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# COVID-19 and Tasmanian Youth Unemployment: A Policy Recommendation

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## COVID-19 and Tasmanian Youth Unemployment: A Policy Recommendation

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#### **Abstract**

The unemployment rate in Australia is expected to be at historically high levels because of the Covid-19 health crisis and policies associated with social distancing. Youth unemployment is generally twice the general unemployment rate. Tasmania youth unemployment is likely to reach 25-30% by the end of the year as the main industries affected by this crisis are tourism and hospitality, which employ a large share of young workers. This will have a significant impact on future skills and social costs for years to come. The literature on youth unemployment indicates that long-term unemployment after high school leads to higher structural unemployment, poverty, crime, drug and alcohol abuse and welfare dependency. Consequently, it is vital to provide better incentives for upskilling the youth population in Tasmania. Achieving this imperative support will avoid a cohort of structural unemployment in Tasmania and higher income inequality.

<sup>\*</sup>The views in this paper are those of the authors and do not necessarily reflect the views of the Federal Reserve Bank of Dallas or the Federal Reserve System.

#### 1. Introduction

The COVID-19 health crisis and the consequent isolation policies have created the largest global economic crisis since the great depression of 1930. The immediate impact on job markets has been severe, and can be expected to be long-lasting, The International Monetary Fund (IMF) has recently estimated that the global economy is expected to sharply decline by 5.2% in 2020 (IMF, 2020). Australian GDP growth is expected to decline by around 6.1% this year (RBA, 2020). The Reserve Bank of Australia (RBA) is forecasting 10% unemployment for Australia by mid-2020, (RBA 2020). The unemployment rate without considering the JobKeeper stimulus program would be around 15%. Tasmania is expected to have high levels of unemployment, as it more heavily relies on the tourism and leisure industry, which is particularly affected by the current pandemic.

Figure 1 shows the number of employed people in Australia (in thousands) since January 2015. The number of Australians employed sharply decreased in March 2020 as a response to the COVID-19 lockdown restrictions imposed by the Government to contain the spread of the virus.



Figure 1: The impact of COVID-19 on Australian employment '000

Data source (Australian Bureau of Statistics, cat:6202.0)

More alarming is the fact that in periods of economic recession, youth unemployment grows more rapidly as new participants of the labour force lack skills and experience, and therefore find it harder to obtain employment; Verick (2009) and Junankar (2015). Empirical evidence shows that youth unemployment generates a large and significant wage penalty up to several decades later;

Gregg and Tominey (2005) & Mroz and Savage (2006). Youth unemployment is also highly correlated with crime -- mainly burglaries, thefts and drug offences; Fougere, Pouget and Kramarz (2009). There is also evidence that those unemployed, remain unemployed for longer periods after the economic recovery, rising structural unemployment rates; Guichard and Rusticelli (2010). Moreover, the persistence of people neither in employment or education or training (NEET) increases during crises periods; Bruno, Marelli, Signorelli (2014).

The main factors associated with existing unemployment are employment experience and educational qualifications; Carroll (2006). As pointed out in Verick (2009), the job crisis may also be seen as an opportunity to tackle underlying factors affecting educational and skills attainment. The fact that Tasmania has lagged behind the rest of Australia in terms of educational attainment and the skilled labour force is not news.

In this policy paper, we argue that the state government should consider important incentives (potentially income support) for young people to attain higher levels of education and upskilling activities in an unprecedented period of high youth unemployment expected to ease only in 2022. For that purpose, it is important to engage the State government, the private sector, the University of Tasmania and TAFE Tasmania to discuss adequate programs to engage tertiary and higher education for young Tasmanians who generally are not engaged in post-college education.

In Section 6, we propose a possible way to finance this program by issuing a state bond to support youth upskilling, taking advantage of the historically low interest rates in the bond market. We also argue that a good policy incentive for young Tasmanians should make sure the relative government monetary incentives for young Tasmanians on full-time education or upskilling programs are higher than that for those young Tasmanians not pursuing upskilling activities. Also, monetary incentives may not be enough, and upskilling campaigns may be necessary to break the stigma or self-esteem burden around tertiary education for some disadvantaged young Tasmanians.

#### 2. The impact of COVID-19 on Tasmanian youth unemployment: Key industries affected

By the beginning of 2020, the Tasmanian economy had been experiencing rapid development. The Tasmanian economy recorded the fastest rate of growth across all state and territory economies in 2018/19; Gross State Product (GSP) in Tasmania grew by 3.6 per cent over the year – the fastest

pace in 15 years (ABS, 2019). Some of the industries pushing this growth reflect Tasmanian fiscal dependency. However, in the private sector, Accommodation & Food, and Arts & Recreation, along with Rental -- industries feeding into the Tourism sector -- are big contributors to the +Tasmanian economic growth. Tasmanian reliance on the tourism and recreation industries has been growing. Rises in Accommodation and Food Services gross value added (GVA) (5.6%) and Arts and Recreation Services GVA (6.0%) reflect growth in both discretionary spending by residents and increased tourism activity. By September 2019 Tasmania had a total of 1.32 million international and interstate visitors spending \$2.08 billion in the State\_(Tourism Tasmania, 2019).

Moreover, some of the main employers in Tasmania are Retail Trade (10.9%) and Accommodation & Food Services (7.6%); (ABS, 2016b).<sup>2</sup> The proportion of people employed in these industries in Tasmania is greater than in the other great capital cities, as shown in Figure 4 in the Appendix. These reflect the growth that Tasmania has been experiencing in recent years, particularly in Tourism. Combined, Retail Trade, Accommodation & Food Services, and Construction employ a quarter (26.1%) of the Tasmanian labour force.

Importantly, as shown in Denny (2017), the Retail Trade and Accommodation & Food Services industries mainly is composed by young labour force (15-34 yrs.). Figure 2 shows the workforce age and gender structure for Accommodation & Food Services and Retail Trade industries in Tasmania for 2016. Age is measured on the vertical axis, while the coloured distributions show the gender -- orange for females and blue for males. It is clear to see that these two industries mainly employ young workforce in the State. An interesting comparison with other industries is shown in Figure 5 in the Appendix.

Figure 2: Key industries for young Tasmanian employment

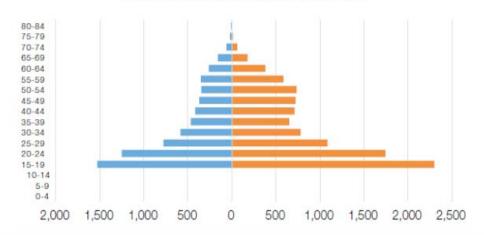
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<sup>&</sup>lt;sup>1</sup> Health Care & Social Assistance account for 13% of industry gross value added (GVA). There has also been an increase in public investment, particularly through infrastructure spending.

<sup>&</sup>lt;sup>2</sup> With the main employer being Health Care & Social Assistance (14.2%)



#### Accommodation and Food Services



Source: Denny (2017)

As these industries have been severely affected by the lockdown restrictions imposed due to the COVID-19 crisis, we expect to see higher youth unemployment. The RBA confirms that the rate of job loss between March and April 2020 Australia wide was largest for young people and in industries most affected by government restrictions, such as Accommodation & Food Services and Arts & Recreation (RBA, 2020).

Figure 2 also adds a gender dimension to the analysis. The most affected industries predominantly hire female young Tasmanians. Higher unemployment in these industries will affect female workers disproportionally and increase gender income inequality in the State.

In particular, the Tasmanian youth unemployment rate (15-24 yrs. old) in April 2020 was 13.8%; equivalent to 5800 unemployed young Tasmanians. Moreover, the unemployment rate is 12% for young Tasmanians not attending full-time education and 20% for those attending full-time education. The proportion of young Tasmanians not attending full-time education who are employed has dropped by 11.9% from 79.1% in October 2019 to 69.7% in April 2020.

Unemployment rates in the West and North West of the State have always been relatively higher than other regions in Tasmania, while participation rates are considerably lower and have been dropping. However, Brotherhood of St. Laurence (2019) youth unemployment hotspots ranked Tasmania's South East (including Oatlands, Huonville, Swansea, Nubeena), the Hobart region (including Margate, New Norfolk, Dunalley, Richmond) and the West and North West of Tasmania (including Burnie, Devonport and Queenstown) between the top 20 worst hotspots for youth unemployment around the nation in 2019 with youth unemployment rates of 17.8%, 16.9% and 15% respectively.

From the estimated population of 63100 young Tasmanians (between 15 and 24 years of age) in April 2020, an estimated 5800 young Tasmanians are unemployed, and a further 20900 are not in the labour force (ABS, 2020). If the youth unemployment rate increases to 25%, 10550 young Tasmanian could be without jobs. Moreover, the newest cohort of young Tasmanians completing education programs in 2020 will have lower chances to commence work and join the labour force.

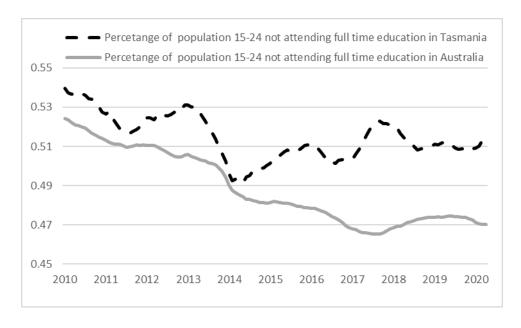
#### 3. Tasmanian youth education attendance way below the Australian average

Tasmania has one of the lowest educational attainment levels in Australia. Around 28% of Tasmanians aged 15 years and over have completed only up to Year 10 of secondary education. This figure is 10% higher than the proportion of Australians aged 15 years and over who have completed only up to Year 10 of secondary education. More concerning is the fact that 45% of Tasmanians aged 15 years and over have not completed education beyond Year 12 of secondary education, implying that the proportion of Tasmanians with secondary education as their highest educational attainment is 12% higher than the Australia-wide proportion (ABS, 2016a).

At the school level, the Programme for International Student Assessment (PISA) results for 2018 report that Tasmania had the lowest proportion of high performers in Australia and the second highest proportion, behind the Northern Territory, of low performers in each of the three assessment areas: reading, maths and science.

In terms of post-secondary education, while 22% of the Australian population aged 15 and over have completed a bachelor's degree or above, only 16% of the Tasmanian population aged 15 and over have completed a bachelor's degree or above. The percentage of the population between 15-24 not attending Full-time education has increased since 2014 and the gap with respect to the Australian benchmarks has broadened. Figure 3 depicts the percentage of young Australians attending Full-time education Australia-wide and for Tasmania in the last ten years. While the proportion of young Tasmanians not attending full-time education has always been higher than that for Australia, the gap between both has considerably increased since 2014.

Figure 3: Percentage of young Australian (15-24) attending Education: Australia vs. Tasmania



Source: Australian Bureau of Statistics. The series were converted to 12-month moving average

There were around 33,600 people between 15-24 not attending full-time education in Tasmania in April 2020, that is 53.2% of young Tasmanians are not attending full-time education – relative to 47% Australia-wide. More concerning is the fact that from those young Tasmanians not attending

Full-time education, around 7,000 are not in the labour force (NILF). This implies that 20.8% of the young Tasmanian population not attending Full-time education is also not in the labour force (ABS, 2020).

Pre-COVID-19 Tasmania was facing a skills shortage, and population taskforce strategies were targeted to young skilled migration; Department of State Growth (2015). In the current COVID-19 environment, we need to skill and upskill the Tasmanian population, particularly the young Tasmanian population.

#### 4. Social consequences of youth unemployment

The consequences of youth unemployment have been associated in the literature with the following negative outcomes: poverty, fiscal erosion, increase in crime and delinquency, increase in mental health issues and suicide.

Hammarstroem (1994a) finds that long-term youth unemployment increases physical and psychological symptoms, as well as smoking, use of cannabis and illicit drug habits. It also increases systolic blood pressure, alcohol consumption and the crime rate. Hammarstroem (1994b) documents the literature on the consequences of youth unemployment arguing that it is associated with minor psychological disorders, health deteriorating behaviour and increased health care consumption; see also Banks and Jackson (1982). Morrell et al (1993), Krupinski et al (1994) and Gilchrist et al (2007) find evidence of a correlation between suicide and unemployment rates for 15-24-year-old Australian males.

Freedman and Wise (1982) found that youth unemployment is associated with increases in youth crime, drug use, violence in schools, and youth suicide. Narayan and Smyth (2004) found that fraud, homicide and motor vehicle theft are cointegrated with male youth unemployment and real male average weekly earnings. Moreover, Chapman et al (2004b) show a strong positive relationship between criminal activity and the extent of youth male long-term unemployment, as well as a negative association between criminal activity and high school completions for Australia. Youth unemployment is a risk indicator for alcohol and tobacco and illicit drugs consumption.

There is ample evidence showing that having been unemployed in the past increases the chances that young Australians will be unemployed again in the future; Dunsmuir et al (1989), Junankar and Wood (1992), Knights et al (2000). Chapman and Gray (2004a) found that while few and short unemployment experiences do not affect future labour market outcomes, frequent and longer unemployment experiences increase significantly the chances of a young person being unemployed and under-employed in the future. Gray (2000) found that the experience of multiple long-term spells of unemployment had a negative effect on hourly wages of young Australians.

Therefore, reducing unemployment, and particularly youth unemployment, has important social returns.

#### 5. The welfare assistance for the young is insufficient for upskilling

Currently, an unemployed Australian aged over 22 qualifies to receive a Newstart Allowance – this includes those unemployed, temporarily unable to work or study. Full-time students or apprentices 24 years of age or younger qualify for youth allowance payments, while full-time students and apprentices 25 years old or over qualify for Austudy payments. For example, as of December 2019, there were 646 Tasmanians receiving Austudy, 523 Tasmanians receiving Abstudy, 2651 Tasmanians receiving youth allowance (as student or apprentice), 3275 receiving youth allowance (due to other reasons), and 21143 Tasmanians on Newstart allowance (DSS, 2020). As a comparison, in 2013 in Tasmania, there were 1238 people receiving Austudy, 1300 on short-term and 2706 on long-term Youth Allowance payments, and 5675 on short-term and 15063 on long-term Newstart payments (Australian Government, 2020).

Since the COVID-19 crisis, the government stimulus package includes 2 rounds of a one-off \$750 to all Australians receiving social assistance (with the first round on 31<sup>st</sup> March and the second on 13<sup>th</sup> July); a subsidy for trainee and apprentice wages between Jan and September 2020; and in addition, from 27<sup>th</sup> April, and for six months, the government is making fortnightly payment of \$550 to recipients of income support.<sup>3</sup> From 20 March 2020, JobSeeker Payment replaced Newstart Allowance as the main working-age income support payment for those who have the

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 $<sup>^3\, \</sup>underline{\text{https://www.rba.gov.au/publications/fsr/2020/apr/annex-selected-policy-responses-to-the-covid-19-pandemic.html}$ 

capacity to work. Sole traders and self-employed people whose income has reduced due to the health crisis as well as carers for COVID-19 infected or in isolation are now included in this category.

The JobKeeper wage subsidy allowed many Australians to avoid losing their jobs during COVID-19 restrictions. Moreover, the Tasmanian Government has announced a package of assistance for temporary and provisional visa holders who have lost their jobs as a consequence of COVID-19 restrictions, and who are not eligible for Australian Government Support. The State Government has also introduced the Rapid Response Skills Initiative (RRSI) which provides individuals up to \$3000 towards the cost of training if they lost their jobs because they have been made redundant, the place they worked has closed, or the employer had to let staff go. The funding can be used to pay for training (including licenses) or for employment advice with specific registered training organisations (RTOs) to improve employment and training prospectus. The Tasmanian Government has also established the Skills Matching Service to help Tasmanians who have lost their jobs due to Covid-19 crisis to connect with employers needing staff, In addition, the Train Now Fund Initiative provides subsidised training; a registered training organisation (RTO) can apply for funding in partnership with an employer or industry association.

We argue that the incentives for upskilling in an environment of high unemployment are not right and that monetary incentives for those deciding to undertake further education or upskilling should be relatively higher than the monetary incentives for those unemployed or not in the labour force deciding not to upskill. For example, a single young individual would currently receive \$1115 (\$565.7 plus \$550) fortnightly on Newstart, but only \$1017 (\$462.5 plus \$550) fortnightly on Austudy and Youth Allowance. Currently, those undertaking full-time education, or an apprenticeship receive slightly lower government payments than those not undertaking any upskilling activity. Not only should this be the other way around, but the relative incentive for those upskilling be much larger than for those choosing not to, as clearly the current payments are apparently not enough in Tasmania to encourage a skilful young workforce.

The Federal Government announced that the top-up for recipients of income support was only temporarily due to the health emergency. Post-COVID-19, these government payments may return to pre-COVID-19 values. However, much debate has been generated on whether the Newstart payments received were enough even before 2020.

Even though these stimulus packages are important for short-term support, they need to set the right incentives for long-term social and economic outcomes. We propose a state bond to finance youth upskilling, taking advantage of the historically low-interest rates in the bond market. This financial incentive for young Tasmanians should reach young Tasmanians who traditionally don't engage with post-college education or skilling; the monetary incentive should be relatively higher for young Tasmanians on full-time education or upskilling programs than those for young Tasmanians not pursuing upskilling activities. We also argue that monetary incentives may not be enough, and upskilling campaigns may be necessary to break the stigma or self-esteem burden around tertiary education for some young Tasmanians.

### 6. Financing income support for youth unemployed: A historical opportunity for a State bond

We propose an income support scheme in the form of a non-refundable income allowance for all young unemployed Tasmanians who traditionally do not engage in tertiary education and who will undertake a full-time upskilling course with a duration of between 6 months to 3 years consecutive -- specifically tertiary education (University or TAFE). We believe this income support should be considerably higher than the income support that an unemployed Tasmanian receives without engaging in an upskilling program. The upskilling incentive will need to be at least 50 per cent higher than the income support received for youth unemployment. Any other Federal income support will be built-in into this total annual income.

Potentially \$100-\$200 million would be required to finance this initiative which will provide suitable upskilling incentives in the form of income support for at least 5,000 young Tasmanians (for two consecutive years). In short, we proposed a total income of around \$20,000-\$30,000 annually for those disadvantaged young unemployed Tasmanians to build the skills for the future. The main aim of this scheme is to incorporate into tertiary education disadvantaged young Tasmanians who have been traditionally excluded from post-college education. The expected outcome of this scheme is to reduce inequality in Tasmania across regions by increasing the skilled young population.

Interest rates in most developed countries are close to zero (including in Australia). More importantly, most developed central banks have been aggressively buying government bonds to

lower the long-term interest rate (and have been indicating further purchases). For example, the Reserve Bank of Australia started buying government bonds for the medium and long term since early 2020. This policy results in a historically low-interest rate for Australian 10-year government bond yield of less than 1% annually. This means that the interest rate for a state bond issued by the Tasmanian Government to support youth unemployed willing to upskill themselves is likely to be very low as government bonds compete in the market. <sup>4</sup> The social return of upskilling youth unemployed Tasmanians is very high and well documented by the literature review in Section 4.

#### 7. Conclusions

The Covid-19 pandemic has already exacerbated youth unemployment in Tasmania and this situation is likely to persist for a few years. Youth unemployment is associated with a very high social cost, including, but not limited to, increase in chronic unemployment, welfare dependency, rise in crime, drug and alcohol abuse, and higher suicide rates for this group. We argue that the Tasmanian Government should consider additional income support higher than the standard unemployment benefit for this cohort in order to encourage low-income Tasmanians aged between 17-25 years to attend tertiary education.

We believe that more than 10,000 Tasmanians aged 17-25 will be unemployed, and without the possibilities of attending tertiary education next year due to poverty and other social barriers. Given the fact that now interest rates are at historically low levels in Australia, we argue that the Tasmanian government should heavily invest in such a program. One possible mechanism would be the bond market. The program can also be extended for other unemployed groups to upskill them while unemployment rates are high. This is consistent with the spare capacity in tertiary education vacancies due to the decline of international students.

This policy proposal requires a broader discussion amongst the Tasmanian Government, tertiary education providers and the private sector to ensure this economic slowdown does not permanently reduce productivity in Tasmania.

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<sup>&</sup>lt;sup>4</sup> Note that the risk premium is an additional cost to this historically low interest rate for the Tasmanian Government and therefore further analysis is required.

#### **Appendix A: Additional Graphs**

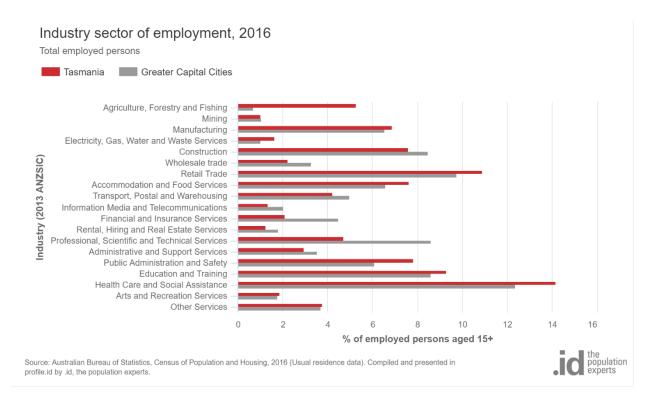


Figure 4: Main industries in Tasmania

Source: <a href="https://profile.id.com.au/tasmania/industries">https://profile.id.com.au/tasmania/industries</a>



Figure 5: TAS employment by industry

Source: -- Denny (2017)

#### References

ABS, QuickStats Tasmania, 2016a. Australian Bureau of Statistics.

ABS. Census of Population and Housing, 2016b (Usual Residence Data). Australian Bureau of Statistics. <a href="https://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/5220.0Main+Features22018-19?OpenDocument">https://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/5220.0Main+Features22018-19?OpenDocument</a>

ABS. Australian National Accounts: State Accounts, 2018-2019. Australian Bureau of Statistics. <a href="https://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/5220.0Main+Features22018-19?OpenDocument">https://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/5220.0Main+Features22018-19?OpenDocument</a>

ABS 6202.0 — Labour Force, Australia April 2020. Australian Bureau of Statistics. <a href="https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/6202.0Apr%202020?OpenDocument">https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/6202.0Apr%202020?OpenDocument</a>

Australian Government Services Australia, 2020. A guide to Australian Government payments. <a href="https://www.servicesaustralia.gov.au/organisations/about-us/publications-and-resources/guide-australian-government-payments">https://www.servicesaustralia.gov.au/organisations/about-us/publications-and-resources/guide-australian-government-payments</a>

Brotherhood of St. Laurence (2019). Smashing the avocado debate. Australia's youth unemployment hotspots. March 2019. <a href="http://library.bsl.org.au/jspui/bitstream/1/11134/2/BSL">http://library.bsl.org.au/jspui/bitstream/1/11134/2/BSL</a> Smashing the avocado debate youth unemployment hotspots Mar2019.pdf

Bruno, G. S., Marelli, E., & Signorelli, M. (2014). The rise of NEET and youth unemployment in EU regions after the crisis. *Comparative Economic Studies*, *56*(4), 592-615.

Carroll, N. (2006). Explaining unemployment duration in Australia. *Economic Record*, 82(258), 298-314.

Chapman, B., & Gray, M. (2004a). Youth unemployment: Aggregate incidence and consequences for individuals. UNSW Press.

Chapman, B., Weatherburn, D., Kapuscinski, C. A., Chilvers, M., & Roussel, S. (2004b). Unemployment duration, schooling and property crime.

Denny, L. (2017). Insight One: The Changing Nature of Work in Tasmania. Institute for the Study of Social Change (ISC), University of Tasmania.

Department of State Growth (2015). Population Growth Strategy. Tasmanian Government. <a href="https://www.stategrowth.tas.gov.au/">https://www.stategrowth.tas.gov.au/</a> data/assets/pdf\_file/0014/124304/Population\_Growth\_Strategy\_Growing\_Tas\_Population\_for\_web.pdf

Dixon, R., Shepherd, D., & Thomson, J. (2001). Regional unemployment disparities in Australia. *Regional Studies*, *35*(2), 93-102.

DSS (2020) DSS Payment Demographic Data [Online], data.gov.au, Canberra, https://data.gov.au/data/dataset/dss-payment-demographic-data, Accessed 3 June 2020

Dunsmuir, W., Tweedie, R., Flack, L., & Mengersen, K. (1989). Modelling of transitions between employment states for young Australians. *Australian Journal of Statistics*, 31(1), 165-196.

Furnham, A. (1994). The psychosocial consequences of youth unemployment. Youth unemployment and society, 1, 199-223.

Fougère, D., Kramarz, F., & Pouget, J. (2009). Youth unemployment and crime in France. *Journal of the European Economic Association*, 7(5), 909-938.

Freeman, R. B., & Wise, D. A. (1982). The youth labor market problem: its nature causes and consequences. In *The youth labor market problem: Its nature, causes, and consequences* (pp. 1-16). University of Chicago Press.

Gilchrist, H., Howarth, G., & Sullivan, G. (2007). The cultural context of youth suicide in Australia: Unemployment, identity and gender. *Social Policy and Society*, 6(2), 151-163.

Görlich, D., Stepanok, I., & Al-Hussami, F. (2013). *Youth unemployment in Europe and the world: Causes, consequences and solutions* (No. 59). Kiel Policy Brief.

Gregg, P., & Tominey, E. (2005). The wage scar from male youth unemployment. *Labour Economics*, 12(4), 487-509.

Guichard, S., & Rusticelli, E. (2010). Assessing the impact of the financial crisis on structural unemployment in OECD countries.

Hammerstein, A. (1994a). Health consequences of youth unemployment. *Public Health*, 108(6), 403-412.

Hammarström, A. (1994b). Health consequences of youth unemployment—review from a gender perspective. *Social Science & Medicine*, *38*(5), 699-709.

IMF. World Economic Outlook April 2020: The Great Lockdown, April 2020. <a href="https://www.imf.org/en/Publications/WEO/Issues/2020/04/14/weo-april-2020">https://www.imf.org/en/Publications/WEO/Issues/2020/04/14/weo-april-2020</a>

Junankar, P. N., & Wood, M. (1992). The Dynamics of Youth Unemployment: An Analysis of Recurrent Unemployment. In *Economics of the Labour Market* (pp. 152-172). Palgrave Macmillan, London.

Junankar, P. R. (2015). The impact of the Global Financial Crisis on youth unemployment. In *Economics of the Labour Market* (pp. 173-203). Palgrave Macmillan, London.

Knights, S., Harris, M. N., & Loundes, J. (2002). Dynamic relationships in the Australian labour market: heterogeneity and state dependence. *Economic Record*, 78(242), 284-298.

Krupinski, J., Tiller, J. W., Burrows, G. D., & Hallenstein, H. (1994). Youth suicide in Victoria: a retrospective study. *Medical Journal of Australia*, *160*(3), 113-116.

Morrell, S., Taylor, R., Quine, S., & Kerr, C. (1993). Suicide and unemployment in Australia 1907–1990. *Social science & medicine*, *36*(6), 749-756.

Mroz, T. A., & Savage, T. H. (2006). The long-term effects of youth unemployment. *Journal of Human Resources*, 41(2), 259-293.

Narayan, P. K., & Smyth\*, R. (2004). Crime rates, male youth unemployment and real income in Australia: evidence from Granger causality tests. *Applied Economics*, *36*(18), 2079-2095.

RBA Statement on Monetary Policy – May 2020. Reserve Bank of Australia. <a href="https://www.rba.gov.au/publications/smp/2020/may/domestic-economic-conditions.html">https://www.rba.gov.au/publications/smp/2020/may/domestic-economic-conditions.html</a>

Tourism Tasmania (2019). Tourism Snapshot, year ending September 2019. <a href="https://www.tourismtasmania.com.au/data/assets/pdf\_file/0006/86199/2019-Q3-Tasmanian-Tourism-Snapshot-September-2019-TVS,-IVS-and-NVS....pdf">https://www.tourismtasmania.com.au/data/assets/pdf\_file/0006/86199/2019-Q3-Tasmanian-Tourism-Snapshot-September-2019-TVS,-IVS-and-NVS....pdf</a>

Verick, S. (2009). Who is hit hardest during a financial crisis? The vulnerability of young men and women to unemployment in an economic downturn.