

How might COVID-19 affect the Indigenous labour market?

Yonatan Dinku
Boyd Hunter
Francis Markham

Abstract

Macroeconomic shocks and the policy responses to those shocks have significant effects on Australia's economy. However, research into impacts of such shocks on the Indigenous labour force is limited. This paper explores how the COVID-19 crisis is likely to affect Indigenous labour market outcomes in future. While this paper briefly examines the immediate consequences of the COVID-19 crisis for Indigenous economic outcomes, it discusses the likely longer-run consequences for Indigenous employment at some length. The sectoral concentration of Indigenous employment, the relatively high levels of casual employment and the relatively young age profile of the Indigenous population may increase Indigenous exposure to significant economic risks. Indigenous business disproportionately employ Indigenous workers, but such businesses are concentrated in small to medium enterprises that may be sensitive to recessionary conditions, especially if economic uncertainty leads to a more generalised financial crisis involving liquidity constraints. Recent history demonstrates that Indigenous employment rates have increased only gradually in the long period of macroeconomic growth leading up to the pandemic. Historical disadvantage, discrimination and geographical constraints are important drivers of the dynamics of Indigenous labour market disadvantage, that limit educational attainment and ability to find work. For those Indigenous people who secure employment, it can be difficult to retain employment. COVID-19 is likely to lead to an intense period of structural adjustment in the economy, and it is important for the Indigenous community and businesses to position themselves to take advantage of potential opportunities and minimise potential risks. The ongoing digital divide may be a particular problem for Indigenous people accessing work remotely. Poor access to the internet of a substantial number of Indigenous households may also exacerbate access to remote education. Such issues have important implications for addressing Indigenous disadvantage in future.

JEL Codes: J15, J71, L26

Keywords: COVID-19, Discouraged workers, Discrimination, Social exclusion

1. Introduction

COVID-19 is a highly infectious disease that poses a serious challenge to all people given it is a *novel* virus for which there is effectively no scientifically validated treatment. Sanche *et al.* (2020) estimate a summary measure of infectiousness, the basic reproductive number or R_0 , and find that COVID-19 has a median R_0 of 5.7, which is twice that estimated in the early stages of the outbreak in Wuhan. All outbreaks of disease are important for Indigenous people because pre-existing comorbidities exacerbate the impact of COVID-19, and because, in recent years, infectious disease outbreaks have disproportionately affected Indigenous Australians (e.g. Flint *et al.* 2010). A number of these comorbidities, for example obesity and diabetes, are associated with Indigenous poverty and social exclusion, which are arguably associated with the original act of dispossession and colonisation.

Of course another reason that this current pandemic resonates with Indigenous Australians is that first contact with European colonists was associated with a series of epidemics that lead to the death of around three-quarters of the pre-1788 population by 1850 (Hunter and Carmody 2015). COVID-19 has a substantially higher R_0 than the smallpox virus, the disease presumed by most analysts to be associated with the decimation of the pre-contact Indigenous population.¹ Disease in the early colonial period had a particularly destructive effect on both the Indigenous and Australian economy², but the current pandemic will not have a similarly devastating effect on the Australian economy going forward because there is a greater appreciation of the spread of disease. Notwithstanding, this article focuses on the likely implications of the COVID-19 pandemic for the Indigenous labour market in the short-run and reflects on possible long-run implications arising from any macroeconomic shocks to the Australian economy.

The medical and policy response to COVID-19 has focussed on the containment of the virus, including active surveillance, contact tracing, quarantine, and early strong social distancing efforts needed to limit transmission (Sanche *et al.* 2020). The containment policy has led to a substantial disruption to economic activity overall, but the disruption in the short-term has been most pronounced in sectors that are directly affected by government fiat and the social distancing regime that is preventing further transmission of the disease. The containment policies directly affect some industries and occupations that are either restricted in activities or completely closed. The net effect on the Australian economy has been a sharp decline in national economic activity, which is likely to be exacerbated by the inherent uncertainty of the health crisis and the ongoing need for further containment for future waves of outbreaks. The uncertainty arising from COVID-19 and the containment of the virus will amplify the original economic uncertainty inherent in recessions. The global nature of the health crisis and the evolving geopolitical environment may affect the volume and composition of international trade for a number of years.

1 Smallpox has a 95 per cent confidence interval for its R_0 of between 3.5-6 (Gani & Leach 2001).

2 Note that the Indigenous population out-numbered the colonists until well into the 1840s, so the effect of disease on Indigenous economic activity after 1788, is likely to dominate the effect of the disease on the whole Australian economy.

Research into impacts of macroeconomic shocks on the Indigenous labour force are limited, let alone the likely economic shocks emerging from this health crisis. This paper outlines some mechanisms of how macroeconomic shocks can affect the Indigenous labour market. The scarring effect discussed elsewhere in this issue by Jeff Borland, is particularly likely to affect Indigenous workers through the atrophying of human capital and the poor quality of job matches that can arise in a recession. However, the main effects on Indigenous workers are likely to be through the long-term effects of racial discrimination and historical social exclusion, which reduces the prospect of re-entry into the labour market following a recession and increases exits from employment and turnover between jobs that reduce the ability to build up labour market experience. It is reasonable to anticipate a particularly strong net discouraged worker effect for the Indigenous population after this recession, but a slow improvement in employment and labour force participation when the macroeconomic situation improves (see, Hunter and Gray 2012).

The next section outlines why COVID-19 has particularly important economic implications for Indigenous Australians, before we discuss some mechanisms by which the macro economy affects the Indigenous labour market. We then identify some Indigenous specific policy considerations of the pandemic, and bring together the limited evidence available on any potential short-run impacts of COVID-19. In order to do this, we use recent administrative, survey and census data on Indigenous and other Australians to identify the likely impacts on the Indigenous labour market. Given the disproportionate Indigenous employment in Indigenous business we also report some qualitative data on how Indigenous businesses are faring in the early stages of the pandemic. The concluding section reflects how the Indigenous labour market may be affected by structural and social change that may occur as result of the pandemic.

2. Why COVID-19 might affect the Indigenous labour market?

Most analyses of Indigenous labour market outcomes emphasise the role of racial discrimination and historical social exclusion with the initial processes of colonisation either killing Indigenous people through disease or massacre, leaving the survivors at a disadvantage in the labour market once legal discrimination was finally abolished. The lack of engagement with the market economy that evolved in Australia has led to low levels of labour market experience, educational outcomes and other accumulated endowments that facilitate labour market outcomes. Clearly, Indigenous people experience low levels of labour market outcomes because of differences in both labour market endowments and differences in the rewards for these endowments (Kalb *et al.* 2014). The latter component can be interpreted as the ‘scope for discrimination’ that can encompass unobservable factors, such as cultural differences, not captured in the statistical model.

Both endowments and discrimination have a role to play in understanding the possible effect of COVID-19 on the Indigenous labour market. The historical disadvantage and exclusion mean that Indigenous people are concentrated in particular

sectors or industries, particularly those that disproportionately include low-skilled, poorly-educated workers and other marginalised groups. Another characteristic of Indigenous workers is that they tend to be much younger than the rest of the Australian workforce, reflecting the relatively youthful structure of the Indigenous population. If these sectors are disproportionately affected by COVID-19, then Indigenous unemployment and participation may be particularly sensitive to the change in macroeconomic conditions.

As Australia enters a COVID-19 induced recession, another possible factor driving differences in labour market outcomes of Indigenous and other Australians is discrimination. Recent research has emphasised significant widespread unconscious bias against Indigenous Australians (Shirodkar 2020). The significance of this finding is that not all discrimination is explicit and unconscious bias could manifest itself in systematic discrimination that affects labour market outcomes.³ The ‘scope for discrimination’ documented in Kalb *et al.* (2014) may or may not be a result of conscious behaviour or attitudes. Regardless of whether or not discriminatory behaviour and attitudes are conscious, they have profound labour market effects.

Discrimination is one of the reasons discouraged workers may leave the labour market during a recession. Groups who experience discrimination may doubt that they will have a good chance of securing employment when the overall job market is poor (Hunter and Gray 2012). This reduces the prospect of re-entry into the labour market following a recession, and increases exits from employment and turnover between jobs, further reducing the ability to build up labour market experience. As the overall probability of a job seeker finding work goes down, the first group to stop looking for work are marginalised groups who tend to be less competitive in the labour market even when the macroeconomic conditions are buoyant. Together it is reasonable to anticipate a particularly strong net discouraged worker effect for the Indigenous population after a recession.

Another important dynamic that may disadvantage Indigenous jobseekers who lose their jobs is the crowding out of Indigenous employment opportunity in low-wage sector. This may occur because more non-Indigenous job seekers who are competing for scarce jobs with an influx of educated and skilled job seekers who have lost their employment in the recession.

Frictional unemployment is driven by the period elapsed between moving from one job to the next and is often driven by the lack of job vacancies. However, the pandemic may lead to a reduction in the overall number of vacancies available, and hence reduce frictional unemployment, as more people hold on to current jobs rather than looking for alternative employment in other sectors to which individual workers may be better matched.⁴ By staying in jobs longer, existing workers reduce the employment prospects of the newly unemployed that may include a disproportionate number of Indigenous people.

3 Shirodkar and Hunter (2020) demonstrate that unconscious bias is associated with significantly low rates of Indigenous entrepreneurship.

4 Mismatch between workers and jobs is common and has important implications for the labour market in its own right, but it is not explored here (see Mavromaras *et al.* 2009).

Another more subtle reason Indigenous unemployment may be particularly high in a COVID-19 recession is how discrimination and low levels of human capital concentrates Indigenous jobseekers in the low skill sector. Goldsmith *et al.* (2004) provide a theoretical neoclassical model where labour supply preferences adjust to the presence of employer discrimination as a result of the psychological processes of cognitive dissonance. In that model, discrimination is associated with lower wages and the resulting substitution effect reduces labour supply. This substitution effect is consistent with a standard neoclassical model, however, Goldsmith *et al.* (2004) also identify a ‘resume effect’ whereby job seekers have to take a job that they might not otherwise do or work at a lower rate of pay in their current job in order to demonstrate to the statistically discriminating employer that they are more productive than the employer originally thought. This response to the experience of discrimination could further concentrate Indigenous workers in the low-skill sector.

Employment inequality across sectors and persistent intergenerational effects of ‘scarring’ from unemployment will lead to diminished competitiveness in the labour market and harm the capacity to secure a suitable job. De Fontenay *et al.* (2020) provide evidence that these scarring effects can even occur when there is no recession, just a sustained period of weakness in sectors of the labour market that is reflected in low occupational mobility. This last condition is likely to be experienced by many Indigenous workers experiencing discrimination, irrespective of the macroeconomic conditions.

Slower economic growth and the increasing employment of older Australians since the global financial crisis had been crowding younger workers out of the labour market (de Fontenay *et al.* 2020). Borland (2020) argues the young are always hardest hit during economic downturns – needing to make the transition from education to work at a time when there are few new jobs on offer. Other reasons identified by Borland for the disproportionate effect on youth are: that a sizable group of older workers are likely to delay retirement to rebuild their superannuation balances; and that the young account for a disproportionate share of workers in industries being most affected by COVID-19 shutdowns, such as hospitality and retail trade. Third, the young are also a large proportion of casual employees who have been in their jobs for less than 12 months. The Indigenous workforce is disproportionately young, but this paper will demonstrate that sectoral concentration of employment, including the casual nature of much of Indigenous employment, is a proximate reason why the Indigenous labour market may be disproportionately affected by COVID-19.

Borland also argues that structural mismatch is likely to be a particular problem in a COVID-19 recession. First, both increases and decreases in labour demand are happening at the same time across different industries. Second, the decrease in labour supply is likely to be spread across industries. Hence, there will be some production activities where extra workers are needed and in some there will be a surplus of workers. Given the nature of quarantining, these issues may be pronounced in particular areas or regions. The litany of potential issues for the Australian labour market arising from the pandemic, include: supply chain effects, structural mismatch, long-run adjustment and factor mobility constraints (internationally and domestically).

The effect of COVID-19 on the Indigenous labour market will be manifested in a negative interaction of labour supply and demand. Let’s briefly consider who

is demanding Indigenous workers. Hunter, Foley and Arthur (2019) show in the *Macquarie Atlas of Indigenous Australia*, that good Indigenous employment outcomes are historically associated with large diversified labour markets in major urban areas or in parts of the country where there is local sustained employment demand associated with a particularly buoyant sector (e.g., in 2016, coal mining in central Queensland and tourism in Tasmania generated a substantial number of jobs in the local market). The significant regional differences in the economic effects of COVID-19 that is becoming apparent with second wave outbreaks in particular regions, is likely to lead to locally depressed labour demand conditions that may interact with labour supply if mobility is constrained.

Discouraged workers are defined as people who want a job and are currently available for work but have given up actively searching for work because they believe they cannot find it.⁵ The belief is likely to be justified in recessions, but it can also be associated with local labour demand and discrimination or labour supply preference associated with individual circumstances. Hunter and Gray (2001) argue that Indigenous Australians were between three and four times more likely to be discouraged workers than other Australians just after the 1990s recession. Hunter and Gray (2012) identified that the Indigenous labour market did improve slowly during a long period of economic growth after the 1990s, but the employment growth was not sufficient to close the gap in employment. Furthermore their finding was conditioned on the exclusion of the Community Development Employment Projects (CDEP) scheme employment, a government-funded community employment program. The argument for excluding CDEP is that it was program-driven ‘employment’ and was dependent on the level of funding allocated by Federal government.⁶

Indigenous employment rates did improve slowly during sustained periods of macroeconomic growth in the last 30 years, and the labour market gap between Indigenous and non-Indigenous Australians did close marginally in both remote and non-remote areas if CDEP jobs are excluded (Hunter and Gray 2012). The attachment to the labour market of Indigenous Australians did also improve very slowly over this

-
- 5 In economics, labour force status is determined in a two-stage process:
- a. individuals decide whether or not they wish to supply their labour to the market (socioeconomic status, the level of unemployment benefits, macro-economic conditions, and the level of labour demand).
 - b. Employment driven by labour demand, incentives to search for work, and willingness to accept any job offers.

Within this framework, individuals will become discouraged workers if they want to work but, because the costs of searching for work combined with the perceived poor chances of finding work, they do not search for work. The costs of searching for employment may be quite considerable as they include both the time involved, monetary costs and psychological impacts of the failure to find employment. Family factors, such as household composition, child care responsibilities, and difficulties with child care, are also likely to play an important role. Any analysis of Indigenous labour force status needs to take account of Indigenous-specific social and cultural factors, the behaviour of potential employers, and the interaction between labour supply & demand. (Hunter and Gray 2001).

- 6 If CDEP is considered to be employment, as it was by the majority of its participants, then Indigenous labour market conditions have deteriorated dramatically in remote areas over the last decade.

period. However with the onset of the COVID-19 recession we have good reason to expect that the decline in Indigenous employment and participation will be larger than that experienced by other Australians because: Indigenous people mostly live outside the main labour markets, are disproportionately young, are concentrated in casual and other jobs with limited prospects, have low levels of educational or other labour market endowments and that this is compounded by the all too common experience of discrimination.

3. Showing how the COVID-19 recession is relevant in the Indigenous labour market?

3.1 Reliance on social security

The recession arising from the economic disruption of COVID-19 will have a sustained and significant effect on the labour market. The unemployment and worker discouragement resulting from the economic downturn are likely to worsen employment outcomes for Indigenous Australians. Even before the pandemic, there was a particularly high rate of social security receipt among Indigenous Australians that reflects the ongoing relatively low level of employment. The Indigenous employment-to-population ratio among 15–64 years olds was just 49% before the pandemic, according to ABS survey data collected in 2018–19.⁷ As Altman and Daly (1992) pointed out during the early 1990s recession, while the relatively low employment rate among Indigenous people excludes many Indigenous people from the benefits of employment income, it also partially insulates them to some degree during labour market downturns.

Administrative data from the early stages of the pandemic indicate substantial and disproportionate increases in Indigenous unemployment and underemployment. According to administrative data (DSS 2020), 100,600 Indigenous Australians were receiving payments related to unemployment in late February 2020.⁸ By May 22, that number had increased to 141,100. As a percentage of the working-age Indigenous population, this constitutes an increase from 18.8 per cent to 26.3 per cent. By way of comparison, the non-Indigenous population receiving these benefits over the same time span rose from 4.5 per cent to 9.3 per cent. Clearly, the economic contraction forced a larger proportion of the Indigenous workforce to rely on government payments than the non-Indigenous workforce.

In this context, the Coronavirus Supplement has been crucial in alleviating Indigenous poverty. Indigenous poverty was already high prior to the pandemic, with estimates based on the 2016 Census suggesting poverty rates of 31 per cent for Indigenous people across the country, reaching 53.4 per cent in very remote areas (Markham & Biddle 2018). In this context, the role of the temporary Coronavirus

7 Authors' calculations from ABS 4715.0 (National Aboriginal and Torres Strait Islander Health Survey, 2018–19).

8 For comparability, we use the term 'payments related to unemployment' to refer to Newstart Allowance, Bereavement Allowance, Sickness Allowance and Youth Allowance (Other) in February 2020 and Jobseeker Allowance and Youth Allowance (Other) in May, as the Jobseeker Allowance combined the former three payments into a single new payment, with Youth Allowance (Other) remaining unaffected.

Supplement has not just been to support the newly unemployed and underemployed; it has also lifted many Indigenous households out of poverty for the first time (Markham 2020).

More onerous mutual obligations were suspended from March 20 as the prospects of finding employment was limited in a deep recession. Since August 4, mutual obligation requirements have slowly been reintroduced. The resumption of mutual obligations was trialed in remote Indigenous communities before being extended into the broader community of job seekers. Historically the mutual obligation requirements have been particularly onerous on Indigenous unemployed, especially in the Community Development Program (Fowkes 2019). There is emerging anecdotal evidence from several sources that substantial numbers of Indigenous people are dropping out of the social system altogether for short or extended periods to escape mutual obligation requirements that they find overly onerous (Community Affairs References Committee 2020), a phenomenon that has also been observed among non-Indigenous job seekers in recent years (O'Halloran, Farnworth & Thomacos, 2019). The re-imposition of mutual obligations could disproportionately affect the Indigenous jobseekers with a lower attachment to the labour market and less savings to invest in the resources required for job search.

Mobility restrictions may also impact on the Indigenous labour market.⁹ However, these mobility restrictions were largely Indigenous-led and supported, and were concentrated in remote areas where the number of job vacancies are already extremely limited. If further waves of infection reach remote Australia, however, mobility restrictions (whether state sanctioned or Indigenous-led) are likely to have a greater impact.

The health advice for COVID-19 singles out Indigenous people over 50 years old as a particularly vulnerable group. While on average Indigenous people are more likely to have comorbidities that put them in the risk of contracting a serious case of the virus. This medical advice has some merit, in a statistical sense, however if it leads to differential treatment of Indigenous people it could further damage the labour market prospects of workers and job seekers even if they do not have the comorbidities that drive the medical concern.

9 A series of mobility restrictions in remote areas have been enacted by Indigenous land trusts and by state, territory and federal governments (see Smith 2020 for an account of these restrictions). Federal mobility restrictions, were introduced under the *Biosecurity Act* on March 26, 2020 and lifted on July 10, 2020, and barred entry to designated areas except after a 14-day quarantine period. The designated area covered much of remote Australia, including: the Ngaanyatjarraku lands, the East Pilbara, and Kimberley in WA; all of the non-urban NT excluding pastoral stations; the Anangu Pitjantjatjara Yankunytjatjara lands, Maralinga Tjarutja lands, and Aboriginal Lands Trusts lands in SA; and much of Cape York and the Gulf of Carpentaria in Qld (see <http://web.archive.org/web/20200820011230/https://www.wa.gov.au/sites/default/files/2020-03/Australia%20-%20Designated%20Biosecurity%20Area%20-%20FINAL%20260330.pdf>). At the time of writing in mid-August 2020, some land trust enforced and state government restrictions on mobility remain in place.

3.2 Composition of employment and short-term impacts on Indigenous labour market: Casual, youth and gender

Wilkins (2020) provides evidence on the demographic groups most likely to be experiencing the worst economic effects of COVID-19 by combining information on job losses by industry in the early stages of the pandemic with characteristics of people from the Household, Income and Labour Dynamics in Australia (HILDA) Survey. He identified the directly affected and secondarily affected Industries based on industries that have been prohibited from operating or severely constrained in their operations.¹⁰ Around 28 per cent of the workforce are in industries affected by COVID-19 with younger and female workers being disproportionately likely to be employed in such industries according to recent HILDA data. Wilkins findings were confirmed by the ABS data, with workers aged less than 20 years old losing 14.6 per cent of jobs between 14 March and 2 May 2020, substantially more job losses than any other age group (ABS 2020b).

While Wilkins (2020) did not report the Indigenous status of workers in affected industries, we can estimate the likely proportion of Indigenous workers in those industries using the most recent ABS data that includes an Indigenous identifier. Table 1 shows that Indigenous workers are slightly more likely than other Australians to be employed in the directly affected and secondarily affected Industries (33.4 per cent versus 28 per cent).

Table 1. Indigenous workers by COVID-19 affected industries

	<i>Directly impacted</i>	<i>Secondarily Impacted</i>	<i>Other Industries</i>
Per cent employed			
Indigenous	10.0%	23.4%	66.6%
Australia	8.0%	20.0%	72.0%

Source: Wilkins (2020); Indigenous estimates derived from NATSIHS, 2018-19.

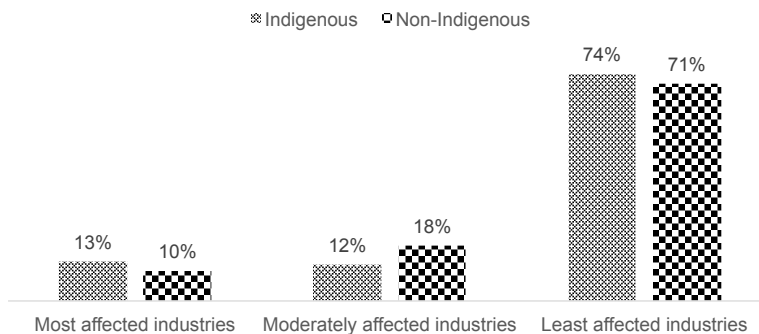
The ABS (2020b) data on weekly payroll jobs and wage statistics provides more direct insight into the likely short-term impacts of COVID-19 on the Indigenous workforce. Rather than using Wilkins method that was formulated before payroll data was available, we can estimate the industries that lost most jobs after 14 March 2020. Up to 2 May 2020, the industries that lost most jobs were: Accommodation & food

¹⁰ Directly adversely affected industries were largely forced to cease operations as a result of public health measures in March 2020 (eg, Food and Beverage Services; Air and Space Transport; Heritage Activities; Creative and Performing Arts Activities; Sports and Recreation Activities; and Gambling Activities). Secondarily adversely affected industries are able to continue operating, but experienced precipitous declines in business (eg, Textile, Leather, Clothing and Footwear Manufacturing; Furniture; Motor Vehicle Wholesaling and Retailing; Accommodation; Real Estate Services; Tertiary Education; Other Education; Social Assistance Services; and Personal and Other Services).

services (254k); Professional/technical services (130k); Construction (77k), Retail (75k); Manufacturing (64k); Other services (50k); Arts and recreation (47k).¹¹ These job losses can be expressed as a percentage loss from the March data and ranked in three categories: most-affected, moderately-affected and least-affected industries. The least affected industries are those whose job loss is less than the average job loss between March and May (7.1 per cent fewer jobs). Most affected industries, which experience job loss prevalence >14.2 per cent (i.e., over twice the average job loss) include: Oil and Gas Extraction; Accommodation; Food and Beverage Services; Other Transport; Motion Picture and Sound Recording Activities; Adult, Community and Other Education; Creative and Performing Arts Activities; Sports and Recreation Activities. Moderately affected industries include those with job loss prevalence between 7.1 per cent and 14.2 per cent. These industry categories are used to compare with the recent ABS data that includes the characteristics of Indigenous and non-Indigenous workers (see sources in Figure 1).

Figure 1 illustrates that Indigenous workers are somewhat more likely to be employed in the most affected industries and the least affected industries.¹² On the face of it that would seem to indicate that we should not be too concerned about the short-term employment effects of COVID-19 on Indigenous workforce. But this method can be used to dig deeper into the characteristics of workers in terms of rates of casual employment, demographics, household income.

Figure 1. Proportion of workers in COVID-19 affected industries by Indigenous status, 2018-19



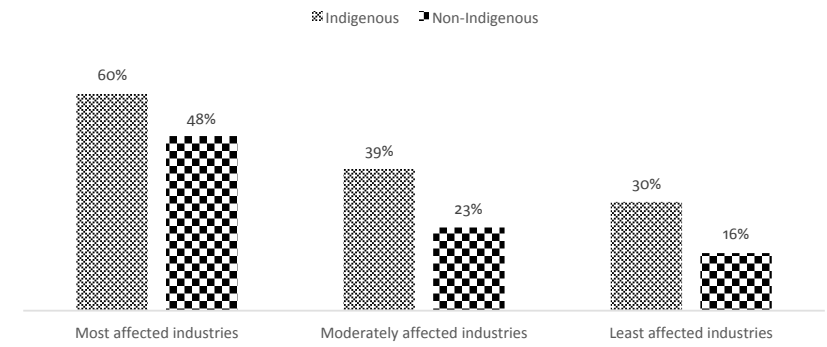
Sources: Author's calculations from ABS (2019a), ABS 4715.0 (National Aboriginal and Torres Strait Islander Health Survey, 2018-19) and ABS 6160.0.55.001 (Weekly Payroll Jobs and Wages in Australia, Week ending 2 May 2020)

11 These statistics are limited to what the ABS term 'payroll jobs', or relationships between an employer and employee where the employee is paid by through accounting or payroll software that reports back to the Australian Tax Office. Accordingly, employees who were stood down but received payment through the Commonwealth's 'JobKeeper' scheme are classified as employed, while those temporarily stood down but not receiving any income from their employer are classified as unemployed.

12 Note, Indigenous employment is historically concentrated in the public sector, which is less likely to be affected by a reduction in aggregate demand (Altman and Daly 1992).

The 2014/15 NATSISS shows that 45.6 per cent of Indigenous casual workers were in their current job for less than 12 months. Figure 2 illustrates that more casuals are employed in the most-affected industries than in other industries. Indeed, the majority of Indigenous workers are casually employed in those industries (60 per cent), compared to 39 per cent and 30 per cent in either the moderately and least affected industries. Within the most affected industries, Indigenous workers are substantially more likely to be casual than their non-Indigenous counterparts (60 per cent and 48 per cent respectively, a differential of 12 percentage points). The differential is even larger in the other industry categories; that is a 16 and 14 percentage point differential in the moderately affected and least affected industries. Given the structure of the JobKeeper program effectively excludes short-term and casual employment, it is reasonable to expect that Indigenous workers will be more disadvantaged than non-Indigenous workers. Furthermore, the longer term effects of a COVID-19 recession is likely to be pronounced for Indigenous workers given that casual workers are most likely to lose their work in a downturn due to the reduced security afforded by their employment contracts.

Figure 2. Percentage of workers employed as casuals by short-term employment impact and Indigenous status



Sources: Author's calculations from ABS 6333.0.00.001 (Characteristics of Employment, Australia, August 2019), ABS 4715.0 (National Aboriginal and Torres Strait Islander Health Survey, 2018-19) and ABS 6160.0.55.001 (Weekly Payroll Jobs and Wages in Australia, Week ending 2 May 2020)

Note: 'Casual employment' is defined in terms of access to paid leave entitlements.

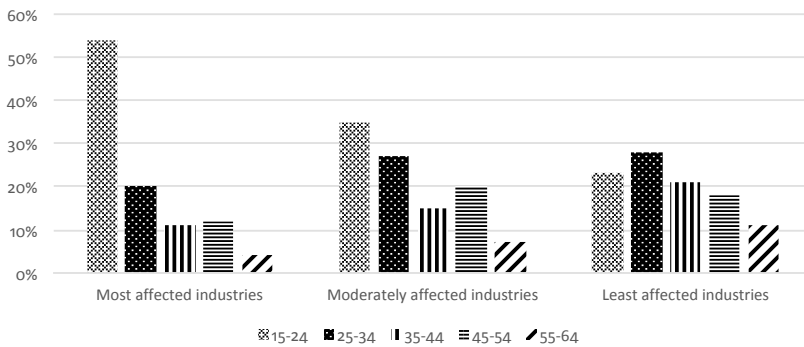
The remainder of the statistics identified in this section refers solely to the Indigenous workforce. Another group identified by Wilkins (2020) as being affected by COVID-19 is the female workforce. Figure 3 illustrates that Indigenous workforces is more likely to be female in the industries most affected by COVID-19. The moderately affected industries is actually less likely to be female with just over 40 per cent of workers being female. Nevertheless, the main point to note here is that, Indigenous females are likely to be amongst the groups most affected by COVID-19.

Figure 3. Percentage of Indigenous workers by gender and short-term employment impact



Sources: Author's calculations ABS 4715.0 (National Aboriginal and Torres Strait Islander Health Survey, 2018-19) and ABS 6160.0.55.001 (Weekly Payroll Jobs and Wages in Australia, Week ending 2 May 2020)

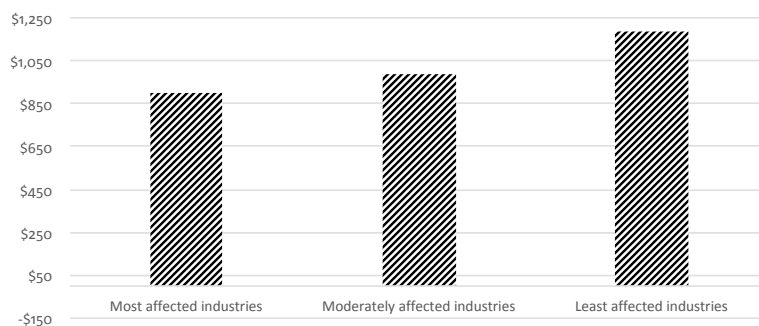
Figure 4. Percentage of Indigenous workers by age group and short-term employment impact



Sources: Author's calculations ABS 4715.0 (National Aboriginal and Torres Strait Islander Health Survey, 2018-19) and ABS 6160.0.55.001 (Weekly Payroll Jobs and Wages in Australia, Week ending 2 May 2020)

Like Wilkins 2020, Figure 4 demonstrates that the most affected industries tend to have high concentrations of young workers, with over 50 per cent of workers being aged between 15 and 24. To some extent, this reflects the casualisation of the workers in those industries, but it underscores the importance of understanding the labour market dynamics of the process of scarring discussed above.

Figure 5. Household income of Indigenous workers by short-term employment impact of their industry



Sources: Author's calculations ABS 4715.0 (National Aboriginal and Torres Strait Islander Health Survey, 2018-19) and ABS 6160.0.55.001 (Weekly Payroll Jobs and Wages in Australia, Week ending 2 May 2020)

Wilkins (2020) identified that affected industries were associated with low wage rates (measured hourly or weekly). Figure 5 is consistent with this observation and that the gross median income of households that include Indigenous workers employed in most affected industries is substantially lower than households that include workers employed in either moderately affected or least affected industries. Living in households with particular low income is a risk factor which compounds the effect of being in casual industries with no access to paid leave (i.e. casual work). Even if workers want to comply with the social injunction not to go to work while sick, there may be additional financial pressure from a tight household budget that might make it imperative that the worker ignores early signs of the illness. Access to paid pandemic leave, and who funds that leave, are important social policy issues that have broader public policy and health implications than simply being an industrial issue.

4. COVID-19 and Australian business

Much of the focus of Australia's policy response to COVID-19 is on the relationship of employers and employees. However, we now tend to an explicit focus on the impact of the pandemic on business and the self-employed. Biddle *et al.* (2020) use ANU Poll on COVID-19 collected between 14 and 27 April 2020 to analyse the impact on the Australian self-employed, an important subset of Australian businesses who tend to be smaller operations that may be particularly sensitive to economic shocks. It is the first longitudinal survey data on the impact of COVID-19 in Australia, with respondents being also interviewed in January and February 2020.

The probability of being employed fell for both self-employed and employees at a level commensurate with the seasonally adjusted employment decline measured in the April Labour Force Survey. However, Biddle *et al.* (2020) provided important insight into the early impact on Australian business. Almost half experienced a decrease in

profits that was either ‘substantial’, completely eliminated, or had gone out of business. Almost a third of the self-employed did not think their business was viable over the next two months if current trends continued. This uncertainty appears to be leading to significant fear, anxiety, and psychological distress amongst the self-employed.

The ANU Poll data also found that compared to employees, the self-employed had a higher reduction in hours worked, a greater reduction in income, an increase in the probability of not thinking current income was sufficient to meet expenditure (compared to a decline for employees) and a higher chance of accessing retirement savings and/or superannuation early. The income finding is not surprising as economic uncertainty associated with a COVID-19 recession will affect the aggregate demand for goods and services from businesses; while on the other side, the JobKeeper program has put a limit on the income losses of employees and, in the case of some low paid or part-time workers may have actually increased income. However, ongoing uncertainty and the winding back of the JobKeeper package may lead to a convergence of the experience between self-employed and employees.

Hunter (2015) demonstrates that Indigenous businesses are particularly important for Indigenous employment since they are up to 100 times more likely to employ Indigenous workers than other Australian businesses. At least until the COVID-19 recession, the Indigenous business sector has been growing rapidly (Shirodkar, Hunter and Foley 2018). However, Hunter (2015) demonstrates that Indigenous businesses are disproportionately concentrated in small to medium enterprises that may be particularly affected by a long COVID-19 recession, especially if it compromises cash flow and liquidity of the firm.

The Indigenous peak organisation for Indigenous businesses, Supply Nation, conducted a survey of members in the early stages of the COVID-19 shutdown. A substantial number of businesses were confused by the government’s initial messaging. While the policy response has been clarified, it is evolving, not least of which because the government is trying to ascertain the likely evolution of the pandemic. Quantitative and Qualitative data were collected from 49 Indigenous businesses, who responded to the invitation to participate. It was effectively a convenience sample of over 2 per cent of Indigenous businesses covered by Supply Nation. It is a non-probability sample, but the qualitative responses yield some insight into the experience of Indigenous businesses in the pandemic. Consistent with expectations, around 85 per cent of the verbatim responses on the revenue impact of COVID-19 were negative; while 68 per cent of response on the business impact of COVID-19 were negative. In terms of businesses operating over the next 6 months, 45 per cent of responses were negative, with 78 per cent mentioning ‘cashflow’ as key. The following verbatim responses from the respondents to the Supply Nation Survey are illustrative of the stress many Indigenous businesses were experiencing:

Hospitality & food events cancelled. Online sales down as people are watching money perhaps? Wholesale orders non-existent as 95% of our wholesale customers are food based businesses/tourist venues who have been shut or closed voluntarily.

Our ability to keep delivery on projects and winning new contracts. We probably have about 3 months of future work, which is more than most in business so we consider ourselves lucky.

By the end of this week, week ending 29.3.20 all permanent jobs have been put on hold until after the COVID-19 outcomes or after lockdown. A 100% of CASHFLOW has gone.

The responses to the Supply Nation survey are consistent with the latest data on business impacts of COVID-19 (ABS 2020a). Two in five (42 per cent) Australian businesses are currently accessing support measures such as wage subsidies, deferring loan repayments or renegotiating rental or lease arrangements, to manage the impacts. Large businesses are less likely than either small or medium businesses to access support (38 per cent as opposed to 42 per cent and 53 per cent respectively). One in ten businesses expects to close the business if support measures were no longer available. Two-thirds of businesses reported a decrease in revenue compared to last year. Around 46 per cent of businesses made workforce changes such as working from home or reduced staffing.

On 30 March 2020, the JobKeeper was announced, just after the above survey responses were collected by Supply Nation. On 21 July 2020, JobKeeper was extended until 28 March 2021, although there are some changes to the eligibility criteria and payment amounts. Given the level of distress Indigenous businesses were under before JobKeeper, and the second waves of infection in the community, JobKeeper may allow some of these Indigenous businesses to survive post-COVID-19. However, the relatively small size of businesses in this sector and the reliance on short-term cashflow may mean that the Indigenous business sector may disproportionately be affected by the recession. However, Supply Nation businesses may be protected somewhat by procurement contracts with governments and larger businesses.

Indigenous employment, like all employment, is driven by the location of businesses (Hunter, Foley and Arthur 2019). Even though Indigenous people are more likely to live in regional and remote areas most Indigenous businesses are concentrated in east coast urban areas where the labour and product markets are most developed, as well as regional parts of the eastern states of Queensland, New South Wales, Victoria and Tasmania. This asymmetry between the distribution of jobs and the distribution of Indigenous population has important implications for the long-run or persistent effects of COVID-19 that we explore in the next section.

5. Long-run/persistent effects of COVID-19 crisis

Recessions, particularly those as deep and potentially sustained as that associated with an ongoing pandemic, can be associated with profound structural & social change. The extent of unemployment and subsequent reallocation of labour has been suppressed temporarily by the JobKeeper program, which has prevented some businesses from closing at this stage. Medium and longer term effect of COVID-19 will include structural adjustment and changes in industry composition because of closures and flow-on effects on depressed aggregate demand, labour shortages in sectors relying

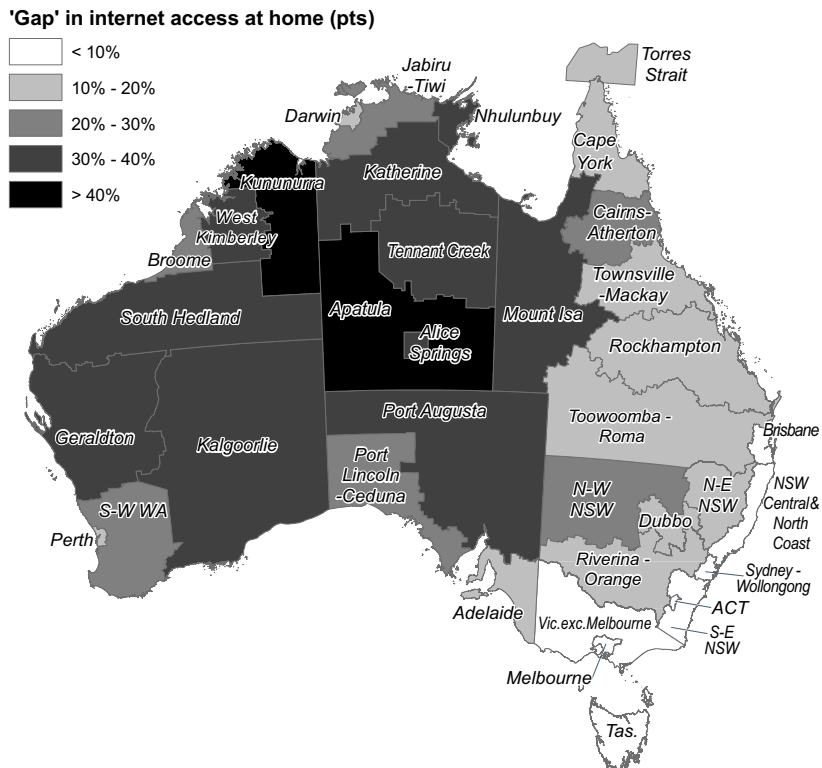
on temporary migration and potentially adverse conditions for international trade/shipping. The recession is likely to be drawn out, perhaps a ‘wheel-barrow’ shaped recovery or even an ‘extended w’ recession with a number of declines in the recovery phases associated with the second and subsequent waves of the disease. These waves may be macroeconomic in nature or geographically focussed (such as the second wave in Victoria after June 2020).

China may have saved Australia from a macroeconomic recession after the global financial crisis because of demand for resources and international students funding the university sector. However, there is unlikely to be a trade-lead recovery, and policy needs to be get ready for a prolonged recession with internationally-exposed industries being particularly affected.

Recessions tend to be periods of concentrated structural change and even social change in the labour market. As discussed above, there are several reasons to expect the Indigenous population to be particularly affected by the COVID-19 recession in the long run: historical social exclusion, sectoral concentration, and ongoing discrimination that collectively produce labour market scarring and discouraged workers.

Some commentators see one of the positive effects of COVID-19 has been the productivity effects of behavioural change in the labour market with the widespread usage and adoption of Information and Communication Technologies (ICT) and telecommuting. However, with respect to the Indigenous population this carries an underappreciated risk that reifies existing structural inequalities in the labour market and educational sector that reinforces Indigenous disadvantage post-COVID-19. The digital divide between Indigenous and non-Indigenous internet access is going to be an important dynamic in Indigenous disadvantage (see Hunter & Radoll 2020). Figure 6 illustrates the digital divide between Indigenous and non-Indigenous Australians in 2016 with Indigenous access to the internet being lower in all parts of the Australian continent systematically across the continent. Even in the south-east corner of Australia there is a substantial gap in the internet access of up to 10%. Hunter & Radoll (2020) also show, even in areas where Indigenous internet usage increases for some households between 2011 and 2016, a substantial number of other Indigenous households in those areas lose access to the internet over time in the same areas.

Figure 6. Digital Divide between Indigenous and non-Indigenous Australians, 2016



Sources: ABS 2016 Census (TableBuilder)

Indigenous workers were 2.4 times less likely than non-Indigenous workers to be working from home on Census day in 2016 (2.2 per cent as opposed to 5.3 per cent). This differential is partially reflecting the types of jobs Indigenous people have. For example, occupations that involve direct interactions with clients or material exchange in the physical world are less amenable to employment that allows working remotely. Once we adjust for the fact that Indigenous workers have different occupations, that are less likely to involve using ICT, there is still a substantial gap in the proportion of Indigenous workers working from home (3.5 per cent compared to 5.3 per cent). That is after adjusting for occupation, at the 3-digit level, non-Indigenous workers were still 1.6 times more likely to be working from home.

If the labour market pivots towards ICT technology this could exacerbate the employment disadvantage that is already emerging for Indigenous jobseekers in the first six months of the pandemic. The need for broader social isolation has led to some schools being closed down and an explicit shift to remote learning. Given the large

digital divide between Indigenous and non-Indigenous Australians, there is substantial risk for the equitable distribution of education and training. Remote learning may reinforce structural disadvantage for Indigenous children (in competing with non-Indigenous children) and lead to scarring in long term economic outcomes and further foreclosing future labour market options for Indigenous Australians.

The short-term economic effects of COVID-19 are dramatic and substantial, but it is important to not lose sight of the long-term challenges facing Indigenous people. If COVID-19 unwinds the labour market gains in closing the gaps between Indigenous and non-Indigenous Australians, this may presage the need for a more radical approach to Indigenous economic policy that takes into account persistent issues such as long-term social exclusion and discrimination.

References

- Australian Bureau of Statistics (ABS) (2019a), *Characteristics of Employment, Australia, August*, cat. no. 6333.0.00.001, ABS, Canberra.
- Australian Bureau of Statistics (ABS) (2019b), *National Aboriginal and Torres Strait Islander Health Survey, 2018-19*, cat. no. 4715.0, ABS, Canberra.
- ABS (2020a), *Business Indicators, Business Impacts of COVID-19, July 2020*, cat. no. 5676.0.55.003, ABS, Canberra.
- ABS (2020b), *Weekly Payroll Jobs and Wages in Australia*, cat no. 6160.0.55.001, ABS, Canberra. Biddle, N., Edwards, B., Gray, M. & Sollis, K. (2020), 'The initial impacts of COVID-19 on the self-employed', ANUPoll #33, ANU Centre for Social Research and Methods, Canberra. doi:10.26193/HLMZNW
- Altman, J. C., & Daly, A. E. (1992), *Do fluctuations in the Australian macroeconomy influence Aboriginal employment status?* (Discussion Paper No. 21). Canberra: Centre for Aboriginal Economic Policy Research, ANU. Retrieved from Centre for Aboriginal Economic Policy Research, ANU website: <http://hdl.handle.net/1885/145452>
- Borland, J. (2020), 'Scarring effects: A small piece of Australian evidence and a review of some main literature', Labour market snapshot #58, <https://sites.google.com/site/borlandjum/labour-market-snapshots>
- Community Affairs References Committee (2020), *Adequacy of Newstart and related payments and alternative mechanisms to determine the level of income support payments in Australia*, Australian Parliament House, Canberra. https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Community_Affairs/Newstartrelatedpayments/Report
- de Fontenay, C., Lampe, B., Nugent, J. & Jomini, P. (2020), *Climbing the jobs ladder slower: Young people in a weak labour market*, Productivity Commission Staff Working Paper, July.
- Department of Social Services. (2020), Senate Select Committee on COVID-19, Answer to Question on Notice SQ20-000453. <https://www.aph.gov.au/DocumentStore.ashx?id=6e2933ff-bf91-4b84-af44-107f111f5cb4>
- Flint, S. M., Davis, J. S., Su, J.-Y., Oliver-Landry, E. P., Rogers, B. A., Goldstein, A., ... Tong, S. Y. C. (2010), Disproportionate impact of pandemic (H1N1) 2009 influenza on Indigenous people in the Top End of Australia's Northern Territory. *Medical Journal of Australia*, 192(10): 617–622.
- Fowkes, L. (2019), The application of income support obligations and penalties to remote Indigenous Australians, 2013–2018, Working Paper No. 126, CAEPR, ANU, Canberra. <https://doi.org/10.25911/5c6e71dd22f05>
- Gani, R. & Leach, S. (2001), Transmission potential of smallpox in contemporary populations. *Nature*. 414 (6865): 748–751. doi:10.1038/414748a
- Goldsmith, A.H., S. Sedo, W. Darity & D. Hamilton (2004), The labor supply consequences of perceptions of employer discrimination during search and on-the-job: Integrating neoclassical theory and cognitive dissonance. *Journal of Economic Psychology*, 25(1): 15–39.
- Hunter, B. (2015), 'Whose business is it to employ Indigenous workers?', *Economics and Labour Relations Review*, 26(4): 631–651, DOI:10.1177/1035304615598526.

- Hunter, B.H. & Carmody, J. (2015), 'Estimating the Aboriginal population in early colonial Australia: the role of chickenpox reconsidered', *Australian Economic History Review*, 55(2): 112–138.
- Hunter, B., Foley, D. & Arthur, W.S. (2019), 'Economic life' in W.S. Arthur and F. Morphy (eds) *Macquarie Atlas of Indigenous Australia*, Macquarie Library Pty Ltd, Sydney.
- Hunter, B.H. & Gray, M.C. (2001), Indigenous Labour Force Status Re-visited: Factors associated with the discouraged worker phenomenon. *Australian Journal of Labour Economics*, 4(2): 115-37.
- Hunter, B. & Gray, M. (2012), Indigenous Labour Supply following a Period of Strong Economic Growth. *Australian Journal of Labour Economics*, 15(2): 141–59.
- Kalb, G., Le, T., Hunter, B. & Leung, F. (2014), Identifying Important Factors for Closing the Gap in Labour Force Status between Indigenous and Non-Indigenous Australians. *The Economic Record*, 90(291): 536–50.
- Markham, F. (2020), COVID-19 and the Indigenous income crisis: Looking back and looking forward. In F. Markham, D. Smith, & F. Morphy (Eds.), *Indigenous Australians and the COVID-19 crisis: Perspectives on public policy*. Topical Issue no. 1/2020, Centre for Aboriginal Economic Policy Research, ANU, Canberra (pp. 6–9). <https://doi.org/10.25911/5e8702eclfba2>
- Markham, F., & Biddle, N. (2018), Income, poverty and inequality. 2016 Census Paper no. 2, Centre for Aboriginal Economic Policy Research, ANU, Canberra. <http://caepr.cass.anu.edu.au/research/publications/income-poverty-and-inequality>
- Mavromaras, K., McGuinness, S & Fok, YK (2009), 'Assessing the incidence and wage effects of overskilling in the Australian labour market', *Economic Record*, 85(268): 60–72.
- O'Halloran, D., Farnworth, L., & Thomacos, N. (2019), Australian employment services: Help or hindrance in the achievement of mutual obligation? *Australian Journal of Social Issues*. Early online publication. <https://doi.org/10.1002/ajs4.82>
- Radoll, P. & Hunter, B. (2017), The Dynamics of the digital divide. *Working Paper 120*, CAEPR, The ANU, Canberra.
- Sanche, S., Lin, Y., Xu, C., Romero-Severson, E., Hengartner, N., & Ke, R. (2020), High Contagiousness and Rapid Spread of Severe Acute Respiratory Syndrome Coronavirus 2. *Emerging Infectious Diseases*, 26(7): 1470–1477. <https://dx.doi.org/10.3201/eid2607.200282>
- Shirodkar, S. (2020), Bias against Indigenous Australians: Implicit association test results for Australia [online]. *Journal of Australian Indigenous Issues*, 22(3-4): 3–34.
- Shirodkar, S., Hunter, B. & Foley, D. (2018), Ongoing growth in the number of Indigenous Australians in business. *Working Paper 125*, CAEPR, The ANU, Canberra.
- Smith, D. (2020), Governing the pandemic: Implications for Indigenous self-determination and self-governance. In F. Markham, D. Smith, & F.

Morphy (Eds.), Indigenous Australians and the COVID-19 crisis: *Perspectives on public policy* (pp. 10–13). Topical Issue 1/2020. Centre for Aboriginal Economic Policy Research, ANU. Retrieved from <https://doi.org/10.25911/5e8702ec1fba2>

Wilkins R. (2020), Who's hit hardest by the economic effects of COVID-19. *Research Insights 10/20* Melbourne Institute. The University of Melbourne, Melbourne.