

Getting Skills Right

Financial Incentives to Promote Adult Learning in Australia





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The world of work is changing. Digitalisation, globalisation, and population ageing are having a profound impact on the type and quality of jobs that are available and the skills required to perform them. The extent to which individuals, firms and economies can reap the benefits of these changes will depend critically on the readiness of adult learning systems to help people develop and maintain relevant skills over their working careers.

To explore this issue, the OECD Directorate for Employment, Labour and Social Affairs has undertaken an ambitious programme of work on the functioning, effectiveness and resilience of adult learning systems across countries. This includes the creation of the Priorities for Adult Learning (PAL) dashboard for comparing the readiness of each country's adult learning system to address future skills challenges, as well as a cross-country report, "Getting Skills Right: Future-Ready Adult Learning Systems," which showcases relevant policy examples from OECD and emerging countries. The Directorate is also carrying out a series of in-depth country reviews of adult learning systems to offer a comprehensive analysis of the key areas where policy action is required.

This report reviews Australia's existing set of financial incentives to promote adult learning, and analyses how they could be reformed to promote engagement among adults and employers. Chapter 1 presents an overview of recent trends in participation and provision, and summarises the types of financial incentives that are currently in place to promote adult learning. Chapter 2 identifies the main barriers to greater engagement in adult learning. It discusses how various types of financial incentives could be implemented to overcome these barriers, drawing on international and Australian experience. Chapter 3 provides an assessment of Australia's current system, and considers the feasibility of various policy options.

The work on this report was carried out by Katharine Mullock from the Skills and Employability Division of the Directorate for Employment, Labour and Social Affairs under the supervision of Glenda Quintini (Skills team manager) and Mark Keese (Head of the Skills and Employability Division). The report benefited from helpful contributions from colleagues in the Skills and Employability division. Special thanks are given to the many Australian stakeholders who participated in telephone meetings between January and March 2019, and provided documentation and comments critical to the report's production.

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¹ As a result of machinery of government changes announced on 29 May 2019, the area of Department of Education and Training responsible for skills and training has merged with the former Department of Jobs and Small Business, which is now the Department of Employment, Skills, Small and Family Business.

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Acronyms and abbreviations

AUS	Australian dollars
ABS	Australian Bureau of Statistics
ACE	Adult community education
AIG	Australian Industry Group
AMEP	Australian Migrant Education programme
AQF	Australian Qualification Framework
ATN	Australia Technology Network
BCA	Business Council of Australia
CAD	Canadian dollars
Cedefop	European Centre for the Development of Vocational Training
CEP	France's Conseil en Évolution Professionelle
CIF	France's Congé Individuel de Formation
CPF	France's Compte Personnel de Formation
СТВ	Canada Training Benefit
CW	Commonwealth government
DESSFB	Department of Employment, Skills, Small and Family Business
DET	Department of Education and Training
DJSB	Department of Jobs and Small Business
El	Canada's Employment Insurance
EUR	Euros
FBT	Fringe Benefits Tax
FT	Full time
GBP	British pounds
GDP	Gross domestic product
HE	Higher education
HELP	Higher Education Loan Programme
HILDA	Household Income and Labour Dynamics in Australia
IAG	Information, advice and guidance
ICT	Information and communications technology
ILA	Individual learning account
IRC	Industry reference committees
ISCO	International Standard Classification of Occupations
ISF	Industry Skills Fund
MOOC	Massive open online course
NCSEHE	National Centre for Student Equity in Higher Education
NCVER	National Centre for Student Equity in Fingher Education National Centre for Vocational Education and Research
NSNL	National Skills Needs List
OECD	Organisation for Economic Cooperation and Development
PAL	Priorities for Adult Learning dashboard
PES	Public employment service
PIAAC	OECD Survey of Adult Skills
QILT	Quality Indicators for Learning and Teaching
RTO	Registered training organisation
S&T	State and territory governments
SEE	Skills for Education and Employment
SEUV	Survey of Employer Use and Views
SEUV	Survey of Employer Ose and views

SFC	Singapore's SkillsFuture Credit
SGD	Singapore dollars
SME	Small and medium-sized enterprise
TAFE	Technical and Further Education
TC	Training consortium
VET	Vocational education and training
WELL	Workplace English Language and Literacy
WRTAL	Work-Related Training and Adult Learning
WSQ	Workforce Skills Qualifications

Executive Summary

Australia requires a strong system of adult learning to position firms and workers to succeed as skill demand changes. Previous OECD analysis estimates that up to 36% of Australian adults work in jobs whose tasks could change significantly as a result of technological progress. Many adult workers will need to upskill or retrain to remain employable.

Australia has scope to improve the coverage and inclusiveness of its adult learning system. In the 2012 Survey of Adult Skills, Australia outperformed most OECD countries in coverage (the share of workers who participate in adult learning). However, national data sources (the Household Income and Labour Dynamics in Australia survey and the Work-Related Training and Adult Learning survey) suggest that overall coverage has declined in Australia since 2012. In 2017, 31% of adults had participated in formal or non-formal jobrelated training in the previous 12 months, down from 35% in 2008. Employer provision of both accredited and unaccredited training also declined. Furthermore, some vulnerable groups are much less likely to participate in adult learning, including low-educated workers, those working in small and medium-sized enterprises, as well as own-account and casual workers. Despite a greater need for training, only 26% of workers in occupations with a high risk of automation participated in job-related training, compared with 40% of workers in occupations with a low risk of automation. Workers in high-risk occupations who do not take advantage of opportunities to retrain risk poorer employment prospects and lower wages in the future.

Financial incentives, if carefully designed, can raise participation and improve inclusiveness in adult learning by addressing cost and time barriers. This report reviews Australia's financial incentives to promote adult learning, and suggests reforms to improve their effectiveness.

Existing financial incentives, notably subsidies, income-contingent loans and a tax deduction for self-education expenses, have strengths. They strike the right balance between recognising the private returns to education (by making individuals and employers contribute to the costs of training) and promoting inclusiveness (by subsidising training for individuals facing financial constraints). In addition, casual and own-account workers are eligible for most financial incentives, which is rare by international standards. On the other hand, current financial incentives fail to address the greatest barrier to adult participation in training: lack of time. Incentives are too tightly linked to full formal qualifications, which are time-consuming, and Australians lack universal access to education leave. Employers cite the cost of releasing employees for training as a barrier to greater provision. Another key weakness is that existing financial incentives do not support retraining in new occupations. For instance, the tax deduction for self-education expenses may only be used for training related to one's current employment. Workers in occupations with a high risk of automation are thus impeded from retraining in lower-risk occupations.

There is growing interest in international learning accounts (ILAs) among stakeholder groups in Australia. The portability feature of ILAs seems to promise broader and more inclusive coverage and the potential to support transitions of high-risk workers to new occupations. However, while ILAs have great potential, there is little international evidence

to suggest that ILAs have so far incited wide participation nor that they have successfully bridged the training gap between high-skilled and low-skilled workers in the countries where they have been implemented. Furthermore, they do not in themselves address the barrier of time constraints which means that individuals would still pay the (high) opportunity cost of training. Quality control deserves careful consideration under an ILA scheme, and particularly given Australia's recent experiences with fraud in the VET-FEE HELP programme. Safeguards would be needed to minimise fraudulent use of the ILA funds: a gradual phase-in period to catch and fix pitfalls related to fraud, a more rigorous approval and quality assurance process for providers, and easy access to information, advice and guidance. A final consideration is that a new ILA could be quite costly in terms of set-up and administrative costs, as well as potentially high deadweight losses, unless efforts were made to modulate the amount of support provided to priority groups.

After assessing various policy options, this report recommends that Australia adjust the design of its financial incentives to address identified weaknesses. Australia should allow use of existing subsidies and loans for less time-consuming types of training (e.g. modular, distance, online, etc.), and broaden the eligibility of the self-education tax deduction to training unrelated to one's current employment. Adding paid education and training leave to the existing set of incentives would address time barriers. Employers could be compensated for lost wages during paid training, or provided with replacement workers through a job rotation scheme. Better targeting of existing incentives would mitigate deadweight loss. These and other recommendations are tabled below.

Table 1. Recommendations

Main findings

Key recommendations

Allow the tax deduction for self-education expenses to be used towards

Allow a broader use of existing subsidies and loans (e.g. VET student Loan,

training that is not directly related to one's current employment, while

excluding training for leisure or personal interest purposes.

Financial incentives

The current set of financial incentives do not encourage retraining in new occupations, which impedes transitions from high-risk occupations to low-risk occupations.

The current set of financial incentives do not adequately address the barrier of time constraints, which is the most commonlyreported barrier to participation in adult learning.

Higher Education Loan programme) to cover more flexible modes of training delivery, e.g. modular learning, distance or online learning, and learning that takes place on a part-time basis or on evenings and weekends. Extend the use of the self-education expenses tax deduction to non-formal learning. Consider introducing a right to paid training leave, either at the national

level or on an industry basis. To encourage firms to release workers for training leave, explore the use of job rotation schemes to provide replacement workers for employers while their employee trains. For training that is not job-specific or sector-specific, and for own account workers, the Australian Government could compensate the employer for lost wages. Alternatively, permitting flexible working arrangements to accommodate training could be another way to address time constraints.

The self-education expenses tax deduction and subsidies in HE and VET (i.e. Commonwealthsupported places and state-supported spaces, respectively) generate deadweight losses by subsidising training for adults who earn high incomes and would likely have undertaken the training without the financial incentive.

Mitigate deadweight losses by limiting use of the self-education expenses tax deduction to adults with incomes below a given threshold. Similarly, Commonwealth-supported and state-supported places in HE and VET for adults (age 25+) could be targeted at those with incomes below a given threshold. Adults with incomes above this threshold may access income-contingent loans.

Framework conditions

While there is an abundance of information online, adults and employers have little access to guidance to help them make skills development investments that correspond to the needs of the labour market.

Consider offering adults subsidised career guidance. Reach out to under-represented groups in their day-to-day environment (e.g. workplaces, community institutions and public spaces) to inform them about training opportunities. Follow through with plans to update the myskills website with provider-level data on employment outcomes by

Chapter 1. A portrait of adult learning participation in Australia

This chapter discusses global trends that are changing job content and skills requirements. It provides a brief comparative snapshot of how well Australia performs on various priorities of adult learning systems, with a focus on trends in the participation of individuals and provision by employers. It identifies groups of adults who have difficulties accessing training and who may have a harder time adapting to changes in skills demand, as well as firms that have difficulties providing training. Finally, the chapter provides an overview of the financial incentives that Australia has in place to promote participation in adult learning.

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1.1. Key findings

As demand for skills continues to change under the combined pressures of globalisation, technological change and population ageing, adult learning systems need to adapt. Labour markets in all countries are expected to experience significant structural change, leading to a re-allocation of labour from declining sectors and occupations to emerging ones. The skills profiles needed for existing jobs are also expected to change. To remain employable over longer working lives, adults need accessible and affordable opportunities to upgrade their skills or to retrain to acquire new skills.

A strong system of adult learning is needed in Australia in order to position firms and workers to succeed in the context of these changes. This report focuses on adult learning that is structured (i.e. formal or non-formal learning, Box 1.1) and job-related, i.e. expected to have an effect on performance and productivity at work, or to help adults successfully transition to new employment.

Box 1.1. Defining adult learning

This report focuses on the population of potential adult learners aged 25-64. Adults in this target age group have generally completed initial education and have begun their working lives.

There are three types of adult learning: formal, non-formal and informal. According to Eurostat's classification, the key criterion distinguishing formal or non-formal learning from informal learning is that it is institutionalised. This report will focus on participation in formal (accredited) and non-formal (unaccredited) learning.

Random learning Informal learning Formal Non-formal education education Family-, socially- or self-directed Media and communication

Figure 1.1. Scope of education and training

Informal learning: non-institutionalised learning activities which are not structured (e.g. no student/teacher interaction) and can take place anywhere, e.g. learning while doing.

Non-formal education (unaccredited training): institutionalised learning activities (e.g. seminars, courses, on-the-job training, open and distance education) which are either of short duration (less than one semester of full-time equivalent) or are not recognised by the relevant education or equivalent authorities.

Formal education (accredited training): institutionalised learning activities which are a minimum of one semester and which are recognised as programmes by the relevant education or equivalent authorities.

Source: Eurostat (2016_[11]), Classification of Learning Activities Manual, http://dx.doi.org/10.2785/874604.

The key findings of this chapter include:

- The OECD Priorities for Adult Learning (PAL) dashboard highlights strong performance for Australia in the areas of coverage and alignment of training content with labour market needs. However, strong performance on coverage is based on cross-country comparative data from the 2012 OECD Survey of Adult Skills (PIAAC). Since the time of the survey, national data sources indicate that participation in adult learning has declined by as much as six percentage points. Declines appear to be concentrated in job-related non-formal learning.
- Evidence from the Household Income and Labour Dynamics in Australia (HILDA) survey suggests that some groups have below-average participation (average is 31%) in job-related adult learning: low-educated workers, own-account workers, casual workers, and workers in small and medium-sized enterprises (SMEs). These relationships hold even when controlling for differences in socio-demographic characteristics between groups. The gap between the training participation rate of older and younger workers nearly closed between 2007 and 2017 due to a simultaneous decline in the participation of younger workers and a rise in the participation of older workers.
- Only 26% of workers in jobs at high risk of automation participated in training in 2017 [OECD calculations using the HILDA survey based on Edmonds and Bradley $(2015_{[2]})$ classification of occupations at risk of automation]. Workers in occupations with a low risk of automation, including managers, professionals, and information and communications technology technicians, are generally more likely to train than workers in occupations with a high risk of automation, including food preparation assistants; agricultural, forestry and fishery labourers; and cleaners and helpers.
- Employer provision of both accredited and unaccredited training has declined over the 2005-2017 period, likely due in part to declines in financial incentives aimed at employers. A rising share of employers report that their employees are engaged in informal learning.
- Several financial incentives are available to support adult learners, including subsidies, income-contingent loans and a tax incentive. Altogether, public financial support for adult learning amounts to about AUS 7.5 billion (Australian dollars) per year (0.4% of GDP), which represents a high public investment in adult learning by international standards. Additional public support also comes from states and territories and employment services.

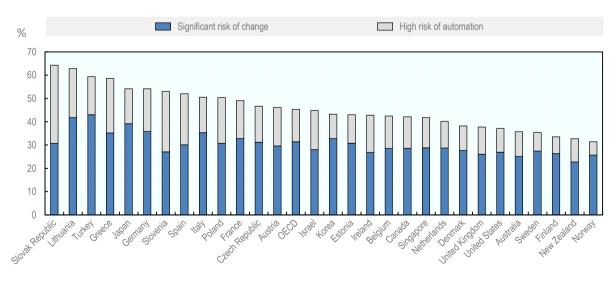
The chapter is structured as follows. Section 1.2 sets the context by discussing how global trends are changing demand for skills. Section 1.3 provides a comparative snapshot of Australia's adult learning system, with particular emphasis on recent trends in the participation of adults and provision by employers. It identifies groups of adults who have low participation in adult learning and who may have a harder time adapting to changing skills demand as a result. Section 1.4 summarises the financial incentives that Australia currently has in place to promote adult learning.

1.2. Introduction

As demand for skills continues to change under the combined pressures of globalisation, technological change and population ageing, adult learning systems need to adapt. All OECD countries face these challenges to varying degrees.

Technological change has had a profound impact on Australia's labour market over the last decades. Technological progress raises demand for skills and knowledge which complement new technologies, including cognitive and soft skills, and at the same time reduces the demand for human labour to perform routine tasks, as these tasks can be more easily codified and therefore performed more cheaply by machines and computers. Recent Australian analysis tracks a steady decline in the demand for labour to perform routine tasks since the late-1980s, along with a rise in demand for labour to perform abstract tasks (Borland and Coelli, 2017_[3]; Deloitte Insights, 2019_[4]). OECD analysis estimates that 11% of Australian jobs face a high risk of automation, while another 25% are likely to be affected by significant changes in task content (Figure 1.2). Altogether 36% of Australian jobs face a significant risk of automation, which is less than the OECD average (45%), but represents a sizeable share of the adult population who will need to upskill or retrain to remain employable. Australian research (Edmonds and Bradley, 2015[21]) has found that over the last decade the susceptibility of automation in Australia has decreased as highly susceptible jobs have become automated. A decomposition analysis concludes that for the most part, this decline is due to Australian industries having reduced the share of jobs performing routine tasks, while increasing the share of jobs performing cognitive, interpersonal or problem-solving tasks (Edmonds and Bradley, 2015_[2]). At the same time, employment in Australia has also shifted away from industries that have a high risk of automation (historically manufacturing) and towards those where technology is less likely to replace workers, including education, professional and health care services.

Figure 1.2. Risk of automation
% of workers facing significant (50-70% of tasks) or high (70%+) risk of automation



Note: Belgium refers to Flanders only, United Kingdom to England and Northern Ireland. *Source*: Nedelkoska and Quintini (2018_[5]) "Automation, skills use and training."

Population ageing is also putting pressure on Australia's adult learning system by increasing the need for workers to upskill or retrain over longer working lives, by contributing to skills and labour shortages due to the retirement of large cohorts, and by changing the demand for goods and services (OECD, 2019₍₆₁₎). The share of the population age 65+ is projected to increase from 23% to 37% in Australia between 2015 and 2050; a non-trivial increase, but less than in other countries (71% of the Japanese population is projected to be over the age of 65 by 2050).

Australia is a strong commodity exporter, but less exposed to international trade than many OECD countries (the sum of exports and imports as a percentage of GDP is one of the lowest across OECD countries). Australia is therefore affected by changes in skills demand that come from greater integration in global value chains - such as growing demand for high-level skills needed to specialise in high-tech manufacturing industries and complex business services – though less so compared to other countries.

These dynamics have contributed to the current shortages and surpluses observed in Australia (OECD, 2018_[7]). The OECD Skills for Jobs database identifies shortages for Australia in education and training, health services, and mathematics and sciences, as well as transversal skills like verbal and reasoning abilities and basic literacy and numeracy skills (Figure 1.3). At the same time, surpluses are observed in knowledge related to manufacturing and production, as well as physical abilities like fine manipulative abilities, control movement and physical strength. Figure 1.4 shows that many of the occupations facing a high risk of automation in the Australian labour market (including plant and machine operators, cleaners and helpers, and labourers) also tend to show signs of surplus (lower wage and employment growth than the national average, lower levels of hours worked, and higher unemployment rate growth).

Figure 1.3. Skills shortages and skills surpluses, Australia, 2016

Index (-1 to +1) 0.5 0.4 0.3 0.2 0.1 0 -0.1 Flexibility, Balance and Endurance Education and Training Mathematics and Science Memory Reaction Time and Speed Control Movement Abilities Complex Problem Solving Technical Skills Health Services Arts and Humanities -aw and Public Safet Communications Engineering and Technology Business and Managemen **Transportation** Manufacturing and Production Verbal Abilities Reasoning Abilities Perceptual Abilities Quantitative Abilities Attentiveness Auditory and Speech Abilities Spatial Abilities Visual Abilities Physical Strength Fine Manipulative Abilities Basic Skills (Process Systems Skills Basic Skills (Content Social Skills Resource Management Skills

Skills Needs Indicator

Note: Positive values indicate shortages while negative values indicate surpluses. The indicator is a composite of five sub-indices: wage growth, employment growth, growth in hours worked, unemployment rate and growth in under-qualification.

Source: OECD Skills for Jobs (database), www.oecdskillsforjobsdatabase.org.

0.8 61 0.6 53 0.4 73 skill needs indicator 83 0.2 0 52 42 43 91 -0.2 35 81 -0.4 72 96 93 -0.6 -0.8 risk of automation (%) 0.2

Figure 1.4. Correlation between risk of automation and skills needs, Australia, 2016

Note: For the skills needs indicator, positive values indicate shortages and negative values indicate surpluses. Occupations are represented by 2-digit ISCO code (see Table 1.1 for legend). The R² (the percentage of the variance in the risk of automation between occupations that can be explained by the variance in the Skills Needs indicator values) is 0.16.

Source: OECD Skills for Jobs (database), https://www.oecdskillsforjobsdatabase.org/; Nedelkoska and Quintini (2018[5]), "Automation, skills use and training".

Table 1.1. Occupations (2-digit ISCO code) by risk of automation

Ranked according to share of jobs in the occupation with risk of high or significant change in task content

	Fewer than 25% of jobs		25-50% of jobs		Over 50% of jobs		
11	Chief executives, senior officials & legislators	54	Protective services workers	44	Other clerical support workers		
23	Teaching professionals	53	Personal care workers	75	Food processing, wood working, other craft & trades workers		
13	Production & specialised serv. managers	74	Electrical & electronic trades workers	96	Refuse workers & other elementary workers		
12	Admin. & commercial managers	31	Science & engineering associate prof.	73	Handicraft & printing workers		
14	Hospitality, retail & other serv. managers	51	Personal service workers	93	Agricultural, forestry & fishery labourers		
22	Health professionals	52	Sales workers	93	Labourers in mining, construction, manufact. & transport		
24	Business & admin. professionals	42	Customer services clerks	41	General and keyboard clerks		
26	Legal, social & cultural professionals	71	Building & related trades workers, excl. electricians	83	Drivers and mobile plant operators		
21	Science & engineering prof.	72	Metal, machinery & related trades workers	94	Food preparation assistants		
35	ICT technicians	43	Numerical & material recording clerks	81	Stationary plant & machine operators		
34	Legal, social, cultural & related associate prof.	61	Market-oriented skilled agricultural workers	91	Cleaners & helpers		
25	ICT professionals						
33	Business & admin. associate prof.						
32	Health associate professionals						

Source: Nedelkoska and Quintini (2018[5]), "Automation, skills use and training".

In this context, the Australian labour market requires skilled individuals who can perform the available jobs. However, according to the OECD Survey of Adult Skills, 24% of Australian workers report that they need more training to do their current tasks. Furthermore, nearly 22% of adults in Australia have low literacy and/or numeracy proficiency (at Level 0 or 1), and 22% have low problem-solving skills in technology-rich environments. According to the Australian Industry Group survey, 39% of employers report that their businesses were highly affected by low levels of literacy and numeracy among their employees¹.

Australia requires a strong system of adult learning in order to position firms and workers to succeed in the context of technological change, globalisation and population ageing. This implies an adult learning system that is well-financed, can be aligned with labour market needs, and which affords opportunities for all adults to continuously acquire and upgrade their skills throughout their working lives.

1.3. Current performance

The OECD Priorities for Adult Learning dashboard (PAL) allows countries to benchmark themselves along seven dimensions of future-readiness of adult learning systems (Figure 1.5). According to the PAL, Australia performs relatively well in the area of aligning training with labour market needs. As highlighted in (OECD, 2018_[7]), Australia is a leader in the variety of skill assessment and anticipation exercises it carries out, and also in how it uses the information from these exercises to inform policy, including training policy. While Australia performed above the OECD average in terms of coverage at the time of the 2012 Survey of Adult Skills, national data sources (Household Income and Labour Dynamics in Australia [HILDA] survey and the Australian Bureau of Statistic's Work-Related Training and Adult Learning [WRTAL] survey) suggest that overall participation has decreased in recent years, as will be discussed in more detail in this section.

Australia is in the middle of the pack in several dimensions, including self-reported impact, i.e. the impact that training has had on the employment and career opportunities of the adults concerned; and inclusiveness, having relatively modest differences in participation between groups such as men and women, low-wage and medium/high-wage workers, unemployed and employed workers. Australia also performs close to the OECD average on the financing indicator. Cost is an important barrier to training for adults in Australia: 18% of adults report cost to be a barrier relative to 16% across OECD countries. Section 1.4 will provide an overview of Australia's current set of financial incentives to support adult learning, and Chapter 2 will share experiences with financial incentives used in other countries which could be instructive for Australia.

Australia falls behind the OECD in flexibility and guidance, a measure of whether adults have access to guidance about learning opportunities and whether learning opportunities are available in flexible formats. Availability of career guidance and flexible learning opportunities will be discussed as part of the framework conditions necessary for financial incentives to function effectively in Chapter 3.

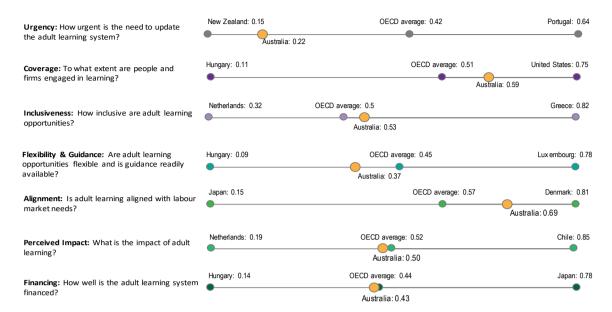


Figure 1.5. Priorities for Adult Learning dashboard, Australia

Note: The seven dimensions of the dashboard aggregate multiple indicators. Indicator scores are normalised (min-max) for the aggregation and the aggregate scores are therefore the relative performance of countries. Source: OECD Priorities for Adult Learning dashboard (http://www.oecd.org/employment/skills-andwork/adult-learning/dashboard.htm).

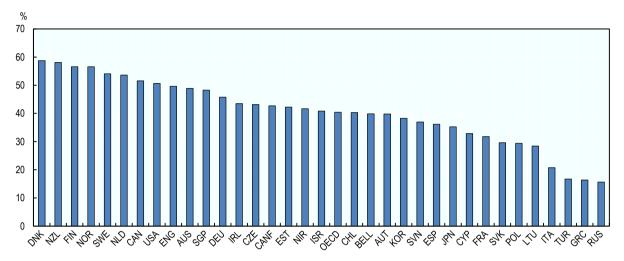
1.3.1. Participation in adult learning

For a future of work that is both productive and inclusive, broad-based coverage of adult learning is necessary. To assess trends in participation in adult learning, this report will draw upon four sources of data. First, the 2012 OECD Survey of Adult Skills (PIAAC) provides international comparative data on adult participation in learning activities. Second, the Household Income and Labour Dynamics in Australia (HILDA) survey is a longitudinal survey of Australian households which has collected data on participation in work-related training annually since 2007. Third, the Australian Bureau of Statistics' Work-Related Training and Adult Learning (WRTAL) survey provides data on participation in formal, non-formal and work-related non-formal learning and was conducted in 2013 and 2017². Fourth, annual programme enrolment statistics from higher education (HE) and vocational educational and training (VET) are also used.

According to PIAAC, 49% of adults participated in job-related adult learning in Australia in 2012, above the OECD average of 40%. Training intensity is also higher than in other countries, with a median of 36 hours per year compared to 30.5 hours in OECD countries.

Figure 1.6. Participation in formal or non-formal job-related training, adults aged 25-64, OECD countries, 2012/2015

Share of adults aged 25-64 who participated in formal or non-formal job-related training over the previous 12 months



Note: Data refer to 2012 for most countries, except Chile, Greece, Israel, Lithuania, New Zealand, Slovenia and Turkey where they refer to 2015.

Source: OECD Survey of Adult Skills (PIAAC).

That being said, participation has declined considerably in the past decade, based on national data sources. While not directly comparable to the PIAAC measure as only employed workers are polled regarding their participation in job-related adult learning, Figure 1.7 (Panel A) shows that according to the HILDA survey, the share of employed adults participating in job-related training (formal or non-formal) declined from 35% in 2008 to 31% in 2017³. Training intensity also declined, with a median of 24 hours in 2017 compared with 28 hours in 2007.

Similar declines are observed from the WRTAL survey, produced by the Australian Bureau of Statistics (ABS), which polls all adults about their training behaviour (not only employed adults, as in HILDA). The share of adults who participated in formal or non-formal learning declined from 43% in 2013 to 37% in 2017 (Figure 1.7, Panel B). This six percentage point decline is almost entirely due to a drop in participation in non-formal learning, and in particular, to a drop in job-related non-formal learning. Participation in formal training remained stable at 13% of the adult population.

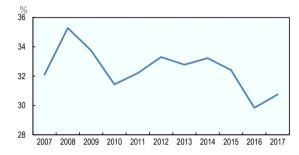
But while the share of adults who report participating in formal training remained stable since 2013 according to the WRTAL, enrolment in formal training declined by two percentage points over this period (from 11% of adults aged 25 to 64 to 9%) (Figure 1.8). Enrolment in HE increased modestly since 2008, supported by Australia's shift in 2012 (until 2017) to a demand-driven system in HE (during which the Australian Government removed caps on its financial support for most domestic undergraduate students). However, VET enrolment declined since 2012 (Figure 1.8). Declines in VET enrolment may be tied in part to tightening of rules in 2012 and 2013 in the use of employer apprenticeship incentives (see Section 1.4.2 for more details), which led to a drop in non-trade apprenticeship starts.

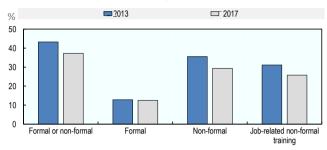
Overall, these trends suggest that while Australia had above-average performance in terms of adult learning coverage in 2012 at the time of the PIAAC survey, this may no longer be the case. Declining participation in adult learning runs opposite to the general increase in participation observed across OECD countries (OECD, 2019[6]). With fewer and fewer Australian adults taking part in adult learning, particularly in job-related non-formal learning, actions are needed to boost participation and reverse these trends.

Figure 1.7. Declining participation in job-related training

A. Share of employed adults in job-related training, 2007-2017

B. Share of adults in training, by type of training, 2013 and 2017

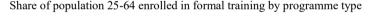


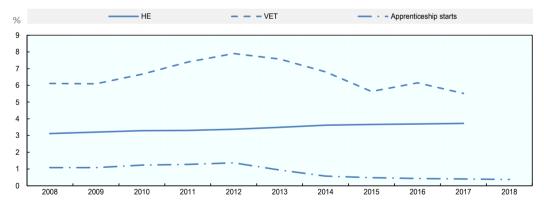


Note: Panel A: Share of employed adults aged 25-64 who participated in formal or non-formal job-related training over the past 12 months. Panel B: Share of adults aged 25-64 who participated in training over the past 12 months.

Source: Panel A: OECD calculations based on the Household Income and Labour Dynamics in Australia (HILDA) survey. Panel B: OECD calculations based on the ABS' Work-Related Training and Adult Learning (WRTAL) survey.

Figure 1.8. Declining enrolment in formal training





Source: DET, Higher Education Statistics collection, unpublished (accessed 18 June 2019); NCVER, VOCSTATS, Government-funded VET program enrolments 2003-2017 (accessed 18 June 2019); NCVER Apprentice and trainee collection, December quarter 2018.

1.3.2. Under-represented groups

Declining participation may exacerbate gaps in coverage between those with high and low participation rates. Several groups who are under-represented in training participation are also those who are most vulnerable to changing skills demand.

The OECD's Employment Outlook (2019_[8])notes that while changes in skills requirements due to technological change have the potential to affect all workers, the growing demand for high-level cognitive skills and complex social interaction skills suggest that low-skilled workers in jobs that are intensive in repetitive or manual task are likely to bear the brunt of these changes. But while low-skilled workers arguably have a greater need for upskilling opportunities, they tend to receive less training than higher-skilled workers. Employers favour investing in higher-skilled workers when it comes to training, expecting the return to be higher. Older workers, too, are likely to experience significant skills obsolescence, particularly in the context of technological change, unless they upgrade the skills they acquired in initial education. Given the shorter period of time that older workers have to recoup this investment before retirement, they also tend to receive less training than younger workers.

Casual workers, own-account workers, those in part-time work or with temporary contracts are potentially vulnerable groups who face challenges in maintaining and upgrading their skills. As training is often provided by employers, workers with less attachment to the labour market have more difficulty accessing it. Some OECD countries have seen a rise in non-standard contractual working arrangements in recent years, and in Australia, the share of adult workers (age 25-64) in at least one of these types of contractual arrangements increased from 42% of total employment in 2007 to 43% in 2017 (Table 1.2). The share of temporary work (fixed-term contracts) in employment increased (from 8% to 9% between 2007 and 2017), and the share of part-time work in employment increased by half of a percentage point to 27.5%. There has been a rise in part-time work among those who would prefer to work full-time: involuntary part-time employment increased from 7% to 9% of employment over this period (OECD, 2019_[9]). The share of casual employees – those who receive a "loading" on their wage in compensation for a lack of leave entitlements, including paid holiday and sick leave, redundancy pay and notice of termination – was stable over this period. Gilfillan (2018[10]) documents a steep rise in casual work in Australia from the mid-1980s to early-1990s before it levelled out. The share of own account workers – self-employed workers with no employees, including gig or platform workers-declined from 8% to 7% over this period. While the share of own account workers includes those in gig or platform work, it does not capture those who use platform work to complement their primary job and may therefore underestimate the extent of such work in the Australian labour market (OECD, 2019[11]).

Table 1.2. Share of non-standard working arrangements in total employment

Share of employment, aged 25-64, 2007 and 2017

	2007	2017
	%	%
Part-time workers	27.0	27.5
Casual workers	12.5	12.8
Fixed-term contract	7.6	8.8
Own-account workers	8.2	7.2
Workers who are part of at least one of the above groups	41.8	43.3

Note: Due to overlap between groups, the rows do not add up to the total.

Source: OECD calculations based on the HILDA survey.

% 50 Large firms Temporary Full-time High educated Low risk Full-time Full-time Surplus permanent A permanent permanent **Employed** Young (25-34 30 Part-time Older (55-64) **SMEs** High risk 20 Casual Shortage Full-time Low educated permanent Unemployed 10 Own account Contract type Labour force status Contract type Firm size Automation Labour demand Contract type

Figure 1.9. Participation in formal or non-formal job-related training by group

Share of employed adults (25-64)* in each group, 2017**

Note: Ranked in order of the gap in participation rates between groups. Share of employed adults who participated in formal or non-formal job-related training over the previous 12 months.

*The exception is the comparison based on labour force status, which includes unemployed adults. **Data for risk of automation and labour demand are for 2016.

Source: OECD calculations based on the HILDA survey; Skills for Jobs database (labour demand); the ABS' WRTAL survey (labour force status); and risk of automation as computed by Edmonds and Bradley (2015_[2]).

An overview of differences in participation rates across groups is provided in Figure 1.9. The largest differences are observed between full-time permanent workers and ownaccount self-employed workers and between highly-educated and low-educated workers. Casual workers also have much lower training participation than full-time permanent workers, and workers in SMEs train less than workers in large firms. Employed workers on fixed-term temporary contracts have comparable (even slightly higher) training participation rates to workers with full-time permanent contracts.

As of 2017, young and older employed workers in Australia have similar participation rates, unlike in most OECD countries where older workers receive less training. The gap between young and older employed workers has declined since 2007 when young workers were eight percentage points more likely to participate in adult learning. The gap closed due to a simultaneous decline in the participation of younger workers (2.8 percentage points) and a rise in the participation of older workers (3.3 percentage points).

As the HILDA survey only polls employed workers about their training behaviour, it is necessary to consult the ABS' WRTAL survey to understand differences in training participation between the employed and unemployed. Figure 1.9 shows that unemployed workers are far less likely to participate in work-related training (for the unemployed, this might include training in employability skills or skills related to a particular occupation) than employed workers (21 percentage points less).

Australia is one of the only OECD countries where workers in surplus occupations train more than workers in shortage occupations. Australia's policies to intervene early to retrain displaced workers in declining industries may have contributed to this positive outcome. On the other hand, workers in occupations with a high risk of automation [based on the calculation by Edmonds and Bradley (2015_{[21)}] train less than those with a low risk of automation. Only 26% of workers in occupations with a high risk of automation participated in job-related training in 2017, compared with 40% of workers in occupations with a low risk of automation. This suggests that workers in occupations with a high risk of automation may be vulnerable to poorer employment prospects and lower wages in the future unless they retrain.

Many of the groups in Figure 1.9 are overlapping. Running a pooled cross-sectional regression using HILDA data of participation in job-related training from 2007 to 2017 on a set of individual, job and firm characteristics provides a way of isolating the effect of each characteristic. Even when controlling for individual, job and firm characteristics, there is a negative time trend on the probability of participating in job-related training which amounts to a total decline of 2.1 percentage points over the 10-year period (Table 1.3, Column 2). This is a larger decline than the one registered in the descriptive statistics, suggesting that declining participation in adult learning cannot be explained by compositional changes in individual or job characteristics. Instead, external conditions in the labour market or policy changes are more likely the cause of the decline. Given the rise in unemployment over this period, employers may have taken advantage of looser labour market conditions to recruit external candidates with needed skills, rather than train existing employees. Higher unemployment goes hand in hand with reduced consumer demand, which may constrain the ability of employers to invest in training.

The regression results presented in Table 1.3 confirm many of the descriptive relationships highlighted in Figure 1.9. Casual workers, own-account workers, and those in part-time work or with temporary contracts receive significantly less training than employees with a permanent contract, even after controlling for other characteristics. Educational attainment also increases the likelihood of participating in training for adults. Employed workers in large firms train significantly more than workers in SMEs. This represents a real challenge in Australia where 68% of all Australian employees work in firms with fewer than 250 employees (OECD, 2019_[12]), the highest share of SME employment across OECD countries, along with Greece.

Women are more likely to participate in job-related training than men, but this gap disappears when industry, occupation, and region differences are accounted for. Similarly, being married and being born in Australia both increase one's likelihood of participating in job-related training, but these effects are no longer significant once region, occupation and industry controls are included. Occupations with a low risk of automation (including managers, professionals, and information and communications technology technicians) train significantly more than workers in occupations with a high risk of automation (including food preparation assistants; agricultural, forestry and fishery labourers; and cleaners and helpers). Workers in the manufacturing industry are significantly less likely to receive job-related training than workers in most other industries.

Table 1.3. Probability of participating in training, by socio-demographic characteristics

Marginal effects from probit regression

	Participation in job-related training Employed population, 25-64		Participation in job-related training Employed population, 25-64		Participation in formal training Employed population, 25-64		
	2007-2017		2007-2017		2007-2017		
	Marginal effect	p-value	Marginal effect	p-value	Marginal effect	p-value	
Year	-0.027	***	-0.021	***	-0.011	***	
Female	0.166	***	-0.016		-0.018		
Age	-0.001		-0.001		-0.022	***	
Married	0.051	***	0.004		-0.098	***	
With dependent children	0.019		0.016		-0.070	***	
Non-native	-0.149	***	-0.035		0.017		
Education (years)	0.041	***	0.018	***	0.012	***	
Firm size (ref=1 employee)							
2-19	0.105		0.128	*	-0.087		
20 - 199	0.374	***	0.294	***	-0.038		
200 +	0.466	***	0.357	***	-0.001		
Part-time job	-0.145	***	-0.226	***	0.092	***	
Contract type (ref=permanent contra	act)						
Fixed-term contract	0.020		-0.065	*	0.035		
Casual	-0.338	***	-0.295	***	0.084	**	
Other	-0.099		-0.109		0.001		
Own account worker	-0.405	***	-0.321	***	-0.062		
Self-employed with employees	-0.507	***	-0.430	***	-0.210	***	
Tenure (years)	0.003	**	-0.002		-0.014	***	
Region dummies	No		Yes		Yes		
Industry dummies	No		Yes		Yes		
Occupation dummies	No		Yes		Yes		
Observations	65592		64972		77641		
Psuedo R ²	0.051		0.109		0.075		

Note: For the first two panels, the dependent variable takes a value of 1 if the employed worker participated in job-related training (formal or non-formal) over the past 12 months, and 0 otherwise. In the third panel, the dependent variable takes a value of 1 if the employed worker participated in formal training (job-related or not) over the past 12 months, and 0 otherwise. Occupation dummies are at 2-digit ISCO, and industry dummies are at 1-digit ANZSIC. *** p<0.001 ** p<0.01 * p<0.05.

Source: OECD calculations based on the HILDA survey.

Participation trends vary depending on the type of training in question. Fialho, Quintini and Vandeweyer (2019_[13]) find opposite relationships between contract type and non-formal training versus contract type and formal training. In particular, fixed term and temporary agency workers are less likely to receive non-formal training but more likely to receive formal training than their counterparts with permanent contracts. The job-related training variable in the HILDA includes both formal and non-formal training, and it is not possible to separate these two. However, a different variable asks respondents whether they participated in formal training (job-related or not). The final column of Table 1.3 restricts the analysis to formal training, controlling for the same individual, job, and firm characteristics as before. There is no significant relationship between fixed term contract and own-account workers and the likelihood of participating in formal training. On the other hand, while part-time and casual workers participate less in job-related training (formal or non-formal), they tend to participate more in formal training than their full-time

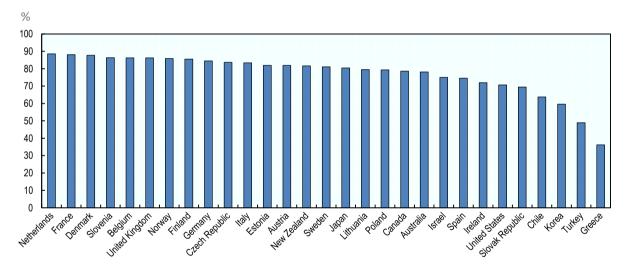
permanent counterparts. Pursuing full formal qualifications is not easily compatible with working full-time, likely explaining these differences.

Age is also a much more important factor in predicting participation in formal training than job-related (formal or non-formal) training: older adults and those with longer tenure are significantly less likely to participate in formal training than younger adults and those with less work experience, probably due to the reluctance of older workers to return to learning in a classroom setting. This is despite evidence (Coelli and Tabasso, 2015[14]) showing that older workers (age 40 to 54) have similar labour market outcomes (employment, hours, wage rates) from formal training as younger adults.

1.3.3. Employer provision

Employer provision of adult learning influences its coverage and inclusiveness. PIAAC finds that 78% of adult learning participants received funding from their employer for at least one learning activity in the previous 12 months. This is in line with the OECD average but 10 percentage points below top-performing countries such as the Netherlands, France or Denmark (Figure 1.10).

Figure 1.10. Share of participants who received funding from their employer for at least one learning activity in the last 12 months



Source: OECD Survey of Adult Skills (PIAAC).

The National Centre for Vocational Education and Research (NCVER) Survey of Employer Use and Views (SEUV) polls employers about their use of VET (the survey does not ask about their use of HE). According to SEUV, the share of firms providing VET or unaccredited training has declined since 2005 (Figure 1.11). Meanwhile the share of firms reporting that their employees are engaged in informal learning has increased, suggesting that employees are turning to informal opportunities to compensate for declining employer provision of structured training. New digital and online tools, including massive open online courses (MOOCs), have likely facilitated this rise in informal learning. While not asked why they stopped using structured training, employers reported a decline in satisfaction with unaccredited training between 2007 and 2017. Employer satisfaction with nationally-recognised accredited training remained stable over this period.

Still, the main strategy which employers report using to address skills gaps is training existing staff (87% of employers), followed by recruitment of new staff (57%) and internal reorganisation (57%). Similarly, using a less representative sample of mainly large firms, the Workforce Development Needs Survey (AIG, 2018_[15]) finds that retraining existing staff on the job is the strategy favoured by most employers (68%) followed by employing experienced employees (64%). This stated preference for training existing staff stands in contrast to employer practices reported in Europe's Continuous Vocational Training Survey (CVTS): among employers that did not train, over 50% reported a preference for recruiting over training existing employees.

90 80 70 60 40 201 30 201 30 201 30

Figure 1.11. Employer provision of training, 2005, 2007, 2013, 2017

Share of firms providing training, by type of vocational education or training

Source: NCVER, Survey of Employer Use and Views (database).

As shown in the regression results in Table 1.3, firm size is a strong predictor of participation in job-related learning. Findings from the SEUV confirm that for every type of training, small firms are less likely to provide training than large firms. This gap is largest for unaccredited training (42 percentage points lower), followed by VET (38 percentage points lower), and then informal learning (19 percentage points lower). These gaps reduced between 2015 and 2017 but remain substantial.

Unaccredited training

Declining employer provision of VET and unaccredited training may be tied in part to reductions in financial incentives, including the removal in 2012 and 2013 of incentives under the Australian Apprenticeships Incentives programme for certain apprentices and trainees⁴, and the 2016 closure of the Industry Skills Fund. External conditions in the labour market or other policy changes may also have played a role.

1.4. Existing financial incentives for promoting adult learning in Australia

Financial incentives have an important role to play as they can promote participation in adult learning when training cost is a barrier, and can also help to overcome time constraints by compensating the opportunity costs of training. If designed with some degree of cofunding they can encourage individuals and employers to financially contribute to the system and achieve a sustainable mix of contributions from the government, employers,

No training

and individuals. Finally, when appropriately targeted or differentiated, they can help steer training towards occupations and skills that are in demand on the labour market.

This section provides a brief description of the overall governance of the adult learning system in Australia and then summarises the existing financial incentives for encouraging participation in adult learning.

1.4.1. Governance and public investment in adult learning in Australia

Adult learning systems tend to be complex as they encompass programmes designed to pursue a variety of policy objectives and reach different target groups, such as basic skills courses for the low-skilled, second chance programmes for adults who did not complete initial education, professional training for workers, training for the unemployed, or language classes for migrants (OECD, 2019_[6]). As a result, responsibility for adult learning policy is often split across several ministries, levels of government, and other actors (e.g. social partners, training providers, non-governmental organisations). Often the different actors do not perceive themselves as being part of a joint adult learning system, in view of their separate objectives, responsibilities, and budgets.

This complexity is reflected in Australia's adult learning system. It consists of a school sector that includes public and private schools, an HE sector consisting of mostly public universities, and a VET sector that includes many private providers and a small number of large public providers (Technical and Further Education, TAFE) (Keating, 2004[16]). While HE is generally funded and administered by the national government, VET is generally administered by the states and territories, but funding is shared between the national, state and territory governments. In 2017, state and territory governments contributed AUS 3.3 billion (52% of total funding) to VET, while the national government contributed the remaining 3.0 billion (48% of total funding) (NCVER, 2019_[17]). The Australian Government also provided AUS 756 million in loans for VET in 2017 (NCVER, 2019[17]). Provision and financial support for adult learning in VET varies by state and territory. This federated approach has the advantage that policies and programmes can be targeted to the needs of learners in the state or territory. The disadvantage is that programmes and policies differ across the country, which can lead to inequities in adult learning opportunities.

Non-formal adult education is provided by an array of bodies. Most employers providing or paying for unaccredited training for their employees choose to perform such training inhouse (54.5% did not use an external training provider in 2017, according to the SEUV). Of those employers who did opt to use external training providers, 41% used a private training provider, 29% used a professional or industry association, 22% used a supplier or manufacturer, 6% used other providers, and only 3% used a TAFE.

The National Foundation Skills Strategy for Adults was launched in September 2012 and is a collaborative ten-year framework to build foundation skills (language, literacy, numeracy, and employability skills) for adults over 2012-2022. All Australian governments have committed to an aspirational target that by 2022, 66% of working age Australians will have literacy and numeracy skills at Level 3 or above (this is relative to the 2012 OECD Survey of Adult Skills benchmark, with 56% of working-age Australians at Level 3 literacy or above, and 46% at Level 3 numeracy or above). There is no funding specifically attached to this agreement. The adult learning sector (also called "ACE", adult community education) provides adult basic education programmes in language, literacy and numeracy skills to low-skilled adults but ACE does not receive national funding and is funded to varying degrees by states and territories. Migrants are eligible for subsidised training in language and literacy skills through the nationally-funded Australian Migrant Education Programme (AMEP). The national government used to subsidise language and literacy skills training in the workplace (Workplace English Language and Literacy, WELL) but closed this programme in 2014 (NCVER, 2018_[18]). Job seekers are eligible for subsidised accredited language, literacy and numeracy training through the Skills for Education and Employment programme.

Job seekers registered with the Australian Government's mainstream employment service, 'jobactive', also have access to funding for learning opportunities through the Employment Fund and other subsidised training programmes. Depending on individual circumstances and needs, jobactive providers can use the Employment Fund to help build a participant's skills and experience and improve their chances of finding and retaining work. This includes providing access to accredited training, employer-required unaccredited training (where this is a job requirement), or unaccredited training to address employability and foundation skills.

Public investment for adult learning in Australia is above average. Total funding for adult learning is estimated to amount to AUS 7.5 billion (0.4% of GDP) though this estimate does not include support which varies by states and territories, nor support for training via employment services (Table 1.4). Due to the cross-cutting nature of the adult learning sector, national spending on adult learning is not accounted for under a single budget line, but usually across a range of budget lines (Andriescu et al., 2019[19]). The complex nature of governance and funding of adult learning precludes consistent and direct comparisons across countries. A European Commission study (FiBS and DIE, 2013_[20]) provides the most comprehensive comparative data on funding for adult learning available. It finds that in most countries, the public sector investment in adult learning equates to 0.1% of national GDP. Australia, at 0.4% of GDP, stands with Scandinavian countries like Denmark (0.4%), Norway (0.6%) and Sweden (0.5%) which have above average public investment in adult learning.

	Share of 25-64 year olds	Total spending (AUS millions)	Prorated amount allocated to 25-64 year olds (AUS millions)
VET loans and subsidies	54%	5 914	3 194
Loans		756	408
Subsidies 1		5 158	2 785
HE loans and subsidies	27%	12 466	3 366
Loans 2		5 473	1 478
Subsidies ³		6 993	1 888
Tax incentive ⁴	80%	1 200	960
Total			7 519

Table 1.4. Annual public investment in adult learning in Australia

Notes: This table does not include state or territory-specific support for adult learning or financial support for employment services. Loans do not take into account loan costs. Adults aged 25-64 represented 54% of enrolments in government-funded VET in 2018 (NCVER, 2019[21]). Adults aged 25 and older represented 27% of domestic students enrolled in undergraduate courses in 2016 (Department of Education, 2017[22]).

Source: NCVER (2019[17]), Government funding of VET 2017; Productivity Commission (2019[23]), Report on Government Services; Australian Taxation Office, Taxation statistics 2014-15 Individuals: Selected items for 1978-79 to 2014-15 income years (database).

¹ Includes both government grants and general programme funding.

² Based on 2017 Higher Education Finance Statistics report.

³ Includes government subsidies for university places in the Commonwealth Grant Scheme in 2017-18, based on the Portfolio Budget Statement for Department of Education and Training.

⁴Can be applied towards formal training either in VET or HE.

1.4.2. Existing financial incentives

The national and state and territory governments in Australia currently provide financial incentives to individuals and employers to engage in adult learning via subsidies, loans, and tax incentives. This section will discuss each of these briefly, and Table 1.6 summarises the financial incentives currently in place in Australia to promote adult learning.

Subsidies

Subsidies are the most common type of financial incentive used in Australia to promote adult learning. Provided they meet eligibility requirements and study with an approved provider, most domestic undergraduate HE and VET students benefit from government subsidies. The states and territories are responsible for setting and providing the subsidy rates in VET qualifications, while the Australian Government sets the subsidy rates in HE for the Commonwealth Grant Scheme. Subsidy rates vary by discipline. For example, in 2019 the average subsidy rate for a national government-supported place in HE was 58% (AUS 13 363), but ranged from 72% in agriculture (AUS 23 590) to only 16% in law, accounting, commerce, economics, and administration (AUS 2 160) (DET, 2018_[24]).

Employers can access subsidies to offset wages and other costs associated with apprenticeships through the Australian Apprenticeships Incentives programme. Employer incentives are designed to support completion of apprenticeships and traineeships (i.e. nontrade apprenticeships) and range in value from AUS 750 to AUS 4 000 per apprentice (Atkinson and Stanwick, 2016_[25]). An econometric evaluation of the programme commissioned by the Australian Government found that employer incentive payments resulted in an increase in commencements of apprenticeships, but also a decrease in the probability of completing (Deloitte Access Economics, 2012[26]). The government reformed the system in 2012: commencement incentives for existing worker apprenticeships and traineeships not on the National Skills Needs List (NSNL), in other priority occupations, or those working part-time, were removed (NCVER, 2018[18]). In 2013, completion incentives for existing apprenticeships and traineeships not on the NSNL were also removed. All occupations on the NSNL are trade occupations. Apprentice and trainee starts in non-trade occupations declined significantly since 2012, including for 25-64 year olds (Hargreaves, Stanwick and Skujins, 2017[27]), and this decline has been linked to reductions in employer incentives (Atkinson and Stanwick, 2016[25]).

National subsidies for training are offered for vulnerable adults with specific skills needs. For instance, older adults are eligible for the Skills and Training Incentive (introduced in January 2019), a training voucher which subsidises the cost of any training that is identified as part of their Skills Checkpoint assessment and which would help them build skills to remain in the workforce longer. The Australian Government provides up to AUS 2 200 towards the cost of training, and either the individual or their employer must match this amount. The Skills for Education and Employment (SEE) programme for job seekers and the AMEP for migrants subsidise foundation skills (literacy and numeracy) training. Other subsidised training programmes are offered to displaced workers, older workers, parents re-entering the labour market, low-skilled adults, and job seekers (see Table 1.6 for a list of subsidised training programmes, along with eligibility requirements).

There have been no national subsidies for the development of foundation skills for employed individuals since the WELL programme closed in 2014. The Industry Skills Fund (closed in 2016) offered grants to certain SMEs to subsidise accredited and unaccredited training (Box 1.2) and went some way to meeting employed individuals' foundation skills needs following the closure of WELL.

Each state offers its own set of subsidies for adult learning, and the type of learning that is eligible for subsidy varies by state. New South Wales, for instance, is the only state to subsidise skill sets (i.e. bundles of units of competency). Many states subsidise a mixture of formal and non-formal learning, and most target subsidies on qualifications deemed to be priority areas for the state or territory (OECD, 2018_[7]).

Box 1.2. Industry Skills Fund

The Industry Skills Fund (ISF), which ran in Australia from January 2015 to December 2016, was a grant programme to support the training needs of enterprises. It was targeted at growth-oriented SMEs and operated under a co-financing model with the amount contributed by firms based on a sliding scale depending on the size and location of the firm. The grant supported both accredited and unaccredited training provided it met certain conditions, including that the training provided a significant return on investment, was fitfor-purpose to meet a specific need related to the growth opportunity, and was not already eligible for funding under other government programs. In addition to the subsidy, SMEs could also receive free and tailored advice to assist them in identifying skills to boost their workforce and overall productivity. Businesses could apply to grants to cover the costs of recommended training based on the skills advice. SMEs who received skills advice and completed a funding agreement were overwhelmingly positive about the value added by Skills Advisers, based on survey findings.

An innovative feature of the ISF was that it covered unaccredited training in addition to accredited training. Skills Advisers who were consulted for a review of the programme thought that this feature filled an important gap, as other government assistance already covered formal qualifications, and the direct and opportunity costs associated with qualification-based training support could outweigh the possible benefit to business and its staff. Feedback from stakeholders suggests that unaccredited training was custom-designed to meet business needs and delivery was generally flexible and timely. Moreover, in some fields accredited training was either not available or not up to date, or no accredited provider was available.

The ISF was closed after two years, as part of a redirection of funding within the education and training portfolio. However, survey results suggest that close to 90% of micro and SMEs agreed or strongly agreed that the training outcome had been positive for their business, and an equivalent percentage reported that the training adequately addressed the skills needs of their business. While the grant helped overcome the cost-related barriers to training for SMEs, the tailored skills advice was effective at addressing barriers to training related to the identification of skills needs: 97% of firms who received an ISF grant agreed that the support they received helped their business to better identify skills needs and training solutions. Only 15% of firms reported that they would have funded this training anyway, while 37% reported that they would have sought other public support if the ISF grant had not been available. These survey results suggest low deadweight losses (Box 1.3). A common criticism regarding the programme was that the process of filling in the grant application was too complex, and could have been streamlined for efficiency.

Source: ACIL Allen Consulting (2016_[28]), "Industry Skills Fund and the Youth Stream Pilot Programs".

Income-contingent loans

Loans are available to help individuals overcome liquidity constraints associated with investing in education and training. As with subsidies, provided they meet eligibility requirements and study with an approved provider, most domestic undergraduate HE and VET students are eligible for income-contingent interest-free loans that go towards tuition fees. Students may obtain loans for multiple qualifications; however, there is a lifetime limit to the amount that can be borrowed (AUS 104 440 in 2019 for most students). Apprentices at Certificate III or IV qualification levels leading to specific priority qualifications and occupations are also eligible for income-contingent loans (Trade Support Loans) that cover the costs of everyday expenses (e.g. tools) while undertaking apprenticeship training. All of these loans are repayable only once the student earns above a threshold income (for the 2018-19 income year, the compulsory repayment threshold was AUS 51 957), helping to overcome barriers related to cost. The Australian Government determines the rules for both the HE and VET loan schemes.

Variation in funding models across VET and HE has led some groups (BCA, 2017_[29]) to argue that the system creates an uneven playing field which distorts individual incentives in favour of HE. For instance, while there are caps on loans and a 20% loan fee for all VET student loans, the HECS-HELP loans (which represents a large proportion of HE loans) do not have caps or loan fees. The Australian Government also regulates the price of course fees in HE, but does not currently have the authority to do so in VET. Specific consideration of funding arrangements in VET and HE sectors remains outside the scope of this review.

The National Centre for Student Equity in Higher Education (NCSEHE) assesses how well represented disadvantaged groups are in HE, which provides a sense for the capacity of the entire package of financial support (subsidies and loans) to target under-represented groups as well as the size of deadweight losses (Box 1.3). In 2017, 17% of domestic undergraduate enrolments were made up of students of low socio-economic status – defined as those from the poorest 25% of Australian postcodes. Their participation continues to be below their population share (25%) but has been increasing since 2012 when only 16% of students with low socio-economic status were enrolled in HE (Koshy, 2018[30]). Representation of students from low socio-economic status tends to be much higher in TAFEs than in HE institutions (in Victoria: 40% in VET, compared with only 14% in HE) (The Senate, 2018_[31]; KPMG, 2018_[32]). This suggests that deadweight losses may be higher for subsidies and loans in HE than for VET.

Box 1.3. Economic rationale for policy intervention in the presence of deadweight loss

Deadweight loss is a reduction in net economic benefits resulting from an inefficient allocation of resources, and is often considered when assessing government interventions and programmes. In the context of adult learning, deadweight loss might occur following the introduction of a government policy aimed at raising participation in training, where the desired training participation might have occurred (at least to some extent) in the absence of government intervention. A related concept, additionality, refers to the change in behaviour (e.g. higher participation in training) that is specifically induced by the government intervention and which would not have occurred in the absence of such intervention.

Most public policy interventions have some degree of deadweight loss and it is up to policy makers to decide whether the expected economic benefits warrant the intervention. Intervention in the presence of deadweight loss is often justified on the basis of distributional advantages or positive externalities associated with learning. In the absence of government intervention, adults with higher levels of qualifications tend to receive more training from employers than adults with lower level or no qualifications. The introduction of a financial incentive aimed at those with lower level qualifications may improve the distribution of training provision, generating significant economic value. An intervention that leads to more training may also bring about positive externalities, whereby the enhanced training provided to one worker increases not only their own productivity, but also the productivity levels of co-workers through knowledge transfer, imitation, and learning by doing. Financial incentives that target firms can capture significant external benefits, as without government intervention firms may under-invest in training out of a fear that the trained employee will go to another firm.

Source: Adapted from BIS (2012[33]), "Assessing the Deadweight Loss Associated with Public Investment in Further Education and Skills", http://www.bis.gov.uk/.

Tax incentives

When claiming their annual taxes, individuals can deduct expenses related to self-education for a course that relates directly to their current work activities. Individuals may not claim this deduction for a course that relates only in a general way to their current employment or occupation or which would enable them to retrain for new employment or a new occupation. This financial incentive covers both the self-employed and employees.

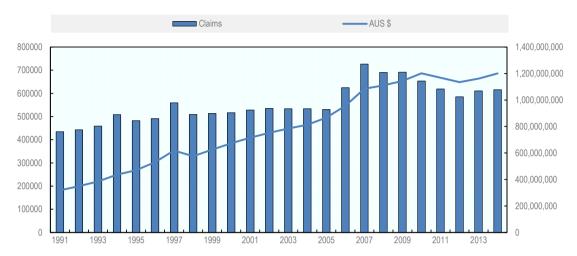
In 2014-15, 616 000 individuals (nearly 5% of all tax filers) claimed AUS 1.2 billion in self-education expenses (Figure 1.12). The average claim was AUS 1 950 and there is no cap on claim amounts, though there is a floor (AUS 450). The tax incentive tends to be used more by younger tax filers (aged 25-39) than by those age 40 and over (Table 1.5). The tax deduction is not income-tested, and is used to a greater degree by tax filers earning between AUS 25 000 to 150 000 than by those earning less than AUS 25 000. It has particularly high use among individuals earning AUS 100 000 to 150 000.

The Australian Government also allows employers who provide or pay for work-related training for an employee freedom from paying the Fringe Benefits Tax (FBT) under certain circumstances, since their employees would could claim these expenses as part of the selfeducation expenses tax deduction if they paid for the training themselves. However, if an employer chooses to provide or pay for training for an employee and that training does not have a sufficient connection to the employee's current employment, then the employer must still pay the FBT.

The next chapter will provide evidence on what the current barriers are to further engagement in adult learning by individuals and employers in Australia. It will discuss the capacity of various financial incentives to boost engagement in adult learning, and will provide Australian and international examples for illustration.

Figure 1.12. Use of self-education expenses tax deduction, 1991-2013

Number of claims and total value of expenses claimed



Source: Australian Taxation Office, Taxation statistics 2014-15 Individuals: Selected items for 1978-79 to 2014-15 income years (database).

Table 1.5. Distribution of self-education tax deduction by age and income level, 2014-15

	Number of claims	Taxfilers	Share of taxfilers who claimed	
Total	615 904	13 213 816		4.7
Age				
25-29	122 768	1 478 576		8.3
30-34	109 596	1 468 114		7.5
35-39	79 556	1 304 319		6.1
40-44	63 294	1 366 974		4.6
45-49	47 711	1 281 344		3.7
50-54	35 802	1 268 198		2.8
55-59	21 897	1 125 540		1.9
60-64	9 476	885 803		1.1
25-64	490 100	10 178 868		4.8
Income Level				
Less than 25 000	81 605	3 724 000		2.2
25 001 to 50 000	212 965	3 864 081		5.5
50 001 to 70 000	130 543	2 167 175		6.0
70 001 to 100 000	111 733	1 830 305		6.1
100 001 to 150 000	66 189	982 701		6.7
150 001 to 500 000	12 869	645 554		2.0

Source: Australian Taxation Office, Taxation statistics 2014-15 Individuals: Selected items for 1978-79 to 2014-15 income years (database).

Table 1.6. Existing financial incentives to promote adult learning in Australia

Туре	Name	Provided by*	Eligible learners	Eligible training	Allocated to
Subsidy	Commonwealth Grant Scheme	CW	Most domestic students, subject to citizenship and residency requirements	Most accredited undergraduate and some postgraduate courses offered at HE institutions	Individual
	VET state-subsidised places	S&T and CW	Most domestic students; eligibility varies by state	Formal training at an approved RTO	Individual
	State-subsidised training	S&T	Varies by state	Varies by state, mostly accredited training	Individual
	Australian Apprenticeships Incentives programme	CW	Apprentices and trainees	Formal VET training in high demand occupations	Employer
	Australian Migrant English Programme	CW	Migrants with less than functional English	Accredited English language tuition	Individual
	Skills for Education and Employment	CW	Registered job seekers with literacy and numeracy needs	Accredited language, literacy and numeracy training	Individual
	Employment Fund	CW	Registered jobactive job seekers	Accredited training, employer required non-accredited training, or non-accredited training in employability or foundation skills.	Individual
	New Enterprise Incentive Scheme	CW	Adults 18+ who are able to work full-time in new business	Accredited small business training at a RTO (Certificate III or IV)	Individual
	ParentsNext	CW	Registered participants who are parents of young children	Employment preparation which includes referral to education, training or other activities that lead to employment	Individual
	Skills and Training Incentive	CW	Adults who have participated in the Skills Checkpoint Programme (must be age 45-70 and at risk of unemployment or recently unemployed).	Suitable job-related formal or non-formal training, as identified by a Skills Checkpoint assessment	Individual
	Stronger Transitions	CW	Displaced workers in regions affected by large-scale redundancies	A range of services are offered including skills assessments, job search assistance, literacy and numeracy support, and digital literacy training.	Individual/Emp
	Career Transition Assistance	CW	Available nationally from July 2019 to help job seekers age 45+ become more competitive in the labour market.	Resilience, digital skills, job search assistance	Individual
Loan	Higher Education Loan Programme	CW	Most domestic students, subject to citizenship and residency requirements	Most courses in HE institutions that are accredited or lead to an award	Individual
	VET Student Loans	CW	Open to all learners	Formal VET training in approved courses only (high national priority, address skills shortages)	Individual
	Trade Support Loans	CW	Apprentices	Loans cover costs while undertaking apprenticeship training in priority occs/quals	Individual
Tax	Self-education expenses deduction	CW	Open to all employed persons	Formal training related to current employment.	Individual
incentive	Fringe benefits tax deduction	CW	Open to all employed persons	Formal training related to current employment	Employer

Note: *CW: Commonwealth government; S&T: state and territory governments.

Notes

¹ The AIG Workforce Development Needs survey is highly skewed towards larger firms: in the 2018 survey, 63% of the sample was made up of firms with 20 employees or more. This contrasts sharply with the actual enterprise structure in Australia, where only 3% of enterprises have 20 or more employees (OECD, 2019_[12]). The vast majority (97%) of enterprises in Australia have fewer than 10 employees.

² The Education and Training Experience survey was an earlier version of the WRTAL.

³ Respondents are asked whether they took part in any work-related training in the last 12 months. This question is only asked of employed respondents.

⁴ Incentives were removed for existing worker apprentices and for trainees not in occupations experiencing skills shortages.

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Chapter 2. Financial incentives to address barriers to adult learning

This chapter discusses the main barriers to participation in and provision of adult learning reported by individuals and firms in Australia. If well-designed, financial incentives can help individuals and firms to overcome barriers related to cost and time, thus promoting greater engagement in adult learning. Six types of financial incentives are presented individual learning accounts, training leave, training vouchers, subsidised training programmes, training levies, and tax incentives – along with examples of how they have been implemented in Australia and in other countries.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

2.1. Key findings

The set of financial incentives that will be most effective at supporting broad and inclusive participation in adult learning in Australia depends on the barriers that individuals and firms face. This chapter first discusses the main barriers to participation in adult learning reported by individuals and firms in Australia. It then presents six types of financial incentives that have been used previously in Australia or introduced in other countries and discusses the advantages and disadvantages of each.

The key findings from this chapter include:

- Low willingness to train is by far the most significant barrier to adult learning for individuals. Among those who reported that there were learning opportunities that they would be willing to participate in, the most commonly-reported barriers were lack of time, followed by cost.
- Among under-represented groups, own-account workers were more likely to cite
 being too busy at work as a barrier, while lack of time due to childcare or family
 responsibilities were cited as larger-than-average constraints for the unemployed,
 those out of the labour force, and part-time workers. Cost was the most commonlyreported barrier for the unemployed.
- Cost and the time employees spend away from work were the two most important barriers that employers reported to providing more training.
- Five of the six financial incentives discussed in this chapter address financial barriers to participating in adult learning: training vouchers, subsidised training programmes, and tax incentives reduce the cost of training for individuals and employers; while individual learning accounts and training levies provide a mechanism to set aside money to fund current or future training. Training leave addresses the barrier of time constraints, by reducing the opportunity costs of participating in adult learning.

The chapter is structured as follows. Section 2.2 analyses the barriers to greater engagement in adult learning among adults and firms in Australia. Section 2.3 presents financial incentives to address barriers to participation, with examples from Australian and international experience.

2.2. Barriers to adult learning participation in Australia

Both individuals and firms benefit from investments in adult learning. By helping to address skills imbalances, adult learning contributes to firm competitiveness and success in national and global markets. For individuals, participating in adult learning improves employability and capacity to adapt to changing skills needs.

However, both individuals and firms face barriers which prevent an optimal and timely investment in adult learning. Identifying these barriers and their relative importance for different types of adults and firms helps to assess which types of policy interventions are most appropriate, and how to design them.

2.2.1. Barriers for individuals

By far, the greatest barrier to participation in adult learning in Australia as in other countries is low willingness to train: among adults aged 25-64 who did not participate in any formal

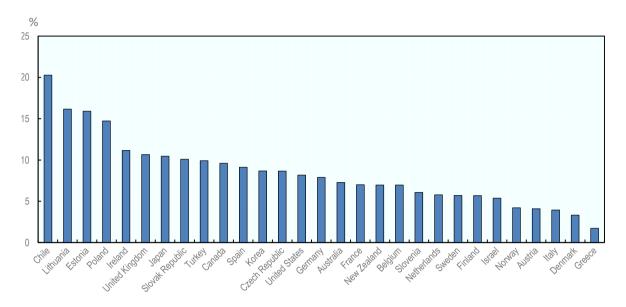
or non-formal training activity in 2012, only 24% reported that there were learning opportunities that they would have wanted to take up, but could not (PIAAC). More recent results from the ABS' WRTAL survey which focuses on participation in non-formal learning show similar results: only 9% of non-participants reported that they had wanted to participate in training in 2017, but could not.

Many reasons could explain why so many adults have low willingness to train, including a lack of understanding of the returns from training, the poor quality of the training available, negative attitudes towards learning, or the perception that existing barriers to participation are unsurmountable. Psychological biases may also play a role, including the myopic tendency to focus on current income and job stability while discounting potential future periods of reduced income and job instability (Productivity Commission, 2017_[1]). As the demand for skills changes gradually, workers in occupations with a high risk of automation may have no trigger for acquiring new skills before the risks are realised. There may also be a tendency to stick to the status quo out of a fear of change (Wood, 2014_[2]; Productivity Commission, 2017_[1]). Low self-confidence may also limit workers' willingness to engage in training, perhaps especially for unemployed adults or older workers who are overwhelmed at the prospect of retraining in unfamiliar technological contexts or embarrassed about their out-of-date skills given the length of time since they completed initial education.

For some adults, low willingness to train may stem from a perception that returns to further training are low. A recent OECD working paper (Fialho, Quintini and Vandeweyer, 2019_[3]) computes returns to job-related adult learning (either formal or non-formal) by country. In Australia, adults who participate in job-related adult learning have wage returns of 7% compared to those who do not, just below the international average (8.5%). Heterogeneity in returns to training across countries can be explained by a variety of factors, including how well employers recognise the value of training and the wage structure (Acemoglu and Pischke, 1998[4]). An Australian analysis exploiting the longitudinal nature of the HILDA survey to control for unobservable ability bias (Coelli and Tabasso, 2015_[5]) estimates the returns to formal training (i.e. certified courses undertaken by adults while in paid work not including initial education). It finds little evidence that formal training for Australian adults leads to significant improvements in standard labour market outcomes of employment, hours of work or wage rates; though it finds evidence of improved levels of job satisfaction and satisfaction with employment opportunities, particularly among women. These findings do not negate the fact, however, that adults with higher levels of educational attainment have more favourable labour market outcomes than those with lower levels of educational attainment¹. For job seekers, returns to training are positive, but only in the medium term. A recent meta-analysis of active labour market programmes (Card, Kluve and Weber, 2017_[6]) find that classroom and on-the-job training programmes for the unemployed have a positive impact in the medium term (after two years) in terms of employment effects, although the short term impact is insignificant or even negative due to "lock-in effects" (i.e. training participants suspend job search effort while training).

Figure 2.1. Wage returns to formal or non-formal adult learning

Percentage increase in hourly wages



Note: Wage returns from participating in at least one formal or non-formal training activity in the 12 months prior to the survey. The wage returns represent the OLS coefficients from country-specific regressions. Wage returns are gross of training costs.

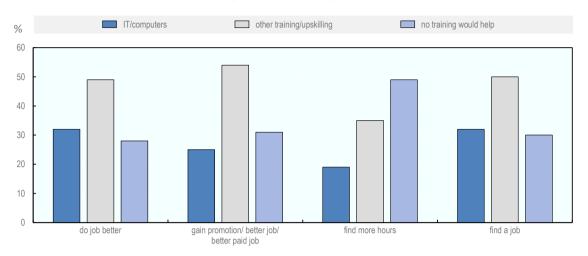
Source: Fialho, Quintini and Vandeweyer (2019[3]), "Returns to different forms of job-related training: Factoring in informal learning." The analysis is based on data from the OECD Survey of Adult Skills (2012, 2015). As reported in Priorities for Adult Learning database.

Compared to other OECD countries, adults with a tertiary degree have a lower willingness to train in Australia: only 23% of adults with a tertiary education in Australia are willing to train, compared with 34% across OECD countries. Australian adults with a tertiary education may have low willingness to train if they believe that having a qualification is sufficient for lifetime employability. In Australia, 45% of the population aged 25-64 has a tertiary education qualification, putting Australia among the top third of OECD countries (OECD average is 37%). About 20% of workers are over-qualified for their jobs (OECD, 2018_[7]), which may reduce motivation to train further. OECD analysis, however, finds that the returns to non-formal learning rise with educational attainment and are highest for those with a tertiary qualification (Fialho, Quintini and Vandeweyer, 2019_[3]). Workers with a tertiary qualification may be unaware of the potential benefits of non-formal learning, having participated predominantly in formal training.

Since older workers have less time before retirement to recoup their investment, they may assess their returns to training to be low which may reduce their willingness to train. Indeed, according to the 2011-12 Survey of Barriers to Employment for Mature Age Australians (Figure 2.2), nearly a third of respondents (age 45 and over) reported that work-related training would not help them to do their job better (28%), find a job (30%), or gain a promotion or find a better paying job (31%).

Figure 2.2. Older workers' views about usefulness of training

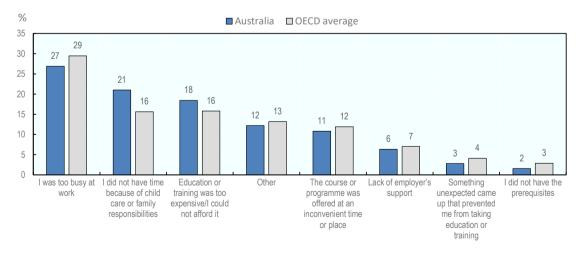
Work-related training (%) would help do job better, gain promotion, find more hours, find a job (%), 2011-12



Source: Adair and Temple, (2012[8]), "Barriers to Mature Age Labour Force Engagement in Australia: Report on the 2011-12 National Survey on the Barriers to Employment for Mature Age People."

Among adults who did not participate in adult learning but would have liked to, the main barrier cited in the 2012 Survey of Adult Skills was being too busy at work (27%), followed by lack of time due to child care or family responsibilities (21%), and then cost (18%) (Figure 2.3). This ranking is similar to the OECD average, though cost and not having time due to child care or family responsibilities are more important barriers in Australia compared to the OECD average (Figure 2.3). This ranking is also generally consistent with 2017 findings from the ABS' WRTAL survey relating to barriers to participation in nonformal learning: adults report that the main barriers are having too much work or no time (39%), followed by cost (28%), and followed by personal reasons (16%).

Figure 2.3. Reasons for not training, Australia and OECD average



Note: Share of adults aged 25-64 who did not participate in formal or non-formal job-related training over the previous 12 months but would have liked to.

Source: 2012 Survey of Adult Skills (PIAAC).

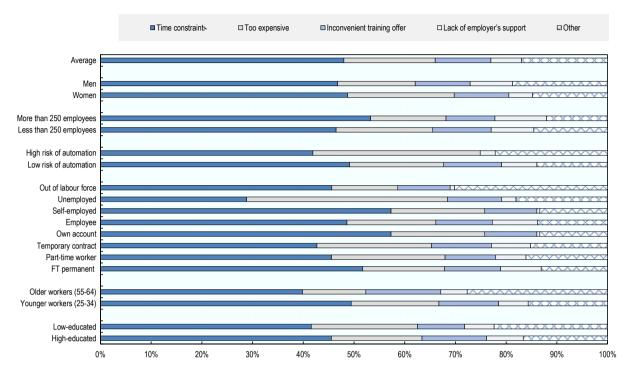


Figure 2.4. Reasons for not training, by group, Australia

Note: Share of adults who did not participate in formal or non-formal job-related training over the previous 12 months but would have liked to. Time constraints includes two reported barriers: being too busy at work, and not having time due to childcare or family responsibilities.

Source: 2012 Survey of Adult Skills (PIAAC). Risk of automation based on Nedelkoska and Quintini (2018[9]).

Some groups were more likely than the average to report being too busy at work as a barrier: full-time permanent workers (40%), workers in large firms (38%), own-account workers (37%), and older adults (30%). Childcare or family responsibilities were cited as major time constraints for unemployed workers (27%), those out of the labour force (40%), as well as part-time workers (31%). Women were three times more likely than men to report not having time because of childcare or family responsibilities (30% versus 10%), while men were nearly twice as likely as women to report being too busy at work (37% versus 19%). Workers in occupations with a high risk of automation were less likely to report time constraints as a barrier than workers in occupations with a low risk of automation. This may be explained by differences in working hours: on average, workers in high-risk occupations work two hours less each week than those in low-risk occupations (35.6 hours versus 37.8 hours, according to PIAAC).

Very closely related to time constraints, 11% of adults who did not participate in adult learning but would have liked to report that the course or programme they were interested in was offered at an inconvenient time or place.

While cost was not the most important barrier for the average adult, cost was the single most important barrier for the unemployed (40%) (Figure 2.4). The fact that the unemployed report cost to be the most important barrier to participating in training reflects that Australia has one of the lowest expenditures on training for the unemployed across OECD countries (0.01% of GDP compared to the OECD average of 0.13% in 2016) (OECD, 2019_[10]), and that few jobactive participants receive training (only 12.3% of active

jobactive participants had commenced any education or training activity in October 2017, based on administrative records from the Department of Jobs and Small Business, OECD $(2018_{[7]})$). Other groups also reported cost to be more important than depicted by the average: part-time workers (22%) temporary workers (23%), low-educated workers (21%), and workers in occupations with a high risk of automation (23%).

Given the public and private benefits to adult learning, costs are generally shared between employers, individuals and the government. Evidence from the Survey of Adult Skills finds that 17% of adults who participated in job-related non-formal learning activities in Australia contributed to the cost of training, compared to 21% across OECD countries on average. Own-account workers, part-time workers and those on a temporary contract are more likely than workers on a permanent contract to contribute to the cost of job-related training, according to the HILDA. Only 6% of permanent workers contributed to the costs of job-related training in 2017 versus 11% of own-account workers, 10% of employees on a fixed-term contract, 9% of part-time workers, and 8% of casual workers. According to the Survey of Adult Skills, nearly 80% of adults who participated in job-related training received funding from their employer for at least one learning activity, just above the OECD average (78% versus 77%). About 22% of workers reported that their employer had given them paid leave to complete their training, thus covering the opportunity cost of training. But this was more common for permanent workers than for own-account workers or those working on a part-time basis.²

2.2.2. Barriers for firms

According to the NCVER's Survey of Employers' Use and Views (SEUV), 60% of employers want to provide more training for their employees, with the most common barriers to providing more training being financial constraints (38%), employees being too busy to be trained (19%), and managers not having the time to organise training (14%) (Smith et al., 2017_[11]). There are three dimensions to financial constraints for employers: the direct cost of training workers (i.e. training fees), indirect costs associated with training (e.g. transportation), and possibly most important, opportunity costs that come from lost wages and productive effort while the employee trains rather than works. Indeed, TAFE Enterprise (2018_[12]) found that the most common barrier cited by employers was the time employees were required to spend away from work (74%), followed by cost (54%), and the inability to motivate staff to take part (46%). Releasing employees for training may be particularly costly for small firms with few employees as the firm's productivity may be strongly affected if employees are absent.

An older report by the Australian Industry Group (AIG, 2008[13])³ identified barriers that prevent firms from increasing the skills of their workforce to required levels. The most common barrier cited was cost (52%). Related to the cost issue, 41% of firms reported they were concerned that staff might depart following training, and 36% cited a lack of government incentives.

Considerations about cost influence not only the decision about whether to provide training, but also the type of training employers choose to provide. Based on NCVER's SEUV, cost effectiveness was the top reason cited by employers who used unaccredited training in 2017 rather than nationally-recognised training (Table 2.1). After cost-effectiveness (37% of respondents), unaccredited training was also viewed to be better tailored to the needs of employers (26%) and available at more convenient and flexible times (21%). Firms that chose unaccredited training over nationally-recognised training tend to be small or medium-sized, with many casual workers (Smith, Oczkowski and Hill, 2009[14]).

Between 2007 and 2017, there was a large increase in the share of employers citing "approach that was tailored to our needs" as the reason they chose unaccredited training over comparable nationally-recognised training, possibly suggesting that this has become more important to employers over recent years. The share of employers who reported cost-effectiveness as a reason for choosing unaccredited training over nationally-recognised training also increased during this period, and briefly spiked to 50% in 2015, then back to 37% in 2017 (Table 2.1). The temporary spike in the share of firms reporting cost-effectiveness of unaccredited training as a reason coincides with the short period during which the Industry Skills Fund (which subsidised both unaccredited and accredited training) was in place⁴.

Table 2.1. Reasons for choosing unaccredited training over comparable nationally recognised training (2005-2017)

Reasons	2005	2007	2009	2011	2013	2015	2017
Approach that was tailored to our needs	1.4	3.5	4.7	NA	27.2*	22.3	26.3
Convenient access or location	13.2	13.9	24.9	NA	25.9*	9.3	8.4
Convenient or flexible times	17.5	22.5	21.5	NA	16.5	24.9*	21.3
Expertise not available elsewhere	4.9	6.9	7.6	NA	8.2	0.0	NA
More cost-effective	28.3*	30.1	38.1	NA	34.6*	49.8*	37.0
Nationally recognised training was not needed	0.7	9.5	5.3	NA	8.5	9.1	11.5
Prefer to use our own trainers	12.5*	20.1	20.1	NA	29.9*	9.5	15.0
Specialists that have a high level of industry knowledge	9.5	16.0	9.7	NA	8.9	8.7	10.4
Other reasons	49.6*	31.4	20.6	NA	14.2*	23.6	16.1

Note: NA: not applicable; * The estimate has an error greater than 10% of margin of error and should be used with caution.

Source: White, De Silva and Rittie (2018_[15]), "Unaccredited training: why employers use it and does it meet their needs?", http://www.ncver.edu.au/research-and-statistics/publications.

2.3. Financial incentives to address barriers to participation in adult learning

The previous section displayed evidence that the high cost of training is one (though not the only) barrier to participation in adult learning. High cost of training could be one of the reasons for the observed declines in provision by employers and in participation by adults, as the generosity of financial incentives declined since 2012.

Well-designed and appropriately targeted financial incentives can be useful tools for raising incentives of individuals and firms to engage in training by reducing costs associated with financial and time constraints. Many countries employ financial incentives to reduce the financial burden on individuals and employers in adult learning, to encourage their participation and contribution, and to reduce under-investment. Table 2.2 highlights some of the main financial incentives available to encourage engagement in adult learning, either by reducing the direct cost of learning (e.g. subsidies, tax incentives), tackling temporary liquidity constraints (e.g. loans), setting aside resources for future training (e.g. individual learning accounts, levies/funds), or reducing opportunity costs of learning (e.g. paid training leave, job rotation).

This section discusses international experiences with individual learning accounts, training leave, training vouchers, subsidised training programmes, training levies, and tax

incentives. When applicable, it also reviews Australian experiences. While this section assesses advantages and disadvantages of each financial incentive separately, it is worth keeping in mind that schemes to promote engagement in adult learning can and often do involve a package of financial incentives, rather than a single incentive in isolation.

Table 2.2. Financial incentives for individuals and employers

	Individuals	Employers	
Reduce cost of training	Subsidies (e.g. vouchers, subsidised training programmes) Tax incentives	Subsidies Tax incentives	
Set resources aside for future training	Individual learning accounts	Training levy/fund	
Tackle temporary liquidity constraints	Loans	Loans	
Decrease opportunity cost of training	Paid training leave	Job rotation	

Source: OECD (2019[16]), "Getting Skills Right: Future-Ready Adult Learning Systems", adapted from OECD (2017[17]), "Financial incentives for steering education and training."

2.3.1. Individual learning accounts⁵

An individual learning account (ILA) is a type of subsidy scheme that attaches training rights to individuals (rather than to employers or jobs) to fund current or future education and training activities. They can be tax-sheltered savings accounts opened by individuals for the purpose of funding current and future learning activities. More often, however, they are voucher-based schemes which preserve use of the term ILA.

Emerging in the late 1990s, the original philosophy underlying these initiatives was to empower individuals in education and training markets by encouraging them to take responsibility for their own education and training choices (OECD, 2017_[18]). The key design feature of ILAs, and the reason they have attracted renewed interest, is that they make training rights portable from job to job and from one employment status to another. This is particularly important in the context of changing labour markets and skills needs. Since training rights are attached to the individual and not the employer, the individual can use the ILA to retrain in a new occupation. The portability feature also broadens training rights to workers who have limited attachment to their employment, including those in nonstandard working arrangements.

If not carefully designed, ILAs are more likely to be used by high-skilled workers than lowskilled ones, potentially exacerbating inequality in skills outcomes (OECD, 2017_[18]) and producing deadweight loss which arise from the fact that some beneficiaries would have participated in training even in the absence of the scheme. In France, employees with a tertiary education were over-represented in their use of the Compte personnel de formation (Individual Training Account – CPF) (accounting for 56% of validated CPF files over the 2015-2018 period, while representing only 38% of the 2016 labour force). Employees with less than upper-secondary education were under-represented (accounting for only 26% of validated CFP files, despite representing 42% of the 2016 labour force). Some OECD countries have tried to overcome this challenge by granting more training rights to lowskilled or other disadvantaged individuals. For example, France's CPF grants low-qualified workers EUR 800 (euros) per year for training compared to EUR 500 for other workers. It is too early to say whether this approach delivers in terms of reducing inequality. Restricting access to some groups is another way to reduce deadweight loss, but this reduces the portability of ILAs.

ILAs generally only cover tuition fees associated with training, and do not cover indirect costs (e.g. child care expenses, transportation costs) or opportunity costs (i.e. wage costs for the time spent off work). This means that on their own, ILAs are unable to address time constraints that prevent adults from participating in adult learning. Some countries offer paid education and training leave which supports the use of the ILA by covering opportunity costs. For instance, the French CPF can be used in tandem with the Congé Individuel de Formation (Personal Training Leave - CIF), which gives adults the right to up to one year of training leave with 80-100% of their salary replaced. Similarly, in Flanders (Belgium) the use of training vouchers (Opleidingscheaues) can be used along with up to 180 hours of paid education leave (Betaald Educatief Verlof), with the maximum 180 hours reserved for vocational training in shortage occupations or for obtaining a first secondary education degree (OECD, 2019[19]). When users of Singapore's SkillsFuture Credit undertake training in Workforce Skills Qualifications, both the learner and the employer are eligible for absentee payroll compensation. The next section discusses training leave in more detail.

Box 2.1. Individual Learning Accounts: Singapore and France

Singapore's SkillsFuture Credit (SFC) was introduced in 2015 to shift focus on adult learning from a workplace-centred approach to one that encourages individuals to initiate their own training. Every adult aged 25+ receives an annual SGD 500 (Singapore dollars) credit which can be used for eligible skills-related courses. It is a lifetime credit and works like a voucher, in that the government pays the tuition fee (up to a maximum of SGD 500) to the provider once the learner enrols in a course. The MySkillsFuture portal showcases all approved courses that can be subsidised with the SFC and allows users to register directly online, and keeps them informed about how much remains in their account.

The SFC is offered on top of an already generous set of incentives for adult learning in Singapore, including Workforce Skills Qualifications (WSQ), which are available to all individuals with 50% to 90% of course fees subsidised. Adults can use the SFC to pay for remaining course fees that are not already subsidised through WSO. Alternatively, adults can use the SFC towards other approved courses, including selected massive open online courses (MOOCs). When used in conjunction with subsidies for WSQ, both individuals and employers receive "absentee payroll" compensation.

France's Compte personnel de formation (CPF) credits each worker age 16+ who has a qualification with EUR 500 per year for training, while those without a qualification receive EUR 800 (up to a limit of EUR 5 000 and 8 000, respectively). The account is rechargeable, and starts to be credited again each time use of the account brings the total credit below a minimum threshold. The self-employed have been eligible for the CPF since 2018. Training credits are transferrable between employers and preserved upon job loss. They can be applied towards training in recognised qualifications or basic skills. If the employer agrees, training can take place during working time. If the credit does not suffice to cover the overall training costs, employers or training funds can provide complementary funding.

Reforms that were implemented in January 2019 converted the CPF from a time account (where each full-time worker was entitled to 24 hours of training per year, and those without qualifications were entitled to 48 hours per year) to the current money account.

Quality control requires careful consideration under an ILA scheme, as public entities no longer have a contractual relationship with the training providers that would allow them to put in place incentives for quality or performance (OECD, forthcoming). Users of Singapore's SFC reported experiences of MOOC providers trying to "upsell" adults by encouraging them to make batch purchases of courses (e.g. buy five courses for the price of one, given the subsidy), even if one course would be sufficient to meet the learner's training needs and the learner would not have time to pursue multiple courses (OECD, forthcoming). The United Kingdom's experience with ILAs from 2000-01 ended abruptly due to several instances of fraud that arose due to a lack of monitoring and quality assurance systems, poorly informed learners, and a hurried implementation (Box 2.2).

In Australia, public sentiment towards demand-driven training entitlements is wary given recent experiences with fraud in the VET sector. An inquiry into the VET FEE-HELP programme (which was introduced in 2008 and expanded in 2012) concluded that the extension of the Australian Government's income-contingent loans to VET courses resulted in many private providers entering the market. A limited number of these private providers engaged in misconduct, including use of high-pressure marketing techniques to increase enrolment (e.g. offering iPads or cash bonuses in exchange for enrolment) (Senate Standing Committee on Education and Employment, 2015_[20]). The committee also noted a trend of rising fees for VET FEE-HELP eligible courses, as access to the loan scheme enabled students to pay more, which in turn allowed providers to charge more knowing that the Australian Government was ultimately responsible for the loan. The committee noted that there has been "a massive transfer of public wealth from the Commonwealth and state government – and taxpayers – to private individuals as a result of rushed rollout of demand driven entitlement schemes..."

The Scottish and Welsh experiences with voucher-based ILAs suggest that minimising fraudulent use of the learning account is possible with stringent vetting of training providers and quality assurance of eligible courses (Johnson et al., 2010[21]). Such monitoring and quality assurance systems can entail substantial costs, particularly if a country has a large number of training providers, as is the case in Australia⁶. France's approach to assessing training providers may help to keep these costs low. In France, training providers can establish that they meet quality criteria required for working with public institutions by registering with the online Data Dock platform (www.data-dock.fr/), and providing supporting documents to justify their self-assessment. Australia has taken steps to improve quality assurance in its national VET sector. In a quality review commissioned after the VET FEE-HELP experience (Braithwaite, 2018_[22]), the author recommends that the VET sector would benefit from greater and more timely access to provider-level NCVER data and more stringent standards for gaining and maintaining registration as a VET provider.

As it is the responsibility of individuals to decide what training to take and where, whether ILAs function well depends on having strong systems of information, including on provider quality. Lack of precise information about labour market needs and provider quality can ieopardize the programme's success and lead to a poor use of public resources. In some countries, quality assurance bodies make the results from evaluations publicly available. In Norway, Skills Plus makes the results from inspections of Skills Plus programmes and adult training in study associations available on its website. In countries that make use of selfevaluation systems it is compulsory to make the results from internal evaluations publicly available, as is the case in Brazil with e-Tec programmes, and in Denmark, through the national VisKvalitet tool. Online databases that provide details on existing training programmes can also help individuals make informed training decisions. Australia's national directory of vocational education and training providers and courses

(www.myskills.gov.au) allows users to search VET qualifications by industry and to compare training providers on the basis of location, course fees and course duration. There is also a plan to make employment outcomes by qualification and training provider available, which would help adults make informed training investment decisions (OECD, 2019_[16]).

Box 2.2. Lessons learned from fraudulent use of ILAs in the United Kingdom

In the **United Kingdom**, ILAs were announced in the 1999 budget law and officially launched in 2000. By 2001, around 8 500 training providers were accredited nationwide when the Department for Education and Skills started investigations related to illicit use of the ILAs. The fraudulent activity was based on collusion between learners and training providers, where learners would allow training providers to buy their learning account numbers without any training taking place. Some providers offered potential learners a computer at no cost as an additional incentive to participate in fraudulent activity. Following its investigation, the Parliamentary Committee of Public Accounts reported that the total expenditure on the scheme exceeded GBP 290 million with fraud and abuse amounting to GBP 97 million.

The committee that examined the level of fraud and abuse and the actions taken drew several conclusions:

- While the government undertook extensive piloting, these pilots did not provide workable solutions. Rather than re-plan the project, the government went ahead with a scheme that was not well thought through or tested and which was implemented in too short a time frame.
- The government ignored advice from the pilots that the scheme was most likely to be successful where new learners had advice from intermediaries such as community groups and trades unions. Research suggests that instead, 45% of account holders first heard of the scheme from providers and many courses were not appropriate to learners' needs.
- To encourage new providers and new learners, the government decided to minimise bureaucracy, including checks on learners, providers and on the quality of learning. As this was not combined with rigorous monitoring downstream, the government was slow to identify emerging problems, including substantial fraud and abuse.

Source: Select Committee on Public Accounts (n.d.[23]), "Tenth Report", https://publications.parliament.uk/pa/cm200203/cmselect/cmpubacc/544/54403.htm.

2.3.2. Training leave

Education and training leave gives adults time away from work to participate in learning, which addresses the most commonly-reported barrier to participation in adult learning, i.e. time constraints. Training leave can be paid or unpaid. During paid training leave, the learner continues to receive part or all of their salary while studying. Under unpaid training leave, the learner is guaranteed a return to their position once their leave is over and they retain their entitlement to health insurance and pension rights while on leave. Education and training leaves are typically regulated by legislation or by collective agreements. Australia is one of only a handful of OECD countries that does not grant education and training leave [Table 2.4 in OECD (2019_[16])], though some employers have their own bi-

laterally agreed leave arrangements. Evidence from the HILDA survey suggests that 22% of Australian adult workers receive paid leave from their employer to complete their jobrelated training, but permanent workers are more likely to receive paid leave than casual or own-account workers.

Training leave may be universal or provided only to certain workers, e.g. those with a minimum tenure in the company. Paid training leave may be limited to use with a particular employer, or may be portable from employer to employer and/or from one employment status to another. In Luxembourg, for example, all employees and self-employed people (including own-account workers) can access up to 80 days of paid training leave over the course of their career, and a maximum of 20 days every two years. Under Canada's recently proposed Canada Training Benefit (CTB), workers need to accumulate 600 hours of insurable employment (i.e. paying Employment Insurance contributions) to be eligible for 4 weeks of paid training leave every four years (Box 2.3). CTB leave accounts are centrally managed by the Canada Revenue Agency, which supports the portability of the training leave from employer to employer, and from one employment status to another.

Box 2.3. Proposed Canada Training Benefit

Canada recently announced plans for a new financial incentive to support adult training and proposed to invest CAD 1.7 billion in this new incentive over five years, starting in 2019-20. The benefit has three distinct but related components for learners. First, an annual CAD 250 (Canadian dollars) training credit for every adult aged 25-64 (subject to a lifetime limit of CAD 5 000) which can be used to refund up to half of the costs of training fees and works like a voucher. Second, a training support benefit for up to four weeks of paid leave every four years at 55% of average weekly earnings to cover living expenses, such as rent, utilities and groceries. Third, leave provisions to protect federally-regulated workers' jobs while on training and receiving the training support benefit. The training credit is financed by public funds, while the training support benefit would be drawn from Employment Insurance (EI), which is comprised of mandatory employer and employee contributions. Some restrictions apply. The training credit is only eligible to workers who earn between CAD 10 000 and 150 000 from work, and who file a tax return. To be eligible for the training support benefit, workers need to accumulate 600 hours of insurable employment (i.e. paying EI contributions).

Source: www.budget.gc.ca/2019/docs/themes/good-jobs-de-bons-emplois-en.pdf.

A review of training leave practices in European countries found that in most cases, workers must obtain their employer's permission to use training leave (Cedefop, 2012_[24]). Requiring an employer's permission may be a barrier in itself, since it implicitly confines the worker to training that is relevant to their current employment and prevents them from training for a new occupation. There are some exceptions. In Flanders (Belgium), employers cannot refuse a request for education and training leave, but the worker and employer must agree upon a timeline for the training. In France the employer can only deny or postpone a request for paid training leave under certain circumstances: i) the employee has not met the job tenure requirement, ii) the employee did not make the request early enough in advance (i.e. 60 days for training of six months or 120 days for training of more than six months), or iii) not enough time has elapsed since the employee was last granted training leave. If one of these conditions are satisfied, the employer can postpone granting the leave by up to nine months, but cannot refuse the request. Still, many CIF requests are ultimately denied by public institutions due to lack of resources (OECD, 2017_[25]).

In some countries, employers can be reimbursed for wage payments and related social security contributions by the state during training leave. Singapore, for instance, provides employers with "absentee payroll" compensation for the period during which their employee trains in Workforce Skills Qualifications (Box 2.1). Similarly, in Flanders (Belgium), the government compensates employers the wage cost up to a maximum of 1.8 times the minimum wage during the employee's paid education leave. While compensating employers for lost wages helps to reduce opportunity costs, feedback from countries where this is practiced suggests that wage compensation may not be sufficient, particularly for SMEs (OECD, 2019[19]). Stakeholders in Flanders reported that SMEs may find it difficult to plan and cover absences while their employees are training, as even a few employee absences can have a significant impact on production. In some OECD countries, including Denmark (Box 2.4), Finland and Portugal, job rotation schemes provide the employer with temporary replacement (usually an unemployed worker) for the employee during their training. This not only reduces opportunity costs for the employer related to releasing their employee to train, but it also provides work experience and training opportunities for job seekers.

Box 2.4. Denmark's job rotation scheme

Job rotation was first introduced in Denmark in the 1980s and allows a firm to send its workers on training while a job seeker covers for him or her. At their high point, there were 80 000 full-time participants in job rotation schemes, but as unemployment levels fell during the 1990s the schemes were gradually rolled back. Today there are around 1 100 full-time participants. Under the scheme, employers receive a hiring subsidy for every hour an employee is on training and an unemployed person is employed as a substitute. The replacement person is provided by the local job centre and receives wages from the employer. Costs are shared equally between the municipality and the national government (EUR 23.4 million in 2012). The job seeker often receives training (a few weeks or longer) in order to fill vacant jobs. A recent Danish evaluation focused on the effects on the unemployed: job rotation made participants enter into regular employment two to three weeks faster than otherwise, and income and employment effects are strongest for lowskilled job seekers. Job rotation is dependent on close cooperation between a business and the job centre in order to find good skill matches for job rotation replacements.

Source: Masden (2015[26]), "Upskilling unemployed adults. The organisation, profiling and targeting of training provision"; Kora (2018[27]), "Effects of being employed as a substitute in a job rotation project", www.kora.dk.

2.3.3. Training vouchers and subsidised training places

Training vouchers and subsidised training places are both types of subsidies, but with important differences. Training vouchers are a type of subsidy in which the government pays the tuition fee to the training provider once the learner enrols in the course. Subsidised training places also involve the government paying the tuition fee to the training provider; however, this transaction takes place based on a prior contractual agreement to deliver specified education and training (e.g. Commonwealth Grant Scheme, VET subsidised places, and training provided through employment services). Such agreements often specify that the training provider will receive a certain amount of public funding per learner.

Therefore, while both training vouchers and subsidised training places are "demand driven", in that institutional funding follows learner enrolment, training vouchers give the learner more flexibility in deciding the type of training they undertake, and also create conditions for greater contestability between training providers by reducing entry barriers.

Both types of financial incentives can be targeted relatively easily at vulnerable groups. thus mitigating deadweight loss. In Australia, subsidised training places offered through employment services are targeted at job seekers who are in receipt of income support payments, and often more narrowly at job seekers with particular characteristics (e.g. parents, low-skilled, older workers, etc.). In countries that employ youchers, access is often based on characteristics such as age, employment status, skills, income and wealth. For example, Flanders limited use of training vouchers to adults without a tertiary degree in 2015, after an evaluation revealed that almost half of beneficiaries were highly-educated adults and that lower-educated adults were under-represented.

With subsidised training places, there is considerable scope for governments to steer training content to skills in high demand or in low supply in the labour market. For instance, subsidised training places offered through employment services (e.g. Skills for Education and Employment, the Employment Fund, New Enterprise Incentive Scheme, ParentsNext, etc.) are all well targeted at portable skills for general employability or skills and training required by employers.

With training vouchers, the learner has more flexibility in deciding the type of training they undertake, but measures to steer the use of youchers can still be employed. Some countries link the delivery of vouchers to the outcomes of career counselling. In Korea, for example, unemployed individuals receive advice before they can access the Vocational Competency Development Account. Similarly, in Australia, older adults at risk of unemployment can access public funding for training, but must first participate in a Skills Checkpoint assessment to identify suitable training linked either to skills upgrading, a future job opportunity, or an industry, occupation or skill in demand. In Flanders, vouchers are available both for training and for career guidance (Box 2.5), and the two are linked: adults who already have a tertiary qualification may only access training vouchers if the career counsellor assesses that training is needed. Another measure that some countries use is to restrict use of vouchers to a list of pre-approved training courses that are in line with labour market needs. In Estonia and Latvia, vouchers can only be used by individuals who enrol in training that has been identified to develop skills that are in shortage in the labour market (OECD, 2019_[16]). In Austria and Greece, vouchers are available for both the employed and the unemployed to develop digital skills while in Israel vouchers must be used to develop skills such as Real-Time, Java, or Application Development. In Flanders, vouchers must be applied to courses that are labour market oriented (Box 2.5).

While greater targeting of vouchers helps to minimize deadweight loss and helps individuals gain the skills needed in the labour market, its benefit must be weighed against greater administrative cost. Feedback from the experience of the Walloon (Belgium) Chèque Formation (a voucher that was targeted at the development of 'green' and language skills), for example, suggests that this targeting can create significant administrative burden (OECD, $2017_{[18]}$).

With vouchers, issues around quality control primarily concern contractual relationships with training providers. As discussed above with ILAs, stringent vetting of training providers and quality assurance of eligible courses is needed to minimize the risk of fraudulent activity.

Box 2.5. Vouchers in Flanders

In Flanders (Belgium), adults can access vouchers for subsidised career guidance and training. Career guidance vouchers (*loopbaancheques*) help to inform use of the training voucher. Workers must pay EUR 40 per voucher, which entitles them to four hours of subsidised career guidance and they are eligible for two vouchers every six years.

Employees (including part-time and contract workers) can pay for recognised training or education programmes with training vouchers (*opleidingscheques*), which they purchase from the public employment service. The Flemish government covers 50% of the cost, with a maximum subsidy of EUR 125 per year. All employees are eligible for the training voucher, provided they do not yet have a tertiary qualification (however, those with a tertiary qualification can become eligible if a career counsellor assesses that they need training). Since 2011, the training vouchers may only be used towards training with a labour market orientation. A recent review found the rules for identifying "labour market oriented" courses to be too vague and as of September 2019 a single database will clarify which courses are eligible. Eligible courses will fall under one of three categories: basic skills (e.g. literacy, official languages, attainment of secondary qualification), job-specific skills (shortage occupations), and general labour market skills (e.g. communication, information and communication technology, teamwork, entrepreneurship, career management and social dialogue).

Source: OECD (2019[19]), "OECD Skills Strategy Flanders: Assessment and Recommendations."

2.3.4. Training levies

Countries can encourage firms to set aside resources for future training via training levies, under which employers pay a (compulsory or voluntary) contribution to a pooled fund out of which training is financed. The primary advantage of a training levy is that it overcomes the free-riding problem that deters many employers from investing in training by pooling resources from employers and earmarking them for expenditure on training. By helping to overcome this market failure, training levies can promote higher levels of employer-sponsored training. They are also a relatively cheap way to increase investment in training from a public spending point of view. Levies also act as an automatic stabilizer by providing a steady flow of funding which prevents training from being linked to cyclical fluctuations.

However, there are several risks associated with levy schemes, including that they may be perceived by employers as nothing more than an additional tax, while at the same time removing employers' autonomy about training investments. Australia's experience with the Training Guarantee Scheme in the early 1990s demonstrates that without employer buyin, levy schemes can lead to employers spending money on training without giving thought to their skills needs, resulting in low quality training outcomes. The Australian Training Guarantee required employers with a payroll above a certain threshold to contribute a minimum of 1.5% of their payroll to structured training (Fraser, 1996_[28]). If employers did not contribute this amount to training, they were required to pay the shortfall as a charge. The scheme was suspended from July 1994 until June 1996 and formally ended in July 1996 (HIA, 2001_[29]). Reasons given for abolishing the levy included that employers perceived the levy to be just another tax and funds were being spent on executive training, often with a recreational component (Department of the Parliamentary Library, 1994_[30]).

In Italy, much of the resources collected through training levies are used to finance compulsory health and safety training, which generates high deadweight losses by financing training that would have taken place in the absence of the levy (OECD, 2019_[31]).

One way to achieve greater employer buy-in is to involve employers closely in the governance of levy schemes, including in decisions on training priorities and funding allocation (OECD, 2017_[18]). Organising levy funds at the sectoral (or local) level promotes use of levy funds for training that meets the needs of employers in that sector (or geographical area), and can achieve efficiency gains by taking advantage of economies of scale. In Italy, for instance, the Fondi Inter professionali (Training Funds) were established with a national law but are managed by social partners (OECD, 2019_[31]). One of the identified advantages of the Irish Skillnets model, a training levy organised at the sectoral level, is that it reduces the administrative costs of training, which is particularly relevant for SMEs (Marsden and Dickinson, 2013_[32]).

Involving employers in decisions on training priorities and funding allocation has the additional advantage that training is more likely to meet specific labour market needs. A potential drawback, however, is that it could result in sub-optimal investment in portable skills and risk losing sight of national skills priorities, including support for vulnerable groups and support for transitions from one sector to another. A review of Australia's training levy in the 1990s found that it had little impact on industries which had trained poorly before its introduction, and most training went to higher-educated and higher-skilled workers (Fraser, 1996_[28]). Some countries design training levies to explicitly target vulnerable groups or to target specific training. Singapore's Skills Development Fund was designed to target lower-income workers, under-educated individuals and SMEs (OECD, 2019_[31]), and South Africa earmarks 40% of levy funds for use in accredited training that addresses scarce and critical national skills needs (OECD, 2017_[33]). An alternative approach is to assign training rights to individuals, for instance via an ILA, while funding the account by an employer training levy. France's CPF is funded in this way.

While restricting spending of training funds to national skills priorities helps to ensure that investments are well spent, an overly burdensome process for recouping training funds can also discourage their use, especially among smaller firms. In South Africa, for example, few firms recoup their skills training funds due to the cumbersome process involved in completing reports which demonstrate that their proposed training meets national skills priorities. Furthermore, while the cost of training levies is low from a public spending perspective, the administrative costs associated with setting up and managing levies can be considerable.

Some countries waive mandatory levy payments for SMEs, given their higher cost constraints. For instance, in the United Kingdom, SMEs are exempt from paying the apprenticeship levy. But while they do not pay into the levy fund, they are still able to access subsidies for apprenticeship training up to a designated funding band (OECD, $2017_{[34]}$).

2.3.5. Tax incentives

Tax incentives can encourage participation and contribution by individuals and employers in adult learning by reducing costs associated with education and training, similar to subsidies. Tax incentives aimed at individuals can be tax allowances (i.e. deductions from taxable income) or tax credits (sums deducted from the tax due). At the firm level, a range of measures are possible, including tax allowances, tax credits, tax exemptions, tax relief and tax deferrals. Reductions or exemptions in social security contributions⁷ are also used to encourage employers' investments in training.

Tax incentives have a number of advantages over other types of financial incentives. Administrative costs of delivering the programme are generally low because countries can leverage the existing tax infrastructure. Since they are part of the annual tax return process and do not require the recipient to file a separate application, awareness and take-up of tax incentives may also be higher among individuals than other types of financial incentives.

However, tax incentives can be harder to target compared to other financial incentives and therefore carry higher deadweight loss as they often favour groups who already have the best access to education and training. In the Netherlands, the tax deduction (aftrekpost scholingsuitgaven) was used primarily by highly-skilled individuals and had a very high deadweight cost, leading to a decision to move away from tax incentives in favour of direct subsidies (OECD, 2017_[18]). Since individuals must generally wait until after the end of the tax year to claim compensation, tax incentives fail to reduce liquidity constraints which may prevent access by lower-income individuals and smaller firms. Further, tax incentives can only reach workers, leaving out vulnerable groups such as the unemployed and inactive workers. Low-income workers benefit little or not at all from tax incentives in countries with a progressive tax system, as the amount of tax they must pay is already low. Similarly, young or struggling SMEs may not generate sufficient profits to make use of tax incentives.

A key limitation in the context of preparing workers for changing skills demands is that most tax allowances, including Australia's tax deduction for self-education expenses, are only available when the training concerned is related to a workers' current employment. Apart from being vague and difficult for tax authorities to monitor and regulate, this requirement prevents use of tax incentives for training that could allow individuals to change career or occupation. Exceptions are the Czech Republic and the Netherlands, where the tax incentive can be used to fund training that is not work-related. Germany and Austria (Box 2.6) also allow tax relief for individuals who pursue work-related professional training that prepares the individual for a change in occupation. In most cases, countries exclude training that is entirely leisure-related (OECD, 2017_[18]).

Tax incentives that allow firms to cover the indirect costs of training can help firms to overcome one of their main barriers, i.e. the cost of releasing workers to train. Some tax incentives are designed to cover wage payments during training periods. For instance, Italy's Tax Credit 4.0 (Credito di Imposta Formazione 4.0) covers 40% of labour costs for the entire duration of training up to a maximum of EUR 300 000 per firm per year. To be eligible for this support, firms must provide training in "Industry 4.0 skills", including ICT.

In light of the advantages and disadvantages of the various financial incentives discussed above, Chapter 3 provides an analysis of Australia's current set of financial incentives, and considers improvements that could be made to better address time and cost barriers. The chapter also reviews framework conditions that must be in place for financial incentives to work effectively.

Box 2.6. Tax incentive for training and retraining in Austria

In Austria, tax filers can deduct expenses related to training as part of a work-related expenses tax deduction (Werbungskosten). Such expenses are deductible both for education and training related to one's current employment, as well as for training which would prepare the individual for a change in occupation.

Retraining costs are only deductible when the training is comprehensive enough to enable an individual to start working in a new occupation unrelated to their previous occupation, e.g. training a worker from the printing industry to be a nurse. This means that expenses for individual courses or course modules for an unrelated professional activity are not deductible as retraining costs. However, such expenses are deductible if they represent education or training costs relevant to the taxpayer's current employment.

Eligible reasons for retraining are not strict and may include external circumstances (e.g. economic restructuring or plant closures), dissatisfaction in the occupation, or interest in professional reorientation. The taxpayer may be asked to prove, however, that he or she is pursuing retraining in order to take up another occupation. This is assumed to be the case if the tax filer no longer earns income in the previously practiced occupation, if future employment in the previous occupation is endangered, or if job or earning prospects can be improved by retraining.

(www.bmf.gv.at/steuern/arbeitnehmer-Austrian Ministry of Finance website pensionisten/arbeitnehmerveranlagung/abc-der-werbungskosten.html)

Notes

- ¹ According to the ABS Survey of Education and Work for May 2018, adults age 25-54 with a Bachelor degree or above have lower unemployment rates (3%) than those with below Year 12 (9%), as well as a higher likelihood of participating in the labour force (90% versus 71%).
- ² Temporary workers are the exception as employers are slightly more likely to offer temporary workers paid leave for training than permanent workers. A similar phenomenon is observed in France, where 70% of requests for paid education leave (Congé Individuel de Formation, CIF) were accepted for employees on fixed terms contracts, compared to only 49% for permanent employees (OECD, 2017_[25]).
- ³ This study is independent from the biennial surveys that the Australian Industry Group has undertaken since 2012 on workforce development needs.
- ⁴ In 2015, the Australian Government introduced the Industry Skills Fund, which subsidised accredited and unaccredited training for SMEs. The government closed the programme in late 2016. Even though both accredited and unaccredited training were eligible under the ISF, the introduction of the programme lowered the cost of unaccredited training relative to accredited training because there were already subsidies available for accredited training (e.g. Commonwealth Grant Scheme, state-supported places in VET) but none for unaccredited training. One of the conditions of the ISF was that it could only apply to training that was not already eligible for funding under other government programs.
- ⁵ Much of the information in this section comes from the forthcoming OECD working paper, "Individual Learning Schemes: Panacea or Pandora's Box."
- ⁶ There were 4 989 registered training organisations in VET and 140 providers in higher education in Australia in 2014 – a very high number of providers per capita when compared internationally (Korbel and Misko, 2016[36]).
- ⁷ These are compulsory payments that can be levied on both employees and employers and are paid to government. They confer entitlement to receive a future social benefit, e.g. unemployment insurance benefits or old age pensions.

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Chapter 3. Feasibility of policy options to promote adult learning in Australia

This chapter identifies strengths and weaknesses in Australia's current set of financial incentives to support participation in adult learning. It compares policy options based on their capacity to support transitions to new occupations, to expand participation in adult learning, to steer training to in-demand skills, as well as cost and governance considerations. The chapter concludes by suggesting actions Australia could take to improve participation in adult learning with a focus on financial incentives.

3.1. Analysis of existing financial incentives

As outlined in Chapter 1, Australia has several financial incentives in place to encourage participation in or provision of adult learning, including subsidies, income-contingent loans and a tax deduction for self-education expenses (see Table 1.6 for a list of existing financial incentives). Together this support amounts to about AUS 7.5 billion in public funding allocated to adult learning annually (Table 1.4). Australia's states and territories and employment services also subsidise training. This section assesses the capacity of Australia's current set of financial incentives to promote broad and inclusive engagement in adult learning, identifying strengths and weaknesses.

3.1.1. Strengths

The combination of subsidies and income-contingent loans available in HE and VET strikes the right balance between recognising the private return to education – by making individuals contribute to the costs of training – and inclusiveness – by subsidising training for those facing financial constraints. Adults can pursue a full qualification, the cost of which may be subsidised by the Australian Government or through shared funding arrangements between the Australian Government and state governments. An income-contingent loan may be used to pay the remainder of the tuition fee in both HE and VET, though this depends on different eligibility requirements. Evaluations revealed that the introduction of income-contingent loans for HE in 1989 (prior to which students did not pay any tuition fees) did not have the expected negative impact on participation, including for disadvantaged groups (Chapman, 1996[1]). These loans are thus viewed to be more inclusive than upfront fees, which restrict access for those with lower income. At the same time, requiring graduates to repay the loan recognises the high private lifetime economic returns associated with pursuing HE and VET (Leigh, 2008[2]; Oreopoulos and Petronijevic, 2013[3]).

Another key advantage of this system of subsidies and income-contingent loans is that they do not discriminate based on age or employment status. Eligibility is extended to the employed, unemployed, inactive workers, and the self-employed, including own account workers who sometimes fall through the cracks in receiving public support for training. The tax deduction for self-education expenses can also be claimed by all employees and the self-employed, though it excludes the unemployed and inactive adults. This is both because eligible self-education must relate to one's current work activities and also because adults who are unemployed or inactive generally have little or no taxable income. Job seekers are, however, eligible for a variety of other subsidised training programmes through jobactive and other employment services.

Many of the existing financial incentives also do a good job of steering training content towards labour market needs, as described in more detail in OECD (2018_[4]). For instance, the current methodology for setting eligible courses for VET Student Loans looks at those which have a high national priority, meet industry needs, contribute to addressing skills shortages and align with strong employment outcomes. Similarly, while HE grants are usually payable only to a restricted set of providers, they are payable to a broader group of providers for courses of study deemed to have a high national priority (e.g. teaching and nursing). Trade Support Loans are also limited to qualifications related to trade occupations on the National Skill Needs List (as well as a set of agriculture and horticulture qualifications) (OECD, 2018_[4]). State subsidies offered for accredited adult learning are generally restricted to training in qualifications deemed to be priority areas for the state or territory. Subsidised training through employment services (e.g. Skills for Education and

Employment, the Employment Fund, New Enterprise Incentive Scheme, ParentsNext, etc.), the Australian Migrant English Programme, the Skills and Training Incentive, and Career Transition Assistance are all well targeted on either portable skills for general employability (e.g. digital skills, basic skills, employment preparation) or skills and training required by employers.

3.1.2. Weaknesses

Existing financial incentives do not support workers transitioning to new occupations

One important drawback with many of the existing financial incentives is that they do not support retraining to new occupations. Australia's structural adjustment initiatives have proven highly successful at facilitating transitions to new occupations and industries for workers displaced by large-scale industry-specific closures, as in the automotive manufacturing, mining and forestry sectors (OECD, 2018_[4]). Following a similar model, the Stronger Transitions package, introduced in July 2018, provides skills training and other transition support to displaced workers in five regions affected by large-scale displacement (Adelaide, Mandurah, North Queensland, North/North-West Tasmania, and North/West Melbourne). However, this sectoral or regional approach may not be sufficient to equip the Australian workforce to meet changing skills needs in the context of technological change. Evidence suggests that the impact of technological change cuts across sectors and occupations, even as it may affect some sectors and occupations more than others (Edmonds and Bradley, 2015_[5]). Currently, only 26% of workers in occupations with a high risk of automation participate in job-related training, making many of these workers vulnerable to poorer employment prospects and lower wages in the future.

The tax deduction for self-education expenses may only be applied to expenses for training related to one's current employment. Expenses for retraining in a new career or occupation are not eligible for the tax deduction. This restriction limits the ability of workers in occupations with a high risk of automation to transition to new occupations with better employment prospects. While the loans and subsidies available for full qualifications in HE and VET can be used to retrain for new occupations, their use requires a considerable time investment as well as an employer's permission to take time off from work. The requirement to obtain an employers' permission to have time off from work to pursue a full qualification in HE or VET may implicitly limit adults to training which is related to their current employment.

The new Skills and Training Incentive (in force from January 2019) allows eligible participants to access up to AUS 2 200 for upskilling or reskilling purposes. The government contribution must be matched by either the participant or their current employer—something the employer is more likely to do if the training relates to the employee's current employment. One could argue that employers have sufficient incentives to train their employees in job-specific skills, but lower incentives to invest in portable skills that may help adults to adapt to changing skills demand. According to the HILDA, only 21% of adults report that they expect to use the skills they acquired in job-related training in their next job, suggesting that the majority of job-related training that adults receive is firm-specific.

Job seekers can access subsidised training through jobactive to help them to transition to new occupations. However, spending on training for the unemployed, as well as the incidence of such training, is low in Australia compared to other OECD countries (OECD, 2018_[4]). One of the limitations is that employment services providers are rewarded for getting job seekers into jobs quickly. While this has the goal of assisting job seekers to avoid prolonged periods out of employment, there is the risk that it reduces providers' incentives to connect job seekers to longer-term training that addresses their skills needs (OECD, 2018_[4]). The fee structure for jobactive rewards providers when participants stay in work for longer periods. However, with outcome payments ending after 26 weeks and only 12 months of performance data taken into account, incentives to provide training which supports longer-term employability are low (OECD, 2018[4]). By reallocating resources to job seekers with higher needs, recently-announced reforms to the employment services model have the potential to lead to more intensive training support for job seekers with higher needs while giving those with lower needs access to lower-cost online support. However, without extending outcome payments beyond the current 26 weeks, these reforms may not sufficiently incentivise employment services providers to assign training which supports longer-term employability.

Existing financial incentives do not address time-related barriers to adult learning

Another drawback of the existing system of financial incentives is that no financial incentive addresses the barrier of time constraints. Lack of time, either due to work or childcare/family responsibilities, was the main reason adults cited for not training (48% of adults who did not participate in training but wanted to). Own-account workers were even more likely than the average adult to report time constraints to be a barrier (55%). Unlike in many OECD countries, Australia does not have a system of training leave which would give workers the right to undertake training during working hours. Similarly, the existing set of financial incentives do not address the cost that employers face to release workers to train.

Most of Australia's financial incentives may only be used towards full formal qualifications, which means that learners must pursue long duration training in order to benefit from existing financial incentives. Subsidies and income-contingent loans for qualifications in HE or VET are primarily focused on full formal qualifications, rather than modules, units of competence, skill sets or non-formal training. The tax deduction for selfeducation expenses can also only be applied when adults pursue a full formal qualification. For state-level subsidies, New South Wales is the only state to fund shorter form credentials. Tying financial incentives to full formal qualifications may be a deterrent to participation in adult learning as full qualifications require a greater time commitment and higher associated costs in terms of foregone earnings, childcare, and difficulty managing workloads. Limiting the use of financial incentives to full qualifications in formal learning may also be problematic in terms of meeting the needs of the labour market, given that over-qualification is high in Australia relative to the OECD average and labour market outcomes of recent graduates from HE and VET have softened.

Declines in participation have been concentrated in job-related non-formal training. Broadly speaking, the current set of financial incentives favour formal training over nonformal training. Non-formal training has a number of advantages over formal training for adult learners: it can be a faster, cheaper, and more flexible way to acquire knowledge and skills. OECD evidence also suggests that adult wage returns tend to be higher for nonformal training than for formal training, at least in the short run (Fialho, Quintini and Vandeweyer, 2019_[6]). While non-formal training will not lead to a qualification recognised by the Australian Qualification Framework (AQF), it may provide knowledge and skills more in line with changing skills demands since training content does not require a lengthy vetting process as with training package development in VET.

Existing financial incentives generate deadweight losses and could do a better job of targeting vulnerable groups

Most public policy interventions have some degree of deadweight loss (Box 1.3). The policy maker must assess whether the economic benefits of the intervention warrant the incurred losses, and take steps to mitigate them when possible.

To mitigate deadweight losses, financial incentives should be targeted at adults with the greatest need for training who may under-invest due to cost, uncertainty, short-sightedness, or lack of information. In Australia, several financial incentives are targeted at underrepresented groups, such as the low-skilled, migrants, or the unemployed. Such targeting mitigates deadweight losses and improves the distribution of training provision.

The loan support available to adults to participate in formal learning through tertiary education is well-targeted in that one must repay the income-contingent loan portion of the financial support immediately upon earning the threshold income (AUS 51 957 in 2018-19). This mitigates deadweight losses by ensuring that those who have the capacity to cover their education expenses, do. However, participation data suggests that low-income students are underrepresented in accessing financial support for courses in HE (The Senate, 2018_[7]; KPMG, 2018_[8]), implying that subsidies in HE go disproportionately towards highincome adults. The fact that high-income adults could likely afford to pay for training without the government intervention is suggestive of deadweight losses, although whether they would participate without the incentive or not is an empirical question. Implied deadweight losses appear lower in VET.

The self-education tax deduction is also associated with deadweight losses. It is used by only 5% of 25 to 64-year-old tax filers each year, but disproportionately by those earning AUS 50 000 to 150 000. With median average earnings in Australia at AUS 57 200¹, adults in this income band are middle-to-high income.

An argument can be made for subsidising the education of young people who come from high-income households, since choices about whether to allocate household income to education may be out of the young person's control. However, adult learners make their own decisions about how to spend their income, and subsidising high-income adults who would have trained without the subsidy may represent an inefficient use of public funds. That said, the positive externalities generated by the additional learning may justify the deadweight losses. Governments may also have a role in alerting high-income workers in occupations at high risk of automation that they are vulnerable and need to retrain (more discussion about the role of good information, advice and guidance in Section 3.4.1).

3.2. Assessment of policy options

Well-designed financial incentives can be useful tools for improving the engagement of workers and firms in training. Currently, 31% of Australian adults participate in adult learning. This is well below the OECD average based on the latest Australian data available and lower than the participation rate in Australia ten years ago, suggesting substantial margins to improve coverage.

Chapter 2 discussed advantages and disadvantages of six different financial incentives to support adult learning (individual learning accounts, training leave, training vouchers, subsidised training programmes, training levies, and tax incentives). Each has its strengths and weaknesses and addresses different barriers to participation. As such, the optimal policy response is not necessarily one incentive over all others, but rather a package of incentives which together best address Australia's specific challenges. Equally important to the decision of which financial incentives to use is how financial incentives are designed. With these considerations in mind, this section assesses three possible courses of action for reforming Australia's current set of financial incentives:

- 1. Tweak the design of the current set of financial incentives (subsidies, loans, and tax incentive) to address weaknesses.
- 2. Introduce an individual learning account, possibly funded by an employer levy.
- 3. Introduce paid training leave.

For each option, this section will discuss its potential to support transitions to new occupations, to expand participation in adult learning by reducing existing barriers and engaging under-represented groups, to steer training towards in-demand skills, costs (including potential for deadweight losses), and governance requirements specific to Australia.

3.2.1. Tweak the design of the existing set of financial incentives to address weaknesses

One option could be to keep the existing set of financial incentives, but adjust their design to address weaknesses. The main weaknesses with the status quo set of financial incentives are that they do not easily support transitions to new occupations, they do not address the important barrier of time constraints and they generate deadweight losses. Australia could make three changes to the design of the current set of financial incentives to address these weaknesses.

First, Australia could broaden the type of training that is eligible for the self-education tax deduction to training that is not related to one's current employment. This would allow it to be used by workers in high risk occupations who want to retrain. To ensure that the tax incentive is used towards training that is considered an investment rather than purely consumption, countries generally exclude eligibility of training that is entirely leisurerelated (OECD, 2017[9]), though this can present administrative challenges. A compromise between efficiency and simplicity lies in setting easy-to-follow but perhaps arbitrary rules for determining the criteria under which training costs are eligible for tax relief (Torres, 2012_[10]). For instance, some countries establish lists of eligible qualifications or courses which exclude leisure-related courses and promote in-demand skills. Flanders, for example, is developing a database to clarify which courses are eligible for public support and eligible courses fall under one of three categories: basic skills, job-specific skills, and general labour market skills. In Austria, one of the few countries which offer tax incentives for training unrelated to one's current employment, expenses for retraining are only tax deductible when the training is sufficiently comprehensive as to enable an individual to start working in a new occupation. Tax filers may be asked to provide evidence that they are pursuing retraining in order to take up a new occupation. Broadening the type of training that is eligible for the self-education tax deduction could lead to deadweight losses, though these may be justified by the economic benefits of more retraining.

Second, to make formal learning in HE and VET a more viable option for adults with time constraints, Australia could also extend the application of subsidies and income-contingent loans to shorter form credentials. France is an example of a country that has taken steps to

subsidise training in a modular format. Upon completing the process of splitting all formal qualifications into "blocs de compétences", France will allow existing financial incentives to be used towards the cost of training in modules.

Similarly, and in view of the fact that there is currently very little financial support for nonformal learning, Australia could also extend the use of the tax deduction to courses in nonformal learning. Courses in non-formal learning are generally of short duration and therefore less time-consuming for the adult learner.

Third, Australia could better target existing financial incentives at under-represented groups to mitigate deadweight losses. The tax deduction for self-education expenses could be limited to adults earning below a given income threshold. Similarly, the subsidies for adult learners in HE and VET (i.e. Commonwealth-supported and state-supported spaces, respectively) could also be limited to adults earning below a given income threshold.

Potential to support transitions to new occupations

Broadening use of the self-education tax deduction to training that is not related to one's current employment would facilitate transitions to occupations with a low risk of automation.

Potential to expand coverage

Reforms to the design of the current set of incentives could improve coverage by addressing the main barriers to participation in adult learning. Among those who were willing to train, the main barrier cited was being too busy at work (27%), followed by lack of time due to child care or family responsibilities (21%), and then cost (18%). Time constraints were particularly important for own account workers (57%), as well as those outside of the labour force, 40% of whom reported not having time due to childcare or family responsibilities. Pursuing shorter form credentials, whether in formal or non-formal learning, may be an easier way for adults to fit time for adult learning into their busy lives. Broadening access of existing financial incentives to shorter form credentials could expand coverage by addressing both time and cost constraints, particularly for under-represented groups like own account workers and those outside of the labour force.

Tax deductions are unlikely to encourage training among lower-income adults since they generally provide a larger benefit as taxable incomes increase and individuals move into higher income tax brackets. While limiting the use of the tax deduction to adults with incomes below a particular threshold would reduce deadweight losses, it would not fully remove this problem.

To successfully expand coverage, efforts to raise awareness about the changes to the existing financial incentives and to reach out to under-represented groups (Section 3.4.1) would be needed.

Potential to steer training towards in-demand skills

While existing financial incentives already steer learning towards in-demand skills, Australia could take further actions in this area to ensure that public funds are used optimally, to promote employability and to address productivity-limiting skills shortages. For example, VET Student Loans and the HE loan programme (HELP) could be restricted to courses linked to occupations in shortage for learners over the age of 25, while maintaining the current system for learners up to age 25. Another option could be to grant remission or forgiveness of income-contingent loans to graduates who work in selected occupations that are in high demand. Tax incentives like the tax deduction for self-education expenses can be harder to target towards in-demand skills because they are administered by tax authorities which do not have the remit to evaluate the labour market relevance of courses and qualifications (OECD, 2017_[9]).

Cost

As these financial incentives are already in place, administrative costs would be low. Additional funding would likely be needed to pay for the new training that would be undertaken as a result of broadening the eligibility requirements. These costs could potentially be offset by better targeting existing financial incentives at under-represented groups to mitigate deadweight losses.

Governance requirements

No new governance arrangements would be needed. Recognition of shorter form credentials by the AQF (currently under review, see Section 3.4.3) would support this option. Quality assurance is the main challenge to recognising shorter form credentials in the AQF, particularly with courses that are not nationally accredited.

3.2.2. Introduce an individual learning account, possibly funded by an employer levy

A second option Australia could consider is an ILA, for which several stakeholder groups have recently put forward proposals.

The Business Council of Australia (BCA, 2018_[11]) is calling for a "Lifelong Skills Account" which would provide all Australians with a government subsidy and income-contingent loan for accredited training, subject to a lifetime cap. Their proposal introduces several innovations which are particularly relevant for adult learners. First, to remove existing distortions between VET and HE, funding would no longer be separated by VET or HE and all funding would be subject to the same lifetime cap. BCA proposes a costing exercise to establish course fees which are reflective of actual costs, and then using estimates of the ratio of public and private benefit to determine subsidy rates for each course. Courses with a larger relative public benefit would be eligible for a larger subsidy. Second, if the training is relevant to the individual's employment, the employer is expected to provide the worker with time off to attend training. Third, adults who have already attained a full qualification would be eligible to use the Lifelong Skills Account to pursue partial qualifications. Finally, BCA recommends the creation of a new and independent institution that would manage the Lifelong Skills Account.

The Australia Technology Network (ATN) recommends a national lifelong learning account which would provide each adult with access to an amount of money each year to use towards adult learning in approved courses (ATN, 2018_[12]). ATN proposes a targeted approach, by allocating more money to workers in at-risk industries or demographic groups. Blockchain technology, they propose, could facilitate the administration of these new learning accounts. It is not clear whether employers would be required to give workers paid leave to undertake training funded by the learning account.

Per Capita proposes an "Economic Security Account," funded by an employer levy (Per Capita, 2018_[13]), similar to the way in which France's CPF is funded. This funding approach is different from the previous two proposals: the ATN proposal was silent on how a learning account should be funded, and the BCA proposal suggested reallocating the

existing money already spent on subsidies and loans in HE and VET. Similar to ATN, Per Capita recommends providing a greater amount of money to vulnerable groups (they cite those in low pay or precarious work). It is not clear whether unemployed or inactive adults would also have access to money through Per Capita's proposal. In France, where the CPF is funded by an employer levy as well, levy funds are distributed to accounts of all adults, including the unemployed and inactive. The public employment service also tops up the accounts for these adults. Similar to BCA, Per Capita recommends limiting use of the account to accredited courses. Per Capita is silent about whether employers would be required to give workers paid leave to undertake training funded by the Economic Security Account.

The Monash Commission calls for a "lifetime learning account" and a "universal learning entitlement." What Monash Commission refers to as a "lifetime learning account" is not an ILA in the sense described in this report. Instead, it is a tracking system. They propose introducing universal student numbers that monitor acquisition of all publicly-subsidised education and training over an individual's lifetime. These accounts would be managed by a new single authority responsible for post-compulsory education and training. Under the universal learning entitlement, current income contingent loans and government subsidies would not be restricted to "first-job qualifications" (i.e. adults who already have a qualification can use the financial support to retrain in new qualifications for new occupations). Government subsidies and income-contingent loans can already be used for multiple qualifications in the current system, provided individuals meet eligibility requirements and have not yet hit the lifetime limit on the amount that can be borrowed. They also propose that the government give both the loaned component of the student contribution as well as the government subsidy directly to the institution, which would mean that no student would pay an upfront fee.

Potential to support transitions to new occupations

The allure of an ILA is its portability feature, which extends access to casual, part-time and own-account workers and supports transitions to new occupations for workers in occupations at high risk of automation. The fact that the ILA is tied to the individual, and not to the employer, enables individuals to upskill or retrain in skills that would help them to transition to new occupations.

Potential to expand coverage

An ILA has the potential to expand coverage in adult learning by addressing cost constraints cited by under-represented groups, especially the low-educated and the unemployed for whom cost is an important barrier. The portability feature of ILAs means that workers can accumulate money towards training while employed, and still be able to access this money for training if they became unemployed. They would not lose their accumulated training money with loss of attachment to an employer.

Another advantage of this policy option is that by targeting adults who have finished their front-ended education, the introduction of an ILA could help to challenge the common mindset that education is for the young (Productivity Commission, 2017_[14]). Changing this perception and "normalising" learning for adults could help to expand coverage.

Despite the portability feature and the potential to expand coverage by normalising adult learning, there is little evidence that ILAs incite wide participation in practice (OECD, 2019[15]). In France and Singapore, the two most recently-implemented ILA schemes with large potential coverage, about 1.7% and 4.2% of the labour force respectively participated in the scheme in 2016 and 2017, partly reflecting their very recent implementation (OECD, 2019_[15]). As in other types of training schemes, low-educated workers tend to participate less in ILAs than the highly-educated where access is not restricted to them (OECD, 2019[15]).

On their own, ILAs do not address the important barrier of time constraints which means that participants would still pay the opportunity cost of training. With the exception of the BCA proposal, none of the ILA proposals put forward by stakeholder groups discuss how time constraints could be overcome with an ILA in Australia. BCA proposes that employers be required to provide their employees with paid leave to pursue training subsidised by the ILA if training is related to their current employment. As noted in Chapter 2, ILAs are often offered in combination with paid training leave (e.g. in France, Flanders, and Singapore). BCA would also allow adults who already hold a full qualification to use the ILA to fund partial qualifications, which are less time-consuming than full qualifications. However, BCA and Per Capita only allow the ILA to be used towards accredited training (BCA, 2018_[11]; Per Capita, 2018_[13]). This restriction helps to ensure that public funding goes to training of high quality; the downside is that it fails to support non-formal training which is not accredited but, like partial qualifications, is less time-consuming and thus more compatible with an adult's family and work commitments.

Potential to steer training towards in-demand skills

The demand-driven nature of ILAs mean that it is the responsibility of adults to decide what training to take and where. Good information, advice and guidance is therefore highly important to helping adults make the best use of the ILA. There is room to steer the use of voucher-based ILAs towards training which is in high demand in the labour market, as is the practice in many countries (e.g. Korea, Flanders, Estonia, Latvia, Austria and Greece; see Section 2.3.3. for more details).

Cost

Risk of deadweight loss is a key concern with ILAs, as extending training rights universally implies allocating public funding to cover training that would have taken place anyway. Both the ATN and Per Capita proposals suggest modulating the amount of support provided such that priority groups (e.g. those in at-risk industries or demographic groups, those earning low pay or in precarious work) receive more training rights, thus mitigating deadweight loss.

There are different ways to fund ILAs, with varying degrees of co-funding between government, workers and employers. The BCA proposal is in a sense cost neutral, as rather than increasing the investment in training, it proposes use of the existing pot of money from VET and HE subsidies and loans. Under the BCA proposal, co-funding is achieved by requiring individuals to pay back income-contingent loans, and by setting the expectation that employers will offer paid time off work, effectively bearing the opportunity cost of training.

Per Capita proposes funding the account using an employer levy. The discussion in Chapter 2 noted several advantages with training levies: they help to overcome the freeriding problem that deters many employers from investing in training, and can promote higher levels of employer-sponsored training. However, as Australia's experience with the Training Guarantee Scheme in the 1990s attests, there is a risk that employers view the levy as an additional tax. Employer-led levy schemes could result in an under-supply of more general or portable skills training and carry a risk of losing sight over national skills priorities, including support for vulnerable groups and supporting workers' transitions from one sector to another. These limitations would be overcome if, as Per Capita proposes, the money went towards funding an ILA, since the individual would be responsible for making their own training decisions. Still, achieving employer buy-in may be difficult under this approach since employers would not be able to influence the type of training the levy funds are used for.

Employer tolerance for a new levy may be low given that Australia already has several training levies. Any new national training levy would come on top of several existing statelevel training levies in Western Australia, South Australia, Tasmania and the Australian Capital Territory (HIA, 2001_[16]). Furthermore, some sectors have their own training levies managed by industry training boards. At the national level, employers who sponsor overseas workers through the temporary or permanent employer-sponsored migration programmes are also required to pay the Skilling Australians Fund levy (OECD, 2018_[41]). Unless a new national levy replaced these existing levies, there may not be appetite to introduce another employer levy. The administrative costs associated with setting up and managing a new levy can also be substantial.

Since ILAs frequently involve only a small amount of money, it is difficult to get commercial banks to provide them. Countries often require a separate bureaucracy or governance structure to manage them which can make administrative costs high. For instance, France has budgeted EUR 90 million to set up their new system of money accounts². Building public awareness of a new ILA scheme in Australia would also have to be factored into set-up costs.

Governance requirements

In Australia, where responsibility and funding for education and training is split between the Commonwealth and state and territory governments (particularly in VET), management of a new learning account would not be straightforward. The BCA and the Monash Commission suggest introducing a new institution - independent from either the Commonwealth or state and territory governments – to manage the ILAs. ATN suggested using blockchain technology to manage virtual ILA accounts, which would eliminate the need for a central agency responsible for managing the new accounts. As defined by one website (https://applicature.com/blog/blockchain-startups/), "blockchain is a software product that allows storage and conversion of data via the Internet, in a secure and transparent way without a central governing body." Using blockchain for ILA management would be an innovative application of this new technology, though not without its risks (e.g. lack of a central authority prevents identify verification). If using the blockchain method, Australia would still need to assign responsibility of the accounts, including verification that training meets eligibility requirements, to somebody.

Quality control deserves careful consideration under any ILA scheme, and particularly in Australia, given recent experiences with fraud in the VET-FEE HELP programme (see Section 2.3.1). In the United Kingdom, the cost of fraudulent activity under their ILA programme which ran from 2000 to 2001 amounted to an estimated GBP 97 million. Lessons learned from both the Australian and UK experiences suggest safeguards to minimize the risk of fraudulent use of public funds with an ILA: a gradual phase-in period to catch and fix pitfalls related to fraud, a more rigorous approval and quality assurance process for providers (see discussion on quality assurance in Section 3.4.3), and easy access to information, advice and guidance to assist adults in making the best use of the ILA. To prevent unnecessarily high fees associated with fraudulent behaviour, as was observed under the VET-FEE HELP programme, the Joyce review (2019_[17]) recommends that Australia set up a National Skills Commission with the responsibility to consult on and agree to national course prices in VET (these are already regulated in HE).

3.2.3. Introduce paid training leave on top of existing incentives

A third option could be to introduce a right to paid training leave, giving adults paid time away from work to participate in learning. Australia does not currently grant education and training leave by national legislation, though evidence from the HILDA survey suggests that 22% of workers have access to paid training leave, presumably through firm-level enterprise agreements. Paid training leave would directly address the barrier of time constraints that non-participants report, and would also complement the use of existing financial incentives that address cost and liquidity barriers (i.e. subsidies, loans, tax incentives).

In cases where training is job-specific, employers would be expected to continue paying the wages of employees while they train. However, if the training is in portable skills or to retrain in a new and high-demand occupation, the Australian Government could repay the lost wages to employers, either by making payments to the employer (who would then pay the employee) or directly to the employee. Under Australia's paid paternity leave, for example, eligible employees get up to 18 weeks of leave paid at the national minimum wage and these payments are sometimes made to the employer first, who then pays them to the employee, and sometimes the payments are made directly to the employee. Under the proposed Canada Training Benefit, the government directly pays the employee 55% of their wages over the maximum 4-week training leave period (Box 2.3). Alternatively (or in addition) to reimbursing lost wages to employers, the Australian Government could provide replacement workers through job rotation schemes, as is practiced in Denmark (Box 2.4).

Assessing whether training is portable or job-specific is not always straightforward, and some countries develop databases or lists of eligible training for clarity. In Singapore, employers only receive compensation for lost wages if training is undertaken in courses on a pre-defined list of Workforce Skills Qualifications (WSQ). There are two categories of WSQ training: technical skills in occupations in high demand, and portable skills like employability, leadership, and customer service.

Potential to support transitions to new occupations

The employer is more likely to grant permission for training which is sector-specific or job-specific, which reduces the potential of paid training leave to support transitions to new occupations. One option is to follow the approach taken in France and Flanders (Belgium), where workers must request their employer's permission to use training leave, but the employer can only deny or postpone the leave under limited circumstances (see Section 2.3.2).

Alternatively, to support the development of portable skills, the Australian Government could compensate employers for lost wage costs in cases where the training is in portable skills or to retrain for a new in-demand occupation, as is the case in Singapore (Section 2.3.2).

Some countries limit eligibility of paid training leave to employees who are at risk of redundancy. For instance, under the part-time unemployment act, the Netherlands offered paid training leave only to employees facing redundancy due to economic hardship

(Cedefop, 2012_[18]). In Hungary, low-qualified and ageing employees are entitled to longer periods of training leave.

Potential to expand coverage

Introducing a right to paid training leave would in principle help to address the barrier of time constraints that non-participants report, and would complement the use of existing financial incentives which address cost barriers. Data on take-up of training leave is scarce but tend to suggest that fewer than 2% of employees use training leave per year (Cedefop, 2012[18]). Take-up is judged to be higher when paid training leave has fewer employmentrelated criteria, is targeted at disadvantaged employees, is offered in combination with personalised guidance services, and in an environment where the social partners play at least some role in the management of the training leave (Cedefop, 2012_[18]).

Whether paid training leave improves coverage of under-represented groups depends on a number of factors. The decision as to who goes on training leave generally depends on the employer (except in France and Belgium, where employers can only deny requests for training leave under limited circumstances). Employers are more likely to approve cases when the training investment would bring a high return which often leads to a preference for high-skilled and younger workers and for training content that is company-specific rather than portable. Paid training leave may therefore do little to bridge the gap in participation observed between highly-educated and low-educated workers. In countries where social partners are involved in managing paid training leave, they can help to reduce cases of discrimination or disagreements between employers and employees regarding the content of training.

Some countries extend paid training leave to own account workers, which could help to expand coverage for this under-represented group who report time constraints to be important barriers to their participation in adult learning. In Luxembourg, wage compensation for education and training leave is available not only to employees but also to own account workers and those in the liberal professions³ (provided they have been registered with social security for at least two years). It covers training leave up to a maximum length of 20 days over a period of 2 years or a maximum of 80 days over an individual's professional career. The amount of wage compensation is based on the individual's income in the previous year and is capped at four times the social minimum wage for unskilled workers (OECD, 2019[15]).

Small businesses, which make up 70% of employment in Australia, may not be able to afford the opportunity costs that come from employee absences while they train. As mentioned above, the Australian Government could compensate employers for lost wages when the training is in portable skills or to retrain in high-demand occupations. Australia could also explore the use of job rotation schemes to provide replacement workers during training (as practiced in Denmark, see Box 2.4). This solution not only reduces opportunity costs for the employer, but it also provides work experience and training opportunities for iob seekers.

Potential to steer training towards in-demand skills

Some countries offer longer periods of paid training leave for adults pursuing training in high-demand areas. For instance, in Belgium, the maximum number of days of training leave is higher when learners participate in training in shortage occupations.

Cost

Administrative costs of paid training leave depend on how it is regulated, with regulation by national law thought to have lower administrative costs than sectoral or company-level collective bargaining agreements (Cedefop, 2012_[18]). Wages are paid by the employer during training leave, but the employer may be partly or fully compensated in the form of subsidies or tax incentives if public funds are involved (Cedefop, 2012_[18]). Deadweight losses could arise if public funds were used to compensate employers for wages lost during job-specific training. To mitigate, public funds should compensate employers only for lost wages in cases where training is portable and not job-specific, as proposed above.

One way to fund paid training leave could be to allow workers to access superannuation for retraining purposes. As part of its proposed Canada Training Benefit, Canada recently proposed to give workers up to four weeks of income support while training paid for by Employment Insurance (EI). EI is a system of mandatory employer and employee contributions that covers living expenses while a worker is unemployed in Canada. Using existing administrative infrastructure keeps costs low. Since both employers and employees must contribute to EI, it ensures a degree of co-funding which recognises that there are private as well as public benefits to training. A limitation, however, is that it excludes those with insufficient attachment to the labour market who do not qualify for EI. Similarly, while it could be advantageous to use the existing infrastructure of superannuation (which operates by mandatory employer contributions and voluntary tax-deductible employee contributions) to fund retraining in Australia, doing so would exclude casual workers and own-account workers who are not eligible for superannuation. Furthermore, using superannuation funds for retraining purposes may not be financially sustainable. Drawing down EI funds for training in Canada is arguably financially sustainable because training (ideally) reduces the likelihood that workers will become unemployed in the future and need to draw upon EI funds for an even longer period. Superannuation funds, on the other hand, are not an insurance system but individual accounts. Drawing down superannuation accounts for retraining would leave individuals with less money to retire on, potentially generating negative welfare effects for the individual and the economy. Since superannuation is not currently used for training leave, this option would also require new and potentially complex administrative infrastructure.

Governance requirements

As noted in Chapter 2, Australia is one of very few OECD countries that do not offer training leave. In most countries, training leave is regulated through legislation at the national level, though collective agreements at sectoral or company levels are also a significant means of regulation (Cedefop, 2012_[18]). In most cases, employees are protected from dismissal or a deterioration in employment conditions and retain their entitlement to both health care insurance and pension entitlements. They are usually obliged to notify the employer in advance about their intention to take training leave (Cedefop, 2012_[18]).

One Australian stakeholder suggested that introducing paid training leave at the industry level might be effective in Australia given the success of sectoral level structural adjustment programmes (e.g. automotive industry). However, training leave regulated by national law (and not by collective agreements) would entail lower administrative burden and could be less expensive (Cedefop, 2012_[18]). To support the wider implementation of collective agreements at sectoral or company levels, the national government would need to guarantee a favourable legal environment for paid training leave by providing a well-defined legal framework.

Permitting flexible working arrangements to accommodate training could be another way to address time constraints. Australia's National Employment Standards already grant workers the right to request flexible working arrangements (e.g. changes to start and finish times, use of split shifts or job sharing, or working from home) under certain circumstances (for caring responsibilities, if a worker has a disability or is 55 years of age or older). Requests can only be refused by the employer on reasonable business grounds and the employers must provide a written response if they refuse the request. Australia could extend the right to request flexible working arrangements to adults pursuing learning opportunities. This may help adults to fit training into their schedules in some cases.

3.3. Recommendations

There is unfortunately no "magic bullet" policy option which will generate broad and inclusive participation in adult learning. The policy discussion in Chapters 2 and 3 highlighted the advantages and disadvantages of several financial incentives based on international experience and given the Australian context. While the portability feature of ILAs seems to promise broader and more inclusive coverage and the potential to support transitions of high-risk workers to new occupations, there is little international evidence to suggest that ILAs incite wide participation nor that they successfully bridge the training gap between high-skilled and low-skilled workers. Introducing a new ILA could be quite costly in terms of set-up and administrative costs, as well as potentially high deadweight losses. It also would not directly address the main barrier of time constraints. Paid training leave would address time constraints. Take-up of paid training leave tends to be low, but increases with social partner involvement, access to career guidance and information, targeting on disadvantaged groups and accessibility by all employment groups.

A low-cost but potentially effective approach to addressing barriers to participation in adult learning would be to tweak the design of the existing set of financial instruments to address weaknesses. Fitting adult learning into already busy schedules that include work and family commitments can be a challenge. Australia could expand eligibility rules around the current income-contingent loans and subsidies in HE and VET for adults (age 25+) as well as the self-education tax deduction to include shorter form credentials (e.g. skills sets, modules, units of competency) and online or distance training. This would support flexible modes of training delivery that accommodate adults' work and family commitments. Furthermore, allowing adults to use the self-education tax deduction for training not directly related to one's current employment would facilitate transitions from occupations at high risk of automation to occupations at low risk of automation.

Table 3.1. Policy recommendations

Main findings Key recommendations Financial incentives The current set of financial incentives do not encourage retraining in Allow the tax deduction for self-education expenses to be used towards training that is not directly related to the individual's current new occupations, which impedes transitions from high-risk employment, while excluding training for leisure or personal interest occupations to low-risk occupations. purposes. Allow a broader use of existing subsidies and loans (e.g. VET The current set of financial incentives do not adequately address the barrier of time constraints, which is the most commonly-reported student Loan, Higher Education Loan programme) to cover more barrier to participation in adult learning flexible modes of training delivery, e.g. modular learning, distance or online learning, and learning that takes place on a part-time basis or on evenings and weekends. Extend the use of the self-education expenses tax deduction to non-formal learning Consider introducing a right to paid training leave, either at the national level or on an industry basis. To encourage firms to release workers for training leave, explore the use of job rotation schemes to provide replacement workers for employers while their employee trains. For training that is not job-specific or sector-specific, and for own account workers, the Australian Government could compensate the employer for lost wages. Alternatively, permitting flexible working arrangements to accommodate training could be another way to address time constraints. The self-education expenses tax deduction and subsidies in HE and Mitigate deadweight losses by targeting use of the self-education VET (i.e. Commonwealth-supported places and state-supported expenses tax deduction at adults with incomes below a given spaces, respectively) generate deadweight losses by subsidising threshold. Similarly, Commonwealth-supported and state-supported training for adults who earn high incomes and would likely have places in HE and VET for adults (age 25+) could be targeted at undertaken the training without the financial incentive. those with incomes below a given threshold. Adults with incomes above this threshold may access income-contingent loans.

3.4. Framework conditions

Financial incentives do not operate in a vacuum and their effectiveness depends on a range of framework conditions being in place, including a system for producing and disseminating up-to-date and user-friendly information about the labour market, a high-quality and responsive training system, and a strong validation and qualification framework.

3.4.1. Good information, advice and guidance

Financial incentives to encourage participation in training may result in sub-optimal spending of public resources unless a robust and user-friendly information, advice and guidance (IAG) system exists to help individuals make informed education and training decisions. This is particularly important in the context of demand-led financial incentives. The failure of the ILA programme in England, for instance, was not only due to widespread fraud, but also due to a lack of IAG: 85% of participants did not receive any IAG to assist with their choice of training, and 73% had not considered more than one provider before starting their course (OECD, 2017[9]). Some older experiments in the United States with the Individual Training Accounts showed that take-up was higher where counselling was offered, but not when such counselling was mandatory or too directive.

A recent study (OECD, 2018_[4]) provides an analysis of Australia's system for assessing and anticipating skill needs and how this information is disseminated and used in policy making. Australia is a leader in the production and use of high-quality information about labour market needs. This information is disseminated via various online portals, including MySkills (national directory of training opportunities in the VET sector); Quality Indicators

for Learning and Teaching (OILT); Job Outlook; the Labour Market Information Portal; and myfuture (national career and labour market intelligence). Online provision of such information is likely to help adults make more informed choices, and to put pressure on training providers and education institutions to be concerned about labour market outcomes.

One challenge identified in both OECD (2018_[4]) and a recent expert review of the VET system (Joyce, 2019_[17]) is developing and maintaining a respected national picture of the current and future skills needs of the Australian labour market. Doing so is challenging in a country as large and diverse as Australia, and given the variety of exercises to assess and anticipate skills needs across policy areas and levels of government. OECD (2018_[41]) recommended that Australia take steps to set a national assessment or "vision" of skills policy, underpinned by strong stakeholder engagement and political leadership. Recent proposals made in the Joyce review (Joyce, 2019_[17]) go a long way towards achieving this objective. The review proposes making a new National Skills Commission responsible for developing and regularly updating clearly linked national, state and territory level and regional skills demand forecasts. Such forecast exercises would rely on wide stakeholder engagement and would be used to advise on all skills-related policy areas, including VET, higher education, employment services and skilled migration. Having a respected and regularly-updated national picture of skills needs would help adult learners to make informed investment decisions, and could inform use of financial incentives to steer training towards in-demand skills.

Accessing the wealth of available information about skill needs can be overwhelming for users, and especially for those with low information and communication technology skills who may have difficulty finding information tailored to their needs. This is why online provision of IAG cannot be a complete substitute for face-to-face careers advice and guidance. Several countries offer subsidised career guidance for adults to help guide their education and training decisions. France, for instance, launched the Advice for Professional Evolution (Conseil en Évolution Professionnelle, CEP) in 2014, which offers free and personalised career advice for adults considering a career change. The CEP is available for all employed and unemployed individuals, and employees can participate without having to inform their employer. In Flanders, workers can purchase vouchers for up to eight hours' worth of subsidised career guidance with a registered provider every six years. Australia does not currently offer subsidised career guidance for adults (other than for the unemployed as part of jobactive and other employment services programmes).

Given the high share of adults in Australia who are not willing, or perhaps not able, to participate in adult learning (80% of non-participants), improving access to career and education guidance for adults may be needed to raise participation. Offering subsidised career and education guidance for adults could help guide them towards training investments that align with labour market needs. Adults (other than job seekers) could purchase vouchers to access subsidised career and education guidance services offered by jobactive providers, similar to the practice in Flanders.

A key challenge is how to reach adults who would benefit from adult learning but might not be aware that they would benefit. An OECD survey (https://oecd-futureofjobs.org/) asked respondents "What do you think is the chance that your job will substantially change because of automation in the next five years?" About 46% of respondents who were working in occupations with a high risk of automation (greater than 60% risk) answered "very low" or "low" to this question, suggesting that they were not aware that their occupation was at high risk of automation.

Active outreach may be needed to engage workers who would benefit from adult learning. International experience shows that meeting adults in their day-to-day environment (e.g. workplaces, community institutions and public spaces) and leveraging their existing community relationships can help them to connect with adult learning opportunities. This is particularly important for low-skilled adults who may be less likely to proactively look for information and support, but is also important for high-skilled adults. Australia already intervenes with early support services at the sectoral and regional levels through both the Skills and Training Initiative and the Stronger Transitions package. The Skills and Training Initiative set up transition centres onsite at Holden, a major car manufacturing plant that closed in 2017. The transition centres offered workers onsite access to career counsellors, skill assessments, recognition of prior learning and training. This support was made available to workers well before the plant closed, enabling 84% them to transition into new employment by the time the plant closed (OECD, 2018_[4]). Expanding this and other types of outreach activities may help to improve participation in learning for adults in occupations at high risk of automation. It might also be worth exploring use of soft "nudging" techniques (Box 3.1) to alert workers in occupations at high risk of automation about training opportunities.

The success of financial incentives aimed at firms (training levies, subsidies, tax incentives) also depends on strong systems of IAG. Firms, and especially SMEs, often struggle to identify their current and future skill needs and which adult learning opportunities would help to fill those skills gaps. OECD (2018[4]) notes for Australia that "a key challenge in giving SMEs a stronger voice in skills policy is lack of advocacy and a means through which SMEs in the same sector can communicate their skill needs to education providers". Good quality information and guidance support to SMEs in assessing their own skill needs and in finding suitable and affordable training options could help to boost their provision of adult learning. In Korea, the SME Training Consortium was instrumental in improving the use of the levy scheme by providing SMEs with support in identifying their skill needs as well as contracting collective training by sector (Box 3.2).

Box 3.1. Nudging high-risk adults to train

Behavioural insights, i.e. insights derived from behavioural and social sciences, are increasingly being applied by governments with the aim of making public policies work better. OECD (2017) collected applications of the use of behavioural insights from around the world and in a variety of policy sectors including consumer protection, education, energy, environment, finance, health and safety, labour market, policies, public service delivery, taxes and telecommunications. Based on their experiences helping governments to implement behavioural insights, the Behavioural Insights Team in the United Kingdom recommends four ways to encourage a behaviour: make it easy by harnessing the power of defaults and simplifying messages; make it attractive by using images, colour or personalisation; make it social by indicating how common the desired behaviour is; and make it **timely** by prompting people when they are most likely to be receptive.

In one example, the Behavioural Insights Team in the United Kingdom worked with the energy regulator, Ofgem, to design and test communications to improve customer engagement and increase rates of switching to lower-cost energy providers. They launched a trial involving 150 000 customers, where the intervention was a personalised letter showing households how much they could save by switching energy provider and including the top three deals in the market for them. The letters tripled switching rates

from a baseline of one per cent. They also found that customers who switched after receiving a letter saved GBP 50 (British pounds) more than those who switched of their own accord, suggesting that the information provided in the letter helped them to make better provider choices.

A similar approach could be trialled in the area of adult learning. In cooperation with the Australian Taxation Office, for instance, personalised letters could be sent to tax filers in occupations with a high risk of automation. These letters could notify adults that their occupation is at high risk of being automated, and indicate the percentage of workers in the same occupation who have already participated in retraining or upskilling in the past year (the social dimension). The letters could also inform the tax filer about the self-education tax deduction and other available financial incentives or guidance that could support their training, possibly even suggesting training courses which would allow them to retrain to a higher-demand occupation and which would make use of the transferable skills and knowledge they have acquired in their current occupation.

OECD $(2017_{[19]}),$ "Behavioural Insights Public Policy." and ilibrary.org/governance/behavioural-insights-and-public-policy 9789264270480-en; The Behavioural Insights Team, "EAST: Four simple ways to apply behavioural insights." www.behaviouralinsights.co.uk/wpcontent/uploads/2015/07/BIT-Publication-EAST FA WEB.pdf.

Box 3.2. Korea's SME Training Consortium

The Korean government piloted the Training Consortium Pilot Program for SMEs in 2001 with the specific objective of removing barriers (financial, organisational, or technical) to SME's use of the training levy. The training levy had been in place since the mid-1990s, but very few SMEs offered levy-supported training to their workers.

The pilot organised SMEs within the same sectors or industries into a Training Consortium (TC). Each TC set up an Operational Committee which was composed of member SMEs, local chambers of commerce and industry, and the Ministry of Labour field office. The TC was managed and run by two training specialists who were responsible for:

- Conducting skills and training needs assessments of each member SME (e.g. through interviews with SME managers and workers);
- Planning training programme activities of member SMEs;
- Contracting with training providers and SMEs to train workers collectively;
- Carrying out networking activities with TC members, via a web page, emails and periodic meetings;
- Carrying out evaluation studies upon completion of training courses.

The pilot considerably improved the use of the levy by SMEs: the proportion of member SMEs that offered training for their workers increased from 11% to 50% within a year of the pilot's implementation. The pilot also helped to set up the demand-driven training system, by establishing strong partnerships among stakeholders. In 2003, the pilot was scaled up to the national level under the Ministry of Labour.

Source: Adapted from OECD (2019[20]), Adult Learning in Italy: What role for training funds?, https://doi.org/10.1787/9789264311978-en.

3.4.2. Responsive education and training system

Making the education and training offer both attractive and responsive to changing labour market needs is critical to motivating adults to participate. Without this, financial incentives are unlikely to be effective at boosting participation. Quality assurance measures are therefore highly important, and information on the quality of programmes and providers should be shared with end users.

Education and training programmes must respond flexibly to changing skills needs. In Australia, the industry-led system of developing and updating VET training packages through industry reference committees (IRCs) helps to ensure that the skills and knowledge that adults acquire in VET align with employers' needs (OECD, 2018[4]). However, there has been criticism that the speed of development of training packages for formal VET qualifications is too slow (Joyce, 2019[17]). As a result, the training may not be updated quickly enough to keep pace with changing skills demand. Indeed, employers who chose non-formal training instead of formal training cited that they did so because non-formal training was more tailored to their needs than formal training (this was the second main reason, after cost-effectiveness). Employers in the information and communications technology (ICT) industry reported using vendor-provided training (a type of unaccredited training that is offered directly by vendors or suppliers) because it is at the forefront of new technologies and concepts and thus more qualified than accredited training to undertake skill development in ICT (White, De Silva and Rittie, 2018[21]).

A responsive training system also means that there are flexible options for training delivery that accommodate the family and work-related time commitments faced by adult learners. Many countries offer different forms of flexible learning provision, including on a parttime basis, during evenings or weekends, as distance or online learning, or in a modular and/or credit-based format. The ABS' WRTAL survey shows that while traditional classroom instruction remains the most common form of work-related non-formal training in Australia, the use of online training is rising: 19% of adults age 25-64 used this training delivery method in 2017, up from 13% in 2013. The rise in participation in online learning is likely due to it being less costly compared to face-to-face learning, and better suited to people who "are working, have caring responsibilities, are geographically distant, or who want to undertake a course at a speed that suits them" (Productivity Commission, 2017_[22]). There is also evidence that demand for short courses is rising – enrolments in skill sets (i.e. bundled units of competency in VET) rose from 150 000 to 250 000 between 2015 and 2017 (DET, n.d.[23]). Australia's competency-based VET framework is well set up to support this type of modular approach to adult learning, which allows adult learners to build skills and knowledge incrementally over their career, either to meet specific skills needs as they arise or to combine to eventually build full formal qualifications. However, this is not the case in HE where flexible modes of training delivery are less common. Australia should develop more flexible modes of training delivery in HE, including options for part-time, weekend and evening courses, modular learning, and distance or online learning.

3.4.3. Qualification frameworks

Motivating adults to pursue learning opportunities also requires that there be clear links between skills, qualifications and occupations. Qualification frameworks establish these links and facilitate comparisons of different education and training systems across states and territories, as well as across countries. Strong qualification frameworks are particularly important for creating a harmonised understanding of the value of particular qualifications in a federated country like Australia, where responsibility for education and training lies largely with states and territories.

Australia is currently conducting a review of its qualification framework for regulated qualifications (Australian Qualification Framework, AQF) (DET, n.d.[23]). One of the considerations under review is whether short form credentials like skill sets, short courses (including units of competency in VET), MOOCs or professional and vendor qualifications should be recognised within the AQF. The advantage of having them recognised would be the reputation for quality education provided by Australia's regulated tertiary education system, and to increase transparency about what is being offered by short form credentials and what could be gained by attaining one (DET, n.d.[73]). For learners, such recognition could increase motivation to participate in this type of training by making it portable from one employer to the next. While some types of short form credentials like skills sets and short courses are closely linked to regulated qualifications, thus making them easier to quality assure, others like MOOCs or vendor qualifications are not linked to regulated qualifications. Solving this quality assurance challenge represents a key hurdle in recognising short form credentials in the AQF. The Productivity Commission suggests that the Australian Government investigate areas of VET where an independent certification model could robustly test a person's skills to overcome this challenge (Productivity Commission, 2017_[22]).

Notes

¹ Australian Bureau of Statistics, 6306.0 - Employee Earnings and Hours, Australia, May 2018, www.abs.gov.au/ausstats/abs@.nsf/0/27641437D6780D1FCA2568A9001393DF?Opendocument

www.centre-inffo.fr/site-centre-inffo/actualites-centre-inffo/la-caisse-des-depots-se-voit-officiellement-confier-la-gestion-du-compte-personnel-de-formation

³ The liberal professions include lawyers, notaries, architects, doctors, dentists and accounts, among others. They require special training in the arts or sciences, and their activities are usually closely regulated by national governments or professional bodies. (https://ec.europa.eu/growth/smes/promoting-entrepreneurship/we-work-for/liberal-professions en).

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Getting Skills Right

Financial Incentives to Promote Adult Learning in Australia

Australia requires a strong system of adult learning to position firms and workers to succeed as skill demand changes. The country has scope to improve the coverage and inclusiveness of its adult learning system as coverage has declined since 2012, and several vulnerable groups are under-represented. Financial incentives, if carefully designed, can raise participation in adult learning by addressing cost and time barriers. This report summarises the advantages and disadvantages with various financial incentives to promote adult learning based on international and Australian experience. Drawing from these insights, as well as analysis of individual and firm-level barriers, the report provides policy recommendations for how Australia could reform its financial incentives to boost participation.

Consult this publication on line at https://doi.org/10.1787/c79badcc-en.

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