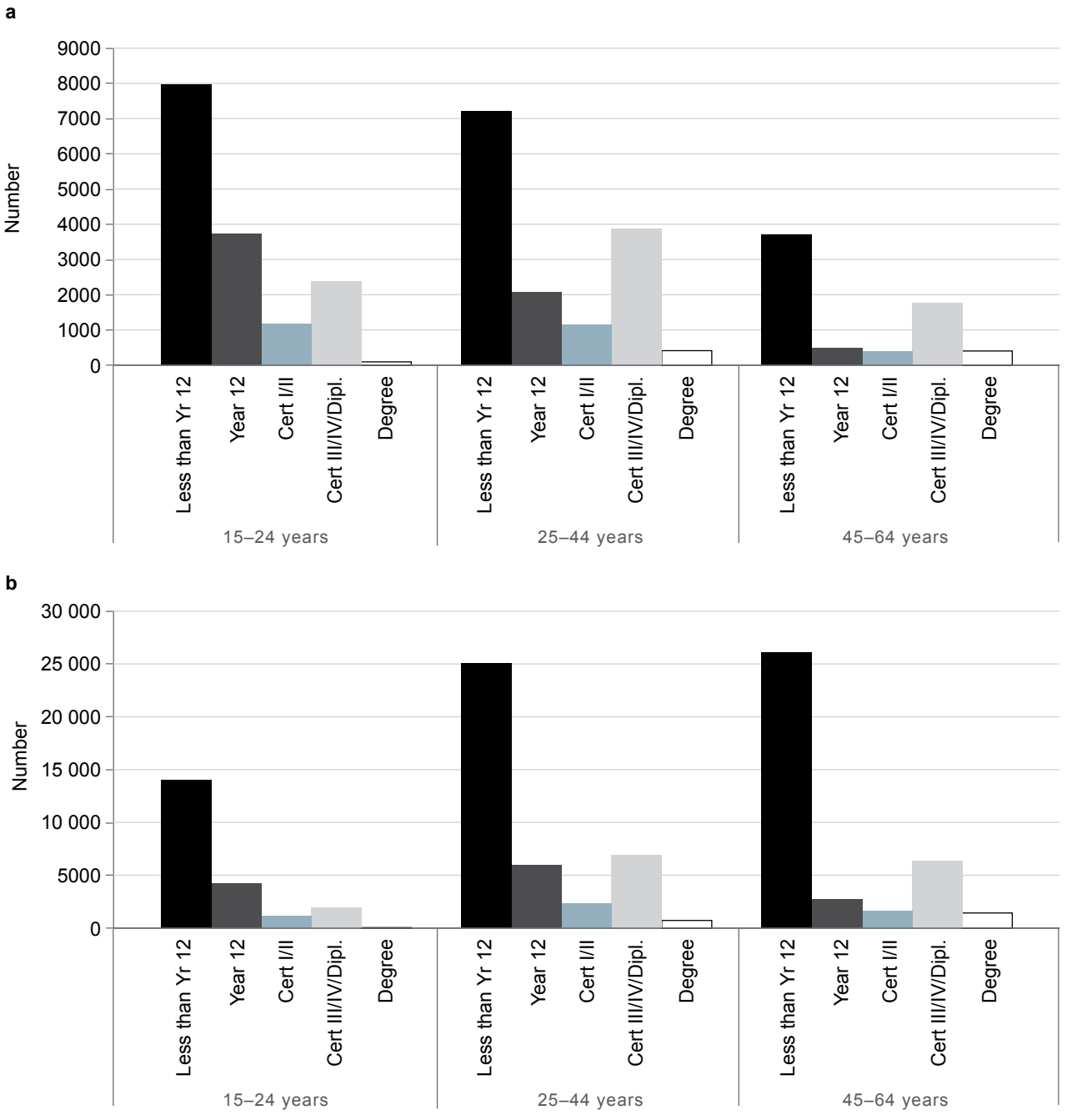
Note: Industries and occupations (three-digit) are ranked by national (Indigenous and non-Indigenous) projected employment growth for 2017–22 using the following thresholds: fast growing – 20 000 or more, medium growing – 5000–19 999, slow growing – 0–4999, declining – less than 0.
Source: Australian Government Department of Jobs and Small Business Labour Market Portal (www.lmip.gov.au); data from the 2016 Census

and may be retired, engaged in caring, volunteering, travelling, or temporarily or permanently unable to work because of ill health or disability.

The non-employed, nonstudying Indigenous population tend to have very low levels of educational attainment (Fig. 11). Around 51% of the unemployed and 65% of those not in the labour force (excluding students) have less than Year 12 education levels. A further 17% of the unemployed and 12% of those not in the labour force have Year 12 but nothing further. Only 32% of the unemployed and 22% of those not in the labour force have vocational or higher qualifications, although close to a quarter of these are at certificate level I or II. The unemployed tend to be younger, on average, than those not in the labour force.

The low levels of educational attainment among the non-employed Indigenous population make it very difficult for them to find employment and are likely to partly

FIG. 11. Age and educational attainment of Indigenous non-employed population, 2016: (a) unemployed; (b) not in the labour force (excluding students)



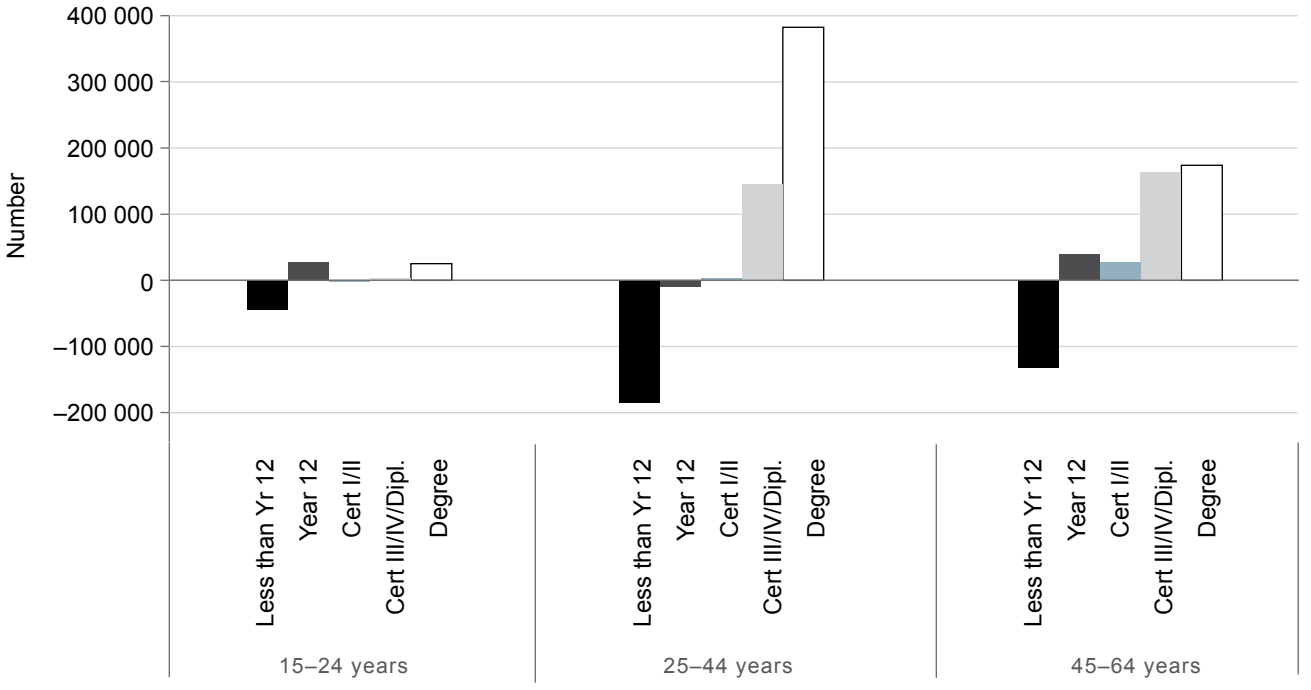
Source: Data from the 2016 Census

explain why growth in the Indigenous employment rate was slow between 2011 and 2016. Most growth in total employment in Australia (Indigenous and non-Indigenous) between 2011 and 2016 was among highly educated people, largely aged 25–64 years (Fig. 12). Only 1.4% of total employment growth was among youth. There was a net contraction of employment of people with less than Year 12 education, while employment of those with Year 12 education increased by only 2%. Employment of those with vocational qualifications grew more strongly, although mainly for those with a certificate III qualification or higher. Around 94% of total employment growth was among those with at least a bachelor's degree.

Despite lack of growth in employment of those without post-school qualifications between 2011 and 2016, the Australian Government Department of Jobs and Small Business is projecting growth in employment between 2017 and 2022 in a range of low-skilled occupations, including for aged, disability, health and child carers; sales assistants; education aides; clerks; truck drivers; baristas; and waiters.[7] The strongest growth will be in caring occupations, where vocational qualifications are often required and relatively few workers have no post-school qualifications. However, some sales, clerical, hospitality and transport jobs may provide opportunities for those without formal qualifications.

In the longer term, increasing the proportion of Indigenous people who finish high school and go on to further vocational or tertiary study will be key to increasing the Indigenous employment rate. In the shorter term, it will be important to ensure that the non-employed who want to work can get skills and experience in caring and service roles, as well as help to obtain the types of licences (e.g. driver's licence, responsible service of alcohol, working with children) that will open future employment opportunities to them.

FIG. 12. Total Australian employment growth, by age and educational attainment, 2011–16



Note: Includes both Indigenous and non-Indigenous people.
Source: Data from the 2011 and 2016 censuses

Summary and concluding comments

At face value, headline employment figures from the 2016 Census when compared with previous censuses do not provide grounds for optimism that the gap in employment between Indigenous and non-Indigenous Australians will close any time soon. However, the employment situation of Indigenous people varies widely by geographical region, with those living in major cities generally seeing an increase in employment rates between 2011 and 2016. The employment rate of Indigenous women in nonremote areas increased between 2006 and 2011, resulting in a fall in the gap between Indigenous and non-Indigenous employment rates for women. For Indigenous men in nonremote areas, growth in the employment rate was slower, but generally faster than for non-Indigenous men, resulting in a decline overall in the gap in employment rates between Indigenous and non-Indigenous men.

It is likely that some of this seemingly positive employment result in nonremote areas is due to an increase in the number of people with relatively good labour market prospects identifying as Indigenous in the 2016 Census but not in the 2011 Census. Using longitudinal census data from 2011 and 2016, Markham and Biddle (2018) showed that the employment rate for those who identified as Indigenous in 2016 but did not do so in 2011 was considerably higher than for those who identified as Indigenous in both years, driving up the average Indigenous employment rate in 2016 compared with the average in 2011. Looking longitudinally, the average employment rate for those who identified as Indigenous in both years fell. However, these average figures are also likely to reflect regional employment variations: newly identified Indigenous respondents to the census live overwhelmingly in urban and, to a lesser extent, regional areas. Disaggregating the change in employment rates because of increasing Indigenous identification by region is an important area for further research.

In remote areas, the end of the CDEP scheme undoubtedly resulted in lower recorded employment rates, particularly for the low skilled. However, the remote labour market also appears to have performed poorly between 2011 and 2016, with non-Indigenous employment falling considerably. The widening gap in the employment rate between Indigenous and non-Indigenous people in remote areas was exacerbated by non-Indigenous people moving away from remote areas in response to the poor labour market, whereas the Indigenous working-age population grew.

Indigenous women have seen a slow but steady increase in their employment rate over the past 15 years, while the men's employment rate has stagnated or fallen. There are two main reasons for this. First, a smaller proportion of Indigenous women worked in CDEP jobs previously (Hunter & Gray 2012), so its end has had less effect on their employment rate. Second, Indigenous women's employment is more concentrated in occupations and industries that are growing in employment opportunities, whereas Indigenous men are more likely to work in jobs where employment is falling or stagnant, relative to both Indigenous women and non-Indigenous men. Nevertheless, women's employment rates remain lower than men's, particularly for those with low levels of education. It is also likely that the concentration of women's employment in some industries and occupations, while positive for their current and future employment prospects, brings with it lower wages and greater job insecurity.

Increasing education and skill levels among the Indigenous population will be the key to further improving employment performance in the future. For the Indigenous population, rapid increases in educational attainment between 2011 and 2016 helped to offset the effects of the weak labour market. However, the average likelihood of employment fell for all levels of education, with the drop greatest at the lower ends of the education distribution where Indigenous Australians are most concentrated. It remains unclear how much increases in educational attainment have affected *individual* labour market outcomes. The latest cohort of school and university graduates is hitting the labour market at a time when youth employment prospects are poor by recent historical standards (Brotherhood of St Laurence 2017, Social Research Centre 2017), but it may be that the quality of education and/or graduates is also falling over time. Further research is needed to better understand the links between educational attainment, skills and labour market outcomes for Indigenous Australians.

Despite recent increases in Indigenous educational attainment, the average level of education of the Indigenous population remains low. This is particularly the case for the large cohort of the working-age population who are currently not employed, the bulk of whom have no formal qualifications. This paper has shown that, at an aggregate level, the skills and qualifications of the non-employed are poorly matched with recent growth of employment opportunities. Future work examining the mismatch between employment opportunities and the characteristics of the Indigenous population at a local level where mismatch is likely to be even worse would shed light on this issue.

Overall, the results presented in this paper show that much work is still to be done at all levels of government and across society to increase employment rates for Indigenous Australians. Improvements in education are important, but we must ensure that the quality of that education is high and that the growth in education is faster than declines in employment for low-skilled workers. It is also important that Indigenous Australians have access to career advice, training and labour market opportunities to help them take advantage of emerging employment opportunities, both nationally and in the areas where they live.

This paper focuses primarily on Indigenous employment. However, other factors, including hours of work, job security and wages will influence the welfare gains to Indigenous people from labour market engagement. We have highlighted the example of Indigenous women, who appear to have had employment gains from working in occupations and industries where employment opportunities are expanding, but who may also experience the adverse effects of low pay and job insecurity. It may also be the case that employment gains from moving currently unemployed people into low-skilled (but low paid and insecure) jobs will not result in commensurate improvements in socioeconomic outcomes or broader measures of wellbeing. These limitations should be kept in mind when interpreting the results of the paper.

Finally, as far as we are aware, there have been no causal evaluations of labour market programs targeting Indigenous Australians using either experimental or quasi-experimental techniques. This is despite an increasing body of evidence internationally on the specific aspects of active labour market programs that work and that do not work (Heckman et al. 1999, Card et al. 2010). We cannot say with any level of certainty that there are specific programs that have had a causal positive impact on Indigenous employment outcomes that should be expanded, nor can we say with any certainty that there are specific programs that are not working effectively. This lack of causal evidence is a significant failure of policy makers and, it should be said, of academic and government researchers.

Notes

1. One of the outcomes that flowed from the Miller report was, in part, the creation of the Centre for Aboriginal Economic Policy Research at the ANU.
2. A useful summary of these changes and potential causes can be found at https://www.rba.gov.au/speeches/2014/sp-ag-160614.html.
3. www.abs.gov.au/ausstats/abs@.nsf/Lookup/2901.0Main%20Features802016/$FILE/2016%20Census%20Sample%20Household%20Form.pdf
4. Participants in labour market programs in remote areas that were implemented after the CDEP scheme was abolished, such as the Community Development Program (CDP), are not classified as employed unless they also are working in a paid job while participating in CDP. If they do not have a paid job, they will be classified as either unemployed or not in the labour force, depending on how they answer questions about job search activities and ability to start a new job.
5. A more detailed examination of trends in school and post-school education participation and attainment will be the subject of future CAEPR Census Papers.
6. Those who are currently studying, but not employed and either not actively looking for work or unavailable to start a new job are also usually included among those who are 'not in the labour force'. We exclude these individuals from the current analysis because those who are studying are in some ways investing in future employment prospects.
7. See www.lmip.gov.au.

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CONTACT US

Centre for Aboriginal Economic Policy Research
Research School of Social Sciences
ANU College of Arts & Social Sciences

Copland Building #24
The Australian National University
Canberra ACT 0200
Australia

T +61 2 6125 0587
W caepr.cass.anu.edu.au

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