

PREVENTING SCARRING IN THE POST-PANDEMIC YOUTH LABOUR MARKET

DISCUSSION PAPER

JULY 2022

EXECUTIVE SUMMARY

The Australian labour market has rebounded strongly from the initial shock of the COVID-19 pandemic and the youth unemployment rate is close to a record low. But history teaches us that recessions can impart 'scarring effects' on the careers of young people for years after the event. This paper identifies priority areas where policy change could mitigate scarring – both following COVID-19 and in the aftermath of future economic downturns.

A companion paper, "[The Effect of the COVID-19 Recession on the Youth Labour Market in Australia](#)" (e61 2022) uses timely and granular information on the Australian youth labour market to identify groups that are vulnerable to scarring. Furthermore, in this paper we investigate the risk that individuals from different backgrounds will end up not in employment, education or training (NEET).

Across both papers, we identify several groups of young individuals that are vulnerable to economic shocks including: those with a NEET history, those not completing Year 12 education, those having a disability or long-term health condition, and Aboriginal and Torres Strait Islanders.

There are two types of barriers that prevent individuals who want to work and train from doing so - skill-based and opportunity-based barriers. Economic shocks exacerbate the effect of these barriers, and the vulnerable groups identified are particularly affected by them.

Skill-based barriers	Opportunity-based barriers
Barriers that make it difficult to develop skills that are relevant to work and can therefore make it more difficult to get a job or change jobs.	Barriers that exclude people from job opportunities due to employer perceptions, discrimination, or unequal access.

Effective policy interventions to reduce scarring must target barriers that effectively shut young individuals out of work or educational opportunities – and that is the intention of the policies discussed.

The paper also raises the possibility that some policy interventions can unintentionally raise barriers to labour market entry by imposing additional costs on employers or reinforcing discriminatory practices. As a result, the policy areas discussed constitute priorities for further investigation to limit labour market scarring from both the pandemic and future economic downturns.

Given these types of barriers, the priority policy directions that warrant further investigation are:

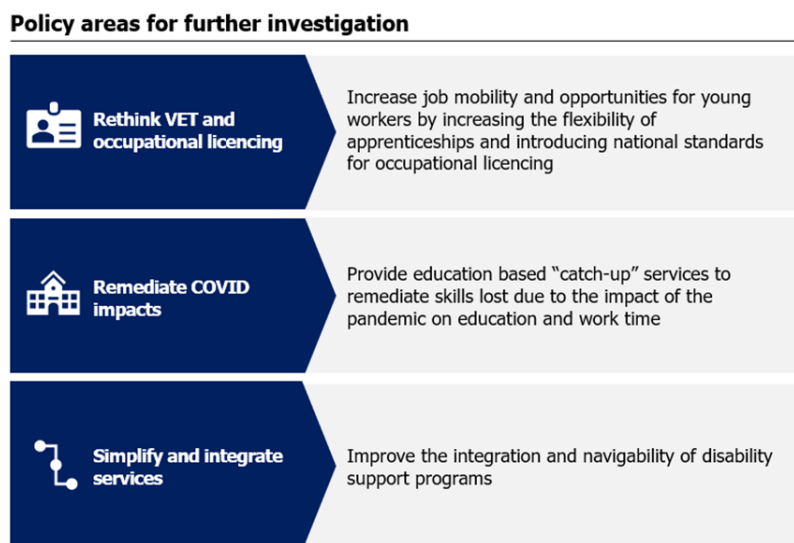


Figure 1: Policy areas summary

The focus is to identify priority areas for further evidence-based research rather than explicit policy recommendations. Such research requires more granular, timely and high-quality data – data that can help to evaluate policies in a way that captures the full lifecycle of an individual’s employment and education experience.

The Australian data environment has improved considerably in recent years with the increasing quantity and availability of integrated microeconomic data, especially at the Federal level. However, it will take time to build up the necessary “time series” information and researcher knowledge for robust policy recommendations. Furthermore, domain-specific information is required to assess specific interventions and this information is typically held at a State-level or by private providers. Availability of this form of data would allow a deeper evaluation of the policy directions suggested here.

An overarching operational recommendation is Government support for data standardisation by private social enterprises in this area and integration of these data into the DataLab hosted by the Australian Bureau of Statistics (ABS).

A full set of social data standards would ensure that the demographic information and program relevant information (i.e. health status, job search experience, or subjective happiness before and after the program) is collected in a consistent manner across private providers. ABS support would then ensure that the privacy of respondents is protected, while the linking of data would allow private providers and researchers to undertake robust evaluations of private and government interventions.

There is an opportunity to avoid the mistakes of past economic shocks where we only realised the impact on youth after the fact. Using the findings in [these reports](#), and the accompanying [data visualisation](#), we can provide insights and indicators to proactively anticipate risks to young people in the labour market and intervene in a timely manner.

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BACKGROUND ON SCARRING

In e61 (2022) we provide the background for why there is a risk of generational labour market scarring associated with the COVID-19 pandemic despite the strong labour market recovery. The disjointed nature of recessions and recoveries has been shown to drive wage scarring among young people (e.g. Andrews, et al. 2020; Yagan 2019; Raaum and Røed 2006; Causa, Luu and Abendschein 2021) and COVID-19 has caused similar disruptions.

This paper explores policies that may prevent scarring of young people's career prospects in the post-COVID world, and in the face of future economic downturns. Such scars work through four channels (e61 2022).

Losing the next rung on the job ladder – lower mobility and match quality

Recessions cause a decrease in the quality of first job and/or quality of job match obtained by new entrants. Getting knocked off the job ladder during one's formative years can lead to persistent reductions in future wages and job quality (Andrews, et al. 2020).

Delayed labour market entry

Recessions cause delayed entry into employment, for both first-time entrants and for those re-entering the labour market. Time spent out of work underpin a deterioration in worker skills and motivation and potential stigma by employers. Individuals who already face discrimination in the labour market are more vulnerable to scarring from this channel (Zuccotti 2018).

Investing in the right skills – human capital and skill loss

During a recession access to education traditionally offers a means for motivated young people to build skills and indicate that they are work ready. However, the interruption associated with COVID-19 was different – with access to high quality education restricted during the pandemic. This factor interplays with the two above, with interruptions to education as well as work driving a sharper decline in human capital attainment for individuals.

Psychological scarring

By reducing confidence and convincing young people to not aim as high when it comes to their career expectations, such downturns can push young people onto inferior job pathways (Mann, et al. 2020). Furthermore, the experience of living through a recession can make individuals persistently pessimistic or uncertain about future economic prospects, changing spending patterns (Penrose and La Cava 2021) and making future CEOs more conservative about investment (Schoar and Zuo 2017).

In this paper we consider policies to ameliorate these scarring effects by addressing unnecessary skill loss and reducing the barriers associated with discrimination or information asymmetries in the labour market.



This paper focuses on labour market scarring through the avoidable loss in wages and productivity associated with an economic shock. But these are not the only policy-relevant costs: if young people are excluded from work and education this can lead to serious issues associated with poor mental and physical health, social isolation and lost social networks. It is thus important to consider these broader costs when designing policy.

THE RISK OF FALLING OUT OF WORK AND EDUCATION

Some young Australians may be particularly vulnerable to scarring effects due to the relative risk of displacement from employment and education, or a lack of depth in their social networks.

Work presented in Annex 1 identifies those who are most at risk of falling into a situation where they are not in employment, education, or training (NEET), bringing into closer focus: those with prior displacement from the labour market, those with long-term health and disability conditions[1], and Aboriginal and Torres Strait Islanders.

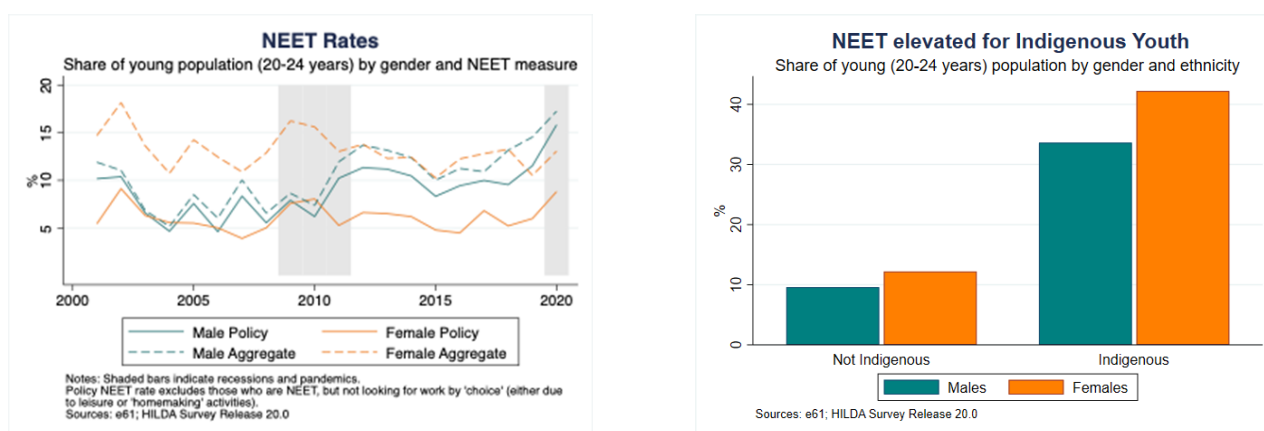


Figure 2: Rising non-voluntary NEET status

The analysis attempts to tease out the *risk* of falling into NEET for a 20-24 year old given their different characteristics - their health status, ethnicity, gender, experience with being in NEET, region, partnership status, education number of children, and other factors associated with their family.

Analysing such risks gives an indication of the groups that are likely to be vulnerable to labour market scarring, or that appear to face significant barriers to entry to education or work. Some factors were not consequential in our analysis (e.g. gender, number of children), which has led us to emphasise these groups less when discussing policy approaches.

The policies below are focused on the barriers that these identified groups are likely to face, and direction where policy may be able to assist in reducing these barriers. We do not point to policies that target certain groups unless the barrier is specific to the group (i.e. for those facing health and disability constraints), as policies that reduce entry barriers will already support these groups disproportionately.

[1] It is possible that some of the risk associated with health and disability is the result of individuals who have become NEET subsequently reporting health or disability conditions (i.e., suffering from anxiety due to job loss) – making NEET instead a risk factor for health.

SKILL AND OPPORTUNITY-BASED BARRIERS – THE RATIONALE FOR POLICY INTERVENTION

Following an economic downturn, effective policy interventions to reduce scarring must target barriers that effectively shut young individuals out of work or educational opportunities, which in turn force them down a less desirable life path.

According to the “portfolio approach” (Borland 2016), the barriers a NEET individual may face when looking for employment or training range from: i) low-barriers, related to the individual maintaining job readiness; ii) moderate-barriers related to their ability to demonstrate a willingness to work; and iii) high-barriers, related to shortcomings in terms of skills. Each of these barriers may create different hurdles for the individual to overcome, suggesting that different policies are needed to help the person back into work.

Moderate barriers associated with the changing nature of work (i.e. gig work) and situations of underemployment can have a consequential effect on a workers life path. However, in this paper, we focus only on relatively high barriers because they are more difficult for an individual to overcome.

The barriers are considered with reference to a broader set of choices: an individual’s incentive and ability to go into work, change jobs, or move into education. A young individual may be in work, and may not lose their job, but due to an inability to move jobs or undertake future education they could face significant scarring. These barriers are summarised in Figure 3.

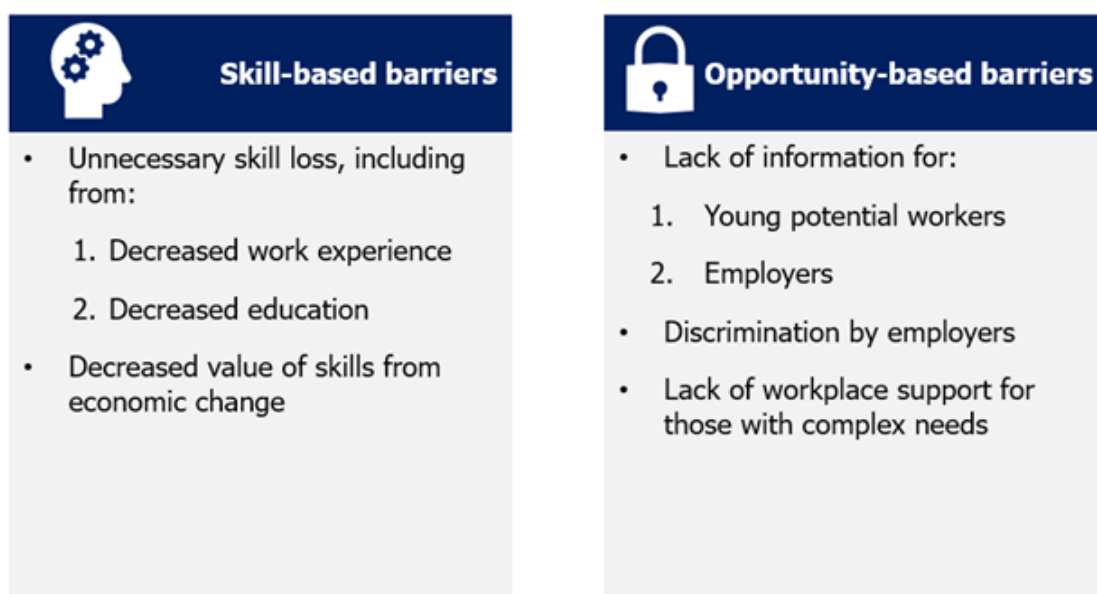


Figure 3: Key barriers

SKILLS, TASKS, AND HUMAN CAPITAL

Time spent working and studying helps young people to develop skills that they can apply in the workplace, aiding wage growth and career progression. The loss of – or the missed opportunity to develop – skills due to a recession generates scarring. Thus, policies that prevent unnecessary skill loss can mitigate such scarring effects.

Individuals face unnecessary skill loss when they find themselves unable to enter work or education, or when their skills lose value following changes in the structure of the economy. Policies that prevent young people from long-term disengagement from work and study or that support individuals to build up portable skills (Christenko, Martinaitis and Gaušas 2020) can help mitigate scarring.

Portable/transferable skills can be used across a range of jobs (e.g., reading comprehension), while non-portable skills are specific in nature – only finding use in a specific task in a given industry or firm (e.g., writing specific computer programs, or knowing how to work a checkout at the local supermarket). A list of the most common skills required across jobs in Australia is given in Annex 2.

Portable skills grant market power to workers – enabling them to enter work that appropriately values their talents – and increases their general employability, making them less vulnerable to economic downturns and scarring (Figure 4).

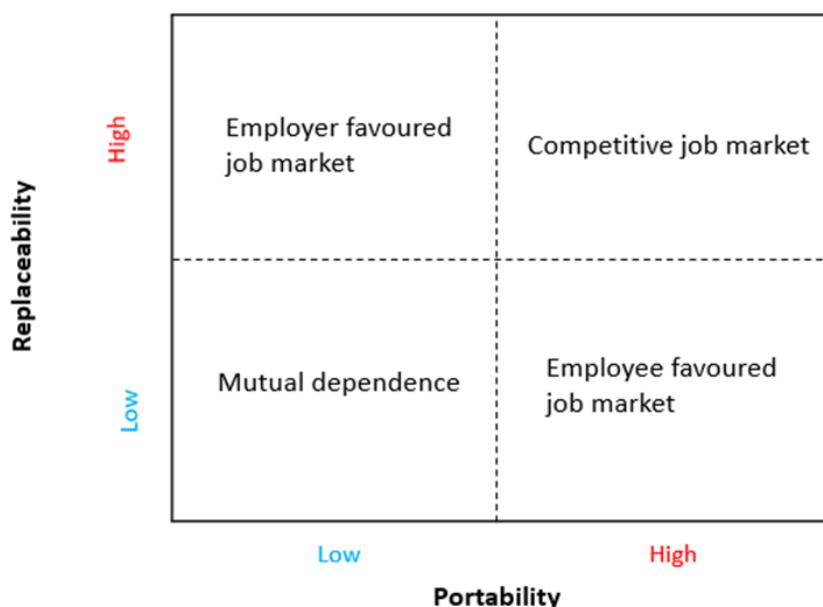


Diagram based on Figure 5 of Christenko, Martinaitis, & Gaušas (2020)

Figure 4: Skills and the labour market

Skills are developed through a combination of work experience, training, and formal education. Work-based skills tend to be less portable, while the skills developed through formal education are more portable – however, there can be considerable overlap. The ability to develop these skills is restricted during a recession. The COVID-19 recession was particularly significant for the development of workplace skills given that it disrupted both work and education.



Lifting the provision of portable skills is consistent with the OECD skill strategy (OECD 2011). However, non-portable skills that are costly to replace can also be very valuable for both the employer and employee – forming a mutual dependence between the two that builds a strong and sustainable workplace relationship. Thus, there can be a trade-off between the risk and reward associated with different types of skill choice by young Australians (Hansson 2009).

Policymakers should bear in mind that there are both private and social costs associated with increasing the portability of skills. For instance, firms may be reluctant to invest in transferable skills because they risk losing workers and hence their investment in human capital.

BARRIERS TO OPPORTUNITY

Conversely, non-skill based barriers to entering the labour market may be exacerbated by economic downturns – generating scarring for individuals. Such barriers can be caused by: limited information about job opportunities, lack of access to education, restrictions to changing jobs, or simply being treated unfairly by an employer. By reducing opportunities for young Australians to enter work or training these barriers further reduce the accumulation of skills and knowledge and can undermine worker motivation and confidence.

The four main barriers identified are: Information available for young people, information available for employers, discrimination by employers, and barriers in supporting those with complex needs in the workplace.



Information gaps

The ability to match young workers to jobs depends on the quality of information that is available to firms and workers. Since information gaps can exacerbate mismatch between workers and jobs and cause young workers to be out of work for longer than is necessary, providing information – or lowering the cost of making choices – can help to mitigate scarring effects.



01 Information gaps for workers

For young Australians looking to enter higher education or the labour force, there needs to be high-quality information that is readily available about potential career paths. Job rating websites and career training, which receive significant public funding, are important mechanisms for providing such information.

Furthermore, for young Australians information gaps can matter insofar as they reflect on their beliefs about what is possible. Beliefs regarding the fragility of any job, and individuals' confidence to look for a job that better matches their skills or undertake training, influences the pathway that they follow. Psychological scarring – a change in job market beliefs after a recession – is a well-established consequence of facing difficult labour market conditions in the formative years (i.e. (Penrose and La Cava 2021), (Schoar and Zuo 2017), (Mann, et al. 2020)). The uncertainty and lack of self-confidence this leads to can create barriers to young Australians achieving their full potential.

As a result, policies that ensure young Australians have access to accurate, timely, and comprehensible information will help to mitigate scarring. For groups that are more at risk of psychological scarring, broader support to build their workplace confidence may have value.

02

Information gaps for employers

If employers are unable to accurately assess whether a young person is a good employment fit, such information gaps can lead a young person to not be hired due to statistical discrimination (Hansson 2009).[2] This statistical discrimination can be particularly problematic for people that have lost their jobs (Gibbons and Katz 1991) or that are from disadvantaged backgrounds. The COVID-19 pandemic may amplify this scarring channel, as it is difficult for young individuals to undertake education or find entry level work in contact intensive industries, such as hospitality and arts and recreation services.

Such information gaps may cause workers to accept a lower wage in order to get a job and prove they are a good worker. This can then lead to persistent wage scarring if such workers are only able to work in low productivity jobs. This brings into closer focus policies that help individuals signal their motivation without forcing themselves down a potentially poor job pathway.

03

Employer perceptions about, and options for, those with disability**Lack of integration**

The large number of services and a lack of integration of these services within the broader system of government employment policies (Brotherhood of St. Laurence 2021).

**Disability Employment Services**

Suffer from mixed service quality, high complexity, poor integration with the NDIS, insufficient competitive pressure and incentive misalignment (Boston Consulting Group, 2020).

**Physical Tasks**

Pandemic-induced shift to remote work may reduce barriers for some workers with disability. However, the physical tasks involved in entry level work may preclude individuals from common entry pathways into employment (see Annex 2).

Figure 5: Barriers for workers with disability

[2]Statistical discrimination is when employers cannot assess the capabilities of an employee, and so will rely on easy to acquire information (such as where an individual went to school, or their gender or ethnic group) to judge whether “on average” that person may be a good hire. Statistical discrimination can worsen if it generates a reinforcing cycle. If statistical discrimination reduces the employment of a group, and this reduces the group’s average base of skills, then this would worsen statistical discrimination. In the end, employers who had only a small bias against a certain group may end up largely refusing to hire individuals from that group.

Despite recent policy interventions, the rising share of youth NEET[3] that have a disability suggests that information barriers persist (and may even be increasing) for workers with disability or a health condition[4] (Australian Government Solicitor 2020). There are many programs in Australia that assist workers with disability to transition into employment. However, both employers and employees reportedly lack awareness of these services (Colmar Brunton 2019). This lack of awareness may be due to several barriers within the disability support system (Figure 5).

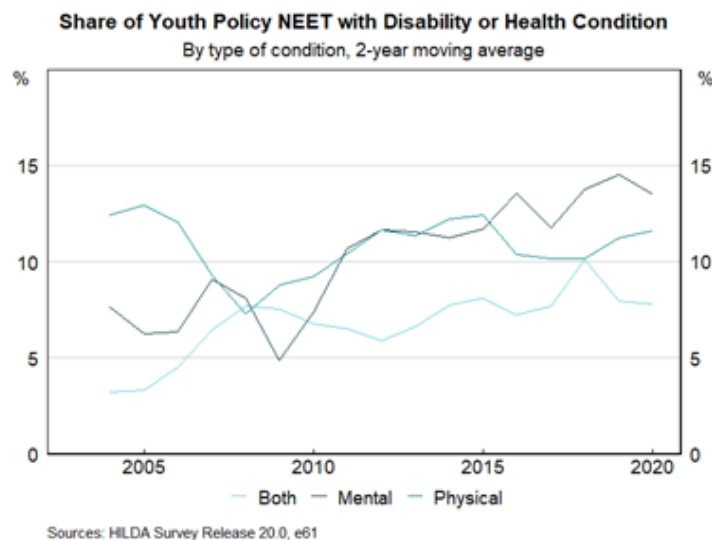


Figure 6: Young people out of employment and education and have a disability or long-term health condition

Discrimination and false employer perceptions of people with disability can also play a role. Around 20 per cent of people with disability aged 15-24 reported experiencing discrimination in a 2015 survey, with a considerable share of these instances being discrimination by an employer (Australian Human Rights Commission 2016). The (Australian Human Rights Commission 2020) reports ongoing perceptions that people with disability are difficult to employ and are only able to complete limited tasks or hours.

The Australian job search system, including Jobactive and Disability Employment Services, aims to match workers with jobs that both suit their skills and ensure that they comply with their mutual obligations. Job agencies face a schedule of payments that rises with the difficulty and the quality of the placement, as measured by the time spent in subsequent employment (O'Sullivan, McGann and Considine 2019).

[3]The definition of NEET used when looking at disability is termed “policy NEET”. This refers to individuals who report being in NEET status for non-choice reasons (homemaking while indicating an interest in EET, health and disability barriers, skill barriers, market constraints in finding work) and excludes those who report being NEET by choice (leisure, travelling, or homemaking while uninterested in EET). Although such a definition is closer to the policy relevant concern we have with NEET, it may also miss some individuals who are heavily discouraged – and so report that they are NEET by choice when they are not.

[4]Although it is unclear what has caused the lift in the share of NEET individuals with disability, the lift suggests that policy is failing this group – creating scarring for individuals who are also experiencing disadvantage due to disability.

Box 1: Challenges within the Australian job search system

This job search system works well for those who require a combination of job search assistance and employment incentives to find a job, but some key challenges emerge:

- For those with complex needs and who may be less job ready, the incentives of the system may diverge and lead to poor quality job matches and longer spells of unemployment.[5]
- Those who are the least job-ready feel that they are either ignored as the payoff associated with fulfilling their requirements is too low for the agency to pursue, or that they are pushed toward inappropriate job matches (The Senate Education and Employment References Committee (2019); Boston Consulting Group (2020)). This is despite the model used by the Australian Government being designed to avoid this informal prioritisation of applicants by introducing formal classifications with increasing payoffs (Langenbacher and Vodopivec 2022).

[5]For example, Borland and Tseng (2004) show that the Work for the Dole program is associated with a reduced likelihood of exiting income support payments. Backhouse et al (2020) find that Work for the Dole is more effective at achieving program exits for participants who were more 'job ready'.

POLICY DIRECTIONS WITH POTENTIAL

Skill- and opportunity-based barriers prevent young Australians from realising their full potential – especially following an economic downturn. As a result, policies should be considered that lower these barriers. To illustrate how the above framework could be operationalised for looking at policy, we consider three potential directions for policy reform: i) Work-based education and the system of occupational licencing, ii) the suite of government employment based COVID recovery programs, and iii) the programs that support people with complex needs in transitions to employment.

The policy interventions considered are:

- 1** Increasing job mobility for young workers by increasing the flexibility of apprenticeships and introducing national standards for occupational licencing;
- 2** Providing education based “catch-up” services to compensate for skills lost due to the impact of the pandemic on education and work time, such as the expansion of high-dose tutoring, and greater targeted use of JobTrainer;
- 3** Improving the integration and navigability of government disability support programs.

The ability of these policies to mitigate scarring is evaluated on two metrics, namely their ability to: i) prevent unnecessary skill loss; and ii) provide job opportunities by reducing non-skill based barriers. To be clear, **we do not recommend these policies be introduced without further evidence-based research.** But we believe these policy directions should be further evaluated given persistent structural issues in the youth labour market.

Unintended consequences are always a risk when taking on policies without sufficient evaluation. As a result, we also examine some margins through which these proposals could back-fire and potentially worsen scarring.

INCREASING FLEXIBILITY AND TRANSPARENCY IN WORK-BASED VET AND OCCUPATIONAL LICENCING

Formal education offers an important pathway for young Australians into work. However, the current education system can limit the ability of young Australians to move up the job ladder due to a combination of long and inflexible work-based VET (namely apprenticeships) and the need to undertake these courses to receive state-based occupational licences (NSW Productivity Commission 2021).

Furthermore, these schemes force individuals down narrow pathways that involve non-portable skills and a considerable time investment (3-4 years) while tying them to an occupational licence that restricts future job-to-job movements (Hermansen 2019). This structure reduces job flexibility and mobility during apprenticeships and after graduation (Productivity Commission 2020). These impediments to job mobility can make these young Australians more vulnerable to economic shocks and persistent scarring effects.

Concerns about the flexibility of the apprenticeship system, and declining apprentice numbers (Figure 7), have led to the introduction of the Australian Apprenticeship Incentive Program (AAIP) (Department of Education, Skills and Employment 2022). This is intended to fund apprenticeships that involve pre-determined skill gaps. However, a priority list of skill gaps can be arbitrary and does not account for the inflexibility of current apprenticeships, the non-portable nature of the skills developed, and the time commitment required.

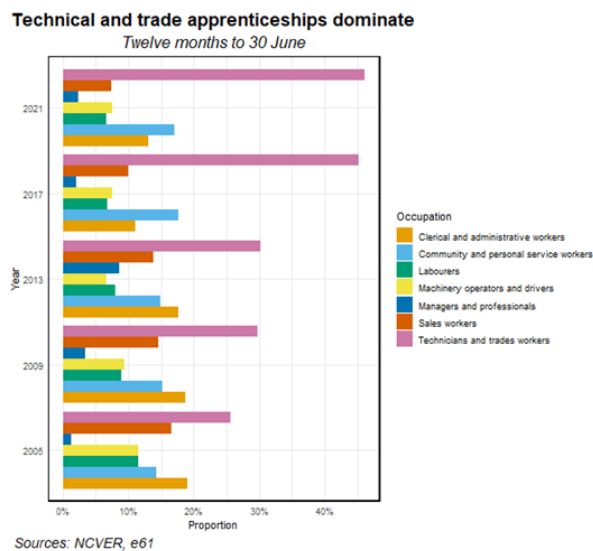
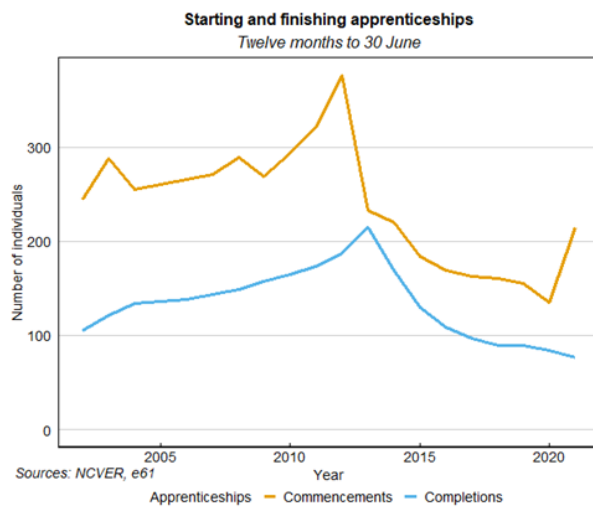


Figure 7: Falling apprenticeship numbers and variety

Other countries, such as Germany and Austria, have addressed these concerns through a dual-education model for apprenticeship – which combines work-based training in non-portable skills with formal-training in more portable, work-ready skills. This is commonly lauded for increasing the flexibility of work-based training and providing a more practical approach for those moving into tertiary education (Rother 2019).

In the Australian context, the five dual-sector universities have already recommended a set of interrelated changes to work-based vocational education and training (VET) (Victoria University 2020). When combined with standardisation of, and national standards for, occupational licencing these changes are likely to assist in breaking down the barriers to entry for young people and broadening the set of skills they receive while on the program. These changes are outlined in Figure 8.[6]

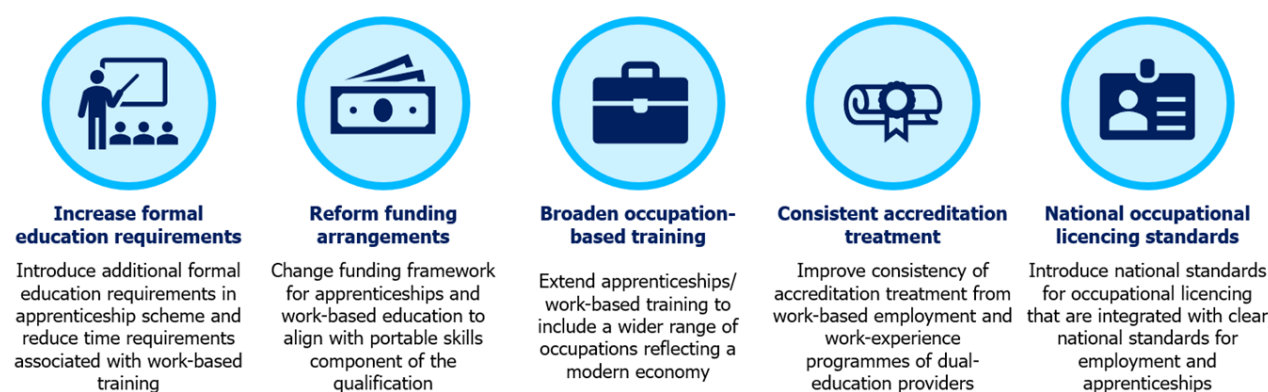


Figure 8: Potential directions for reform of the VET system

These reforms may more efficiently target funding to worker skills that employers do not have an incentive to invest in across jobs – thereby increasing the general access and build-up of skills among young Australians for a similar fiscal outlay. Such a set of reforms could reduce the risk of future scarring by increasing the transferability of the skills that young Australians learn, improving access to work-based retraining, and increasing the ability for Australians to take their skills across state lines without a large wage penalty.

However, these reforms are not costless, and we would recommend data-driven evaluation of the AAIP and other related policy changes prior to considering further changes in funding. Specifically, such reforms entail risks to the extent that they generate perverse incentives and compliance costs (Box 2).

[6] Apart from the recommendation for national standards for occupational licencing, these are similar recommendations to those made by Australia's dual-sector universities (Victoria University 2020).

Box 2: Potential costs of such VET reform

Such a VET system is potentially **more expensive to administer and imposes costs on businesses** whilst reducing their market power over their employees. As a result, higher fiscal costs, lower on-job training (Šćepanović and Martín Artiles 2020), and reductions in employment may result if the change is implemented poorly. If increased portability leads to an expectation of shorter employer-employee relationships, this may further **limit the willingness of employers to offer apprenticeships or on-job training** (Doepke and Gaetani 2020).

Similarly, there is a risk that the application of additional formal education alongside apprenticeships **would increase barriers to entry for low-achieving young individuals**, by increasing the academisation of the system (Haasler 2020). One of the concerns with the current apprenticeship system is the length of the qualification – as a result, if the inclusion of additional formal education increased the length of the apprenticeship or generated “over credentialism” (Waugh and Circelli 2021) this would reduce flexibility.

ADJUSTING COVID SCHEMES TO BETTER MATCH THE RISK OF SCARRING

SUPPORTING THOSE TRYING TO BREAK INTO THE WORKFORCE

Australia had a strong, consistent but flexible policy response to the COVID-19 pandemic, with differential policies used during the varying stages of the outbreak (OECD 2020). During the recovery phase the focus has been on limiting skill-based scarring using policies such as JobTrainer and JobMaker. However, these policies mostly target skill shortages rather than the skill gaps of workers that are most at risk of long-term scarring (Department of Education, Skills and Employment 2022).

Given the strong labour market recovery, and some evidence that job mobility rates are picking up, there is little need to extend JobMaker beyond its October 6 expiry. However, there remains a skills gap because of the time that individuals spent outside of work and education, which JobTrainer may be able to help close – but not in its current form.

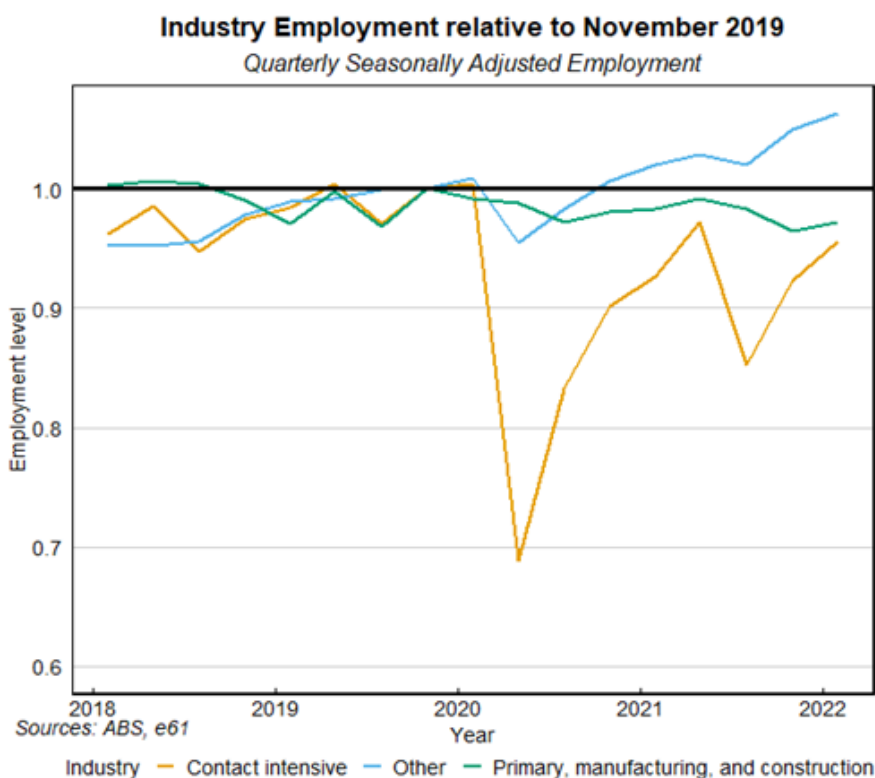


Figure 9: COVID Industry Employment Change

If the goal is to prevent scarring, JobTrainer could be adjusted to support the provision of “catch up microcredentials[7]” based on the nature of skill loss during the pandemic. Using the new National Microcredentials Framework (Australian Department of Education, Skills and Employment 2021) and the JobTrainer scheme, funding could be provided to proposed microcredentials offered by existing providers that meet the criteria in Figure 10:



Figure 10: Potential COVID Microcredentials criteria

By filling these skill gaps quickly, such a policy could provide opportunities to young workers to get back to where they would have been on the job ladder in the absence of the COVID-19 pandemic.

These microcredentials do come with some costs/trade-offs though. A quickly established microcredential scheme to fill this gap risks suffering from many of the issues that led to the establishment of national standards – fragmentation, wasteful repetition of other training, and insufficient depth (Australian Department of Education, Skills and Employment 2021). If JobTrainer itself was not seen as a cost-effective intervention, then the more limited catch-up support being suggested is also unlikely to be a cost-effective way of supporting individuals back into the EET (employment, education, and training) system.

[7]Microcredentials are skill-specific qualifications that can be completed in a short period of time.

AND THOSE STRUGGLING WITH GAPS IN CLASS TIME

Pandemic-induced class disruptions have had a negative effect on the quality of education, with disadvantaged students most at risk from this loss in human capital. Such general educational attainment is difficult to make up for later in life and may exacerbate other disadvantages (Save the Children 2022), leading to scarring of these individuals.

The evidence of this loss has been mixed, with recent studies finding limited education loss and some improvements in flexibility and mental health from the shift to online classes (Institute for Social Science Research 2021). However, the most recent NAPLAN results for year 5, 7, and 9 (National Assessment Program Literacy and Numeracy 2022) indicate that year 7s and 9s grade improvements between 2019 and 2021 have come in below the 2019 cohort for reading, grammar, and numeracy (Figure 11) – suggesting that there may have been educational costs from school lockdowns.

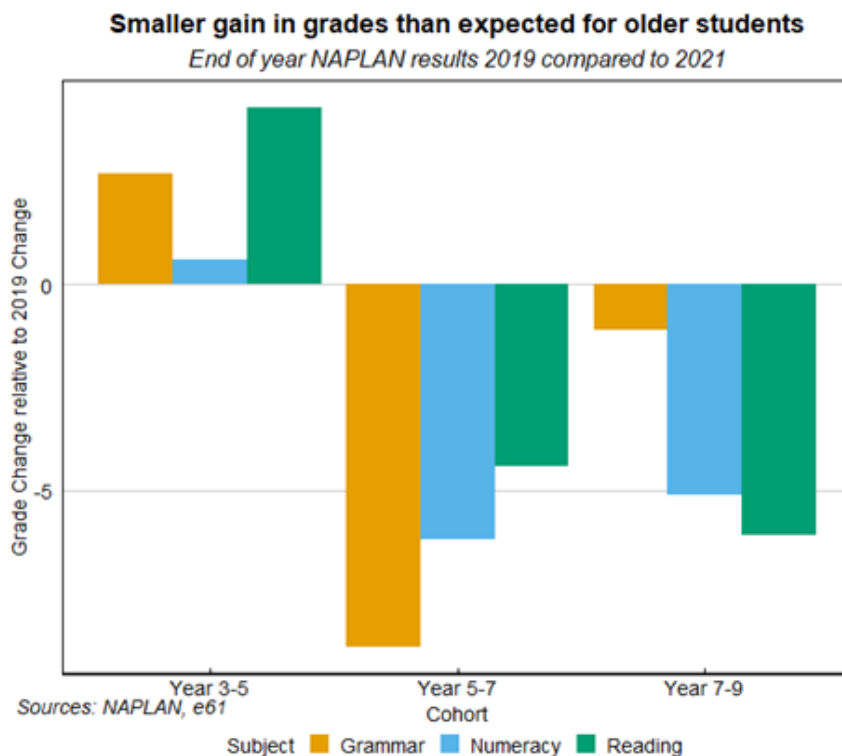


Figure 11: Relative grade improvement pre and post COVID

In so far as there has been a tangible loss in educational quality due to lost class time, high-dose tutoring for disadvantaged individuals may provide an effective catch-up mechanism.

Recent US studies have shown mixed results for the effectiveness of high-dose tutoring. (Nickow, Oreopoulos and Quan 2020) (Guryan, et al. 2021) found that high-dose tutoring led to large increases in the test-performance of students while (Fryer Jr. and Howard-Noveck 2020) indicated more limited gains. However, all three studies found large gains among those who come from a disadvantaged background. Furthermore, given the low implementation cost these schemes appear to be a cost-effective way of lifting performance when compared with other educational policies (Education Endowment Foundation 2022).

Even so, these studies are focused on the impact on test scores alone – given that there has not been time to track the impact on lifetime outcomes. There is a risk that these interventions have boosted test scores without supporting genuine learning and skill development, in which case a higher number does not reflect an increase in human capital. Figure 12 captures our suggested policy approach to high-dose tutoring.

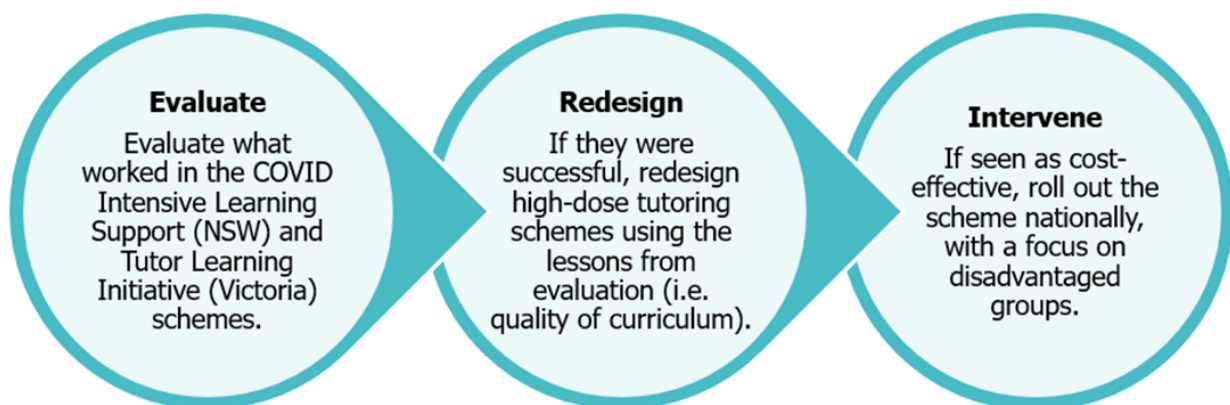


Figure 12: Intervention pathway for high-dose tutoring

TACKLING JOB AND TRAINING ENTRY BARRIERS FOR THOSE WITH COMPLEX NEEDS

Those with complex needs often face greater barriers to re-employment or re-training after a period of displacement, and as a result they are particularly vulnerable to scarring effects. Policies that aim to reduce barriers to labour market entry for displaced workers must balance high-quality job matching with an appropriate level of income support.

This balance is particularly important for policies that target people with complex needs as more time and resources is needed to ensure that the person is job ready and that the job match is appropriate. As scarring effects depend on both the quality of the job match and the amount of time the individual is outside of work and training, finding the right balance to support individuals with complex needs is difficult.

And it is not clear that we are hitting the right balance. As discussed, the share of youth NEET with a disability or health condition has risen over time (Figure 13, see Annex 1 for further details). This emphasizes the need for effective policy to support the transition of people with disability into employment.

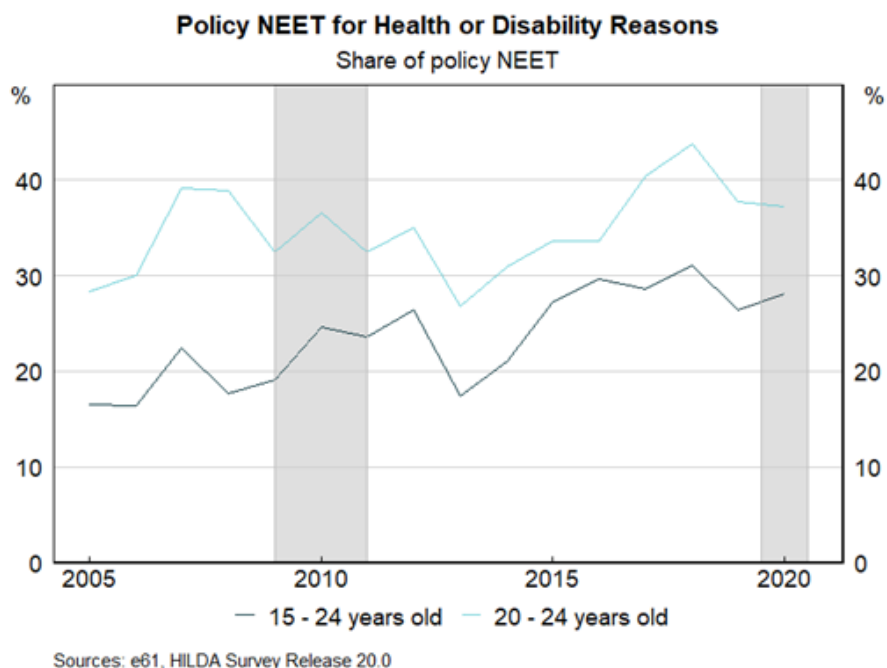


Figure 13: NEET and disability

The existing Disability Employment Services focus is on either improving the productivity of workers with disabilities or explicitly compensating employers for real or perceived lower productivity caused by complex needs, through wage and equipment subsidies (Australian Human Rights Commission 2020).

However, these programs remain underutilized (Colmar Brunton 2019), partly due to the vast and complex network of policies and programs which makes it difficult to keep track of changes in policy. Improving the integration of these programs and thereby simplifying their application would reduce these congestion costs and improve match quality between job seekers and firms.

This extends to ongoing support services. There are gradations of support depending on perceived need and whether disability is permanent or temporary. This introduces potential miscategorisation of individuals and increases the potential for prioritisation of easy to place participants at the expense of more vulnerable job seekers (Boston Consulting Group 2020).

Additionally, efforts to minimize miscategorisation introduces a further problem where provider discretion can cause two similar participants to receive different levels of support. The lack of clarity about potential ongoing support could discourage those with disabilities from entering the job market in the first place. This system can create large arbitrary distinctions between participants in ongoing support programs and even affect the behaviour of potential job seekers.

Our suggested changes in support for those with complex needs are given in Figure 14:

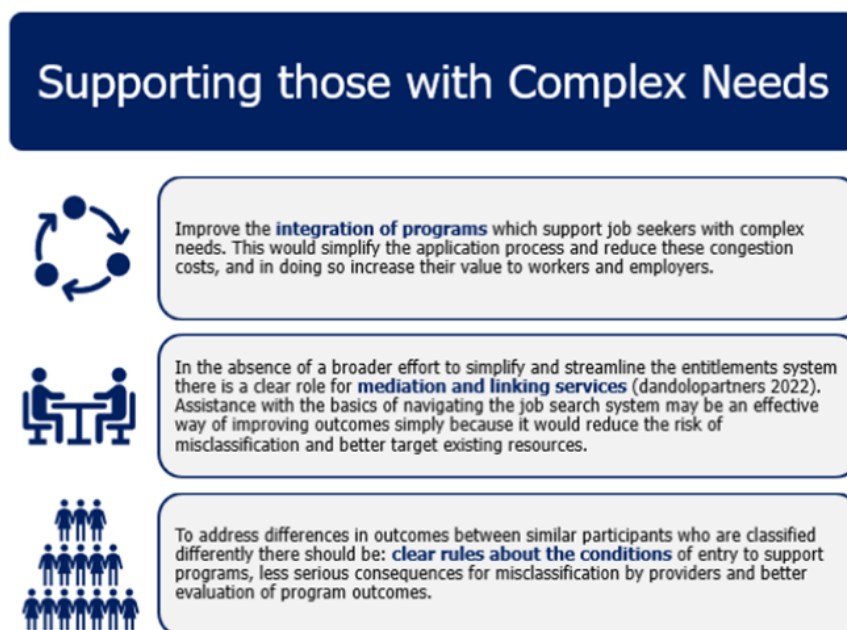


Figure 14: Suggestions for supporting those with complex needs

These policies come with some trade-offs (see Box 3 for policy guidelines). A more generous system with less targeting will cost more but reduce the chance of those with complex needs falling through the cracks due to program rigidity or a provider assessment. This highlights the need for the evaluation of existing programs and a high-quality data infrastructure.[8]

[8]While there has been some attempt to evaluate the system, there has been less work produced on the effectiveness of support programs for improving job tenure and match quality.

Box 3:

Policy guidelines for equal opportunity

Policy should be guided by the principle of equality of opportunity, thereby supporting the fair treatment of all people (including through accommodation for differences) and address barriers which might unfairly limit people with disability (Department of Social Services 2021). More specifically, policies to improve outcomes for people with disability should:

- Target people with specific and complex needs without creating gaps for people who do not neatly fall into a particular group.
- Ensure an adequate level of baseline support for all job seekers.
- Balance the number of targeted policies with the added complexity and time cost to making good matches.

RECOMMENDATION: IMPROVING THE DATA INFRASTRUCTURE FOR MAKING POLICY EVALUATIONS

Data is a critical tool for describing policy problems and evaluating the efficacy of potential solutions, especially when considering youth employment and wellbeing (OECD 2022). Good data are not just a product of supporting portals where information can be shared – it is an issue of coordination between disparate groups to collect information in a way that is consistent and exchangeable (interoperability).

Effective and timely policy interventions to prevent scarring requires a stronger data infrastructure, which underscores the importance of standardisation and sharing of data about participants, outcomes, and the details of social programs (using a process that protects the privacy and anonymity of participants). Such a data infrastructure is not just useful for evaluating the big “P” policy ideas described in this paper, but also for evaluating the often more important little “p” operational policy decisions that are made when implementing any program. The benefits are outlined in Figure 15:



Figure 15: Benefits of standardised data collection

These benefits do not solely accrue to the organisation that is collecting the information. Given there may be a cost from collecting standardised data – such as more preparation time, or a change in existing systems – it is not surprising to see that social enterprises have not focused on standardised data. Given the spillover benefits associated with social enterprises collecting data in a standardised manner there is a role for government support in coordinating and providing tools to simplify standardised collection.

To make the most effective use of available tools, and share insights with other stakeholders, we would recommend the development of a set of **Australian Community Social Data Standards** with reference to necessary information regarding social evaluation programs. These standards would include both a data dictionary to define social data variables and standards about collection of this data. Examples of current data standards and tools which partially achieve this in Australia are given in Box 4.

Box 4: Examples of existing tools

A good example of **basic data standards** is the data standardisation framework of the Western Australian Government (Western Australian Government 2022). However, a full set of social data standards would cover a broader range of information than just demographic information, with reference to standard ABS classification methods (e.g the General Social Survey from (Australian Bureau of Statistics 2022)) and broader international social concepts.

For **open-source tools**, the Social Enterprise Impact Lab (Social Enterprise Impact Lab 2022) (SEIL) is a clear example of a product building up general data capability in the social enterprise space in Australia. Since 2020, SEIL has provided an open-source dashboard that allows social enterprises to enter primary evaluative data and visualise it. Such open-source tools are an essential for showcasing the importance of data and data visualisation for generating insights about participants and their outcomes.

A good example of **standardised data and analysis being combined** is the NSW Human Services Dataset (Data.NSW 2022). This project indicated the importance of clear privacy standards in making information sharable without adversely affecting the willingness of participants to respond. Extending this to include social enterprises and charities would allow for a significant improvement in government and civil society's ability to understand what constitutes effective policy.

Box 5:

Examples of the insights that an improved data sharing and data standardisation infrastructure could provide

Evaluation of active labour market programs (ALMPs) and other interventions

Meta-studies of ALMPs ((Card, Kluve and Weber, Active Labour Market Policy Evaluations: A Meta-analysis 2010), (Card, Kluve and Weber 2015)) indicate that “training first” programs tend to offer more significant labour market gains for participants in the long term than “work first” policies. However, the Australian context may differ as shown by the large response to welfare reform in the mid-1990s (Herault, Vu and Wilkins 2020). As there is limited Australian evidence on ALMPs, Australia specific work on this would be of great value.

Shared evaluation insights would increase the value of program design that includes evaluation

When considering a potential intervention, a trial period with a clear experimental design would provide important information to all groups who are interested in supporting vulnerable young individuals. As described in (Card, Ibararán and Miguel Villa 2011), such evaluation design needs to be included within the design of any intervention – and the benefit comes from the measurements being standardised, and the method applied meeting scientific research standards. If the information and evaluation work of public and private institutions was based on comparable data and methods, then the public benefit of these evaluations would also be larger.

Identification of individuals who are at risk of falling out of the support system

Annex 1 outlines work that we have undertaken to consider the characteristics that are associated with a greater risk of falling into NEET status. This work greatly helped to clarify the direction of the policy interventions that were suggested. In the same way, standardised, and shared, high frequency information on individuals between public and private institutions would help these institutions identify who is at risk of falling into NEET, or into another area of disadvantage. Such monitoring would help improve how these institutions target and respond to vulnerable individuals.

CONCLUSION AND A FORWARD-LOOKING RESEARCH AGENDA

The COVID-19 pandemic was a generational shock that threatens to leave permanent scars on young Australians – by reducing wages, stunting the opportunity to build skills and opportunities, and imposing negative psychological costs due to lock-downs and time outside work or education.

The purpose of this paper has been to consider some of the key ways that labour market scarring occurs, and look at examples of potentially beneficial policy interventions – through their ability to prevent unnecessary skill loss or help individuals overcome barriers to finding work and entering education. The policy directions that appear to warrant further investigation are:

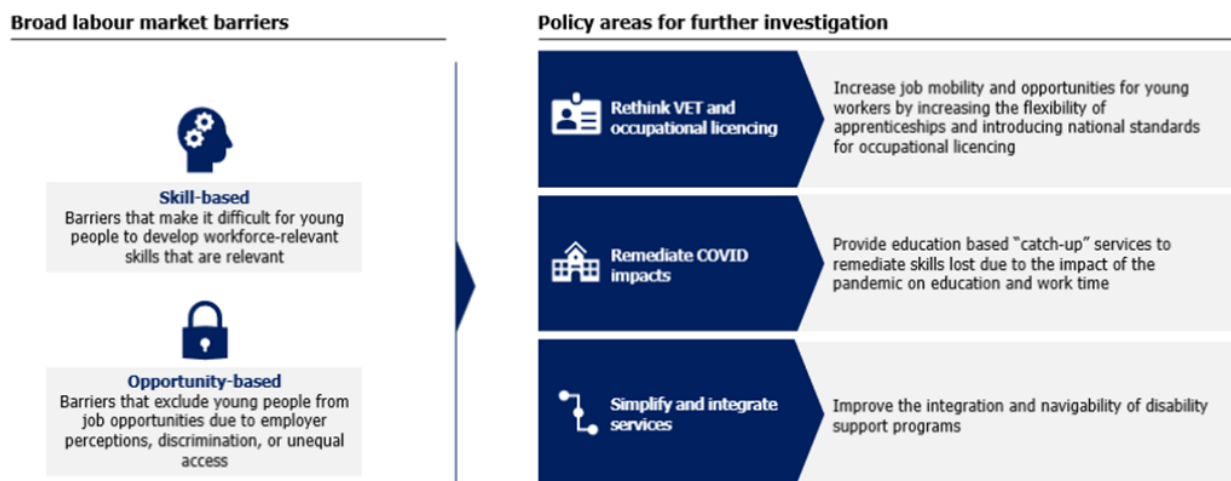


Figure 16: Policy areas for further investigation

Although each of these policies is consistent with our understanding of wage scarring, they also have significant trade-offs, and a deeper process of policy evaluation is necessary before implementation.

This paper, when combined with (e61 2022) and the e61 data visualisation tool "*Tracking Australia's vulnerable youth in the COVID-19 recovery*", provides an indicative framework that allows us to think about the risk and possible impacts of scarring from a large shock such as COVID. Changing economic conditions are part of life, and we hope this work drives a broader discussion about how social support can be structured to limit scarring in the future.

As a result, our key recommendation is the construction of a world-leading social policy database to assist with policy evaluation and risk assessment. This would require the joint efforts of civil society and government, to create a set of Australian Community Data Standards, help practitioners implement these standards, and integrate this data with the broader economic and social data in the ABS datalab. Such a data infrastructure will support social enterprises in evaluating the efficacy of their own interventions, and also give private stakeholders and government a clearer idea of how best to intervene to support vulnerable Australians.

NEXT STEPS – RESEARCH

Both structural reforms and responsive fiscal changes in the face of a significant shock like COVID-19 should be based on detailed analysis and modern research design. To help inform the policy suggestions and recommendations in this paper, work has already been undertaken to understand the risk factors associated with young NEET – this refers to identifying what factors are associated with individuals having a greater chance of being in NEET status (Auer Forthcoming). The results of this research are discussed in Annex 1.

To support future policy debates, we have identified several areas for research using microdata that we intend to undertake over the next 18 months as listed in Figure 16.

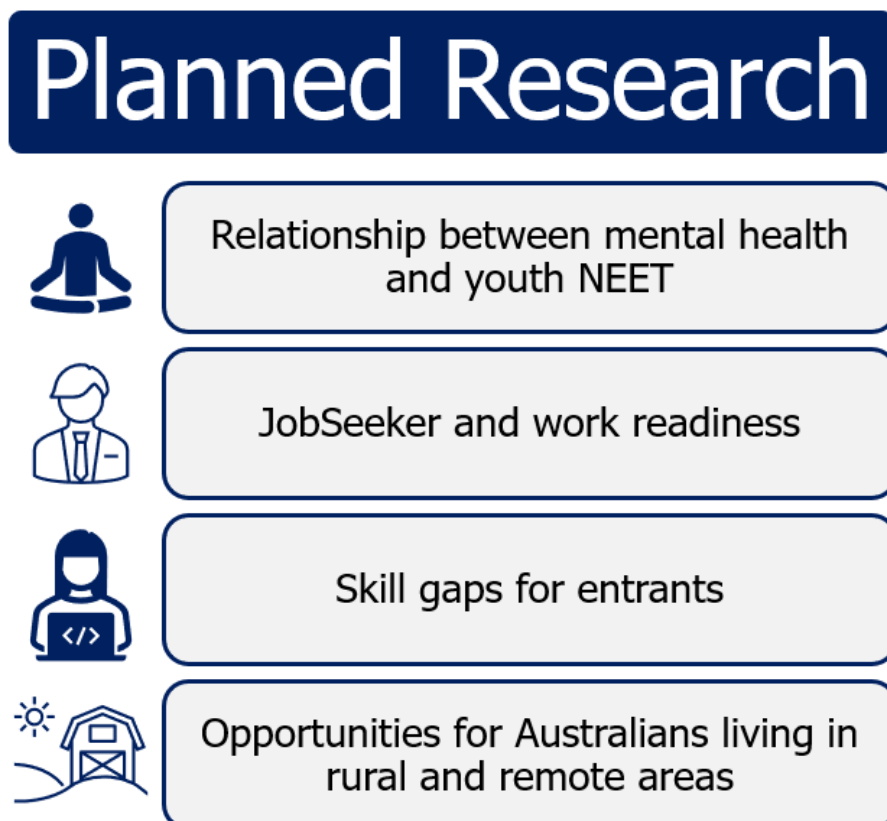


Figure 17: Future e61 Research

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Disclaimers

HILDA Survey

This paper uses unit record data from Household, Income and Labour Dynamics in Australia Survey [HILDA] conducted by the Australian Government Department of Social Services (DSS). The findings and views reported in this paper, however, are those of the author[s] and should not be attributed to the Australian Government, DSS, or any of DSS' contractors or partners. DOI: 10.26193/PI5LPJ

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ANNEX 1: RISK FACTOR RESULTS

To provide additional context to the risk of scarring for young Australians, we have undertaken an empirical evaluation of the key risk factors associated with falling into NEET status (Auer Forthcoming). Although those who have fallen into NEET status are not the only labour market participants that may be subject to scarring, individuals who become NEET are often those in the most vulnerable position. As a result, understanding the risks and potential scarring of this group is of particular importance.

The main risks factors identified in this work are: previously experiencing NEET, not completing Year 12 education, having a health or disability condition, and the individual’s ethnicity.

GENDER DIFFERENCES AND POLICY NEET

Although this is not one of the highlighted risk factors, the increase in NEET rates for females and males has occurred for different reasons – with an increasing number of men reporting education and skill constraints, while more and more young women report rising anxiety and depression.

When looking at NEET, a family’s second-earner is included when they are not working. However, second-earners are on average more willing not to work and instead take-on homemaking duties in their relationship.

By removing “NEET by choice”[9], policy NEET gives a clearer idea of those who are genuinely looking for work or training opportunities – however, it may also inadvertently remove individuals who are very disengaged from society and the labour market.

In aggregate, female NEET is higher than male NEET. However, the majority of second earners in a family are female. Removing NEET by choice leads to considerably higher male NEET rates relative to female rates – a gap that has been expanding in recent years. This gap is reflected in the discussion and estimates in later categories.

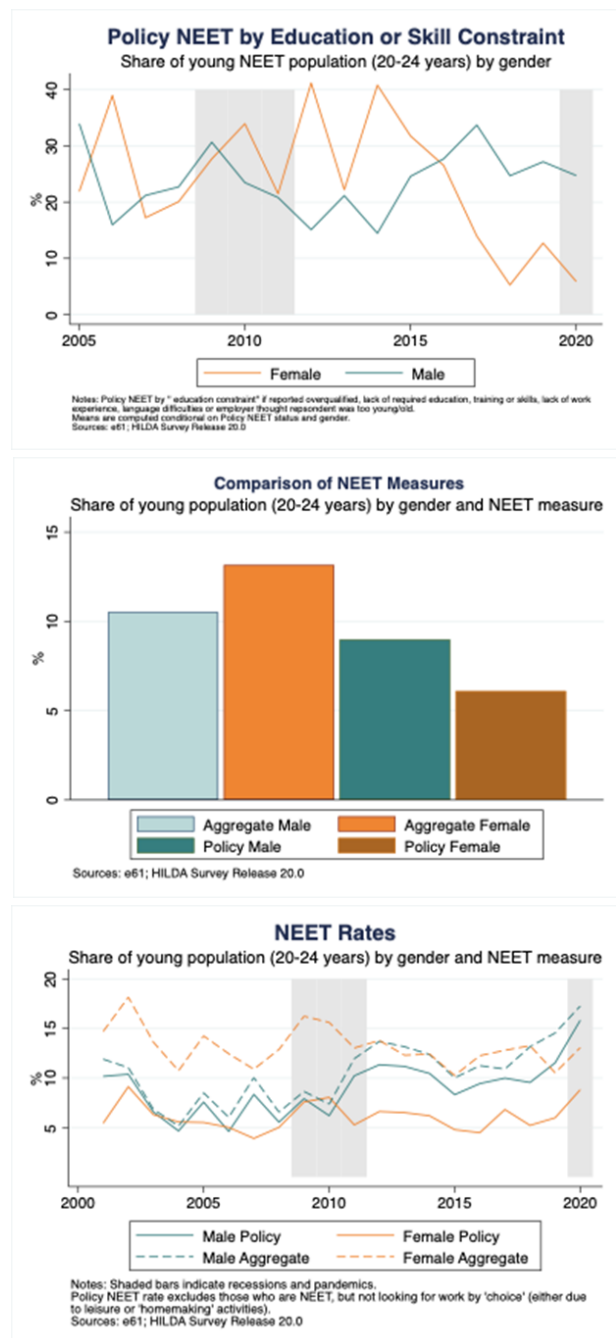


Figure 18: Gender and NEET

[9]This includes those who report being NEET for leisure, travel, or those reporting homemaker duties while not being interested in work.

NEET HISTORY AND EDUCATIONAL ATTAINMENT

Prior experience with being NEET is a key determinant of NEET status for young Australians. Among those who are 20-24, NEET rates for those who were NEET between the ages of 15-19 are significantly higher than the rate among those who were in either education or work during this time.

To classify as persistently NEET during the age 15-19, an individual must be out of work for 2 years. As a result, this higher level of NEET in some way represents individuals who left school without a sufficient connection to future employment or education, suggesting a measure of social isolation, detachment, or disadvantage. However, even after accounting for observed markers of disadvantage in this group, the experience of NEET provides an indication of future NEET status, suggesting that individuals who have experienced NEET face situations where they are more likely to fall outside the education and employment system.

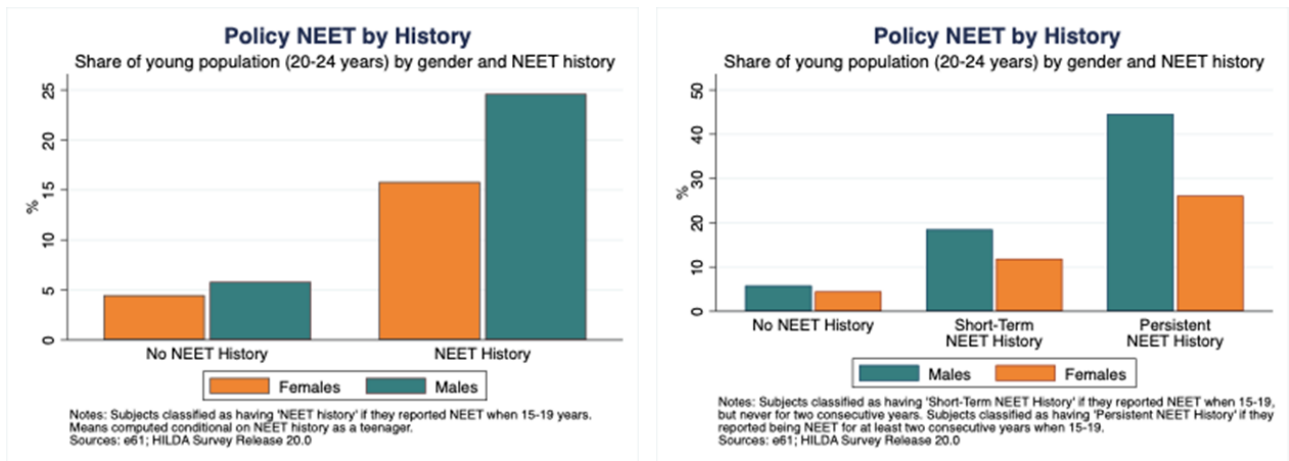


Figure 19: Policy NEET and prior NEET status

Relatedly, NEET rates tend to be higher among those who do not complete Year 12 (the final year of high school), even after accounting for other observable markers of disadvantage.

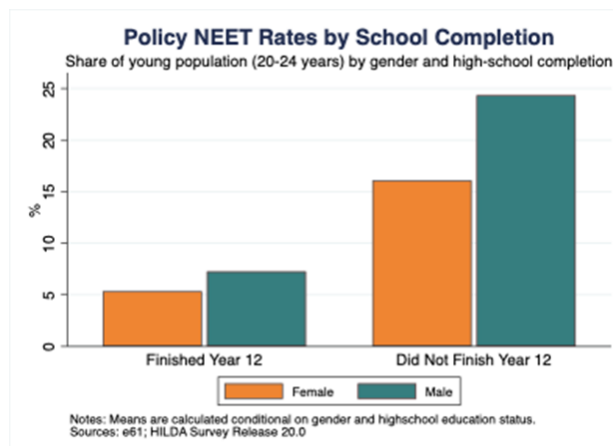


Figure 20: Policy NEET and school completion rates

HEALTH CONDITIONS AND DISABILITY

Having a health condition or disability is a key NEET risk factor for a young person[10]. Indeed, the share of policy NEET with a health condition or disability has been steadily rising over the past decade or so. There are a range of potential explanations for this increasing share: reduced stigma around mental health could mean that more young people are comfortable reporting it as a health issue, there could simply be an increase in people who have a disability, there could be increased barriers to work and education for young people, or the true explanation could be a combination of these and other unknown factors. Regardless of the explanation, this growing share suggests that is worth considering the specific barriers to this sub-group of youth NEET.

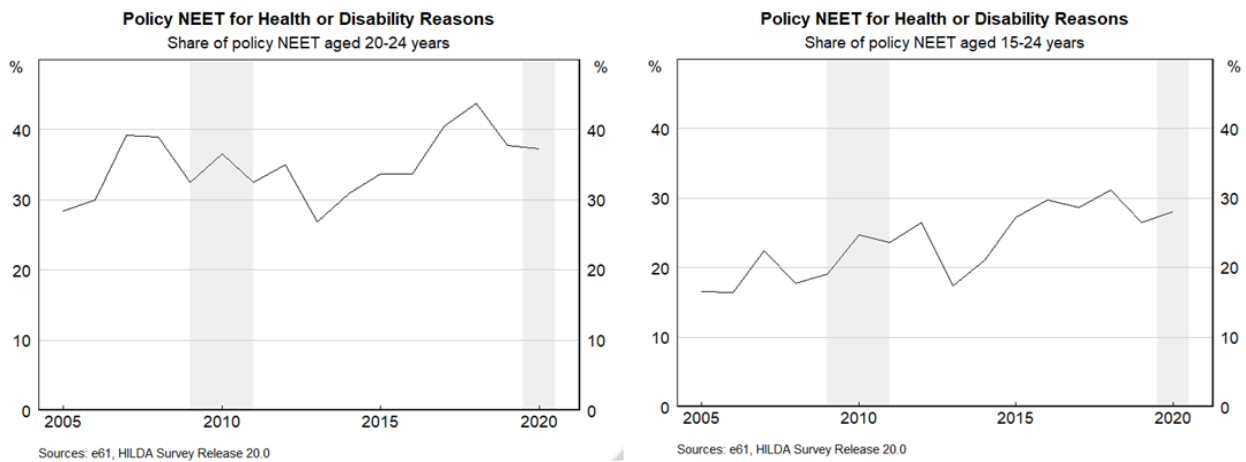


Figure 21: Share of NEET citing Health or Disability as reason

Looking more closely at health-related risk factors reveals mental health to be a risk factor of increasing importance. Self-reported mental health scores are lower among young NEET than other young people and diagnoses of depression or anxiety were considerably higher for NEET during the pandemic.

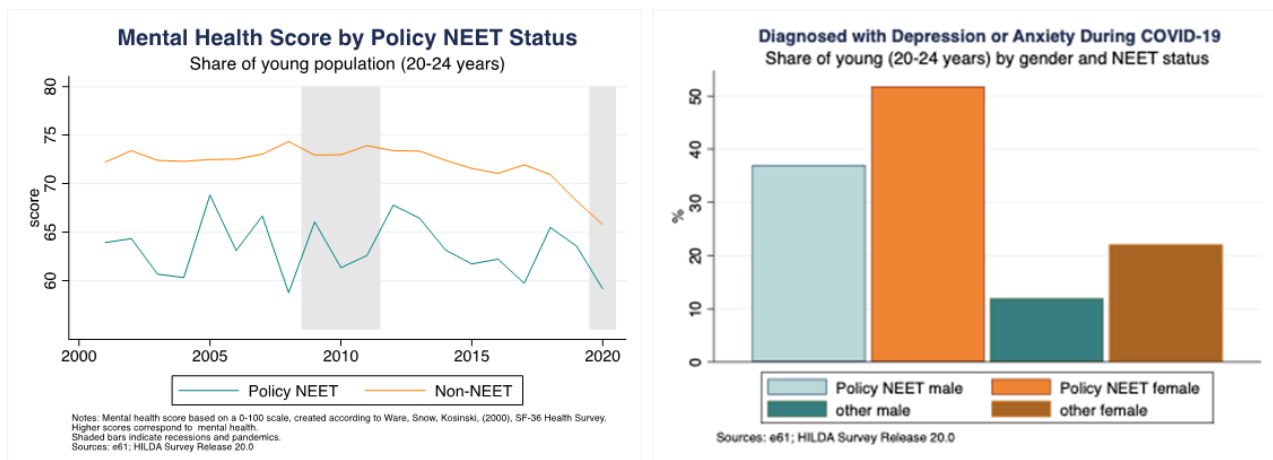


Figure 22: Mental health and NEET status

[10]It is possible for the reason for the association between NEET and disability to go either way – either a barrier or change in incentives that leads to more people with disabilities becoming NEET, or periods of NEET increasing the chance someone reports a disability. Furthermore, it may be the case that growing diagnosis rates (especially among those who are NEET) could have driven the increase. However, even in all of these cases, the rising number of individuals reporting these complex needs is still relevant for considering how to help individuals transition out of NEET status.

ETHNICITY AND THE RISK OF NEET

Another risk factor for falling into NEET status appears to be ethnicity, with Aboriginal and Torres Strait Islanders more likely to experience NEET, even when accounting for other observable risk factors such as region, education, health, and disadvantaged status. This likely refers to specific barriers experienced by Aboriginal and Torres Strait Islander individuals, whether they be discrimination, cultural barriers, or other differences that our data is not sufficiently granular to capture. However, we would want to look carefully at administrative data to evaluate this risk factor more, given the small sample size.

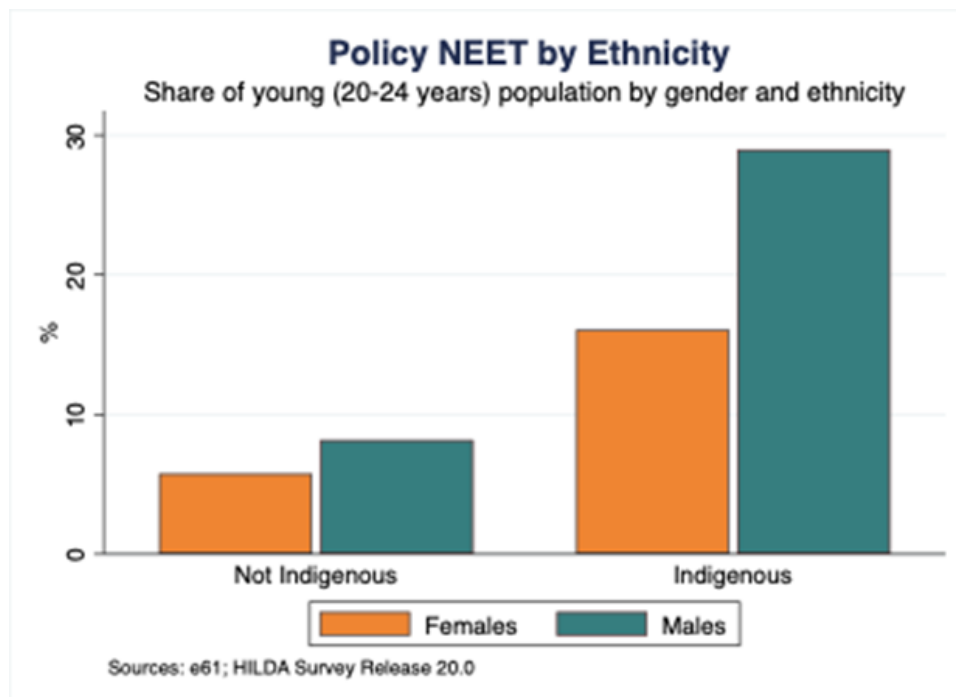


Figure 23: NEET and ethnicity

REGRESSION TABLE

The estimates are based on a correlated random effects model of the risk factors associated with youth NEET (Auer Forthcoming). The regression table for the results is included below.

The estimated effects should be read as an estimate of how many percentage points higher NEET is estimated to be for someone who experiences the risk factor – holding the other risk factors fixed.

Table 1 - Regression output for Policy NEET rates amongst 20-24 year olds

Variables	Estimated effect	Standard Errors
<i>Individual History</i>		
Short-Term NEET History (15-19 years)	0.070***	(0.01)
Persistent NEET History (15-19 years)	0.165***	(0.01)
Finished Year 12	−0.063***	(0.01)
Teenage Pregnancy	−0.052*	(0.02)
Lived with Both Parent as 14-year-old	−0.027***	(0.01)
Both Parents Educated Beyond Year 12	−0.015*	(0.01)
<i>Marital Status</i>		
Separated or Divorced	0.040	(0.06)
Never Married and Not De Facto	0.021**	(0.01)
<i>Current characteristics</i>		
Aboriginal and Torres Strait Islanders	0.091***	(0.01)
Disadvantaged (SEIFA 2011 IER)	0.021	(0.01)
Health Condition or Disability	0.033***	(0.01)
Disadvantaged # Health Condition or Disability	0.049**	(0.02)
Regional	0.007	(0.01)
Still Living at Home	−0.010	(0.01)
Female	−0.05	(0.01)
1 Dependent	−0.050**	(0.02)
2 Dependents	−0.103***	(0.02)
3+ Dependents	−0.141***	(0.03)
Observations	19,295	19,295

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Other controls (not displayed) include: state dummies, year dummies, gender and time interactions, disadvantage and regional interactions, disadvantage and ethnicity interactions.

ANNEX 2: SKILL AND TASK REQUIREMENTS FOR ENTRY LEVEL JOBS

WHAT ARE THE MOST USED SKILLS AND TASKS IN AUSTRALIA

Using information from the O*Net database about the skills and work activities associated with jobs, we have been able to calculate the skills that a wide range of employers state are the most valuable for employees to have a different education levels. These are portable skills that are widely valued.

For Australia as a whole

All work

Skills	Tasks
Active Listening	Getting Information
Critical Thinking	Communicating with other Staff
Speaking	Identifying Objects and Events
Reading Comprehension	Monitoring Processes and Materials
Monitoring	Processing Information

Entry level roles/low education requirements

Skills	Tasks
Monitoring	Controlling Machines and Processes
Speaking	Handling and Moving Objects
Active Listening	Communicating with other Staff
Critical Thinking	Getting Information
Coordination (social skill)	Identifying Objects and Events

For Australians aged 15-24

All work

Skills	Tasks
Active Listening	Getting Information
Critical Thinking	Communicating with other Staff
Speaking	Identifying Objects and Events
Monitoring	Monitoring Processes and Materials
Reading Comprehension	Inspecting Equipment and Structures

Entry level roles/low education requirements

Skills	Tasks
Monitoring	Handling and Moving Objects
Speaking	Getting Information
Active Listening	Communicating with other Staff
Critical Thinking	Controlling Machines and Processes
Coordination (social skill)	Performing General Physical Activities

*Data sourced from O*Net (O*NET OnLine 2022), weighted using Survey of Income and Housing survey weights.

Figure 24: Skills and Tasks in demand in Australia

ANNEX 3: POLICY TAXONOMY TABLE

RATIONALE FOR INTERVENTION - YOUTH NEET AND LOW-INCOME YOUNG WORKERS

Barrier	Interventions	Rationale	Skill/technology risk to barrier	Example service	Intervention risk
Information gap for businesses	Trial periods, matching services	By reducing the cost of a "poor match" employers are more willing to provide opportunities to young		Probationary Period. PaTH.	Business abuse, reduce employee power
Work information gap for young people	Matching services, career support, wrap-around services	By reducing the cost of a "poor match" employees are more willing to try a broader range of roles.	Reduced portability - increases the lock-in associated with job choice	Jobactive. PaTH	High cost, risk of "excessive choice"
Skill mismatch/inflexibility	Market driven training, retraining support, level of income support	Differences in the skills people have and the skills employers need	Increased portability - less on job training	Mid-Career Checkpoint	Incentive mis-match among private providers of training services.
High labour cost making employment unattractive	Minimum wage reductions (training), subsidised employment, dual-education programs	Cost barriers prevent employers from offering job opportunities.	Increased portability - greater risk from incurring a given labour expense	Junior Pay Rates. Youth Wage Subsidy. JobMaker.	Business abuse, insecure work.
High cost to finding work or education (i.e. regional mobility)	Relocation allowances, standardising occupational licences, housing policy	Barriers to moving and finding work outside of the young persons home town prevent the individual from finding better work.	Reduced portability/increased replaceability - makes it more risky to move, restricting mobility.	RATTUAI	Subsidy based incentives may lead to job seekers taking on excessively risky moves - without a social support network.
Persistent displacement, cycles of disadvantage	Educational interventions, wrap-around-services, social support networks, social enterprises.	Intergenerational disadvantage creates a trap for young people that limits their opportunity to meet their potential.	Reduced portability/increased replaceability - reinforces negative perception of labour market effort	High dose tutoring, industry-based social enterprise.	Without data heavy evaluation risk of significant expense with little effect
Disability	Subsidised employment, wrap-around-services, tailored matching services	The interplay of disability and discrimination associated with this can reduce opportunities for those with disabilities.		DES (Disability Employment Service)	Without data heavy evaluation risk of significant expense with little effect

Figure 25: Barriers, policy interventions, and risks