Disability, Work and Inclusion

MAINSTREAMING IN ALL POLICIES AND PRACTICES

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Please cite this publication as:
OECD (2022), *Disability, Work and Inclusion: Mainstreaming in All Policies and Practices*, OECD Publishing, Paris, https://doi.org/10.1787/1eaa5e9c-en.

ISBN 978-92-64-59659-7 (print)
ISBN 978-92-64-94147-2 (pdf)
ISBN 978-92-64-50765-4 (HTML)
ISBN 978-92-64-76406-4 (epub)

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Preface

Access to employment opportunities is a top priority for persons with disabilities. Article 27 of the Convention on the Rights of Persons with Disabilities (CRPD) on the right to work, is one of its most detailed articles, given the impact of employment on the social inclusion processes. Yet, despite efforts and focus from governments, employers and organisations of persons with disabilities, available data tells us that persons with disabilities continue to be excluded from the labour market disproportionately.

Available figures show that employment gaps between persons with and without disabilities range from 10 to over 40 percentage points, depending on the country – and in some countries, the gap is even greater for women with disabilities. Unemployment and inactivity rates have also stagnated and, in some cases, are even growing. Data from the EU shows that almost 40% of persons with disabilities between 20 and 64 years of age are left out of the labour market. The COVID-19 pandemic exacerbated this scenario. An IDA Survey in 2021, on the impact of COVID-19 on persons with disabilities, reveals that 44% of respondents lost all or some of their income during the pandemic. This was even higher among persons with intellectual disabilities (62%) and people living in the Global South (53%).

As the world now shifts its attention to recovery and rebuilding, it is a good time to reflect on what more needs to be done or 'undone' to realise the right to work and inclusion for persons with disabilities. The OECD report *Disability, Work and Inclusion: Mainstreaming in All Policies and Practices*, therefore, comes at a very opportune time. While the report has a focus on jobseekers with disabilities, it also calls for a structural approach. This resonates strongly with the International Disability Alliance (IDA) and the European Disability Forum (EDF), who call for a move away from looking at employment through a narrow lens of placing people into jobs, without securing preconditions for inclusive employment such as inclusive workplace culture, provision of reasonable accommodation, and accessible housing and transportation to work. Mainstreaming disability in employment and social protection policies also means focusing on fair remuneration, proper and non-exploitative working contracts and the ability to work without losing eligibility for necessary services or disability allowances. When discussing barriers to employment, the report also rightly highlights the crucial role that inclusive education and training play.

Implementing inclusive employment in its broadest sense means moving away from trying to fit a person to a job, and instead adapting the job and its environment to an employee with disability, simultaneously addressing system-level issues by supporting workplaces and employers to practice inclusion. For too long, the focus on disability and work has been on either the supply side – that is persons with disabilities seeking employment, without an equal focus on creating workplaces and supporting employers to be inclusive – or the demand side. It is time for the discourse to shift in order to bridge both these components. The OECD report is an important piece in this discourse. We are hopeful that the report will provide a strong impetus in our collective journey towards a sustainable transformation of the labour market, for it to be more inclusive of all persons with disabilities.

Yannis Vardakastanis,
Chair of the International Disability Alliance,
President of the European Disability Forum.

Foreword

The OECD report *Disability, Work and Inclusion: Mainstreaming in All Policies and Practices* is an attempt to better understand the labour market situation of people with disability and derive and propose innovative ways to improve their labour market participation. People with disability continue to face disadvantages in the labour market, resulting in considerable employment, unemployment and poverty gaps compared with people without disability. Twenty years ago, the OECD has promoted a paradigm shift in disability policy to strengthen the focus on employability and employment. Policy makers have acknowledged the need for this fundamentally different way of viewing disability policy and tried to strengthen employment elements in their approach. Labour market outcomes of people with disability, however, have changed little.

The report begins with an overview of labour market outcomes for people with and without disability covering all 32 OECD countries for which comparable data is available. This is followed by a focus on policies and developments in six OECD countries (Austria, Belgium, Canada, the Netherlands, Norway and Switzerland) which provide a broad range of approaches and belong to the countries which have undergone significant reform. The four policy chapters of the report – on youth, social protection, the future of work and skills – cover policies and practices in these countries, informed by a wide range of research from across the OECD. The policy considerations build on this material and are relevant for the OECD area as a whole. The policy conclusions also build on recent and ongoing country-specific work by the OECD, on Ireland, Italy, Korea and Slovenia, which has focussed on aspects that are only covered in passing in this report, including the role of the public employment service (Ireland), ways to improve disability assessments (Italy), the necessity of an effective system of paid sick leave (Korea), and the critical role of policy co-ordination and early intervention (Slovenia).

The key conclusion from this analysis is that the shift in the approach to disability and the implementation of actual change has fallen short of what is needed to achieve substantially better employment outcomes and greater labour market inclusion of people with disability. While the growing evidence base continues to suggest that the previously proposed paradigm shift in disability policy is the right direction to travel, the report concludes that the paradigm itself needs to evolve as well, to capture elements that have not been covered sufficiently so far: youth with disability, the skills of people with disability, and early intervention in the course of a health problem or disability. The report suggests that the necessary policy shift can only be achieved by rigorous *disability mainstreaming* throughout all policies and practices. Mainstream systems must target the needs and strengths of everyone and be accountable for providing their services to people with disability to the same extent as people without disability.

The case for change is very strong now as countries work on building a stronger and more resilient labour market after the COVID-19 pandemic without leaving anyone behind and further increasing inequality.

Acknowledgements

This work has been performed under the OECD Directorate for Employment, Labour and Social Affairs (ELS). The report was prepared by Sílvia Garcia-Mandicó, Christopher Prinz and Stefan Thewissen, with contributions from Benjamin Levy. Dana Blumin, Daniel Camacho and Erika Chaparro Pérez provided the statistical analysis, and Lucy Hulett prepared the report for publication.

The OECD team would like to thank several experts from the governments of Austria, Belgium, Canada, Norway, the Netherlands and Switzerland for their continuous support of the project, the provision of relevant policy information and administrative data, and their comments to an earlier version of the report. Thanks go in particular to the National Ministry of Social Affairs, Health, Care and Consumer Protection of Austria, the National Institute for Health and Disability Insurance of Belgium, Employment and Social Development Canada, the Ministry of Social Affairs of the Netherlands, the Ministry of Labour and Social Inclusion of Norway and the Federal Social Insurance Office of Switzerland. Valuable comments have also been received from other member countries following the discussion of a draft of Chapters 1 and 2 of the report at the meeting of the Employment, Labour and Social Affairs Committee in spring 2022. Benjamin Geiger, Mark Keese, Mark Pearson, Stefano Scarpetta and Stefan Trömel also provided valuable feedback.

The painting on the front cover comes from Ateliers Personimages, a French non-profit association promoting artistic creation for persons with disabilities (www.personimages.org).

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Acronyms and abbreviations

AI	Artificial Intelligence
AAP	Norwegian Work Assessment Allowance (transitional disability programme)
ACL	Administration for Community Living
ACS	American Community Survey
AFP	Swiss Certificate of Professional Formation
AMS	Austrian Public Employment Service
ARR	Belgian non-contributory disability benefits
BCSS	Crossroads Bank of Social Security
BMGSPK	Austrian Federal Ministry for Social Affairs, Health, Care and Consumer Protection
CAD	Canadian Dollar
CASEN	National Socio-Economic Characterization Survey (Chile)
CAST	US-based non-profit education research and development organization
CCRW	Canadian Council on Rehabilitation and Work
CEP	*Conseil en Évolution Professionnelle* (Professional Development Consulting)
CFC	Swiss Federal Certificate of Capacity
CHF	Swiss Franc
CIS	Canadian Income Survey
CPP	Canada Pension Plan
CPS	Current Population Survey (United States)
CRPD	United Nations Convention on the Rights of Persons with Disabilities
CSD	Canadian Survey on Disability
CVT	Continuing Vocational Training
CVTS	Continuing Vocational Training Survey
DI	Disability Insurance
DTC	Canadian Disability Tax Credit
EASNIE	European Agency for Special Needs and Inclusive Education
EHIS	European Health Interview Survey
EI	Employment Insurance
EL	Swiss means-tested compensation supplement
ENIGH	National Survey of Household Income and Expenditure
EQLS	European Quality of Life Survey
EU-AA	European Accessibility Act
EU-OSHA	European Agency for Safety and Health at Work
EUR	Euro
EU-SILC	European Union Statistics on Income and Living Conditions
EWCS	European Working Conditions Survey
GDP	Gross Domestic Product
GFC	Global Financial Crisis
GSS	General Social Survey
HILDA	Household, Income and Labour Dynamics in Australia Survey
HPWI	High-Performance Working Initiative
HR	Human Resource
IBO	*Individuele Beroepsopleiding* (Dutch individual vocational training)
ICF	International Classification of Functioning, Disability, and Health
ICT	Information and Communications Technology

IVA	*Inkomensvoorziening Volledig Arbeidsongeschikten* (Income Provision Scheme for Fully Occupationally Disabled People)
JRRP	Job Retention and Rehabilitation Pilot
NAV	Norwegian Labour and Welfare Administration
NDA	Irish National Disability Authority
NEET	Not in Employment, Education or Training
NGO	Non-Governmental Organization
NLDS	Netherlands Design System
NLIA	Norwegian Labour Inspection Authority
NOK	Norwegian Krone
ODSP	Ontario Disability Support Programme
ÖGK	Austrian Health Insurance Fund
PES	Public Employment Service
PIIS	*Projet individualisé d'intégration sociale* (Individualised Social Integration Project)
PPP	Purchasing Power Parity
PWD	People with Disability
PWOD	People without Disability
R&D	Research and Development
RTW	Return-to-Work
RWA	Ready, Willing and Able programme
SA	Social Assistance
SEN	Special Educational Needs
SMEs	Small and Medium Enterprises
SP	Social Protection
SSI	US Supplemental Security Income
UI	Unemployment Insurance
ULRs	British Union Learning Representatives
UN	United Nations
UTIP	Canadian Union Training and Innovation Program
UWV	Dutch Employee Insurance Agency
VDAB	Flanders Public Employment Service
VET	Vocational Education and Training
VR	Vocational Rehabilitation
WGA	Dutch Return to Work Scheme, partial/temporary incapacity benefit
WHO	World Health Organization
WIA	Dutch Work and Income according to Work Capacity benefit
YESS	Youth Employment and Skills Strategy programme
YWD	Young people (youth) with Disability
YWOD	Young people (youth) without Disability

Executive summary

The employment rate of persons with disability remains stubbornly low. In 2019, across a set of 32 OECD countries about one in four people with high support requirements and one in two with moderate support requirements had a job. Taken together, the employment rate of people with disability was 27 percentage points lower than for people without disability, a gap that has remained constant over the past decade. At the same time, more people with disability today are seeking employment but cannot find a job. In 2019, people with disability were 2.3 times more likely to be unemployed than people without disability, compared to around two times before and soon after the global financial crisis in 2008-09.

The persistent disability employment gap across OECD countries is aligned with a persistent disability gap in education and skills. Educational attainment of people with disability has improved considerably in the past two decades, but is not catching up with that of people without disability; people with disability continue to lag behind by at least 15 years. The disability education gap is reflected in a substantial disability skills gap: almost 50% of those with permanent disability have low literacy skills and 55% low numeracy skills, compared with just over 20% and 25%, respectively, for the total population.

The education and skills gaps start early in life, as children and youth with disability often face multiple disadvantages that translate into difficulties in thriving at school and transitioning to the labour market. As a result, youth with disability are highly overrepresented among those who drop out of the education system prematurely. Consequently, youth with disability also struggle with the transition into the labour market. About 30% of youth with disability and nearly 70% of those with high support requirements are NEETs, i.e. young adults not in employment, education or training, compared to only one in eight youth without disability.

Given the large share of youth with disability who are NEETs, it is key to support their transition to the labour market while providing adequate social protection. Mainstream programmes to help NEETs and to facilitate their transition to the labour market must have a stronger focus on barriers for youth with disability and barriers caused by a disability. Ensuring social protection is key for youth with disability to maintain a decent living standard. However, benefits for youth with disability can also perpetuate intergenerational disadvantage and nurture a welfare culture. Finding a balance between support and incentives for self-sufficiency and making supports permeable and flexible is critical. Mandatory registration with the public employment service helps all young people not in employment, and youth with disability in particular. These services should have the competencies and resources to help youth with disability and refer them as necessary to vocational services.

Social protection is essential in breaking the link between disability and poverty, and so its design is one of the cornerstones of disability policy. Social protection coverage for people with disability is high in most OECD countries. Among people with disability who are not working, about 80% receive some form of income-support payment and 90% or more in most countries among those with high support requirements. The share not working and receiving a sickness or disability benefit, however, is only 40-60% among people with disability with high support requirements and 20-30% among those with moderate support requirements. This reflects the critical importance of mainstream benefit programmes (such as unemployment benefits, social assistance and early-retirement benefits) in providing income security for people with disability.

Over the past decade, many countries have reformed their disability benefit systems, but the aggregate effects of disability reforms on employment of people with disability have been limited. Reforms that merely affect the generosity of the disability system and strengthen employment-oriented programmes, while effective in curbing the size of the programme, do not translate into changes in the employment rate of people with disability. The limited impact from strengthening employment-oriented programmes comes from the fact that these efforts are still generally too small and come too late. Too small because the share of employment-related measures in total incapacity spending across OECD countries has barely increased from 9% in 2007 to barely over 10% in 2017. Too late because when people apply for disability benefits, they have typically been out of work for a long time or gone through considerable periods of unstable employment. Even the best programmes, or incentives, are unlikely to achieve much at such a late stage.

The world of work is changing and this change is affecting people with disability at least as much as other groups of the population. Ongoing labour market changes, such as job polarisation, increased automation and the appearance of new forms of work, could affect the job prospects of people with disability unfavourably. Big changes come with risks as well as opportunities and it is in the hands of policy makers to harness the potential of a better labour market that works for all, including people with disability. Countries should aim at improving the quality and flexibility of employment to close the disability wage gap, better accommodate the needs of workers with disability, improve access to social protection for non-standard forms of work, and pivot advances in technology towards disability inclusion, by promoting inclusive technologies that use Universal Design.

The current disability skills gap makes it difficult for people with disability to succeed in the labour market. people with disability can only fill a vacancy or keep a job if they have the required skills and maintain and upgrade those skills in a constantly changing labour market. Adult learning systems could help address the large skills gap but participation in adult learning programmes is lower for people with disability than for people without disability – a difference that comes predominantly from the low participation of people with disability who are not employed and the high share of this group among people with disability. Mainstream career guidance and adult learning systems must be accessible for people with disability and offer flexible courses targeting the person's individual needs and addressing their barriers.

Disability mainstreaming should be an objective in all OECD countries. The single biggest problem in disability policy is that intervention is coming too late: when employment is no longer an option, or after having missed the opportunities to ensure equal treatment, equal skills development and equal labour market transitions. Disability mainstreaming, i.e. a disability-inclusive approach in all relevant mainstream services and institutions, will help to achieve the shift to early intervention in all policies, including education and youth policies, employment, skills and labour market policies, and social protection policies.

1 Assessment and recommendations

This chapter summarises the findings and conclusions of the OECD study on Disability, Work and Inclusion. The chapter argues that a rigorous disability mainstreaming approach is needed that affects all policies and practices. Rather than continuing to treat people with disability differently and to develop new special support tools, mainstream systems and services must be accountable for being disability-inclusive and develop the capacity to help people with health problems or disability in the same way as other clients. While the employment-oriented policy paradigm put forward by the OECD about 20 years ago remains valid, the chapter also argues that three aspects must receive more attention: helping young people with disability into employment; making people with disability competitive in the labour market; and helping much faster when people become sick or unemployed.

Twenty years ago, the OECD first promoted a new disability policy paradigm that emphasises the promotion of the employability and employment of people with disability on a par with providing them with adequate income support. Suggesting that disability policy should move closer to the philosophy of employment policy, this paradigm included a focus on tailored early intervention, participation requirements and work incentives in line with a person's capacity, and stronger responsibilities for employers and public authorities. What has happened in the disability policy field since? Has the proposed policy paradigm unfolded and, if so, has it delivered on its employment promises?

Countries have made considerable efforts to follow these recommendations. Yet, social and labour market outcomes for people with disability continue to be disappointing, suggesting that the necessary policy transformation is incomplete and resources invested in creating equal opportunities continue to be insufficient. For instance, the share of rehabilitation and employment-related measures in total spending on incapacity across all OECD countries has increased slightly from 9% in 2007 to barely over 10% in 2017, but this is still a very low share of the total compared with 41% dedicated to employment-related measures in total unemployment spending.

The disability policy paradigm itself needs to evolve too, in line with the state-of-the-art developments in policy thinking. The analysis in this new OECD report suggests that the following three policy aspects, in particular, have not received the necessary attention:

- *Early intervention is not yet the norm*. The focus in policy has been on promoting employment efforts in disability benefit programmes, not recognising that people applying for a disability benefit will often have had fragile and interrupted employment experiences and may have been navigating the welfare system for years. Interventions should start early in life or as soon as any health barriers to employment become visible.
- *Persistent skill gaps need to be tackled*. Despite longer schooling and school completion at a higher average level, the education and skills gap has not closed, or not enough. This means that people with disability are still less skilled than people without disability and thereby often less attractive to employers.
- *Young people with disability have received too little attention*. Discrimination and skills gaps start early in life. It is important to tackle them early in life, to break the perpetuation of disadvantage, and to help young people with disability in making a transition into adult life and the labour force.

It is important to tackle these predominantly supply-side oriented aspects of disability policy. Demand-side policies, such as training regarding disability sensitivity and stigma reduction, job accommodation support, or hiring subsidies, can tackle discrimination and encourage and support employers to hire and retain people with disability. However, without adequate skills for the current and future world of work, people with disability will remain at a huge disadvantage in the labour market.

Disability mainstreaming: The key to implementing a new policy paradigm

Implementing a new policy paradigm within existing systems and structures appears difficult. For instance, early intervention in vocational rehabilitation and employment policies is critical but countries continue to invest a lot of resources and effort much too late, often only at a time when the mind-set of people has already shifted towards inactivity. A real change will require shaking up the existing system, and thinking policy differently. In particular, it is critical to think ***disability mainstreaming*** differently and to implement it rigorously – in education policy, labour market policy and social protection policy.

Treating disability by special measures, special programmes and even special systems, and not within the mainstream systems and services provided to people without disability, risks perpetuating difference and disadvantage. Individualised, targeted approaches are key but they are key for everyone who needs support; mainstreaming and individualised targeting must therefore go hand in hand.

Disability mainstreaming, which is also at the core of the UN Convention on the Rights of Persons with Disabilities particularly when it comes to the right to work and employment (Article 27), will need to be different in the future and expanded to all policies and services. This is also important in view of the big ongoing shifts in the economy and labour market, which come with new risks but also with new opportunities. For people with disability to benefit fully and equally, a mainstreaming approach should take into account the diversity of people with disability, and be adopted through all areas of policy to avoid that future risks outweigh future opportunities, including:

- Disability mainstreaming in education systems.
- Disability mainstreaming in supports for NEETs.
- Disability mainstreaming in labour markets and employer practices.
- Disability mainstreaming in adult learning systems.
- Disability mainstreaming in employment services.
- Disability mainstreaming in social protection systems.
- Disability mainstreaming in poverty prevention measures.
- Disability mainstreaming in technological developments.

The principle in each case implies that countries should avoid the development and use of special systems or services and that, instead, mainstream systems and services must be disability inclusive. Mainstream systems must target the individual needs and strengths of everyone, including those of people with disability, and be accountable for providing their services to people with disability to the same extent as people without disability.

Disability is diverse, in terms of types, duration and extent of support required, and the type and nature of help needed to access and stay in the labour market, and to live a decent life, will vary accordingly. Disability mainstreaming should mean getting the basics right for everyone, irrespective of whether a health problem or disability, some of which are temporary, are involved. A successful mainstreaming approach has a number of characteristics, among which the following are particularly noteworthy:

- *Whole-of-government approach*. Mainstreaming disability means that all employment policies and social protection systems matter, not just incapacity-related systems. Public employment services and adult learning systems are key disability policy components, to give two examples.
- *Personalised approach*. Mainstreaming disability is not an excuse to ignore barriers. To the contrary, it implies policies that actively understand and reduce the impact of any barriers, including health barriers and disability, within all mainstream systems.
- *Mutual responsibilities approach*. Successful mainstreaming requires strong responsibilities for all stakeholders and institutions, including people with disability themselves. It also relies on the application of the principle of full participation and equalisation of opportunities for, by and with people with disability (*Nothing about Us, Without Us*). Relevant labour market institutions must apply a mainstream approach from the outset and be accountable for disability inclusion.

A successful disability mainstreaming approach that takes a more individualised approach to addressing labour market inclusion could also help other people without disability who nevertheless face a range of employment barriers. Conversely, addressing employment barriers more generally for disadvantaged groups of the population will also help people with disability.

It is very timely now, after two years of a health crisis that has quickly turned into an economic and labour market crisis as well, to evaluate outcomes and policy developments for people with disability in the past 15-20 years. In building back better after the COVID-19 pandemic, it will be crucially important to ensure an inclusive recovery that leaves no one behind, including people with disability. A rigorous and further strengthened disability policy paradigm, in line with the UN Convention and based on a mainstreaming philosophy will help achieve this.

Labour market outcomes of people with disability

Employment rates of people with disability remain stubbornly low

Improvements in labour market outcomes for people with disability lag far behind aspirations. In 2019, across a set of OECD countries for which comparable data are available, about one in four persons with high support requirements and about one in two persons with moderate support requirements had a job. Taken together, people with disability were about 40% less likely to be in employment than were people without disability. The global financial crisis of 2008-09 has affected employment rates of people with disability more than the rates of people without disability, measured across the OECD area as a whole, and it took longer for those rates to recover their pre-crisis level. Employment rates of people with disability surpassed their pre-2008 levels in the last 3-4 years before the COVID-19 pandemic – but without any significant narrowing of the persistent disability employment gap.

Labour market dynamics are different for people with disability

Labour market dynamics differ greatly between people with disability and people without disability. Data for European OECD countries show that entering the labour market is much more difficult for people with disability: across all age groups, the hiring rate is about 2.5 times higher for people without disability, with a particularly large disadvantage for persons of prime working age. Transitions into unemployment, voluntarily or involuntarily, are also much more frequent for people with disability than for people without disability, by a factor of around 1.7 on average across demographic groups. Once employed, however, the likelihood of a job-to-job change is relatively similar for people with disability and people without disability, indicating that people with disability have the potential to thrive in the labour market.

Rising labour supply has increased the unemployment gap in some cases

Labour supply of people with disability has increased more in the past few years before the COVID-19 crisis than of people without disability but the reduction in the labour force participation gap translated into an increase in the unemployment gap in several countries. In 2019, across a large set of OECD countries, people with disability were 2.3 times more likely to be unemployed than people without disability, compared to around 2 times before and soon after the global financial crisis. This suggests that, compared to 10-15 years ago, more people with disability are seeking employment but cannot find a job. This aligns with findings according to which some OECD countries have succeeded to lower the disability beneficiary rate, but with little impact on the employment rate of people with disability. There are considerable differences across countries in both the level and change over time of the share of people receiving a disability benefit: some countries have experienced large decreases, others have seen increases. On average across OECD countries, these changes cancel out and the share of people receiving a disability benefit has remained rather stable for about 20 years – despite the ageing of the working-age population which would have driven up beneficiary rates if age-specific rates would have remained unchanged.

The long-term impact of the COVID-19 crisis is not yet known

The long-term impact of the COVID-19 crisis, if any, has yet to unfold. Recent administrative data suggest that so far, disability benefit caseloads have not increased, despite an increase in long-term unemployment in many countries and upturns in sickness absence during certain periods of the pandemic. Widespread use of job retention schemes and the surge in telework have helped to prevent large-scale labour market exit. Lower labour supply, however, is a growing concern, for people with disability and people without disability alike. In previous economic downturns, people with disability were more likely to leave the labour force. Up-to-date high frequency data for both the United Kingdom and the United States indicate no significant differences between people with disability and people without disability in the development of employment and unemployment rates during the COVID-19 pandemic, however.

Supporting young people with disability

Young people with disability are a particularly disadvantaged group

Children and youth with disability often face several disadvantages many of which start early in life. They are more likely to live in families that are income poor and dependent on social benefits and therefore at risk of intergenerationally transmitted welfare dependence. Multiple disadvantages also translate into a considerable education gap from a young age. Youth with disability are highly overrepresented among those who drop out of the education system prematurely. About one in five youth with disability and two in five with high support requirements are early school leavers, defined as young people aged 15-29 not in education and without upper secondary school diploma, compared to less than one in ten youth without disability. Consequently, youth with disability also struggle with the transition into the labour market. About 30% of youth with disability and close to 70% of those with high support requirements are NEETs, a group defined as young adults not in education, employment or training, compared to only one in eight youth without disability.

Countries provide income security for young people with disability in different ways

One task for governments is to provide income security for youth with disability, a necessary condition for their growth and progression. Countries use three types of benefits to achieve this aim, sometimes in combination. First, child allowances for youth with disability, sometimes extended into adult age and/or regular child allowances topped up for youth with disability; second, disability benefit programmes, in most cases the general programme used for adults but with looser entry requirements and accessible as of around age 18; and third, means-tested minimum income or social assistance programmes. Only the Netherlands has a special disability benefit programme for youth with disability, although several countries pay benefits to youth with disability through disability programmes without contribution requirements. Across European OECD countries, four in ten youth with disability receive a social benefit, with about 40% of them each receiving either disability benefit or social assistance and the remainder other benefits. Youth poverty tends to be higher in countries relying on means-tested payments.

Ensuring income security is important. Research from the United States suggests that social protection is key for youth with disability to maintain a given living standard. However, benefits for youth with disability can also perpetuate the intergenerational disadvantage and nurture a welfare culture. Finding the right balance between providing support and incentives to self-sufficiency is especially important in this case because these payments are perceived as permanent by recipients of all ages and outflow from these programmes is low. Administrative data for Belgium, Canada, the Netherlands and Switzerland show that the exit rate from disability programmes is low and has remained constant over time, at around 10% of all claimants.

Successful transition to the labour market starts with inclusive education

The UN Convention on the Rights of Persons with Disabilities instructs signatories to phase out or abolish special schools and provide inclusive schooling for all. Research suggests that students with disability perform better in mainstream settings than their peers in special education, through peer learning and better social skills, and that there are benefits of inclusive schooling more generally, not only for youth with disability. OECD countries have made considerable efforts in this direction. Data for European countries show that about two-thirds of all youth with disability enrol in mainstream classes for at least 80% of the time, though with large differences across countries. More in-depth data suggest that inclusive schooling has become the norm in many countries at primary school age but that for many youth with disability, the transition to mainstream secondary school and consequently tertiary education is difficult, including the transition to vocational schools and apprenticeships. Countries will have to make more efforts to facilitate this transition for those youth with disability able to move on, building on the approach and success at primary school level.

Supporting education completion and the transition to the labour market

Higher education facilitates labour market entry and allows people to progress to better jobs. Supporting youth with disability in staying in education and completing school at the highest possible level is critical. Investments in training for all teachers to be able to support students with special needs, together with a sufficiently large number of support teachers and vocational counsellors will pay off in the longer run. NEETs face a considerable risk of experiencing persistently poor labour market outcomes and becoming long-term unemployed or inactive. The high share of youth with disability among them suggests that this is a field where disability policy has not been involved enough. Mainstream programmes to first identify and reach out and to help NEETs must have a stronger focus on barriers for youth with disability and barriers caused by their health and disability. The same holds for mainstream programmes facilitating the transition to the labour market, which tend to be most effective if involving schools, local actors and institutions and employers.

Linking school-to-work support with social protection for young people with disability

Too often, there is a disconnection between social protection provided at the national or sub-national level and school-to-work support, which is typically organised locally. These two parts of a successful disability policy must link very closely, as conditionality and a strong education and employment focus are the cornerstone in social protection for youth with disability. Making supports permeable and flexible is critical, to allow youth with disability to transition into the labour market while receiving benefits and to return to benefits when employment integration has failed. Conditionality should imply that benefit receipt is conditional on mandatory participation in training or apprenticeships, in line with the individual's capacity. Mandatory registration with the public employment service is another promising element for all young people who are not in employment and for youth with disability in particular. Public employment services should have the competences and adequate resources necessary to help youth with disability and refer them as necessary to vocational services.

Providing incentive-compatible and adequate social protection

The majority of adults with disability not able to work receive social benefits

The situation for adults with disability is different from that of young people insofar as different policy levers are available to support them, even if many of the general challenges – such as finding a balance between income protection and work incentives – are similar. Survey data across a set of countries show that work contributes about two-thirds to the total income of people without disability but less than 50% for people with disability (and for those with high support needs, just over one-third of total income). Conversely, income from benefits plays a critical role for people with disability, contributing one-third of their total income across all people with disability and even half of total income for those with high support needs.

The same survey data indicate that across all age groups social protection coverage for people with disability is relatively high in most OECD countries. Among people with disability who are not working (both in inactivity or looking for a job), about 80% receive some income-support payment and 90% or more in most countries among those with high support requirements. The share not working and receiving a sickness or disability benefit is only 40-60% among people with disability with high support requirements and 20-30% among those with moderate support requirements. This reflects the importance of mainstream benefit programmes (such as unemployment benefits, social assistance and early-retirement benefits) in providing income security for people with disability and the need for policy makers to think more widely than a narrow focus on programmes with "disability" in their title, when designing effective disability policies.

Disability benefit programmes have seen changes in many OECD countries

Many countries have been and are in the process of reforming their disability programmes, often with the aim to achieve better employment outcomes for people with disability. For instance, countries like Austria, Hungary, the Netherlands and Norway, have introduced or strengthened transitional programmes with a strong focus on vocational rehabilitation and training to prevent shifts onto disability benefits from which a return to the labour market is the very exception, not the norm. A large share of people with disability recover and transition to the labour force after exiting transitional programmes: in Norway, over 50% of the claimant's recover, 35% in Austria, and around 15-30% (depending on the system) in the Netherlands. When evaluated causally, however, the positive employment effect of transitional programmes is less evident. Research from Austria and the Netherlands finds limited employment effects from participation in transitional programmes.

Many countries also make considerable use of partial disability benefits to provide flexibility and more possibilities to combine work and benefit receipt. Such programmes allow persons with partial capacity to work while receiving a partial benefit, even on a permanent basis. However, partial benefits may also provide incentives for some people to claim benefits to support a subsidised shift from full-time to part-time employment. Supporting this view is evidence from Austria showing that allowing for partial work among disability claimants is increasing the fiscal costs of the disability programme.

The employment effects of disability benefit reforms have often been modest

Across OECD countries with available data, the employment gap of people with disability has remained largely unchanged on average, in spite of substantial disability programme reforms in many countries. Reforms that affect the generosity of the disability system and introduce employment-oriented measures (e.g. new transitional programmes or better financial incentives to work), while effective in curbing the size of the programme, do not correlate with changes in the employment rate of people with disability.

The main reason for the limited employment effect of disability reforms is that employment-oriented efforts even if far-reaching in some cases are coming too late. When people apply or consider applying for disability benefits, they have typically been out of work for a long time or have gone through considerable periods of unstable employment and/or repeated phases of unemployment or sickness absence. Even the best rehabilitation and reintegration efforts, or the most attractive financial incentives, are unlikely to achieve much at such a late stage. For the same reason, declining large shares of applicants at this stage is per se not an effective approach: Rejected applicants will need significant help to stay in, or return to, the labour force. The consequence of this is that policy efforts must be reoriented to prevent people from getting to a stage from which there is no sustainable return to work.

The need for early intervention calls for a strong sickness benefit programme

Workers in most countries go through phases of long or repeat absences before dropping out of the labour market via disability benefits (or other long-term benefits). During this period, people can receive sickness benefits in most OECD countries, and initially often employer-provided sick pay for a limited period. In most countries, there is no institutional link between these sickness programmes and the disability programme even though they are clearly an intermediate step from work to labour market exit. In this respect, sickness programmes in most countries are also still very passive in nature, especially when connected with health insurance, as they are income-support schemes complementing medical treatment and rehabilitation.

In countries like Austria, Belgium, the Netherlands, Norway and Switzerland, sickness programmes play a key role in gatekeeping entry to disability benefits. These countries make substantial efforts to manage sickness absences in a more active way, promoting and facilitating a fast return to work, often through partial benefits and a gradual return to work. This is only possible with the involvement of employers, and requires refocusing doctors responsible for granting sickness certificates on the work capacity of their

patients, who will often be able to work reduced hours or in a different function when sick. Skills depreciate very fast and evidence shows that it is much easier for people to remain in employment building on the existing employer-employee relationship, than to find new employment. However, it is also important for effective return-to-work programmes to react quickly when a return to the same job, or the same employer, is not possible, and to expand the efforts to the broader labour market even at an early stage.

Early intervention is equally important for unemployed people with disability-related employment barriers

Data for various countries suggest, however, that 20-50% of all new disability benefit claims go through unemployment, not employment. This implies that for those people early intervention must take a different form and involve the unemployment system rather than the sickness programme. Public employment services must be equipped with the tools to identify health and other disability-related barriers to employment as quickly as possible, including mental health issues, which are the most frequent health barrier that jobseekers face, or be able to refer people for a capacity assessment, and to offer integrated health and employment services. Not addressing these health barriers early is likely to lead to long-term unemployment and eventually labour market exit, often through the disability programme. This makes the unemployment system and the mainstream public employment service an essential disability policy institution, not only for labour market entrants but, equally so, for adults of any age – a role well recognised in an increasing number of OECD countries. The growth of disability benefit claimants with mental health conditions and the high share of this group among claimants coming through the unemployment route is testimony of the key role of the public employment service. Survey data demonstrating the high share of people with disability and people with mental health conditions among unemployment benefit recipients in all OECD countries also confirm this.

Participation requirements and regular reassessments of the situation are needed

Participation requirements are a key aspect in the success of early intervention and return-to-work efforts, and employment measures more generally, irrespective of the programme that delivers such support. The relative success of mandatory programmes for registered jobseekers is in sharp contrast to the extremely low take-up in most countries of voluntary programmes for persons applying for disability benefits. Without participation requirements, fully aligned with people's work capacity, few people will choose the activation route, thereby compromising the impact of promising approaches. Countries like the Netherlands, for example, successfully gatekeep the entry into disability benefits with strict employer and employee requirements to facilitate a fast return to work during sick leave. Adequate participation requirements also facilitate the implementation of responsibilities for other stakeholders, including requirements for employers but also the obligation for the involved public authorities to offer more than a benefit.

A second key aspect distinguishing disability from unemployment benefits is their nature as a permanent payment. This is in contrast to the nature of disabilities, many of which are not permanent. Moreover, the ability to work may also change over time due to technological advances or rising labour demand. Very few countries have a rigorous system of reassessment in place. In those few countries that have ever gone through a systematic reassessment of all beneficiaries, like the Netherlands or the United Kingdom, many have lost their eligibility. This is only acceptable, however, if effective employment supports are in place. There is no doubt that reassessments are problematic for people with permanent inability to work. In addition to the direct negative impact on well-being, simply removing people with disability from disability benefits could be counterproductive, and worsen people's disability, as well as the social support provided to them. As these people will have been out of work for a while, it will be difficult to bring them back to the labour market although data for the Netherlands suggest that about 20% find employment, even with limited reintegration support. This group of people losing benefit entitlement would be similar to many of those who are rejected disability payments in the first place, many of who also struggle to return to the

labour market. A more rigorous approach to entitlement reassessment is not only difficult politically but would also require greater flexibility in disability programmes to ensure eligibility for social support in periods when self-sufficiency is not realistic, e.g. in the case of disability fluctuating over the life cycle, and strong employment support in periods when work is an option.

Disability benefits provide income security but benefit systems are fragmented

Disability benefit programmes have to provide income security. Many of those relying and depending on those payments have limited work capacity and employment opportunities. Moreover, those with the lowest opportunities may also often face the highest disability-related costs. By themselves, the average benefit from the main disability programme is relatively low measured against the average wage in a country; often representing around 30% of that wage, with considerable variation across countries. However, this low rate must be interpreted with caution. First, as many people with disability will have earned a low wage, a comparison with the minimum wage may be more meaningful. Secondly, many people will receive additional payments. These payments include top-ups for high-income groups for instance regulated in collective agreements designed to replace a higher share of the past wage, or top-ups for low-income groups designed to make ends meet. Depending on the system, the take-up of the latter may be low in some countries but may reach up to 50% of all benefit recipients in others. In addition, people may receive other benefits specifically designed to cover disability-related costs, including the costs of care for people with high support requirements in need of constant attendance but also other payments, such as mobility allowances.

Overall, it appears that disability benefit systems are often fragmented e.g. distinguishing different types of payments, often including contribution-based and means-tested payments, and, sometimes, permanent and temporary payments or full and partial benefit programmes, and that there are substantial barriers to accessing top-up payments. As a result, people with disability may have to go through various eligibility assessments for different payments and may not receive what they need. System simplification could contribute to better income security. After all, a more mainstream approach to benefits could do away with a number of the problems that countries face with their disability benefit system. The OECD work on disability policy some 12 years ago brought forward the idea of a single working-age benefit for everyone who is not in employment, with top-up payments to cover the additional costs of disability, which are independent of the person's employment status. It is time to consider a shift in thinking about the design of social protection, especially in view of the evidence that a high share of people with disability rely on social assistance rather than disability benefits, further supporting such a shift and simplification in the social protection system.

Disability benefits alone are not sufficient to prevent widespread poverty

Despite a range of main and additional disability benefits in many countries, people with disability remain among those most at risk of being income poor. On average across the OECD, one in four people with disability live in households with incomes below the poverty line, defined as household-size adjusted disposable income below 60% of the median, compared to one in seven people without disability. The poverty gap has gradually increased over time, both on average and in the majority of countries for which data are available. The average disability poverty gap today is around 10 percentage points, compared to 8.5 percentage points before the global financial crisis, with much higher levels in some countries and over 20 percentage points in Korea and the United States.

Survey data for European OECD countries suggest that disability benefits prevent about one in four people with disability from falling into poverty, another quarter lifted out of poverty through social assistance, and in total about 54% through either of the two social protection programmes. These shares vary from country to country but the key poverty-preventing role of social assistance payments for people with disability is clear for all countries. The exclusion from disability insurance benefits in many countries or the entitlement

to very low payments only, because of lacking contributions payments, explain the importance of social assistance payments for people with disability. This is another key lesson for policy makers: benefit adequacy considerations must take a more complete view on the benefit system as many people with disability depend on top-ups provided through social assistance or, more often, on social assistance payments altogether. While adequate benefits also facilitate the investment in skills in view of transitioning to work, tackling inactivity gaps when benefits are similar to the wage a person can earn in the labour market remains an ongoing challenge, not only for people with disability.

Harnessing the promise of the Future of Work for all

Work is going to look different in the future, and the future is now

Getting services and benefits structurally right is an important step to better employment inclusion of people with disability. Meanwhile the world of work is changing and this change is affecting people with disability at least as much as other groups of the population. The digital transformation and the increased use of artificial intelligence is deeply affecting labour markets around the world. While massive technological unemployment is unlikely, many new jobs will be created while others will be automated or overhauled. Many people including people with disability will have to adapt on the job, or change their job or even occupation. The COVID-19 crisis has accelerated some of these developments and certain gradual trends occurred abruptly and are here to stay, such as widespread teleworking. Big changes like those will widen the opportunities in the labour market but this will not happen for everyone and not automatically. It is in the hands of OECD countries to harness the promise of a better future of work for all, including people with disability.

Ongoing labour market change may affect people with disability unfavourably

While the changes affect all workers, evidence suggests that without public attention to the issue they could affect people with disability in a less favourable way, due to their skills and the type of jobs they are holding. First, ongoing job polarisation caused by the loss of middle-skilled jobs is a larger problem for people with disability, who are much less likely to hold a high-skilled job; job polarisation could increase the skills gap if people with disability are more likely to shift into jobs that require lower skills. Secondly, people with disability are slightly more likely to be in jobs at risk of automation, due to their overrepresentation in certain economic sectors and occupations. Thirdly, overall people with disability are less likely to have a job that is amenable to teleworking, for the same reasons. Teleworking and new technologies offer great opportunities for particular types of disability (e.g. by removing commuting or communication barriers) but people with disability will not benefit from ongoing technological and labour market change equally without public investments in infrastructure and workplace accommodation to ensure new technologies and accessibility aids are available. Consultation with and involvement of people with disability in developing future work policies will be critically important to make the most of the new opportunities.

Ongoing changes might affect the health of workers and the prevalence of disability

Another aspect is that ongoing labour market changes might affect the health of the workforce and thereby even the prevalence of disability. New forms of work that are emerging and expanding, including platform work, dependent self-employment, or employment on on-call and zero-hour contracts, can offer health benefits through more autonomy and flexibility. However, associated lower labour market security and poorer access to health and social protection may compromise worker health. There is evidence that such forms of employment come with a higher risk of work accidents, for example, and higher work-related stress due to lower job security. Automation and digitisation lower the physical toll of work, but the

psychological demands of work are likely to continue to increase. Teleworking which has spread quickly during the pandemic can facilitate a better work-life balance, but can worsen health by lengthening working hours, and increasing occupational health and safety risks for both physical and mental health.

Improving the quality and flexibility of dependent employment is critical

Job characteristics already differ between people with disability and people without disability and it is not a given that ongoing changes will reduce those differences. Across a large set of OECD countries, people with disability are much more likely to work part time; while this may often be a matter of choice, and for some people with disability the best way to work or to transition into the labour market, involuntary part-time work is nevertheless also higher for people with disability. The quality of employment is lower for people with disability on all measurable dimensions. For instance, people with disability more often have a job that involves monotonous tasks and/or repetitive tasks; more often work unpredictable hours; and, if they are self-employed, are more likely to be in dependent self-employment working for only one client. Lastly, people with disability earn less on average, measured on an hourly basis. The disability wage penalty, just like the disability employment gap, has remained very stable on average across countries for which comparable data are available: based on an hourly full-time wage, people with disability earn about 10-15% less than people without disability. All these findings show that labour markets are not flexible and adaptive enough to provide equal opportunities for people with disability.

Improvements in the quality of employment will benefit all workers, and workers with disability and, among them, those with mental health conditions will benefit in particular. Working time and workplace flexibility are the types of flexibility most demanded by workers, with close to zero costs for employers. Facilitating such flexibility is a very effective strategy to accommodate the needs and capacities of workers with disability. A statutory entitlement for all workers to request workplace and working time flexibility that can only be refused by the employer on strict grounds, is a strong mainstream tool providing the necessary accommodation for people with disability without them necessarily having to disclose all their needs and thus without putting them at a disadvantage vis-à-vis other workers. To make teleworking an attractive reality, encompassing occupational health and safety regulations and guidelines that cover the workplace at home are important: several OECD countries put such regulations in place during the COVID-19 pandemic.

Improve access to social protection for new forms of work and self-employment

For new forms of work, limited access to social protection is a big challenge. Reducing fiscal and regulatory differences between employment forms and combating dependent self-employment is an important step to take, to make the “grey zone” between different forms of work as small as possible. Beyond this, there is a strong case for full health coverage for all forms of work as well as for more quality in access to social protection; after all, some forms of new work only exist to circumvent the cost of social contributions. Universal access to sick pay and sickness benefits is particularly important; such access was critical during the COVID-19 pandemic but is also critical as a tool to prevent work incapacity and labour market exit, through a strong focus on return-to-work measures. The necessary strengthening of sickness programmes will only be effective, however, if covering all forms of work, including all forms of self-employment. During the pandemic, many OECD countries have extended access to sickness programmes for self-employed workers; such coverage should become the norm. The potential costs of implementing such programmes should be weighed against their long-term productivity gains.

Pivot advances in technology towards inclusion

Equal benefits from the shift to digitalisation require better digital skills for people with disability and better access to digital tools. Data for a large sample of countries suggest that people with disability are half as likely to have access to basic digital tools and one-third as likely to use the internet for personal use. These are strong indications of a large digital divide, the implications of which became very apparent during the

COVID-19 crisis, for example, when children living in disadvantaged circumstances were at risk of falling further behind. Several countries are investing in closing the gap in access to digital technology, which will help all those now disconnected, including people with disability. Closing the gap in digital skills is a bigger task (see further below).

More generally, advances in technology and the spread of artificial intelligence should be inclusive. Technologies should use Universal Design from the outset so that (virtually) everyone can access, understand and benefit from them. There are various ways to support achieving inclusive technological advancement, including by adjustments in regulatory frameworks to prevent biases against disability in mainstream technologies and changes in engineering curricula to facilitate a more inclusive approach to technological developments. Other measures can include the incorporation of inclusion objectives and criteria in mainstream innovation and R&D strategies, the inclusion of Universal Design and accessibility requirements in public procurement, and the preparation and dissemination of information and guidance for the private sector on how to implement accessibility and Universal Design.

Governments also have a role to play in promoting the development and availability of assistive technology specifically designed to promote the needs of people with disability, as stipulated in the UN Convention on the Rights of Persons with Disabilities, and to stimulate the adoption of such technologies in firms, in co-operation with the social partners and the disability sector. Disability awareness training can promote the adoption of assistive and personalised technologies at the work floor. The adoption of such technology can be a critical cornerstone for putting people with disability at a par with other workers, at least for some types of disability.

Getting skills right for all

Higher employment of people with disability is hampered by a skills gap

Limited change in employment rates of people with disability and the considerable employment gap with people without disability on average across OECD countries may seem surprising at first in view of the improvement over the past 15 years in the educational attainment of people with disability. The share of people with disability with a low level of education has fallen from close to 50% to about 30%, with equal increases in middle and high levels of education. However, on average across the OECD, the disability education gap has not closed, as the education level of people without disability has also improved. The education distribution of people with disability is lagging behind by at least 15 years so that people with disability remain at the same relative disadvantage: the education improvements were just fast enough to keep the disability employment gap at its current level.

People with disability can only fill a vacancy or keep a job if they have the required skills and maintain and upgrade those skills in a constantly changing labour market. Employers may have social motives in their hiring practices but will generally hire and retain workers who can fulfil the requirements of the job, and look for a skilled workforce to produce and innovate. In a context where higher skills are more and more important, a skills gap is a substantial employment barrier for people with disability. Governments play an important role in promoting skills formation for all people, including people with disability.

While skills are the most essential ingredient for successful employment entry and career progression, data from OECD's survey of adults skills suggest that the skills disadvantage of people with disability is large. Almost 50% of those with permanent disability have low literacy skills and 55% low numeracy skills. This compares to just over 20% and 25%, respectively for the total population; 30% and 35%, respectively for older workers; and 40% and 45%, respectively for the low-educated population. This is a substantial skills gap even if the measure of permanent disability used in this survey is narrower than the disability definition otherwise used in this report. Closing the skills gap is a condition for closing the employment gap of people with disability.

Participation of people with disability in adult learning is also lagging behind

Adult learning systems could help address this skills gap but participation in adult learning programmes is also lower for people with disability than for people without disability. According to data for European OECD countries, about 18% of all people with disability participate in adult learning, compared with 33% of people without disability. The difference comes predominantly from a much lower participation of people with disability who are not in employment plus the higher share of this group among people with disability. Among those who work, there is almost no training participation gap, which aligns well with earlier findings that people with disability who are in employment are as likely as people without disability to make a job-to-job transition in a given year. In other words, once in employment, the disadvantages are comparatively small although other data also suggest that a higher share of people with disability think they are over-qualified for their job (30% of people with disability compared with 24% of people without disability).

The lower take-up of adult learning programmes among non-employed people with disability might be related to certain disability-related barriers to participation. More important for the low take-up are regulations in mainstream employment services in most OECD countries that exempt jobseekers with health problems or disability from participation in training, under the false premise to address skills barriers only after addressing health and disability-related barriers rather than addressing them at the same time.

Provide effective career guidance that is accessible and disability inclusive

Career guidance is a first necessary element of an effective adult learning strategy, especially important for those who are not in employment or unemployed, given the lesser disadvantages across groups of workers. The public employment service, responsible for registered jobseekers, is a key institution in the provision of career guidance. Mainstream career guidance approaches have seen considerable change lately, sometimes also coupled with efforts to make the system more inclusive and accessible. Like any other employment measure, career guidance should be targeted to the person's individual needs, so to address people's individual barriers. A mix of face-to-face and online services, in line with people's preferences, will achieve better accessibility, with online services built on Universal Design principles so that people with disability with various types of disability can use them effectively.

Reach out to potential learners, including learners with disability

Adult learning programmes, including career guidance, tend to help those least who would need them most, including people with disability as well as youth with disability. Outreach strategies must ensure that programmes reach those who need them. Such outreach strategies can help many groups at a significant distance to the labour market and they must be disability inclusive. Unions can play an active role in encouraging workers with lower skills, including workers with disability, to participate in adult learning. Awareness campaigns that are disability-inclusive could be a way to reach the general population, while the disability sector can play a role in encouraging people with disability further away from the labour market to participate in career guidance. Public employment services can reach out to everyone registered with them but also to groups traditionally not registered, such as sickness and disability benefit recipients, who could also benefit from career guidance and training. More generally, career guidance and adult learning should be mandatory for all those receiving public benefits, including those receiving social assistance payments.

Make mainstream adult learning accessible, flexible and relevant

Mainstream adult learning and training systems must again built on the principles of Universal Design, to be accessible and relevant for people with disability. Guidelines and evidence on developing learning systems based on Universal Design collected by CAST, a non-profit education research and development organisation based in the United States, provide a good basis for how to do this. An effective publicly

funded mainstream adult learning system requires an active engagement and awareness of adult learning providers and teachers. The adult learning system should accommodate individualised learning pathways by means of widely available flexibility in content and provision, and it should be accountable for disability mainstreaming.

There are many barriers to participating in adult learning programmes including two, which are frequent and where governments can provide a remedy: time and cost. Time is the biggest barrier for workers while financial constraints can be a barrier for many unemployed, often also for people with disability. Entitlement to training and paid or unpaid training leave are the best response to time constraints. Data for Austria, however, suggest yet again that low-skilled workers who would need training most are least likely to use training leave and the share of people with disability among all leave takers is less than 2%. It will therefore be important to ensure such leave reaches people with disability, through the active involvement of employers and staff representatives. Financial constraints can be tackled through public subsidies or vouchers, which can be geared towards the most disadvantaged and to people with disability, or be more generous for those groups.

Disability mainstreaming should be an objective in all OECD countries

Disability reforms in the past decade, even if going into the right direction to support higher employment, have only partially delivered the necessary change. It appears that societies across the OECD have yet to embrace the value and the inevitability of full disability mainstreaming for all labour market institutions and throughout all policies and all areas of life. Current policies and practices fail to address in an adequate manner the discrimination and inequalities that people with disability are facing. Disability mainstreaming must become a matter of course, paralleling earlier powerful diffusions of gender mainstreaming which gradually made its way into all policies and practices, and with increasing success. Disability mainstreaming is equally important for our societies, which face considerable and growing inequities and inequalities many of which are attributable to poor health and disability.

The single biggest problem in disability policy is that intervention is coming too late: when employment is no longer a consideration, or after having missed a number of opportunities to ensure equal treatment, equal skills development and equal labour market transitions. Mandatory disability mainstreaming, i.e. a disability-inclusive approach in all mainstream services and practices, will help to achieve the shift to early intervention in all policies. The reliance on special systems with special entry requirements in many cases explains the late intervention for people with disability – intervention that is typically more costly and less effective. Early intervention must be a principle applied throughout all mainstream policies, in education and youth policies, in employment, skills and labour market policies, and in social protection policies.

2 Labour market inclusion of people with disability: Where are we now?

Using population survey data for a large number of OECD countries, this chapter presents a set of indicators to measure the social and labour market inclusion of people with disability and compare outcomes across countries and over time. Findings are mixed: while people with disability are more likely today to achieve a higher level of education, disability gaps in both employment and unemployment remain high and largely unchanged. Similarly, the high disability poverty gap has increased further, even though the large majority of people with disability who have no job receive some form of income support. Overall, these outcomes suggest that the current policy approach fails to generate highly needed improvements in the labour market position of people with disability.

In Brief

Labour markets across OECD countries do not give the same opportunities to everyone and people with disability in particular face considerable barriers to labour market participation. This is reflected in low employment rates of people with disability and, despite considerable shares of them receiving social benefits, a high risk to live in a low-income household. Considerable policy efforts in the past 15 years have not succeeded in closing the disability employment and poverty gaps.

- **Disability prevalence stands at around 18% but varies hugely across countries**. The UN Convention on the Rights of Persons with Disabilities (CRPD) describes disability as a social construct resulting from the interaction between people with impairments and their (attitudinal) environment, and as a concept evolving over time. The measurement of disability is volatile and can be linked to cultural factors and self-perception, reflected in large differences in disability prevalence over time and across countries (Section 2.1).
- **The education distribution of people with disability is lagging behind by at least 15 years to that of people without disability.** Despite the education improvements for people with disability, the education gap with people without disability remains large. Disability also remains a high risk factor for early school leaving (Section 2.2).
- **The employment rate of people with disability has slightly improved over the past decade on average across OECD countries.** Overall, employment rates of people with disability are low, with only 40% of them having a job on average across OECD countries. In most countries, the employment rate of people with disability is higher now than it was in 2008, recovering the pre-GFC crisis levels. More recent data are needed to assess whether this recovery will be jeopardised in the post-COVID-19 era and in the current economic context (Section 2.3).
- **Taken together, the improvements in the employment rate of people with disability were not sufficient to close the disability employment gap.** On average across OECD countries, people with disability are about 40% less likely to be in employment than are people without disability, a gap that has remained constant over the past decade (Section 2.3).
- **Across OECD countries, the large majority of adults with disability that are not working receive social transfers**. On average, 70% of people with disability not at work receive a social benefit. Most of these persons are not receiving disability benefits, contrary to what could be expected. On average, only 30% of people with disability not working are receiving disability benefits. The remaining 40% receive a mix of old-age pensions, unemployment benefits, and – very importantly – social assistance (Section 2.4).
- **Disability remains a major poverty driver in most OECD countries**. Despite comprehensive benefit systems and high shares of people with disability receiving benefit, i.e. high coverage rates, poor employment inclusion implies that on average across a large set of OECD countries, one in four people with disability live in a household with income lower than 60% of the median, a share that has increased slightly in the past decade (Section 2.5).

2.1. The size of the population with disability varies hugely across cultures

Around one in six persons across the OECD report having a disability (Figure 2.1). Differences in disability prevalence, however, can be large, both across countries and within countries, across men and women, age groups and educational backgrounds (see Box 2.1 on disability definitions and measurement):

- Differences across countries are striking (Panel A). Measurement differences are only a small part of the explanation as most surveys use the same questions. Differences in stigma, self-stigma, perception, culture, attitudes and awareness all play an important part in explaining the variability across countries and also within countries over time, in addition to health itself. The exclusion of mental health conditions in the screening instrument contribute to the exceptionally low disability prevalence of 3% in Korea and the poor recognition of mental health conditions in other countries' instruments (Chile, Mexico, United States) also lowers the prevalence in those countries.
- Further country-specific disaggregation, not shown in the figure, suggests that disability prevalence has increased over the past 15 years in 18 out of the 26 countries for which 2005 data are available. This increase is caused, in part, by a larger share of the 50-69 year-olds in the working-age population; they were 32% of the working-age population in 2005 against 38% in 2018.
- Another visible distinction relates to gender. Panel B shows on average a difference in disability prevalence between men and women of 3 percentage points, for a number of reasons. Firstly, mental health conditions such as depression and anxiety, a growing cause of disability, impact women more often than men. These conditions have grown in importance to the point of now being one of the main causes of disability. Secondly, and potentially due to perception and (self-)stigma, men are less likely to report having a disability than women.
- Older people are more likely to have a disability (Panel C). However, among young people (aged 15-29), also about 8% on average in the OECD report having a disability. They represent a group of people who may not have had the time to contribute enough to create entitlement social benefits. A group of people whose disability may have prevented them from finishing their studies or entering the labour market with the same ease as their peers, making their disability a double burden.
- There is a strong negative correlation between education and disability (Panel D). On average, 25% of low-educated individuals have a disability compared to 11% of high-educated individuals. Those with low level of education also more commonly face instable labour market conditions, a higher risk of job automation, lower wages and riskier or more physically demanding jobs.

There is also considerable heterogeneity within the group of people with disability (PWD), related to the type of disability, the intensity or severity, the cause and the duration or permanence. The high prevalence of disability (on average 18%) only underlines the importance of including PWD in all aspects of our society and especially the labour market, work being a pillar of independence, purpose, self-esteem and social balance. The heterogeneity makes providing the right support for everyone a challenge. It also makes it an opportunity; the opportunity to provide individualised support for everyone, disability or not, while following the strictest definition of mainstreaming. The lack of commonality between two PWD means that support must be provided according to need instead of status and that the same support can be provided to several people all of whom may or may not have a disability and still benefit from it.

Figure 2.2 illustrates that in Europe the prevalence of disability is growing. Certain intangible factors such as cultural differences and changes prevent from drawing hard conclusions from such time trends, similarly to cross-country comparisons. Population ageing explains about half of the overall increase. However, disability prevalence has increased significantly among young adults (aged 15-29) and, to a lesser degree (and only until 2013), among those with medium and higher levels of education. Thus, disability now seems to affect more people than about 15 years ago. This suggests disability is more likely today to lead to exclusion or disadvantage, or felt as a greater social and labour market barrier despite the considerable efforts made by many countries to follow recommendations from OECD's previous work, 20 years ago.

Box 2.1. Defining disability and identifying people with disability

People with disability, according to the UN Convention on the Rights of Persons with Disabilities (CRPD), include those who have long-term physical, mental, intellectual or sensory impairments, which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others. This reflects the understanding of disability as a social construct resulting from the interaction between people with impairments and their (attitudinal) environment. The CRPD further recognises that disability is a concept that is evolving over time.

The understanding of disability as a social construct, which is subject to cultural differences as well as changes over time, makes disability measurement and comparisons across time and between countries difficult. However, it also suggests individuals themselves can judge best if they should count towards the group of people with disability at a particular moment. In turn, subjective disability measurement provides a meaningful proxy to assess social and labour market disadvantages arising from disability – even though any comparisons must keep in mind underlying differences in disability prevalence.

Identifying disability in population surveys

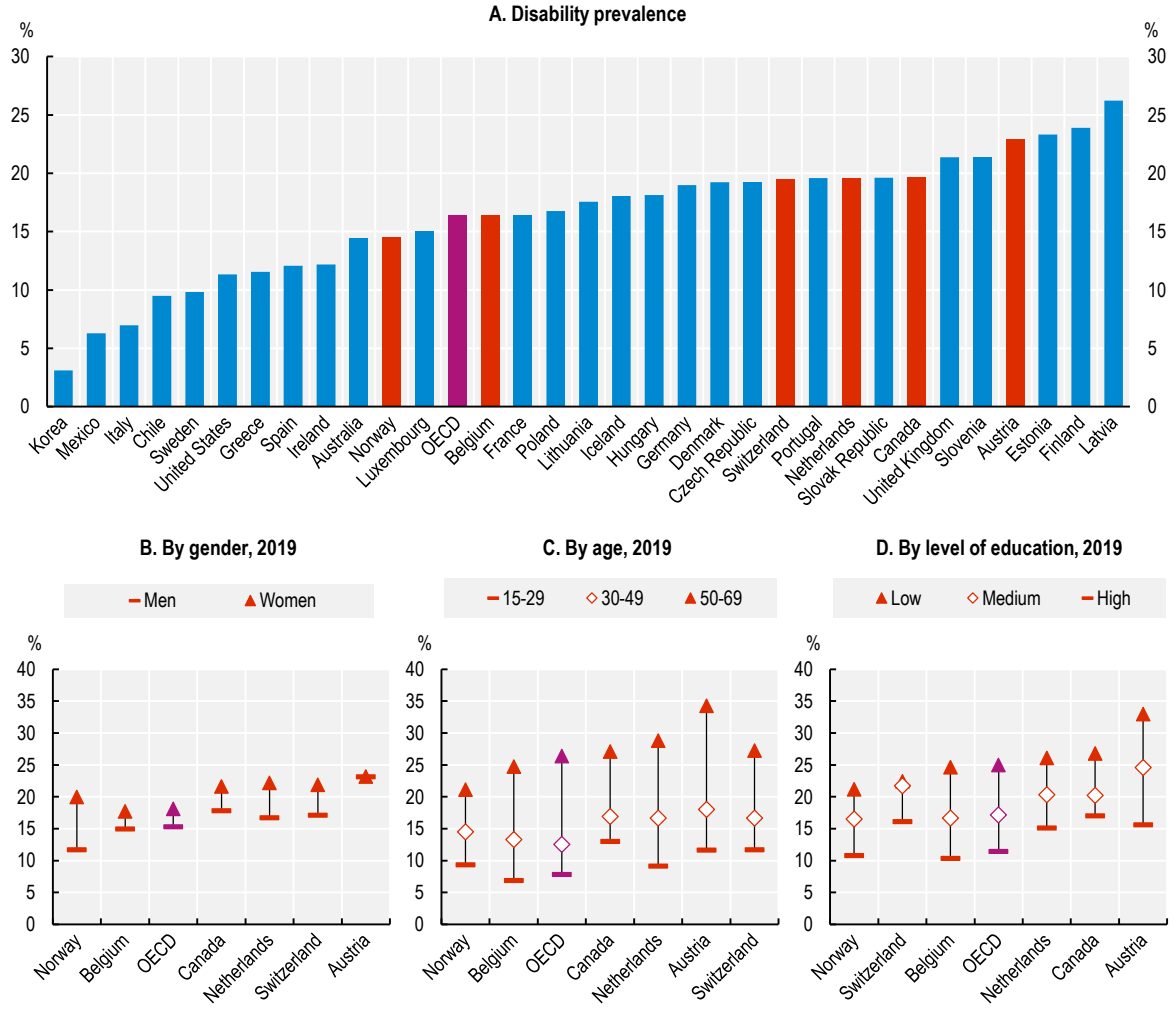
Population surveys identify people with disability through a set of disability screening questions. The type of questions used vary across countries and surveys but two concepts are especially widespread. One concept (option 1) uses questions about difficulties people may have when performing activities because of a health problem in different life domains such as vision, hearing, mobility, cognition, self-care and communication, using the WHO's International Classification of Functioning, Disability, and Health (ICF) as a conceptual basis. These instruments measure both type and severity of disability. A frequently used alternative (option 2) is an instrument consisting of only two questions: the first asking whether people have any permanent or long-standing illness or health problem, and the second asking about the degree to which the long-standing illness or health problem limits activities people usually do. While this instrument allows for a distinction in severity of disability, it does not measure disability type.

Comparability of data from European and non-European countries

EUROSTAT uses option 2 in several surveys, including the European Union Statistics on Income and Living Conditions (EU-SILC) and the European Working Conditions Survey (EWCS) used in this report. Data for other OECD countries are based on national surveys, which all use variants of one of the two disability screening options. For Canada, data come from the Canadian Survey on Disability (CSD), the Canadian Income Survey (CIS), and the General Social Survey (GSS), all using a variant of option 1. Canada is a special case as the same disability-screening instrument is now used in several population surveys. This is a more general trend which the United Kingdom is also currently aiming to follow. For Australia, data come from the Household, Income and Labour Dynamics in Australia Survey (HILDA) using an option-2 type screening instrument similar to the one used in the European surveys and the Survey of Disability, Aging and Carers (SDAC) using an option-1 screening instrument. The surveys for Chile (National Socio-Economic Characterization Survey/CASEN), Mexico (National Survey of Household Income and Expenditure/ENIGH) and the United States (American Community Survey/ACS) use the ICF-based option-1 approach. People with mental health conditions are only partly covered with these instruments. Data for Korea, which come from the Korean Labour and Income Panel Study (KLIPS), also use an option-1 screening tool but only include people with a persistent physical limitation or disability; mental health conditions are excluded. Finally, income data for the United States are from the Current Population Survey (CPS) which uses its own screening taxonomy (PWD are those who: ever retired or left a job for health reasons; are not in the labour force because of a disability; did not work in the previous year because of illness or disability; are under 65 years old and covered by Medicare or receiving Supplemental Security Income or Veterans' Allowance in the previous year).

Figure 2.1. Disability prevalence stands at around 18% but varies hugely across countries

People with disability as a share of the population aged 15-69, selected OECD countries, average over 2016-19



Note: OECD is the unweighted average of the 32 countries shown. Based on different sources for European and non-EU countries, data are not fully comparable. European countries define people with disability as those who 1) declared to suffer from any chronic illness or condition and 2) with moderate to severe activity limitation due to health problems. For Australia, persons who declared having a long-term health condition, impairment or disability that restricts them in their everyday activities, lasting for six months or more. For Canada, persons who report a limitation in their day-to-day activities due to difficulty in 1) seeing, hearing, mobility, flexibility, dexterity, pain-related, learning, developmental, mental health-related or memory issues, or 2) because of any other long-term health condition. For Chile, Mexico and the United States persons who reported having difficulty in: 1) Walking, moving around, going up or down stairs; 2) Vision, even when wearing glasses; 3) Talking, communicate or exchange (and difficulty doing errands alone, United States); 4) Hearing, even with a hearing aid; 5) Dressing, bathe or eat; or 6) Concentrating or learn simple things. For Korea, persons who declared having any persistent physical limitations or disability: 1) Visual, auditory problems or speech impediment, 2) Difficulties in physical activities, 3) Difficulties in learning; 4) Difficulties in indoor activities; 5) Difficulties in outdoor activities; 6) Difficulties in working. Levels of education defined according to the International Standard Classification of Education (ISCED). *Low* refers to below upper-secondary, *Medium* to upper secondary and *High* to tertiary education. Data refer to 2016 (Mexico), 2017 (Canada), 2016-17 (Chile) and 2016-18 (Belgium, Iceland, Ireland, Italy, Korea, United Kingdom, United States) and 2018 (Australia).

Source: OECD calculations based on the European Union Statistics on Income and Living Conditions (EU-SILC) for European countries; Survey of Disability, Ageing and Carers, Australia: Summary of Findings, 2018 (Table 3.1); the Canadian Survey on Disability (CSD, 2017) provided by Employment and Social Development Canada; Chile's Encuesta de Caracterizacion Socio-economica Nacional (CASEN, 2016-17). Mexico's Encuesta Nacional de Ingresos y Gastos de los Hogares (ENIGH 2016); the Korean Labour & Income Panel Study (KLIPS, 2016-18) and the American Community Survey (ACS, 2016-18).

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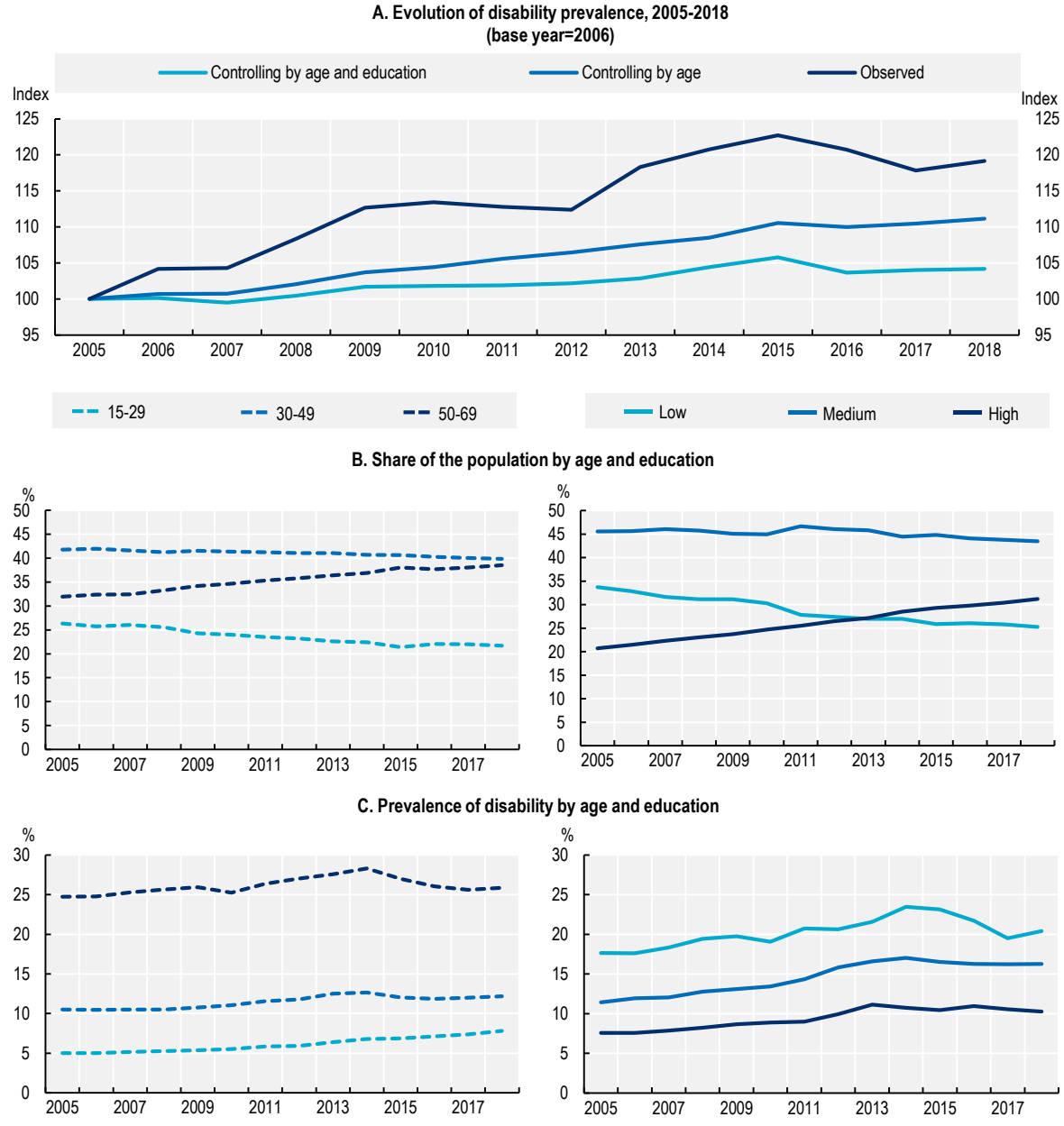
Figure 2.2. Looking behind the increase in disability prevalence: the role of age and education



Note: Data cover persons aged 15-69 and show the weighted average of 20 European countries: Austria, Belgium, the Czech Republic, Denmark, France, Greece, Hungary, Iceland, Ireland, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain and Sweden. Panel A: To control by age the prevalence of disability was generated using five-year age groups in 2006 and applied to the following years to simulate the number of people with disabilities that would have existed if the same prevalence by age group and age proportions were maintained. This same process was used to control for age and education in Panels B and C. Disability is defined as people who 1) declared to suffer from any chronic illness or condition and 2) with moderate to severe activity limitation due to health problems.

Source: OECD calculations based on European Union Statistics on Income and Living Conditions (EU-SILC).

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2.2. Education improvement is not enough to close the education gap

2.2.1. Continuous improvement in educational attainment

Higher levels of educational attainment increase the likelihood of being employed, and for maintaining and upgrading the skills to maintain and progress in employment (OECD, 2021[1]). It is thus encouraging to see that across all countries, the share of PWD with low level of education has fallen from around 48% to about 30% from 2005 to 2019 (Figure 2.3, Panel A). The share of people without disability (PWOD) with low level of education decreased from about one-third to one-fifth over the same period. Accordingly, while the disability education gap has closed slightly, the share of PWD with a low education remains higher than among PWOD by about 10 percentage points.

At the same time, data show a large difference between PWD and PWOD in the growth in the share of the population with a high level of education at tertiary level. Among PWOD, the share with mid-level education – corresponding to completed secondary education – remained rather stable (Figure 2.3, Panel B). Among PWD, however, much of the drop in low education translated into an increase in med-level education; the increase in the share of people with high education was much slower than for PWOD. While there is a high demand for workers with vocational education, this development may indicate that PWD could be hit harder in labour markets characterised by a high degree of job polarisation, i.e. a loss of middle-skilled jobs.

People with severe disability are least likely to achieve the highest level of education, with a share of about 20% with post-secondary education across the six selected countries and slightly lower than this for Norway, compared to about 40% among PWOD and a share slightly higher than this in Canada (Figure 2.3, Panel C). The share of people with a medium level of education is almost the same for PWD and PWOD in all six countries and highest in Austria and Switzerland, at over 50%.

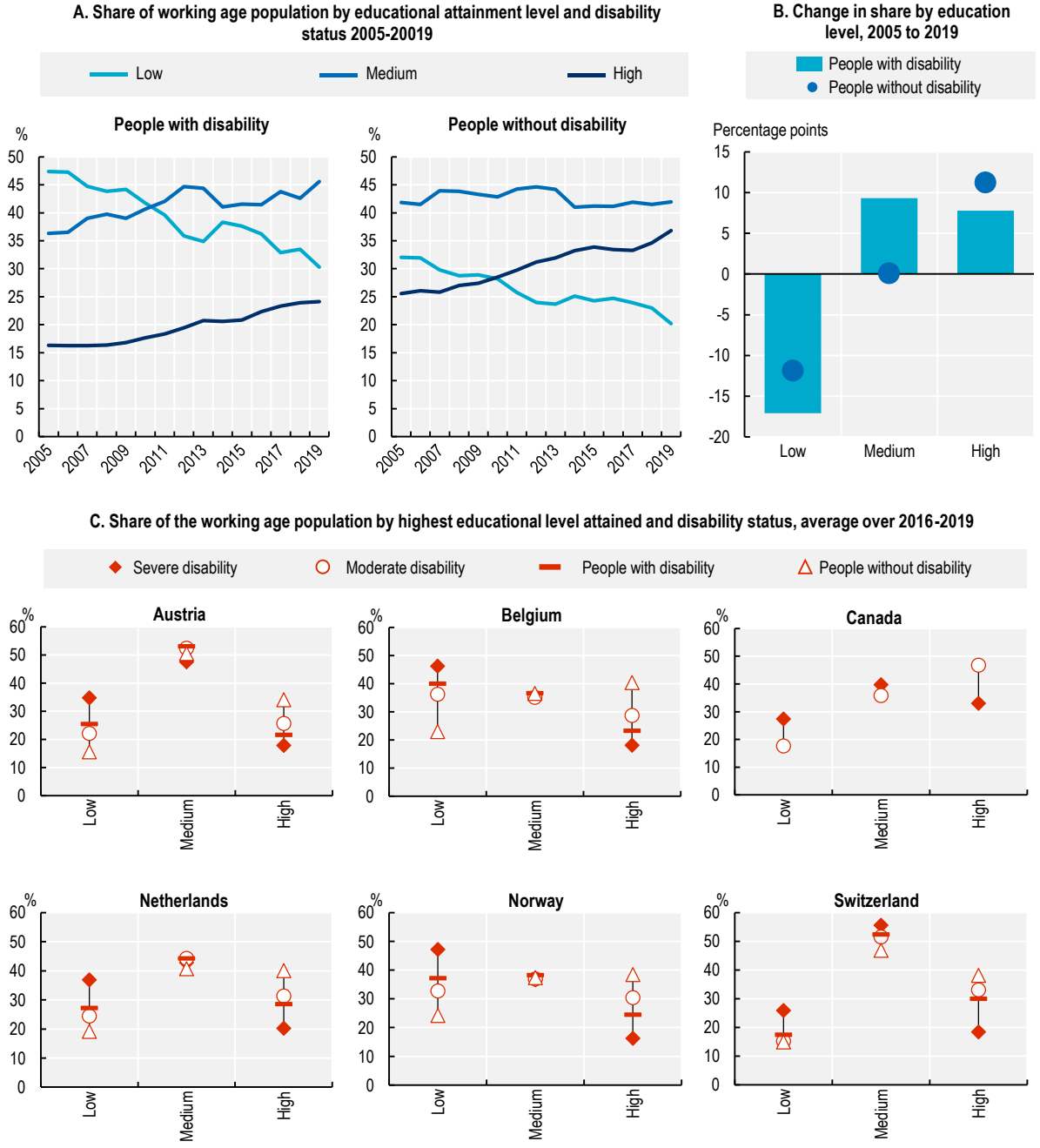
Overall, the level of education has gradually improved between 2005 and 2019, for both PWD and PWOD (data are not available yet on the impact of the pandemic). Nevertheless, PWD remain largely at the same relative education and skills disadvantage. It appears that the education improvements for PWD have been just fast enough to keep the disability employment gap at roughly its current high level.

2.2.2. However, disability remains a risk factor for early school leaving

While levels of educational attainment of PWD have improved, Figure 2.4 shows why closing the education gap has remained and will remain a challenge. One in five young people with disability aged 15-29 leaves school without completing a secondary degree, here interpreted as an indicator of early school leaving, compared to only one in ten among young people without disability (Panel A). A deeper look into these differences indicates large variation by severity of disability: 15% and over 35% of those with moderate and severe disability, respectively, leave school early on average across OECD countries. The particular disadvantage of young people with severe disability is found in most countries, and in some – including Lithuania, Portugal and Spain – this share can be as high as 60%. In a few countries, like the United Kingdom and the United States, however, early school leaving is rare for all groups.

Figure 2.4 also shows that the transition into the labour market is difficult for PWD. One in three young people with disability and even one in two among those with severe disability belong to the group who are not employed, not in education and not in training, commonly known as NEETs (Panel B). This compares with one in seven young people aged 15-29 without disability. It is noteworthy that, on this indicator of labour-market opportunity, young people with moderate disability are doing much worse than those without disability (both on average and in most OECD countries).

Figure 2.3. Education levels of people with disability are improving but not enough



Note: Data cover persons aged 15-69. Levels of education defined according to the International Standard Classification of Education (ISCED). *Low* refers to below upper-secondary, *Medium* to upper secondary and *High* to tertiary education. Panels A and B are weighted averages of 26 European countries: Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, United Kingdom. Panel B: The difference is calculated from 2018 (Belgium, Iceland, Ireland, Italy) and 2016 (United Kingdom). Panel C: Data refer to the average over 2016-18 for Belgium and to 2017 for Canada; for exceptions and for country definitions of people with disability, see Figure 2.1.

Source: OECD calculations based on European Union Statistics on Income and Living Conditions (EU-SILC 2005-19) for European countries and data provided by Employment and Social Development Canada based on the Canadian Survey on Disability (CSD, 2017).

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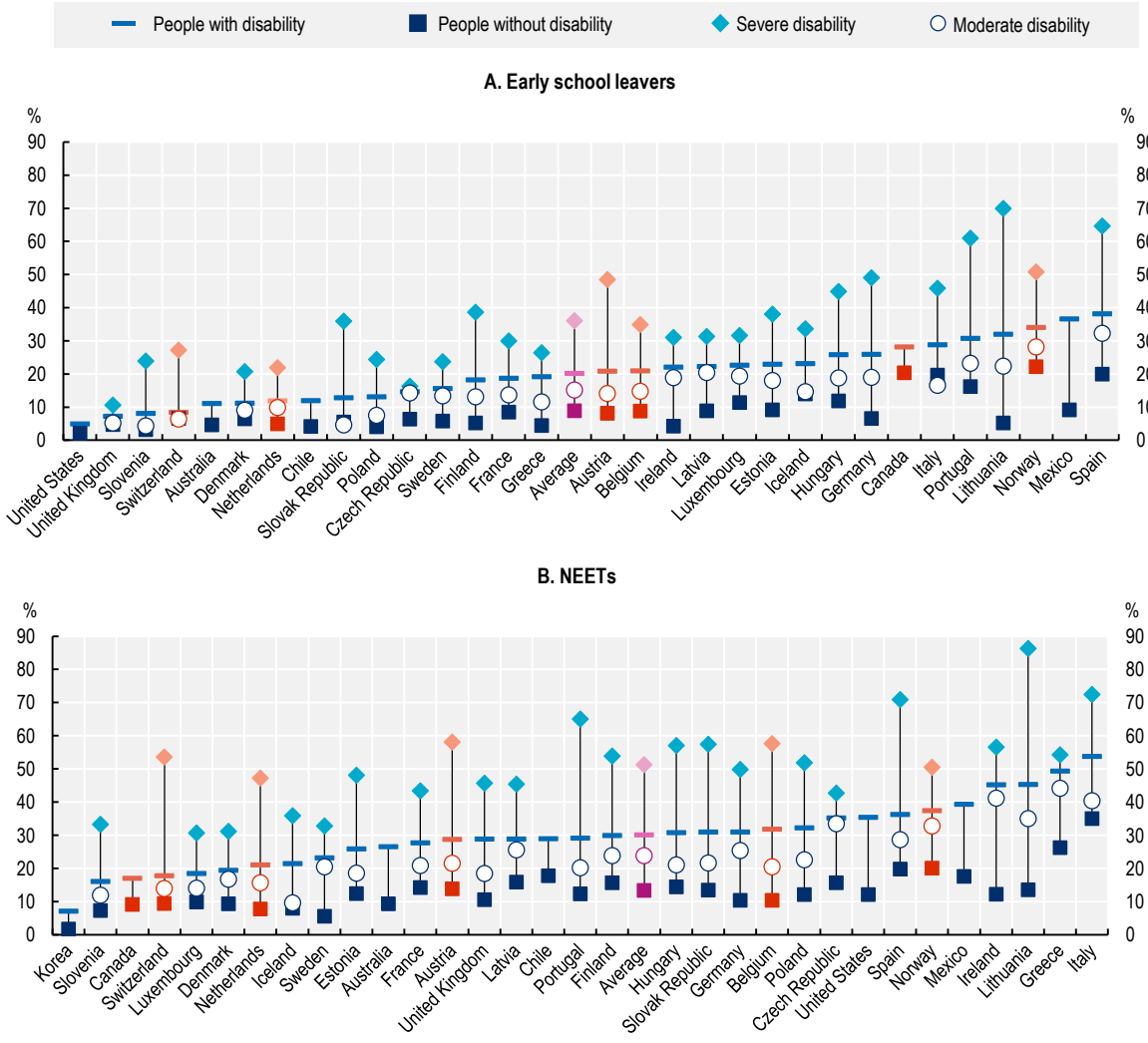
Figure 2.4. The transition from school to work is more difficult for young people with disability

Share of early school leavers and share of NEETs (aged 15-29) by disability status, average over 2016-19



Note: Data for Canada refer to 2017. No data available in 2019 (Belgium, Iceland, Ireland, Italy, United Kingdom) and in 2018 (Estonia). The purple markers are an unweighted average of the 32 countries shown. Panel A: Early school leavers are defined as persons aged 15-29 who are not in education and do not have an upper secondary school diploma. Panel B: NEETs are defined as persons aged 15-29 who are not in education, employment or training. NEETs rates based on other data sources seem to suggest that the data in the figure overestimate the NEET levels in some countries, especially Norway and Italy. Disability gaps are likely less affected by the choice of the data source.

Source: OECD calculations based on European Union Statistics on Income and Living Conditions (EU-SILC, 2016-19) for European countries. Household, Income and Labour Dynamics in Australia Survey (HILDA, from 2016-17), the Canadian Survey on Disability (CSD, 2017) provided by Employment and Social Development Canada, Chile's Encuesta de Caracterizacion Socio-economica Nacional (CASEN, 2017), Mexico's Encuesta Nacional de Ingresos y Gastos de los Hogares (ENIGH, 2016), the Korean Labor & Income Panel (KLIP) and the American Community Survey (ACS).

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2.3. Labour market outcomes have changed little in the past 15 years

2.3.1. Small improvement lately in labour supply

Labour force participation rates measure the labour supply of the population, i.e. the share of the population that has a job or is looking for a job. Labour supply has changed during and after the global financial crisis, in line with the strength of the economy, for both PWD and PWOD and with limited changes in the labour supply gap between PWD and PWOD. Only in the past few years before the COVID-19 crisis, labour supply has grown faster for PWD than for PWOD, but only slightly so and not in all OECD countries. However, the small reduction in the disability gap in labour force participation has led to an increase in the unemployment gap in many cases, reflecting the challenges in accessing the labour market.

2.3.2. But high levels of unemployment and almost unchanged levels of employment

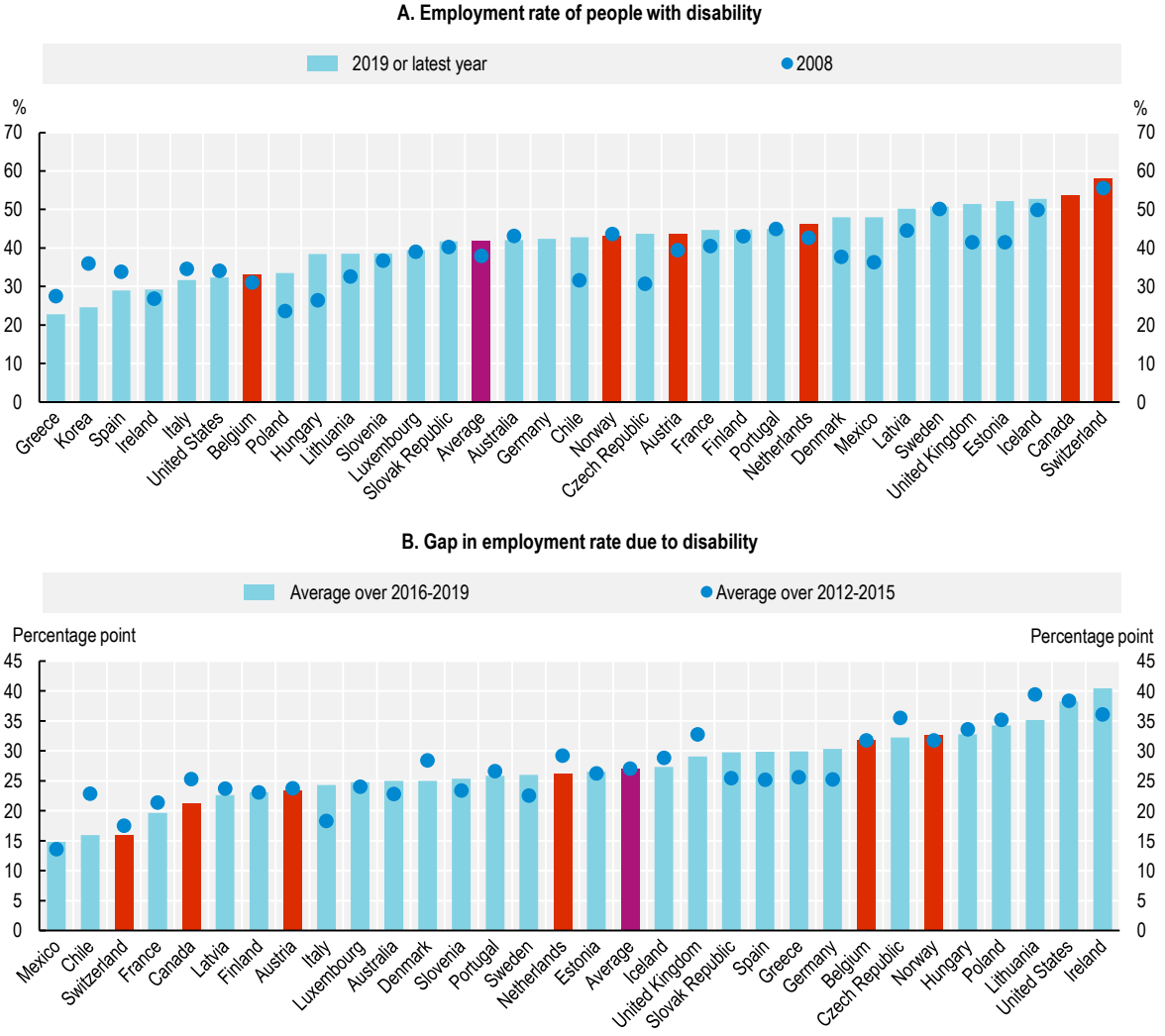
Employment rates of PWD and the gap in employment rates between PWD and PWOD have changed little on average across the OECD area and also in the majority of countries (Figure 2.5, Panels A and B). The crisis of 2008-09 has affected employment rates of PWD more negatively than the rates of PWOD but in the past 3-4 years prior to the COVID-19 crisis, PWD have been able to catch up a little, just so that the disability employment gap is back to a very similar level overall. Across 32 OECD countries for which comparable data are available, in 2019 about 42% of PWD were employed. The share ranges from less than 30% in Greece, Korea, Spain and Ireland to 54% in Canada and 58% in Switzerland. The disability employment gap, measured as the difference in the employment rate between PWOD and PWD over 2016-19, was 27 percentage points on average across all 32 countries, ranging from around 15 percentage points in Mexico, Chile and Switzerland to over 35 percentage points in Lithuania, the United States and Ireland. Only a few countries, including Chile, the Czech Republic, Denmark, Lithuania and the United Kingdom, have seen visible improvements in both the employment rate of PWD and the disability employment gap. Improvements in the employment rate of PWD but without narrowing the disability employment gap were also observed in Poland, Hungary, Mexico, Estonia and Latvia. On the other end, some countries, including Germany, Greece, Ireland, Italy, the Slovak Republic, Spain and Sweden, have seen a noticeable increase in the disability employment gap in the past few years.

In 2019, across the same set of countries, 15% of PWD were unemployed, the same unemployment rate overall as a decade ago (Figure 2.6, Panel A). However, unemployment rates of PWD have fallen very considerably in a few countries since 2008 (Belgium, the Czech Republic, Hungary, Poland) and increased in many others (Norway, the Slovak Republic, Sweden, Portugal, Finland, Italy, Greece, Spain). The disability unemployment gap, measured as the difference in unemployment rates between PWD and PWOD, stood at 8.6% on average across the same set of countries in the period 2016-19, very similar to the level five years earlier (Figure 2.6, Panel B). The disability unemployment gap has increased most noticeably for Ireland and Sweden, and is now highest in Germany. Today, PWD are on average more than twice as likely to be unemployed than PWOD, a higher ratio than observed before and soon after the global financial crisis, suggesting that it has become even more difficult for PWD to find a job.

In countries like the Czech Republic, France and Switzerland, the employment and unemployment rates of PWD have both increased because of the increase in labour supply. This has not been the case for all countries. In Germany, Austria, Italy and Sweden, for instance, the gap between PWD and PWOD grew larger for both employment and unemployment rates. Only five countries, Canada, Chile, Iceland, Lithuania and the Netherlands, have seen a decrease in both their employment and unemployment gaps for PWD compared to PWOD. For more country-specific details on trends in employment and unemployment rates by disability status, see Annex Figure 2.A.1 and Annex Figure 2.A.1. Lacking improvements in employment rates of PWD and the unchanged disability employment gap are disappointing in view of the improvement over the past 15 years in the level of educational attainment of PWD. This suggests that the necessary policy transformation that many countries have started over the past decade has not gone far enough.

Figure 2.5. Disability employment gaps are large and have changed little in the past decade

Employment rate for people with disability and gap in the employment rate, calculated as the percentage point difference of rates of employment of people without disability and people with disability



Note: Data cover persons aged 15-69. For country definitions of people with disability, see Figure 2.1. Exceptions Panel A: Year 2019 refers to 2014 (Korea), 2016 (Mexico), 2017 (Australia, Chile) and 2018 (Belgium, Iceland, Ireland, Italy, United Kingdom, United States). Exceptions Panel B: Periods refer to 2013-16 and 2017-19 for Canada, 2016-18 (Belgium, Iceland, Ireland, Italy, United Kingdom) and no data in 2018 (Estonia). The purple bars represent the unweighted average of the 26 countries shown (excluding Korea). For Australia, data presented are based on the Household, Income and Labour Dynamics in Australia Survey (HILDA). When using data from the Australian Bureau of Statistics' *Survey of Disability, Ageing and Carers (SDAC),* the employment rate of persons with disabilities in 2018 is slightly higher at 48%, and the gap in employment due to disability is also higher at 32 percentage points.

Source: OECD calculations based on European Union Statistics on Income and Living Conditions (EU-SILC, 2005-19) for European countries; the Household, Income and Labour Dynamics in Australia Survey (HILDA, 2005-17); Chile's Encuesta de Caracterizacion Socioeconomica Nacional (CASEN, 2006-17); Mexico's Encuesta Nacional de Ingresos y Gastos de los Hogares (ENIGH, 2010-16); the Korean Labour & Income Panel Study (KLIPS, 2008-18) and the American Community Survey (ACS, 2008-18). Data for Canada provided by Employment and Social Development Canada based on the Canadian Income Survey, 2013-19.

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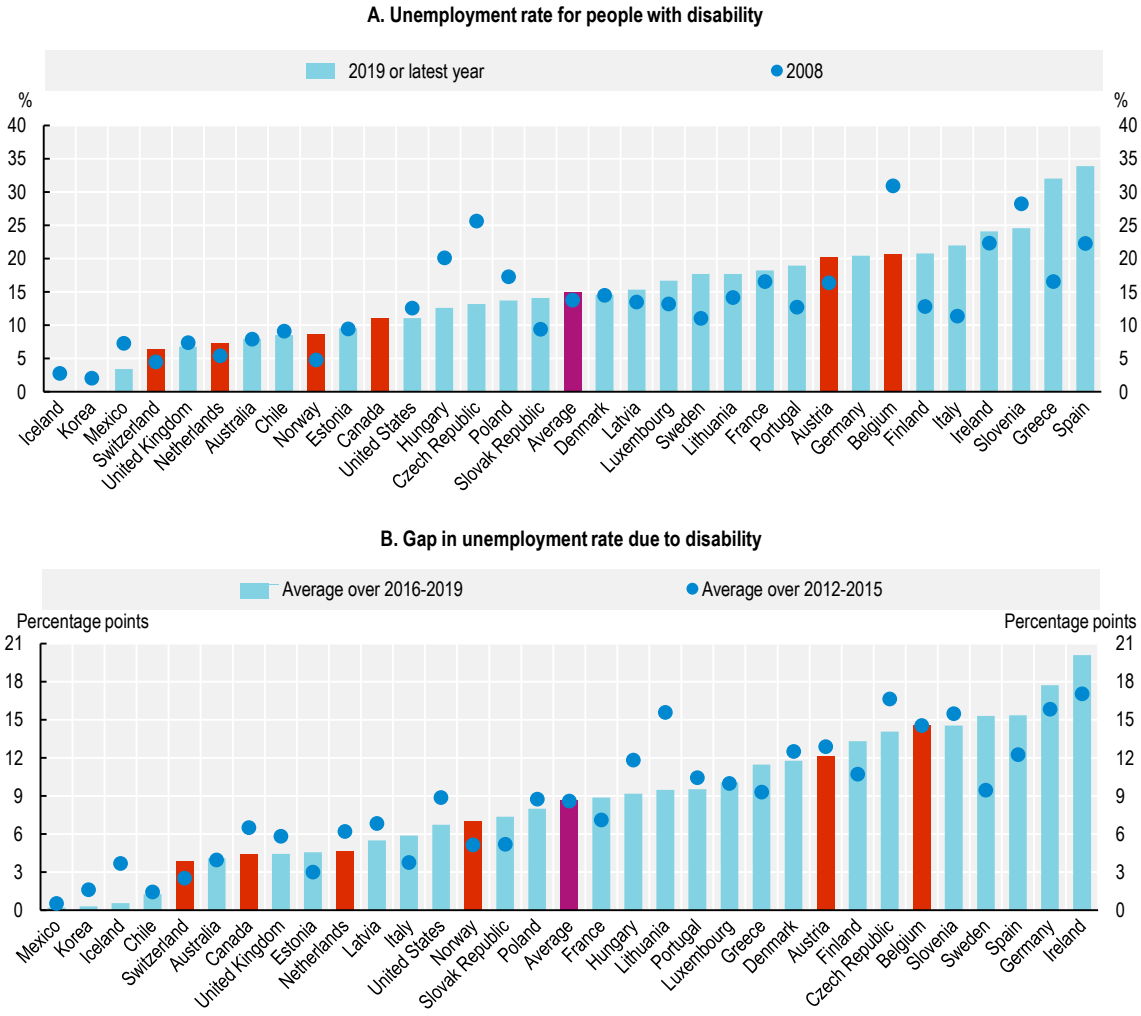
Figure 2.6. Disability unemployment gaps have remained very high in most OECD countries

Unemployment rate for people with disability and gap in the unemployment rate, calculated as the percentage point difference of rates of unemployment of people with disability and people without disability



Note: Data cover persons aged 15-69. For country definitions of people with disability, see Figure 2.1. Exceptions Panel A: Year 2019 refers to 2014 (Korea), 2016 (Mexico), 2017 (Australia, Chile) and 2018 (Belgium, Iceland, Ireland, Italy, United Kingdom, United States). Exceptions Panel B: Periods refer to 2013-16 and 2017-19 for Canada, 2016-18 (Belgium, Iceland, Ireland, Italy, United Kingdom) and no data in 2018 (Estonia). The purple bars represent the unweighted average of the 26 countries shown (excluding Korea). For Australia, data presented are based on the Household, Income and Labour Dynamics in Australia Survey (HILDA). When using data from the Australian Bureau of Statistics' *Survey of Disability, Ageing and Carers (SDAC),* the unemployment rate of persons with disabilities in 2018 is slightly higher at 10%, and the gap in unemployment due to disability is also higher at 5.7 percentage points.

Source: OECD calculations based on European Union Statistics on Income and Living Conditions (EU-SILC, 2005-19) for European countries; the Household, Income and Labour Dynamics in Australia Survey (HILDA, 2005-17); Chile's Encuesta de Caracterizacion Socioeconomica Nacional (CASEN, 2006-17); Mexico's Encuesta Nacional de Ingresos y Gastos de los Hogares (ENIGH, 2010-16); the Korean Labour & Income Panel Study (KLIPS, 2008-18) and the American Community Survey (ACS, 2008-18). Data for Canada provided by Employment and Social Development Canada (Panel A) and OECD calculations (Panel B) based on the Canadian Income Survey (CIS, 2013-19).

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2.3.3. Severity of disability, gender, age and level of education effects

The severity of disability has a significant negative impact on the employment of people with disability (Figure 2.7, Panel A). As shown across OECD countries for which data is available in 2019, about one in four persons with severe disability was employed compared to one in two persons with moderate disability. The negative effect extends to unemployment, as people with severe disability were about 1.6 times more likely to be unemployed than people with moderate disability.

The employment gaps for men with disability, compared to men without disability, are generally larger than for women (Panel B). A larger disability gap for men can also be observed in the unemployment rates between people with and without disability, compared to women. However, gender differences in labour market outcomes are large for both PWD and PWOD, and employment rates for women are generally lower than for men, irrespective of the disability status.

The employment gap also increases with age (Panel C). Prime-age PWOD (age 30-49) are about 1.3 times more likely to be employed than PWD of the same age group. This difference is largest for the oldest group of workers (age 50-69); at this age, PWOD at are about 1.8 times more likely to be employed. This suggests that PWD may find it more difficult to retain employment at that age. In contrast, age does not have a very strong effect on the difference in unemployment between PWD and PWOD; young adults (age 15-29) have the highest unemployment rates among both groups, PWD and PWOD alike.

Disability has a strong negative impact on the employment rate of all people irrespective of their level of educational attainment but the impact seems strongest for people with medium level of education; across this set of countries, PWD with medium level of education appear to be employed as often as PWOD with low level of education (Panel D). The disability unemployment gap is similar for people with low and medium level of educational attainment, around 10 percentage points on average, and slightly lower than this, around 5 percentage points on average, for people with high level of educational attainment. This finding could also be suggesting that improving education and skills levels of PWD is an important element in any strategy to close the disability employment and unemployment gaps.

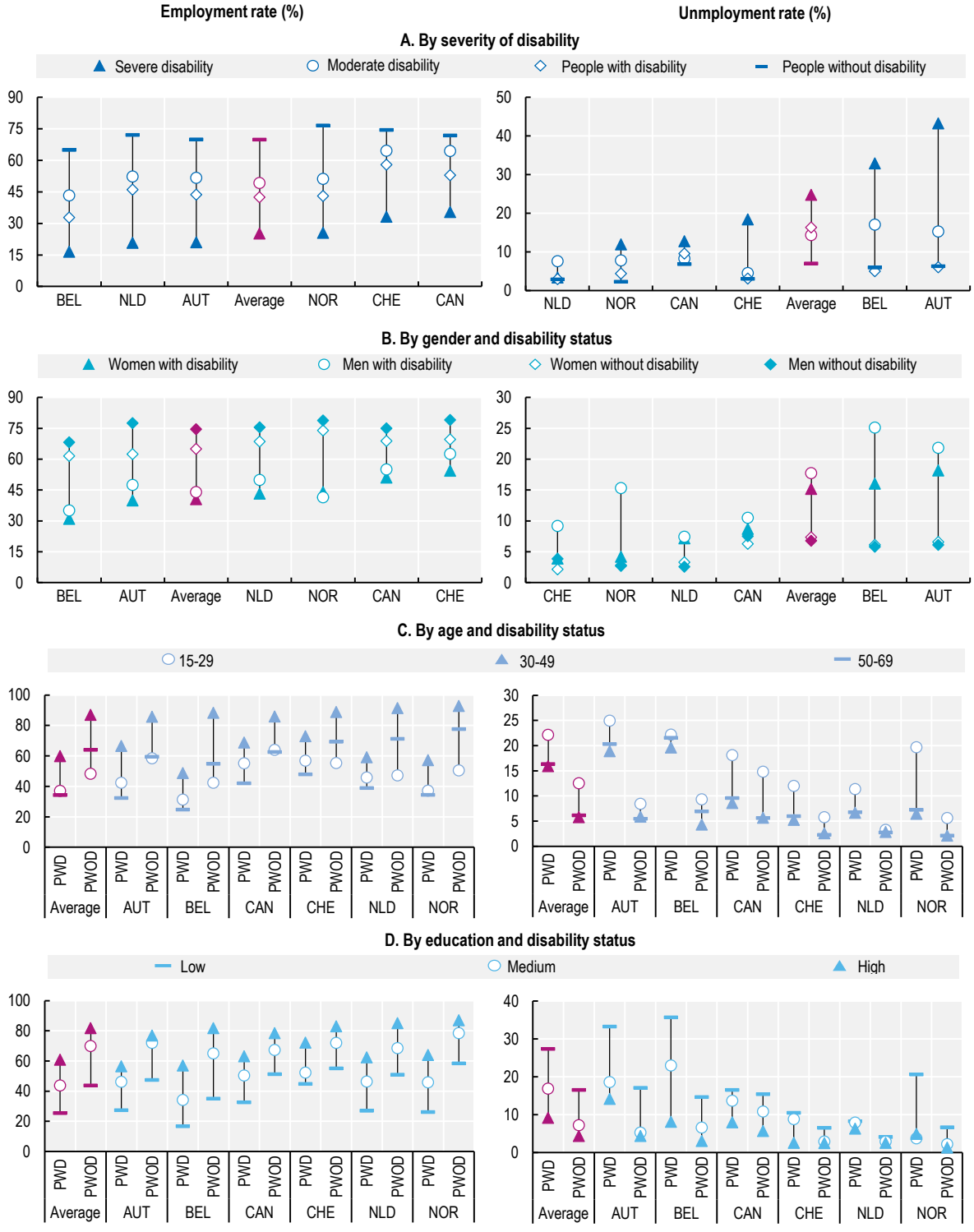
2.3.4. The impact of disability prevalence on labour market outcomes

While the messages from the comparative analysis of labour market outcomes seem clear, country-specific differences should be interpreted with some caution. The measurement of disability is volatile and linked to cultural factors and self-perception, reflected in large differences in disability prevalence over time and across countries (Figure 2.1). Disability gaps in employment rates and other social and labour market outcomes could be influenced by underlying differences in disability prevalence, e.g. if the average severity of disability varied. There is reason to assume that people identifying with disability in countries with a low disability prevalence have, on average, a more severe disability, for instance. Similarly, the interpretation of differences across countries or even within countries over time could be hampered if the likelihood to perceive a health condition as disabling varied with age or the level of education, or changed over time.

A simple way of correcting for prevalence effects, to assess and compare the size of employment gaps, is to weight the resulting disability gap by the country's disability prevalence. In the case of the employment gap, such a measure can be interpreted roughly as the share of the population deprived of employment because of a disability. Figure 2.8 shows the result of this exercise. Weighted disability employment gaps range from less than 2% in Korea, Mexico and Italy, countries with a very low disability prevalence, to 4.5% on average across the 32 countries, and very similar levels of 5.1-6.2% in half of the countries. Countries with lower-than-average disability prevalence, such as Norway, Sweden and the United States, appear to have a lower-than-average disability employment gap.

Figure 2.7. Employment and unemployment levels vary across socio-economic characteristics

Employment and unemployment rates by severity of disability, gender, age and level of education, 2019



Note: PWD: People with disability; PWOD: People without disability. The purple markers represent the unweighted average of 26 European OECD member countries and Canada. Data refer to 2017 (Canada, Panels A and B) and 2018 (Belgium).

Source: OECD calculations based on the European Union Statistics on Income and Living Conditions, 2019. Data provided by Employment and Social Development Canada based on the Canadian Survey on Disability, 2017 (Panels A and B); Canadian Income Survey, 2019 (C and D).

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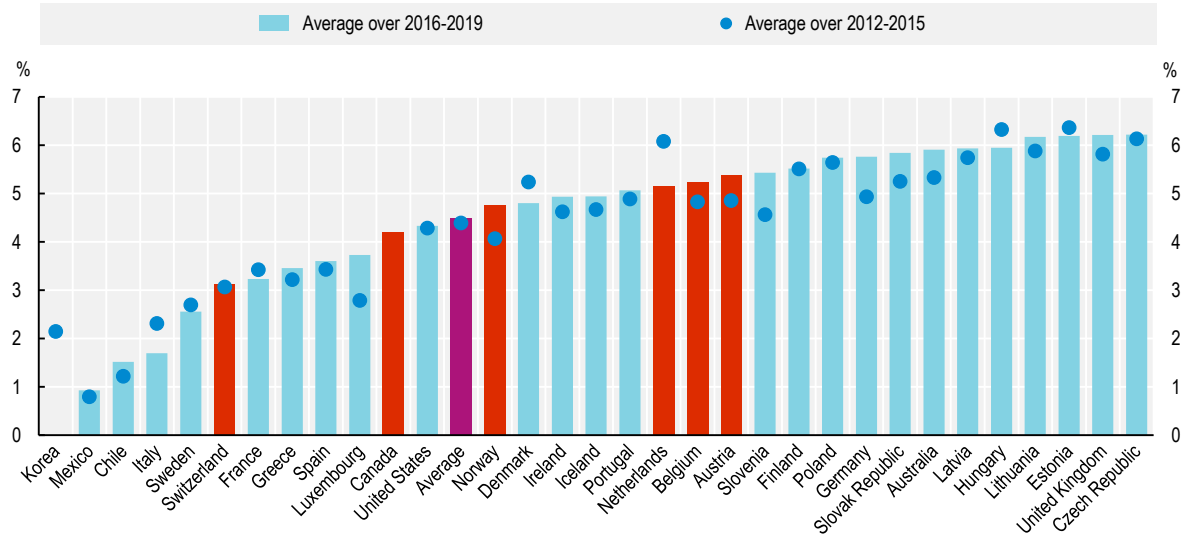
Figure 2.8. Accounting for disability prevalence reduces country differences in the disability employment gap but also blurs the impact of disability on employment outcomes

Population deprived of employment because of a disability, measured as the employment gap (percentage point difference in the employment rate between PWD and PWOD) multiplied by the country's disability prevalence



PWD: People with disability; PWOD: People without disability.

Note: Data cover persons aged 15-69. For country definitions of people with disability, see Figure 2.1. Exceptions: periods refer to 2013-16 and 2017-19 for Canada, 2016-18 (Belgium, Iceland, Ireland, Italy, United Kingdom) and no data in 2018 (Estonia). The Canadian data is weighted with the disability prevalence from 2017. The purple bars represent the unweighted average of the 26 countries shown (excluding Korea).

Source: OECD calculations based on European Union Statistics on Income and Living Conditions (EU-SILC, 2005-19) for European countries; the Household, Income and Labour Dynamics in Australia Survey (HILDA, 2005-17); Chile's Encuesta de Caracterizacion Socioeconomica Nacional (CASEN, 2006-17); Mexico's Encuesta Nacional de Ingresos y Gastos de los Hogares (ENIGH, 2010-16); the Korean Labour & Income Panel Study (KLIPS, 2008-18) and the American Community Survey (ACS, 2008-18). Data for Canada provided by Employment and Social Development Canada based on the Canadian Income Survey, 2013-19 for employment data and the Canadian Survey on Disability (CSD, 2017) for disability prevalence.

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The interpretation of trends within countries, however, is difficult. In Norway, for example, the weighted gap in 2016-19 is around the OECD average but has increased quite considerably in the past few years while the unweighted gap, shown in Figure 2.5, suggested a high but unchanged disability employment gap. Hence, both levels and trends hinge on the measurement. Not knowing the reason for the decline in the prevalence rate – in this example, in Norway – limits the interpretation of the weighted gap. The volatility of the measurement of disability prevalence affects cross-country comparisons but is equally relevant across different surveys within a country. Australia is a good example in case. Australia commonly uses the SDAC survey, a dedicated disability survey, to generate evidence on disability prevalence and the situation of PWD. The survey uses a strict definition of disability and, therefore, identifies a relatively low share of people as PWD – about 14.5% of the working-age population, compared with 18% according to the HILDA survey which uses the same disability definition used in EU-SILC and, therefore, offers better comparability with other countries. Moreover, SDAC (in contrast to HILDA) overestimates employment participation considerably; SDAC estimates an employment rate for PWD of 48%, compared with 42% according to HILDA. The employment gap is also much larger according to SDAC (32 percentage points, compared with 25 percentage points with HILDA). There is no right or wrong: both results are valid and none is necessarily better than the other. Using the weighted indicator reduces the difference between the two surveys in the employment gap (around 5% with SDAC and 6% with HILDA), thus reducing the impact of the choice of the survey, but SDAC's low prevalence rate seems to dominate the result.

2.3.5. Relatively minor discrepancies in employment characteristics and job quality

Once in employment disadvantages related to disability, or differences between people with and without disability, seem to be much smaller. PWD and PWOD do not differ much on most job characteristics. For instance, the share of people who are self-employed or working with a temporary contract hardly differs between PWD and PWOD. This is a confirmation of general labour market findings according to which country differences are larger than individual differences, due to the impact of employment protection legislation. Thus, the use of temporary employment for entry jobs is very common in some countries and not at all in others but there is no particular relationship with disability.

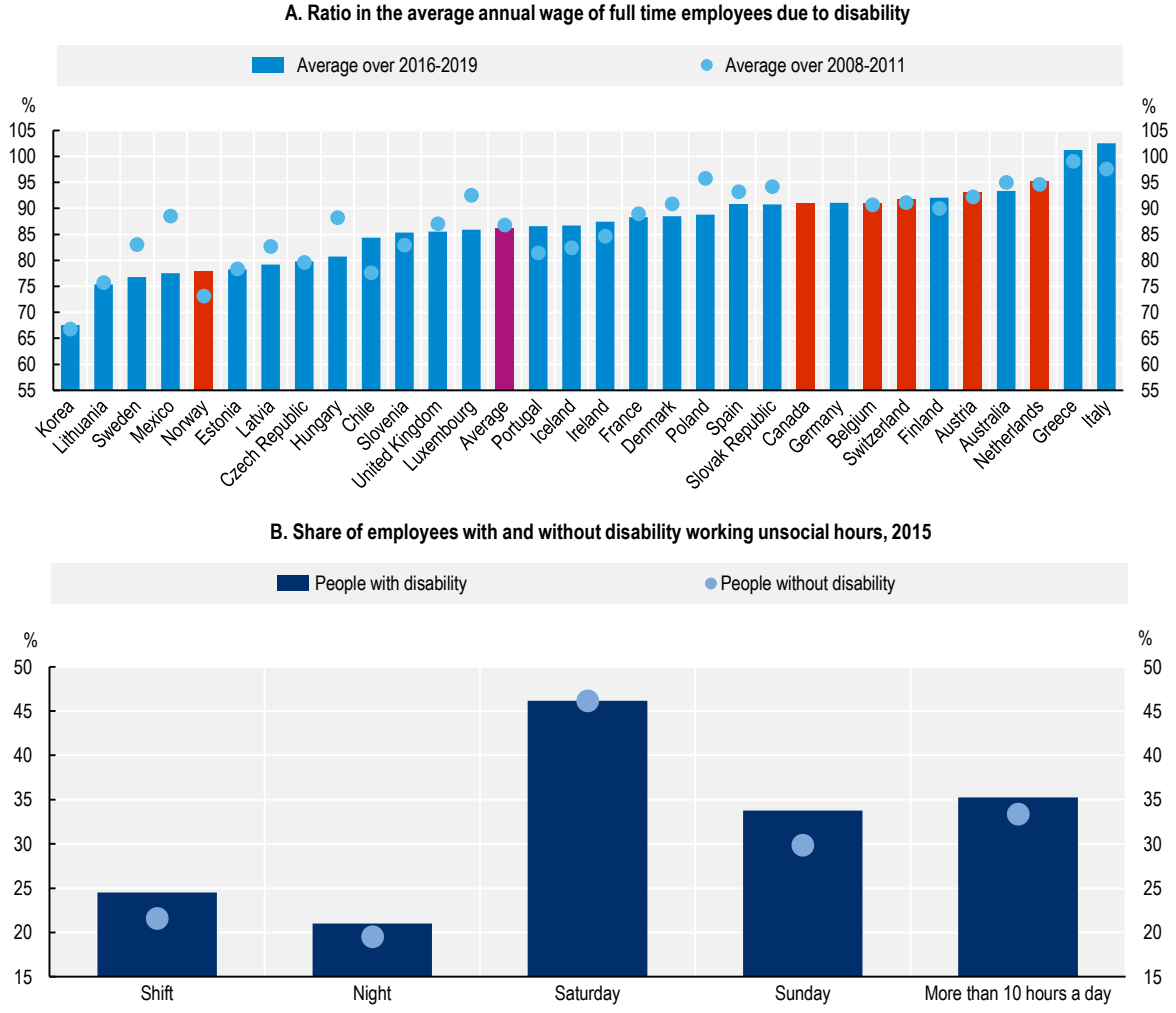
In most OECD countries, however, PWD are significantly more likely to work part-time. The reasons will include a mix of issues, including difficulties in accessing full-time employment and a preference of PWD for part-time employment. A flexible labour market facilitating part-time work can help PWD in accessing the labour market. On average across 32 countries with comparable data, one in five PWD work part-time compared with one in ten among PWOD. In Norway and Sweden, PWD are three times more likely to hold a part-time job, while in many countries with high part-time shares overall this ratio is lower despite a large difference (e.g. in the United Kingdom, the shares are 21% and 32% for PWOD and PWD, respectively). By contrast, in a few countries like the Slovak Republic and Portugal, the difference between PWD and PWOD in part-time employment shares is small.

The average wage of PWD is about 85-87% of the average wage of PWOD. In some OECD countries, the disability wage penalty is (still) very large: PWD earns only about 65% of the wage of PWOD in Korea and around 75-79% in Mexico, the Baltic countries, and also Sweden and Norway (Figure 2.9, Panel A). On the other end of the scale, in Austria, Australia and the Netherlands PWD earn 90% or more of the wage of PWOD and Greece and Italy appear not to have any disability wage penalty at all. However, in the latter two countries this is coupled with an exceptionally low employment rate among PWD; hence, selection effects seem to be at stake. Compared to eight years earlier, the disability wage penalty has increased in one-third of the countries (e.g. Mexico, Hungary, Poland, Sweden, Luxembourg) and decreased in another third (e.g. Chile, Norway, Portugal, Italy), but has remained stable on average. An interpretation of the causes for these different trends is not possible on the basis of such aggregated data.

On the other hand, there are only very small differences between PWD and PWOD in weekly working patterns (Figure 2.9, Panel B). PWD tend to work more often on Sundays with a difference of 4 percentage points between PWD and PWOD. Roughly one in four PWD work in shifts, often including jobs with lower educational attainment, more so than among PWOD. Overall, once employed, however, work patterns are similar for both groups of workers. The shares of workers working on Saturdays, working overnight or working very long hours (10 or more hours per day) are similar among PWD and PWOD.

Figure 2.9. Wages are lower for people with disability, but working-hour patterns are similar

Average annual full-time wage of people with disability over people without disability, average over 2016-19 and 2008-11, and share of employees aged 15-69 working unsocial hours by disability status, 2015



Note: Panel A: Data refer to annual employee wages employee cash or near cash income for employees and cash profits or losses from self-employment for persons self-employed (European countries); main labour income in cash (Chile); financial year gross wages and salary (Australia); average hourly wage excluding self-employed and the Canadian Armed Forces (Canada); total after-tax yearly earned income (Korea); main wage in main work, piece rates, commissions, payment for extra hours in main work, incentive pay, bonus, holiday pay and cash income second job (Mexico) and total wage and salary earnings (United States). Period 2016-19 refers to 2012-15 (Korea). The purple bar is the unweighted average of the countries shown excluding Canada and Germany which do not have data for the earlier period. For country definitions of people with disability, see Figure 2.1; Panel B: Data represent the unweighted average of 21 European countries: Austria, Belgium, the Czech Republic, Denmark, Estonia, Germany, Finland, France, Ireland, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom). Shift: working in shifts. Night, Saturday, Sunday, More than 10 hours a day relates to normally working at least once a month this type of unsocial working hours.

Source: OECD calculations based on European Union Statistics on Income and Living Conditions (EU-SILC, 2008-19) for European countries. Exceptions: 2016-18 (Belgium, Iceland, Ireland, Italy, United Kingdom). The Household, Income and Labour Dynamics in Australia Survey (HILDA, 2008-17); the Canadian Income Survey (CIS, 2016-19) provided by Employment and Social Development Canada; Chile's Encuesta de Caracterizacion Socioeconomica Nacional (CASEN, 2010-17); Mexico's Encuesta Nacional de Ingresos y Gastos de los Hogares (ENIGH, 2016).; the Korean Labour & Income Panel Study (KLIPS, 2008-18) and the United States Current Population Survey (CPS, 2008-18). Panel B: European Working Conditions Survey (EWCS).

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2.3.6. However, labour market dynamics are different for people with disability

On the other hand, data available for European OECD countries show that labour market dynamics differ significantly between PWD and PWOD (Figure 2.10):

- Once employed, the likelihood of a job-to-job change during a year is similar (Panel A).
- Dropping out of the labour is much more frequent for PWD than for PWOD (Panel B).
- Getting into the labour market is much more difficult for PWD than for PWOD (Panel C).

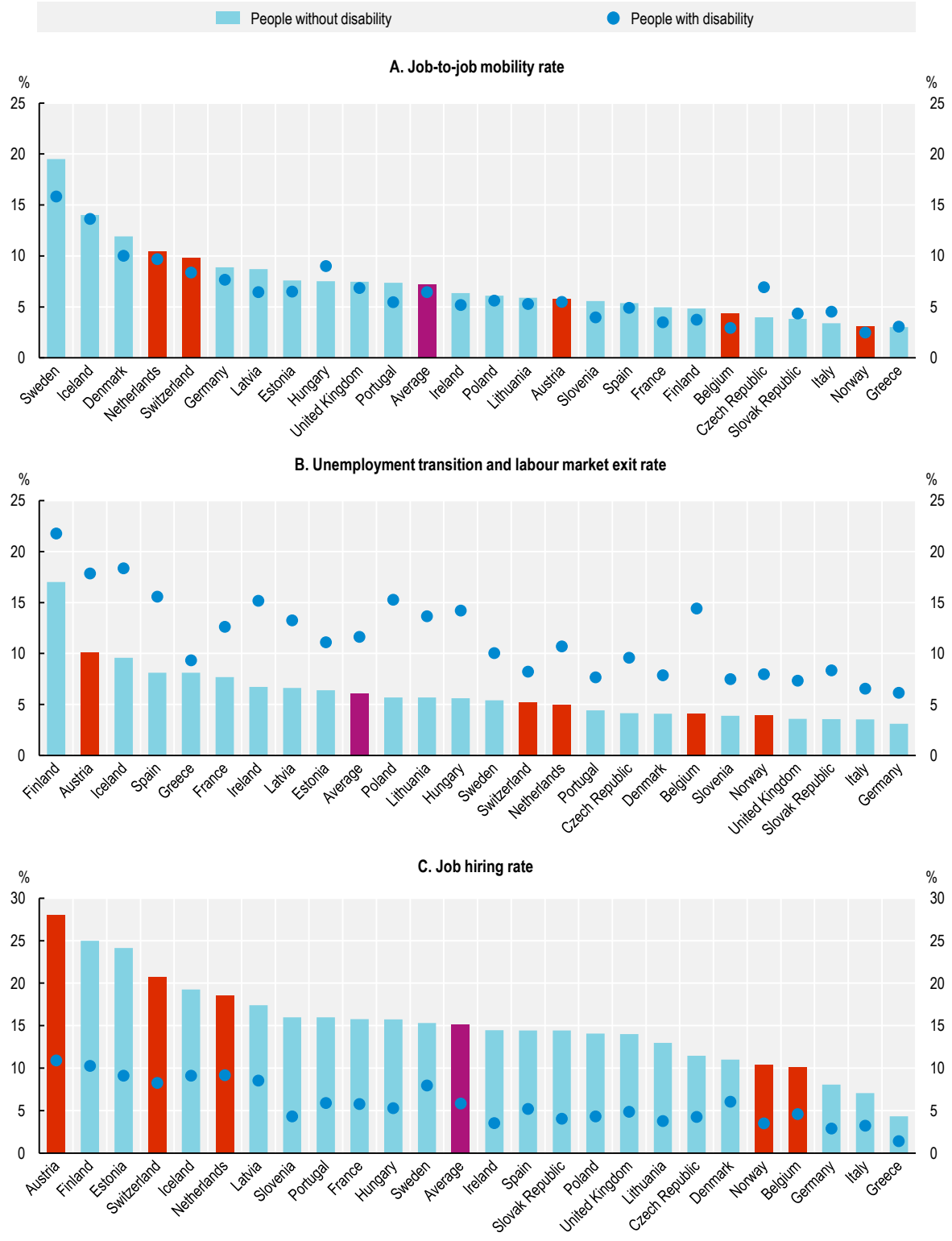
Country-specific differences in labour mobility are large, reflecting differences between countries in the dynamism of the labour market; for instance, both job-to-job transitions and hiring rates can be five times higher in some OECD countries than in others. However, disability gaps in those dynamics are quite similar and systematic across countries. The likelihood to drop out of the labour market is broadly speaking around twice as high for PWD as for PWOD, while at the same time PWD out of work are not even half as likely as PWOD out of work to get into, or re-enter, the labour market. The disability disadvantage in hiring rates is particularly large in many central European countries, including Slovenia and Austria, as well as Ireland and the United Kingdom.

Further disaggregation of these findings by demographic characteristics (in this case, due to sample size, for all countries taken together) sheds further light on these labour market dynamics (Figure 2.11):

- Differences between PWD and PWOD in job-to-job mobility transitions for those in employment are small for any age, gender and education category (Panel A).
- Transitions to unemployment are much more frequent for PWD in all demographic groups but those among them with high level of educational attainment have the lowest disability disadvantage (Panel B). Young adults and those with low level of education generally receive notice more often than others, among both PWD and PWOD.
- The labour market exit rate, i.e. transitions from employment to inactivity, is significantly larger for young and older workers, irrespective of their disability status. The likelihood of exiting the labour market is much higher for PWD in all socio-demographic groups, suggesting that many workers exit the labour market permanently due to health problems or disability (Panel C).
- Hiring rates drop sharply for older workers, which is true for PWOD as well. The disability gap in hiring rates is relatively small for both young workers (age 15-29) and older workers (age 50-69), with only a 2.5 percentage points difference on average (Panel D). However, the gap is very large for prime-age workers (age 30-49): in this age group, the annual hiring rate is only 10% for PWD but over 25% for PWOD. The disability gap in hiring rates increases with the level of educational attainment and is, on average, 1.5 times larger for men than for women.

Figure 2.10. Job entry and job exit rates are much less favourable for people with disability

Year-to-year labour market transitions by disability status, average over 2016-19



Note: For country disability definitions, see Figure 2.1. The purple bars represent the unweighted average of the 25 countries shown.
Source: OECD calculations based on European Union Statistics on Income and Living Conditions (EU-SILC).

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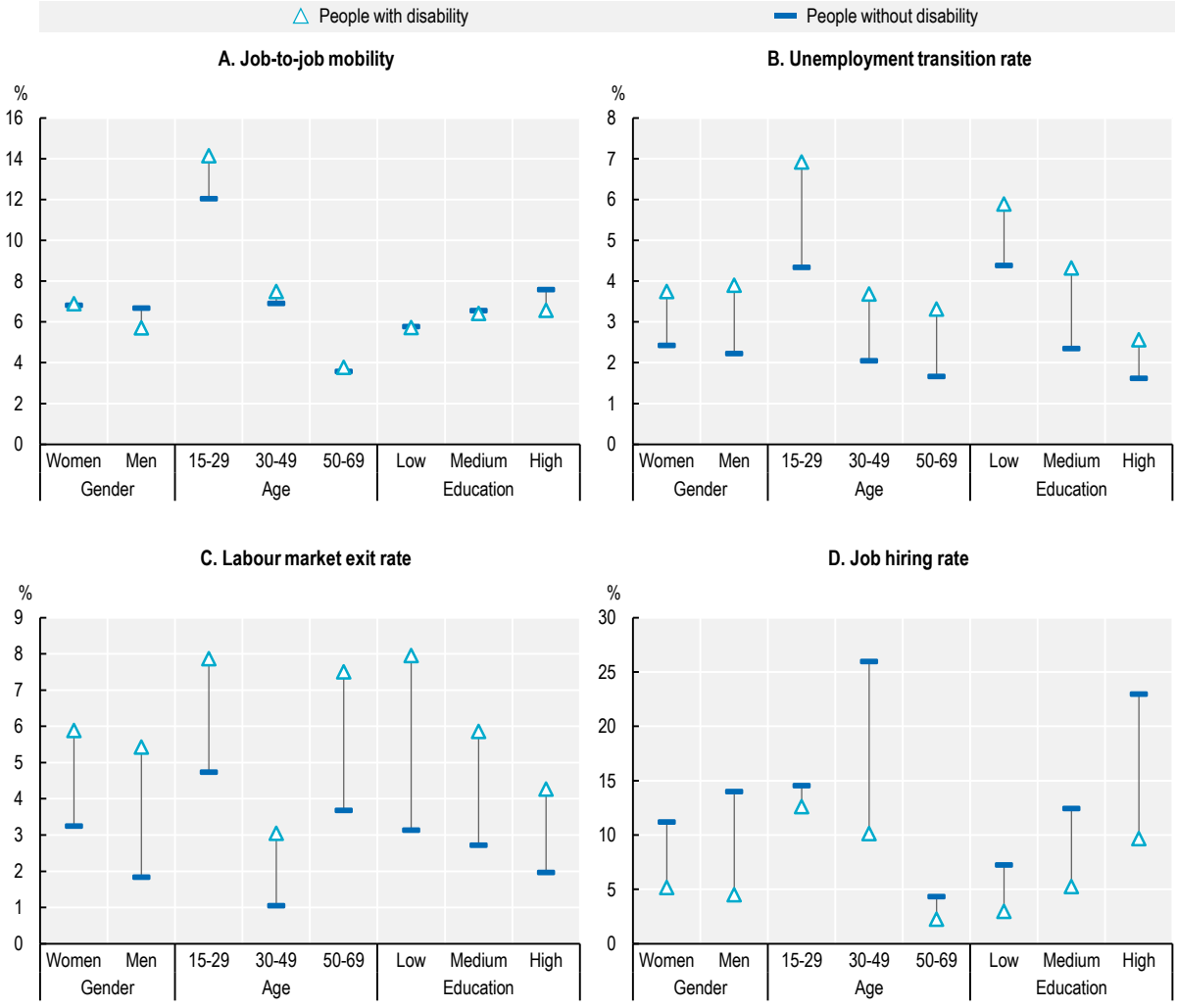
Figure 2.11. Job hiring and unemployment transition rates vary considerably by age and education

Labour market transitions by disability status and demographic characteristics, average of 26 European OECD member countries, average over 2016-19



Note: Data show the unweighted average of the 26 countries shown in Figure 2.10. People with disabilities are defined as those who 1) declared to suffer from any chronic illness or condition and 2) with moderate to severe activity limitation due to health problems. Levels of education are defined according to the International Standard Classification of Education (ISCED), where low refers to below upper-secondary, medium to upper secondary and high to tertiary education. Labour market transitions refer to individuals moving from one employment status to another in the year before the survey. Panel A: The job-to-job mobility rate is the share of those who were employed at the time of the survey and the previous year, but changed jobs, out of all the employed. Panel B: The unemployment transition rate is the share of those who were unemployed at the time of the survey, but the previous year were employed, out of all the employed. Panel C: The labour market exit rate is the share of those who were inactive at the time of the survey, but the previous year were employed, out of all the employed. Panel D: The job hiring rates is the share of those who are employed by the time of the survey but did not have a job the previous year, over the non-employed.
Source: OECD calculations based on European Union Statistics on Income and Living Conditions (EU-SILC, 2016-19).

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2.4. Benefits play a very critical role in the income of people with disability

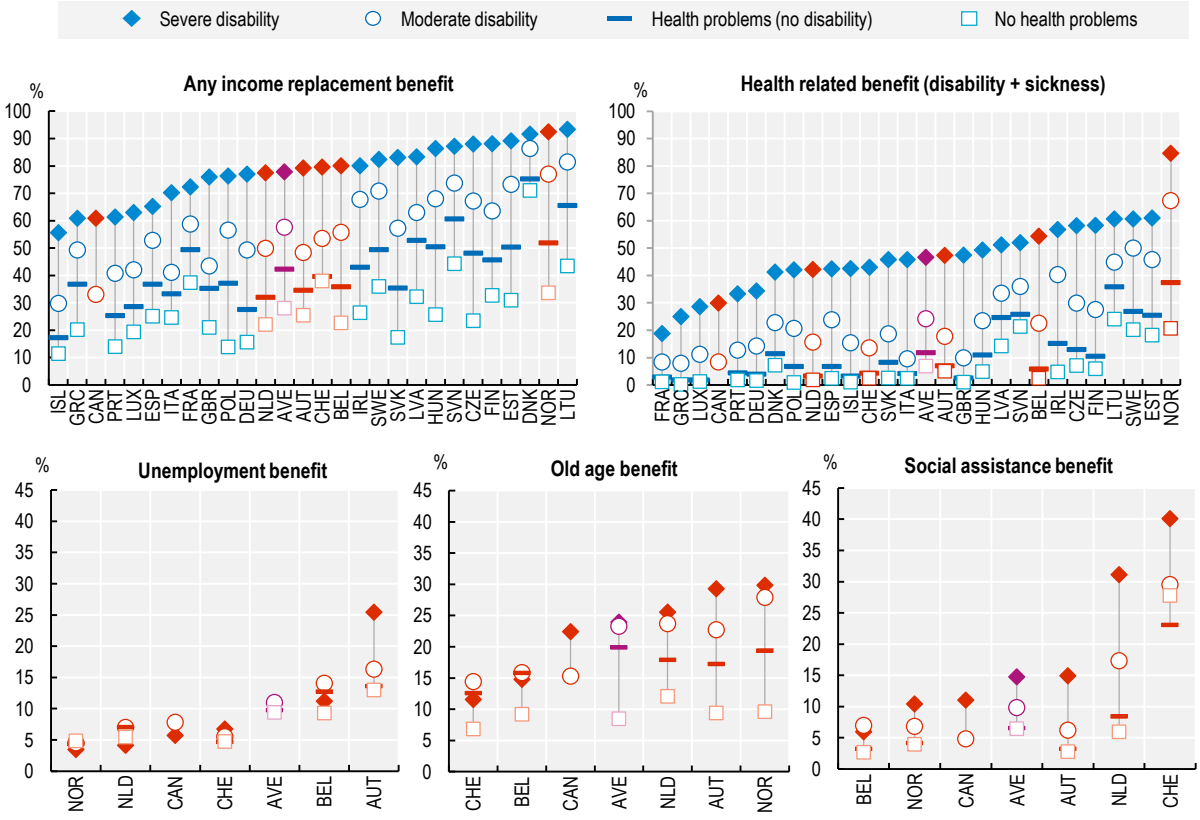
2.4.1. People with disability receive all kinds of income-replacement benefits

Social protection is a key element for people with disability, as it helps breaking the link between disability and poverty, particularly for those with severe disability who cannot work. On average across countries, about 80% of people with severe disability receive at least one income replacement benefit (Figure 2.12). This share is substantially lower for people with a moderate disability (around 60%), with non-invalidating health problems (42%), and without health problems (30%). While differences between countries are large, this finding suggests that overall social benefits are well targeted towards those who need them most.

The number of PWD receiving a health-related benefit is much lower than the number receiving another working-age benefit, across all OECD countries. This is because PWD and in particular people with severe disability, more often receive old-age pensions (via early retirement) and social assistance than PWOD. The large number of people with disability on old-age pensions partly reflects the age pattern of disability. Instead, the large social assistance receipt suggests that people with severe disability may not be covered by social insurance, thus giving a large safety-net role to social assistance.

Figure 2.12. Sickness and disability benefits are the main but not the only benefits received

Share of persons (aged 15-69) receiving income-replacement benefits by type of benefit and disability status, average over 2016-19



Note: Data refer to 2017 for Canada. For country definitions of people with disability, see Figure 2.1. The purple markers (AVE) represent the unweighted average of the countries shown in the top panels.

Source: The Canadian Survey on Disability, (CSD, 2017) provided by Employment and Social Development Canada and OECD calculations based on European Union Statistics on Income and Living Conditions (EU-SILC, 2016-19).

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2.4.2. Type-of-benefit distributions vary by country but also with age

Figure 2.13 shows the distribution of social assistance and health-related benefits in more detail, country by country. On average across OECD countries, health-related benefits represent almost half of the total of benefits received by PWD, but with large variation across countries, ranging from 19% of all benefits in France to 89% in Norway. Social assistance represents around 15% of the benefits received by PWD, a slightly higher share than for PWOD. Again, there is large variation across countries: in Switzerland, social assistance amounts to 40% of the benefits PWD receive (60% for PWOD), while the share is below 5% in countries like Germany and Italy. There is also substantial variation in the benefit composition across age groups. Social assistance represents a higher share of benefits received by young people compared to older age groups, regardless of disability status. This is in line with the exclusion of younger age groups from social insurance, due to limited employment histories and contribution payments. In some countries, like Switzerland and to a lesser degree the Netherlands, social assistance is critically important as source of income for PWD, unlike the average OECD country, where disability insurance is still the principal source of social support. This reflects an effort of mainstreaming of social protection of PWD, effectively reducing any compositional differences between PWD and PWOD in the type of benefits received.

2.4.3. Most people with disability who do not work receive social benefits

The coverage of social protection programmes is best evaluated when observing the benefit receipt of people with disability who are not working, particularly for those who are most vulnerable. Figure 2.14 shows two alternative estimates of benefit coverage:

- People not working and receiving any type of income support (broad coverage).
- People not working and receiving sickness or disability benefits (narrow coverage).

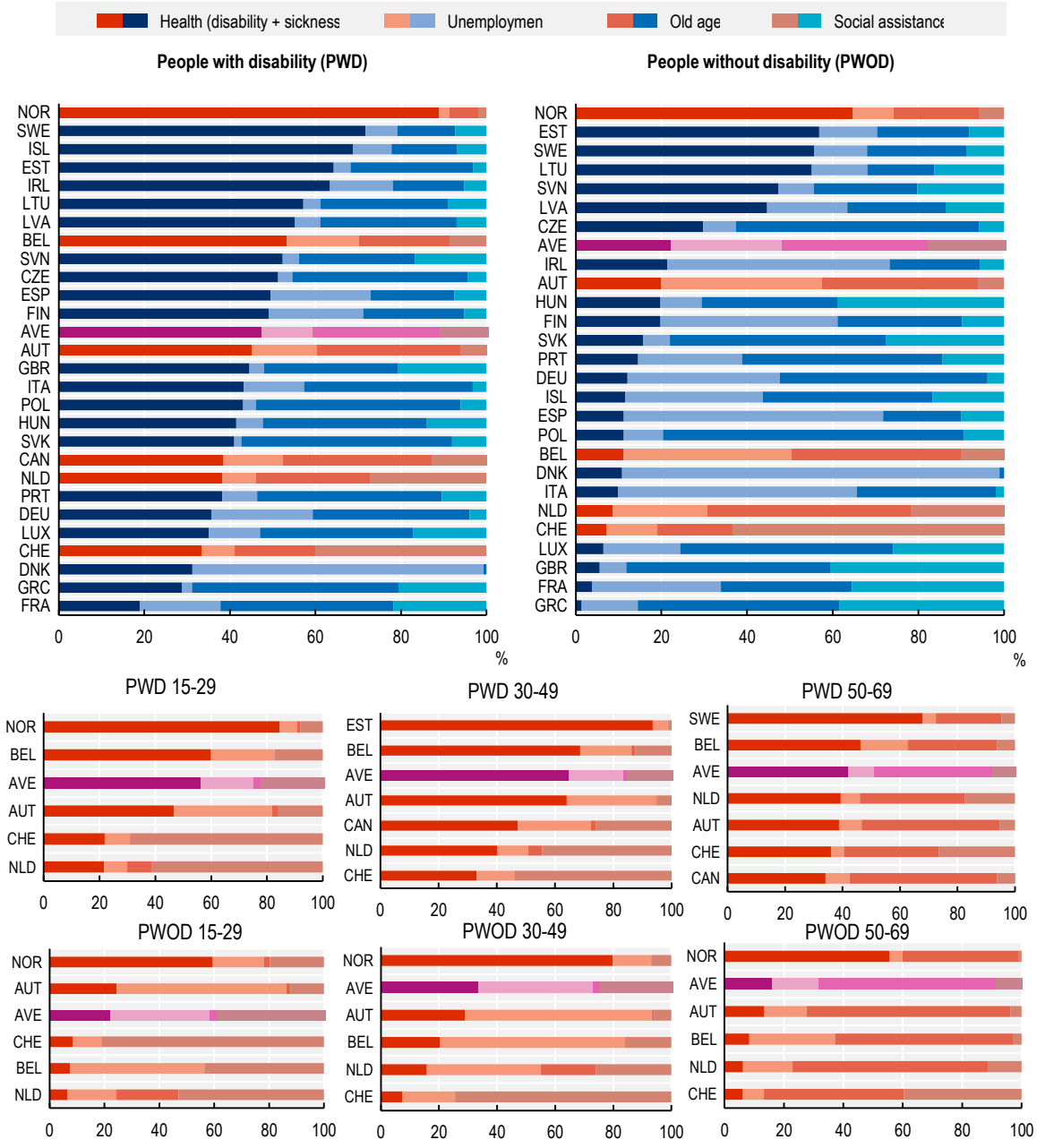
Most PWD not working are supported through at least one type of income-replacement benefit: on average across the OECD, 82% of PWD receive any benefit (Panel A). The share for those with severe disability is even higher, 87%, and in most countries, the difference between those with moderate and severe disability is about 5-10 percentage points; only in Italy and Iceland, this difference is much larger. Among those without a disability who are not working, about one in two receive income support.

Country differences appear much larger when looking at more narrowly defined health-related benefits only, i.e. sickness and disability benefits. Across all OECD countries, one in two non-working persons with severe disability and one in four with moderate disability receive a health-related benefit (Panel B). Country differences range from only 20% for people with severe disability in France to almost 70% for persons with moderate disability in Norway – again reflecting how the role of different working-age benefits varies across countries. The share of non-working PWOD receiving such benefits is generally lower than 10% but amounts to 20% in Ireland and Luxembourg, and reaches 35% in Norway.

Further disaggregated data for the six study countries suggest that benefit coverage is very high for older workers and still rather high for prime-age workers (Panel C). On the contrary, most of these countries are more careful in granting benefits to young people with disability, who typically face benefit coverage rates of around 50%. Narrow coverage by disability benefits for those with severe disability varies less with age.

Figure 2.13. Distributions across types of benefits depend on benefit system design and operation

Beneficiary distribution across the four main types of benefits by age and disability status, average over 2016-19



Note: The purple bars (AVE) represent the unweighted averages of the countries shown in the top panels. Data for Canada refer to 2017 and are not available for PWOD. For country definitions of PWD, see Figure 2.1. Due to an overlap in benefits – person simultaneously receiving disability and unemployment benefits – a benefit hierarchy was generated. If a person receives any benefit related to health (disability or illness), they are classified as a beneficiary of health benefits. If a person receives unemployment benefits and some other income replacement benefit other than health, they are classified as a beneficiary of unemployment benefits. If a person receives a social assistance benefit while receiving old age benefits, they are classified as a beneficiary of social assistance. In the case of Canada, for methodological reasons the benefit hierarchy of the last two categories is swapped: social assistance comes last and old-age benefits second to last. Data not available in 2019 (Belgium, Ireland, Iceland, Italy, United Kingdom) and 2018 (Estonia). PWD ages 30-49 refer to ages 15-49 for Canada.

Source: Data provided by Employment and Social Development Canada based on the Canadian Survey on Disability (CSD, 2017) and OECD calculations based on European Union Statistics on Income and Living Conditions (EU-SILC, 2016-19).

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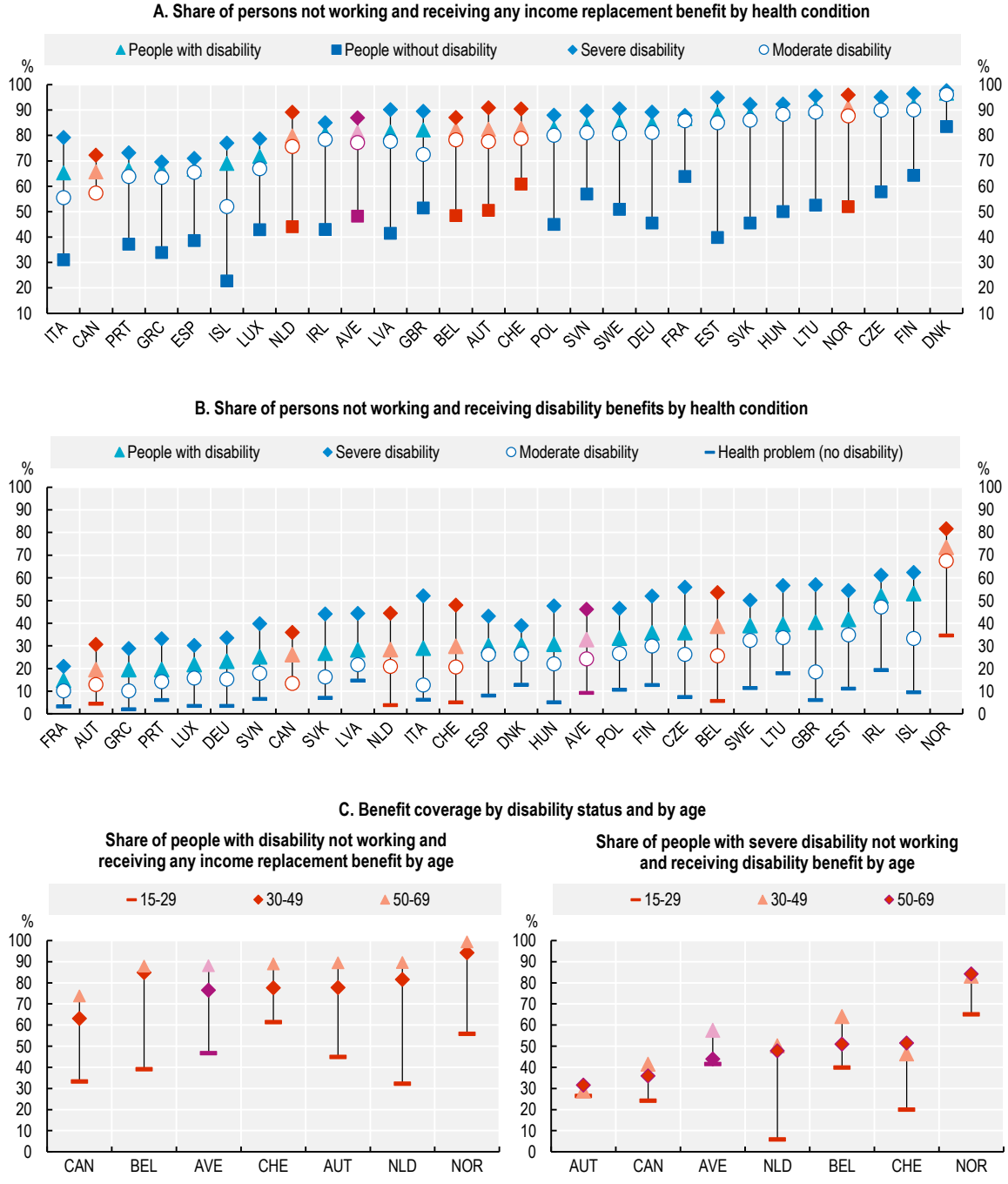
Figure 2.14. Most people with severe disability who are unable to work receive benefits

Share of persons not working and receiving benefits (two alternative estimates of coverage) by health condition and for selected countries by age, average over 2016-19



Note: Any income replacement benefits include disability, sickness, unemployment, old age and social assistance benefits. For Canada, any income replacement benefits includes health-related or unemployment or old age or social assistance and refer to 2017. The purple markers (AVE) represent the unweighted average of 26 the countries shown. For country definitions of people with disability, see Figure 2.1. Data are not available in 2019 (Belgium, Ireland, Iceland, Italy, United Kingdom) and 2018 (Estonia).

Source: Data provided by Employment and Social Development Canada based on the Canadian Survey on Disability, 2017 and European Union Statistics on Income and Living Conditions (EU-SILC, 2016-19).

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2.5. Inequality and poverty remain high for people with disability

Ultimately, the objective of effective employment and social policies is to ensure equality across population groups and a decent standard of living for those who are unable to work or restricted in their capacity to earn a living. Household-based, household-size adjusted measures of income levels, income distributions and poverty risks best capture the success of countries' policies in achieving this objective.

2.5.1. Income levels differ between households with and without people with disability

Figure 2.15. shows that on average across all OECD countries households including PWD live with 84% of the disposable income of households not including PWD (Panel A). This difference reflects on the one hand the higher costs often linked to disability, such as medical costs, and on the other hand, the lower income they receive. Benefits received seem insufficient to compensate for the lower rate of employment. Data also show that differences between households with and without PWD have increased slightly in the past eight years. Differences between OECD countries, however, are large. In a number of European OECD countries, including Austria and Switzerland, the difference in incomes of households with and without PWD is less than 10%. On the other end, the difference is larger than 25% in Ireland, Lithuania, Mexico and Korea and as large as 35% in the United States. The largest increase in the income difference was observed in Mexico and Sweden, while Chile has seen the largest drop in that difference.

2.5.2. Type-of-benefit distributions vary by country but also with age

Figure 2.15 (Panel B) shows how income sources – benefit income, work income, and other income – vary by disability status but also by socio-economic characteristics (for country-specific details see Annex Figure 2.A.4). Benefits make up about 50% of the income of households with people with severe disability, and thus more than income from work. The share is even higher for those among them with low education or over age 50. Overall, even for those with moderate disability benefits represent a twice-larger share of income than in household without PWD. Gender differences in income source distributions are negligible but differences by age are large: the older, the more important benefit income becomes – and for those aged 50-69, even among those with health problems but no disability, benefit income is central.

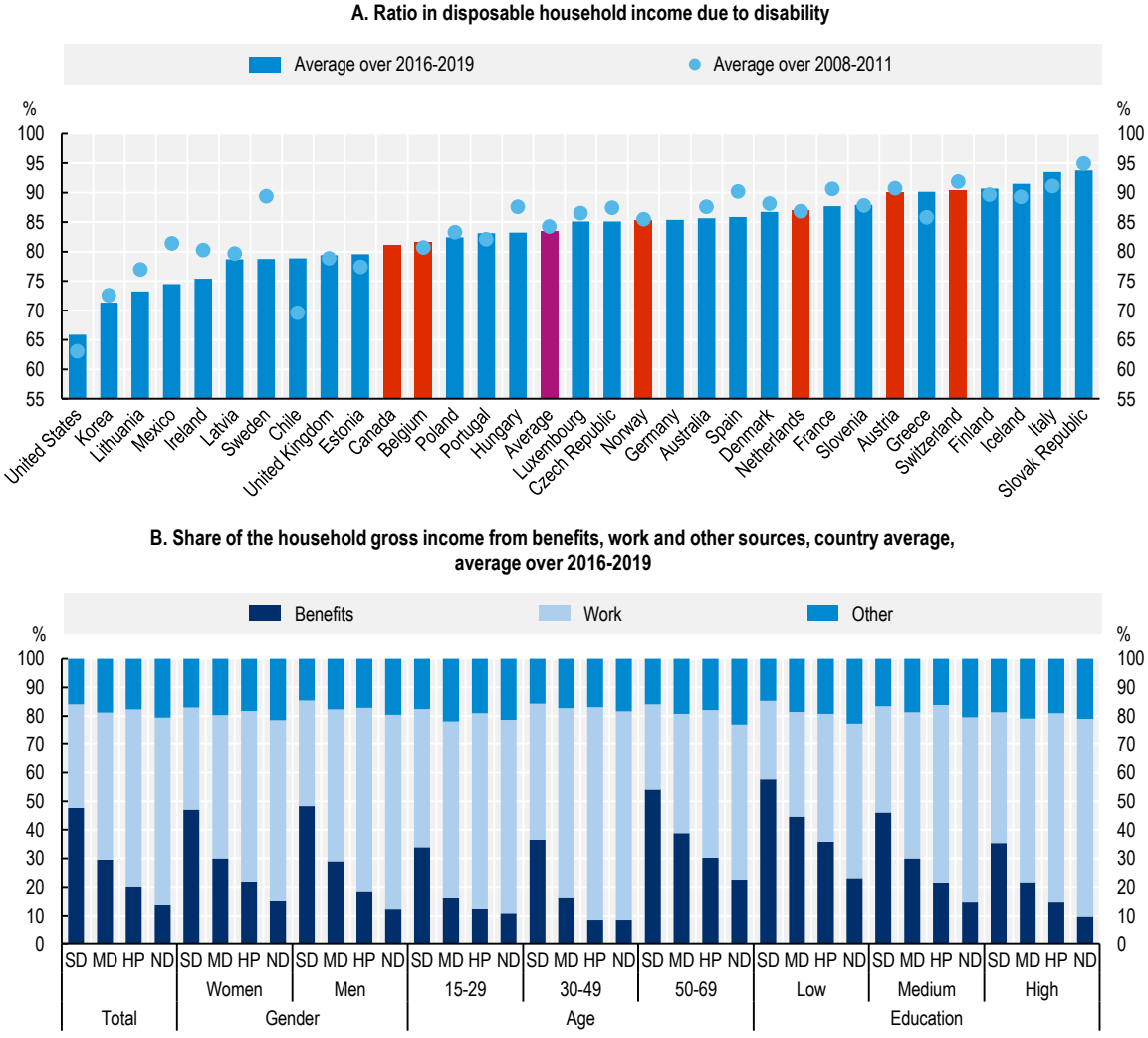
2.5.3. Disability poverty gaps are large in a majority of OECD countries

Putting all pieces of information together, disability remains a major poverty driver in most OECD countries. Despite comprehensive benefit systems and high coverage rates, poor employment inclusion implies that on average across a large set of OECD countries, one in four PWD live in a household with income lower than 60% of the median (Figure 2.16, Panel A). This share has increased slightly in the past decade. Differences across countries in the share living in income-poor households are large, ranging from 10-15% of PWD in Iceland, the Slovak Republic and Denmark, to 33-50% in Ireland, Korea and the United States.

Figure 2.16 (Panel B) compares disability poverty gaps across countries and over time. The poverty gap is just below 10 percentage points on average and has increased slightly in the past decade. This increase is the result of a deterioration in the relative income position of PWD in two-thirds of the countries. Some of the largest increases in the disability poverty gap over time took place in countries with large initial gaps already (Lithuania, Ireland), while other European countries (Czech Republic, Hungary, Sweden) have seen fast increases from a low level. The United States continues to be the country with the largest disability poverty gap (27%), followed by Korea (22%). Several European OECD countries have disability poverty gaps of less than 5% in 2016-19. Country-specific trends shown in Annex Figure 2.A.3 show that deteriorations in the disability poverty gap over time are in most cases the result of a worsening in poverty risks for PWD together with no change in the poverty risk of PWOD.

Figure 2.15. Income levels and income sources differ for people with and without disability

Ratio in disposable household income of PWD over PWOD, 2016-19 and 2008-11, and distribution of income sources by disability status, 2016-19



SD: People with severe disability, MD: People with moderate disability, HP: People with a long-standing health problem but without disability, ND: People with no health problems.

Note: Data cover persons aged 15-69. Panel A shows the average equivalised disposable household income ratio between households with and without people with disability. Household income was equivalised dividing by the square root of the size of the household. The purple bar represents the unweighted average of the countries shown for both time periods (excludes Canada and Germany). Panel B: Data are an unweighted average of 26 countries: Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland and the United Kingdom. For country definitions of people with disability, see Figure 2.1.

For the distribution of income sources by country, see Annex Figure 2.A.4.

Source: OECD calculations based on European Union Statistics on Income and Living Conditions (EU-SILC, 2008-19) for European countries. Data not available in 2019 (Belgium, Iceland, Ireland, Italy, United Kingdom) and 2018 (Estonia). The Household, Income and Labour Dynamics in Australia Survey (HILDA, 2008-17); the Canadian Income Survey (CIS, 2016-19) provided by Employment and Social Development Canada; Chile's: Encuesta de Caracterizacion Socioeconomica Nacional (CASEN, 2016-17); Mexico's Encuesta Nacional de Ingresos y Gastos de los Hogares (ENIGH, 2016); the Korean Labour & Income Panel Study (KLIPS, 2008-18) and the United States Current Population Survey (CPS, 2008-18).

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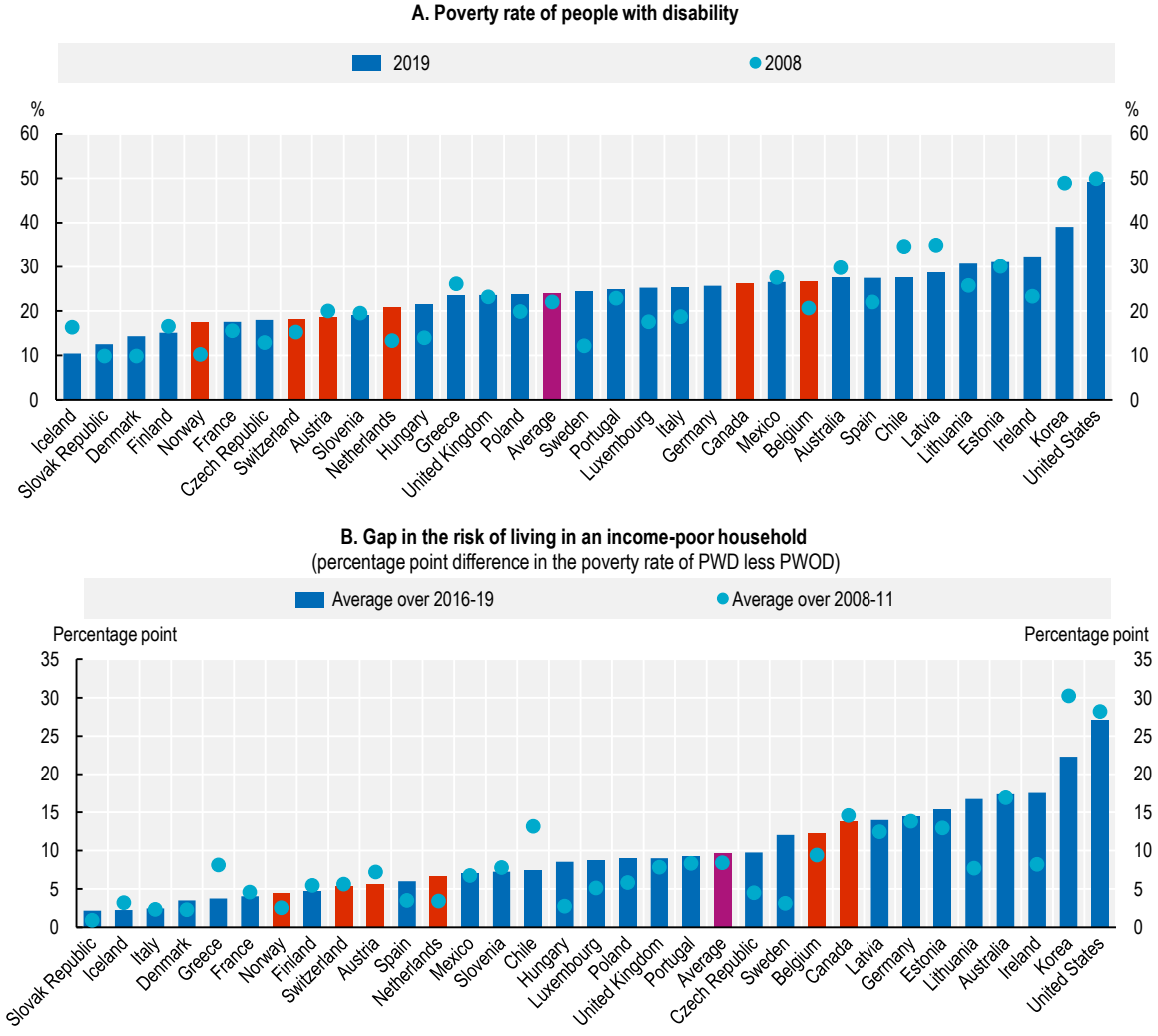
Figure 2.16. Despite high benefit coverage, poverty rates and gaps remain unacceptably high

Share of the population living in an income-poor household and gap in the low-income risk between people with and without disability, average over 2016-19 and 2008-11



PWD: People with disability, PWOD: People without disability.

Note: The data in Panel A show relative income poverty, i.e. the share of people living in a household with an income below 60% of the median income. Household income is equivalised for household composition by dividing by the square root of the size of the household. The data in Panel B show the percentage point difference between households with and without people with disability in the risk to live in a low-income household. The data for 2008-11 refers to: 2013-16 (Canada); 2012-15 (Germany) and 2010 (Mexico). Data for 2016-19 refers to 2016-17 (Australia); 2017-19 (Canada); 2017 (Chile); 2016-18 (Belgium, Iceland, Ireland, Italy, United Kingdom, United States); 2016-17, 2019 (Estonia); 2018-19 (Korea); 2016 (Mexico). The purple bars represent the unweighted average of the countries shown in each panel.

Source: OECD calculations based on the European Union Statistics on Income and Living Conditions (EU-SILC, 2008-19) for European countries. The Household, Income and Labour Dynamics in Australia Survey (HILDA, 2008-17); the Canadian Income Survey (CIS, 2013-19) provided by Employment and Social Development Canada; Chile's: Encuesta de Caracterizacion Socioeconomica Nacional (CASEN, 2016-17); Mexico's Encuesta Nacional de Ingresos y Gastos de los Hogares (ENIGH, 2016); the Korean Labour & Income Panel Study (KLIPS, 2008-18) and the United States Current Population Survey (CPS, 2008-18).

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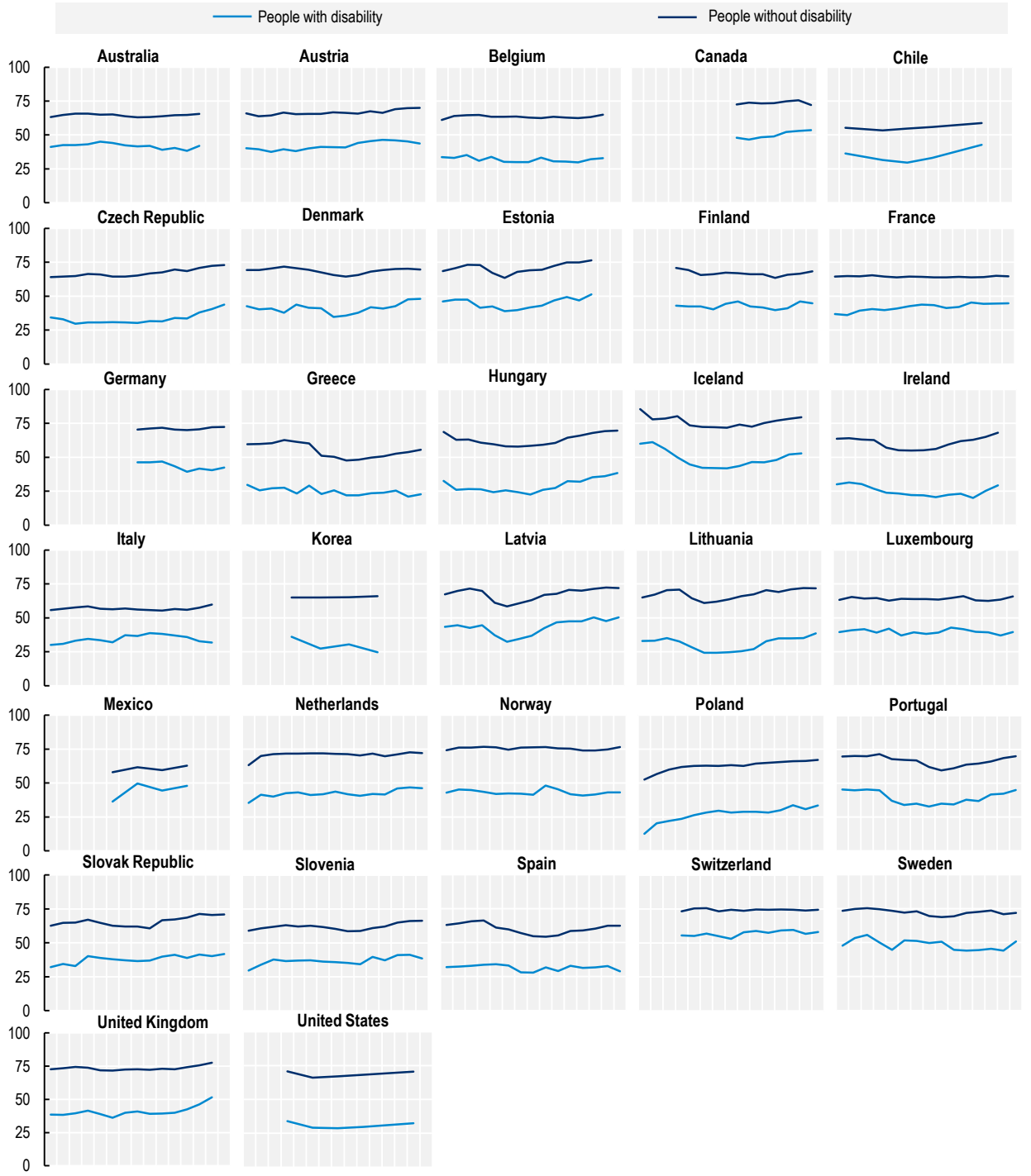
Annex 2.A. Additional figures

Annex Figure 2.A.1. Employment rate by country and disability status, 2005-19 (percentage)



Source: OECD calculations based on European Union Statistics on Income and Living Conditions (EU-SILC, 2005-19) for European countries. The Household, Income and Labour Dynamics in Australia Survey (HILDA, 2005-17), Canadian Income Survey (CIS, 2013-19) provided by Employment and Social Development Canada, Chile's Encuesta de Caracterizacion Socioeconomica Nacional (CASEN, 2006-17), Mexico's Encuesta Nacional de Ingresos y Gastos de los Hogares (ENIGH, 2010-16), the Korean Labour & Income Panel Study (KLIPS, 2008-18) and the American Community Survey (ACS, 2008-18).

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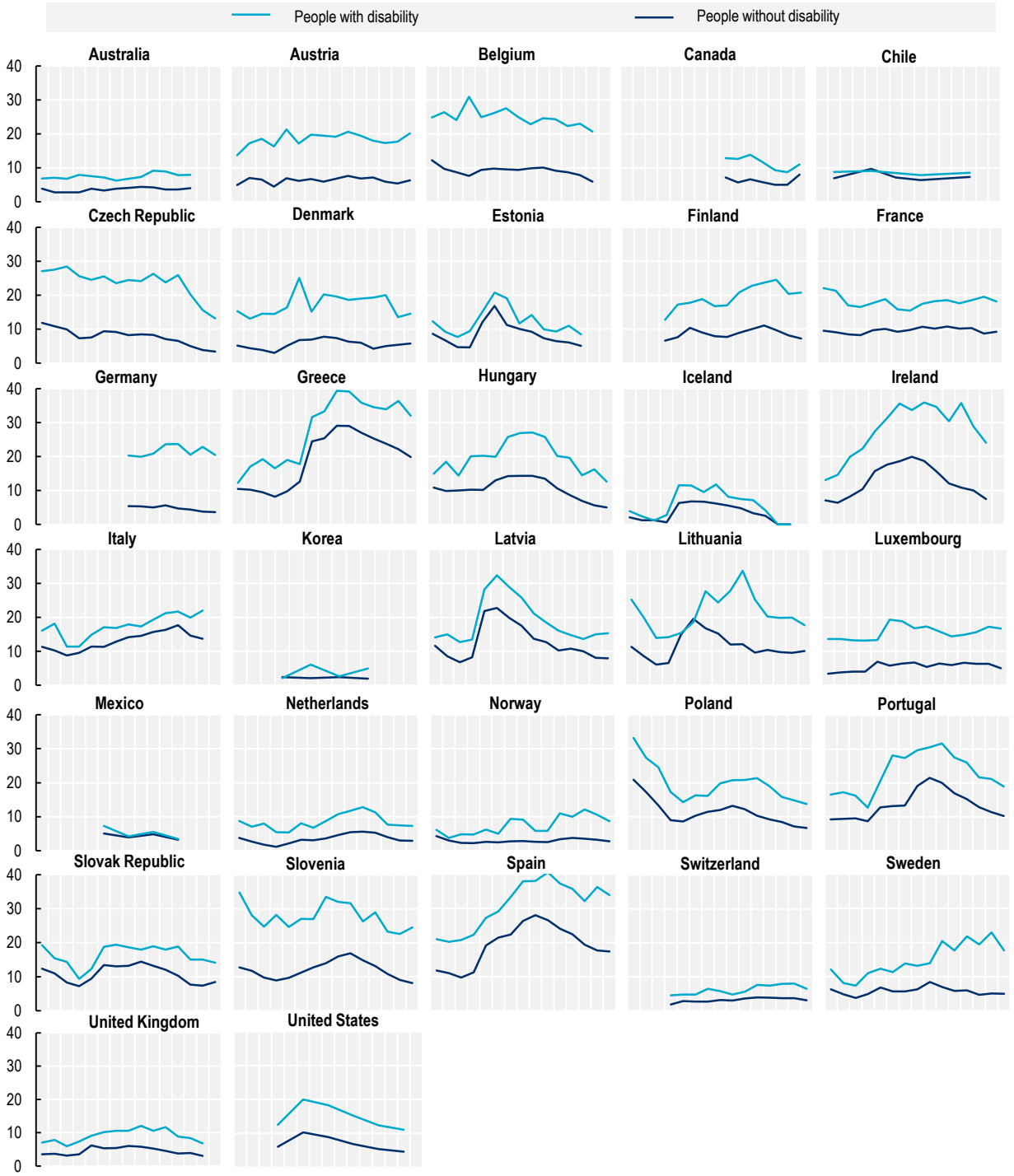
Annex Figure 2.A.2. Unemployment rate by country and disability status 2005-19 (percentage)



Source: OECD calculations based on European Union Statistics on Income and Living Conditions (EU-SILC, 2005-19) for European countries. The Household, Income and Labour Dynamics in Australia Survey (HILDA, 2005-17), the Canadian Income Survey (CIS, 2013-19) provided by Employment and Social Development Canada, Chile's Encuesta de Caracterizacion Socioeconomica Nacional (CASEN, 2006-17), Mexico's Encuesta Nacional de Ingresos y Gastos de los Hogares (ENIGH, 2010-16), the Korean Labour & Income Panel Study (KLIPS, 2008-18) and the American Community Survey (ACS, 2008-18).

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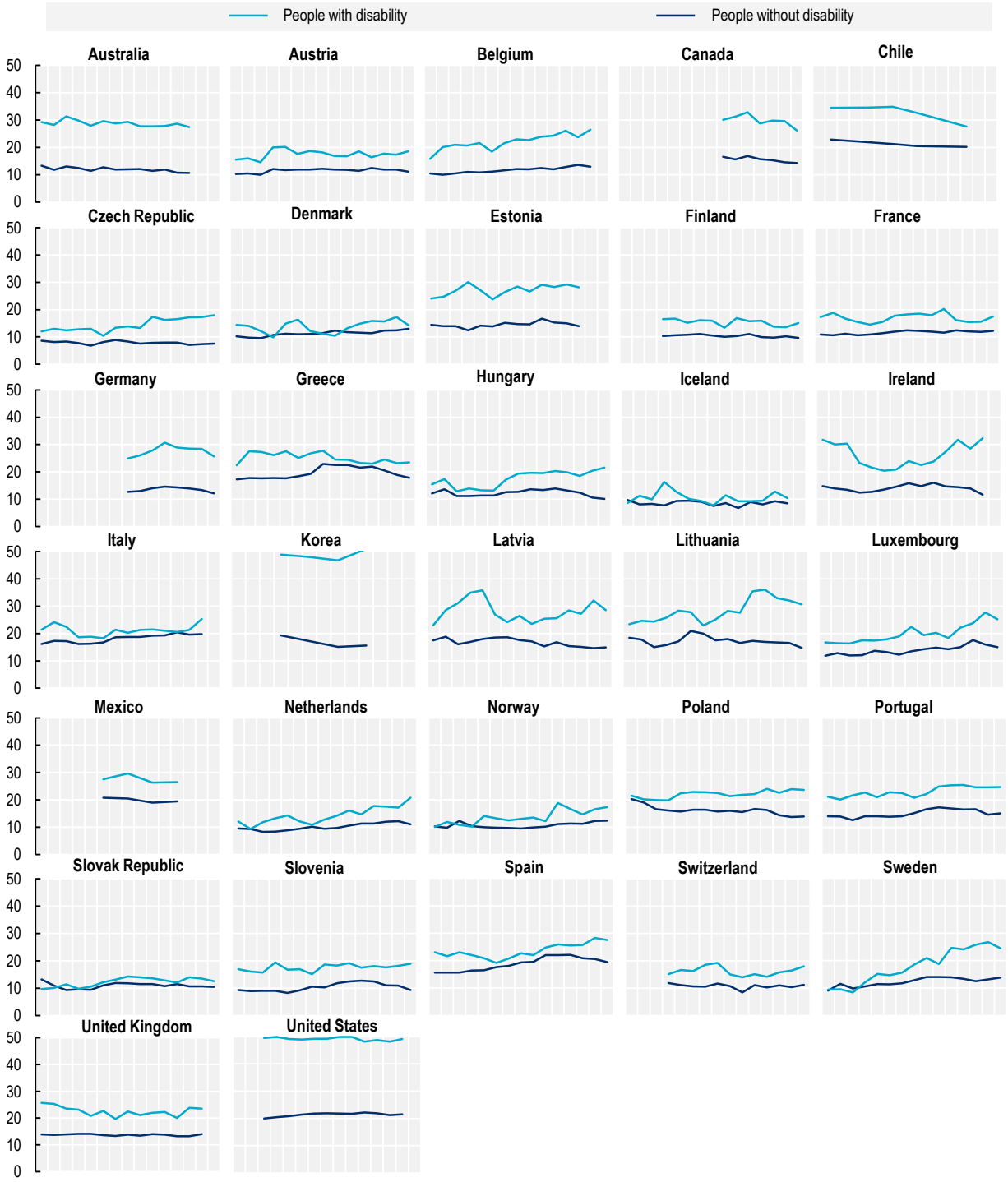
Annex Figure 2.A.3. Poverty rate by country and disability status, 2005-19 (percentage)



Note: Poverty line is 60% of the median equivalised household income. For Canada, based on after-tax economic family income below 60% of the median after-tax family income adjusted by family size.

Source: OECD calculations based on European Union Statistics on Income and Living Conditions (2005-19) for European countries. The Household, Income & Labour Dynamics in Australia Survey (2005-17), Canadian Income Survey (2013-19) provided by Employment and Social Development Canada, Chile's Encuesta de Caracterizacion Socioeconomica Nacional (2006-17), Mexico's Encuesta Nacional de Ingresos y Gastos de los Hogares (2010-16), the Korean Labour & Income Panel Study (2008-18) and the US Current Population Survey (2007-18).

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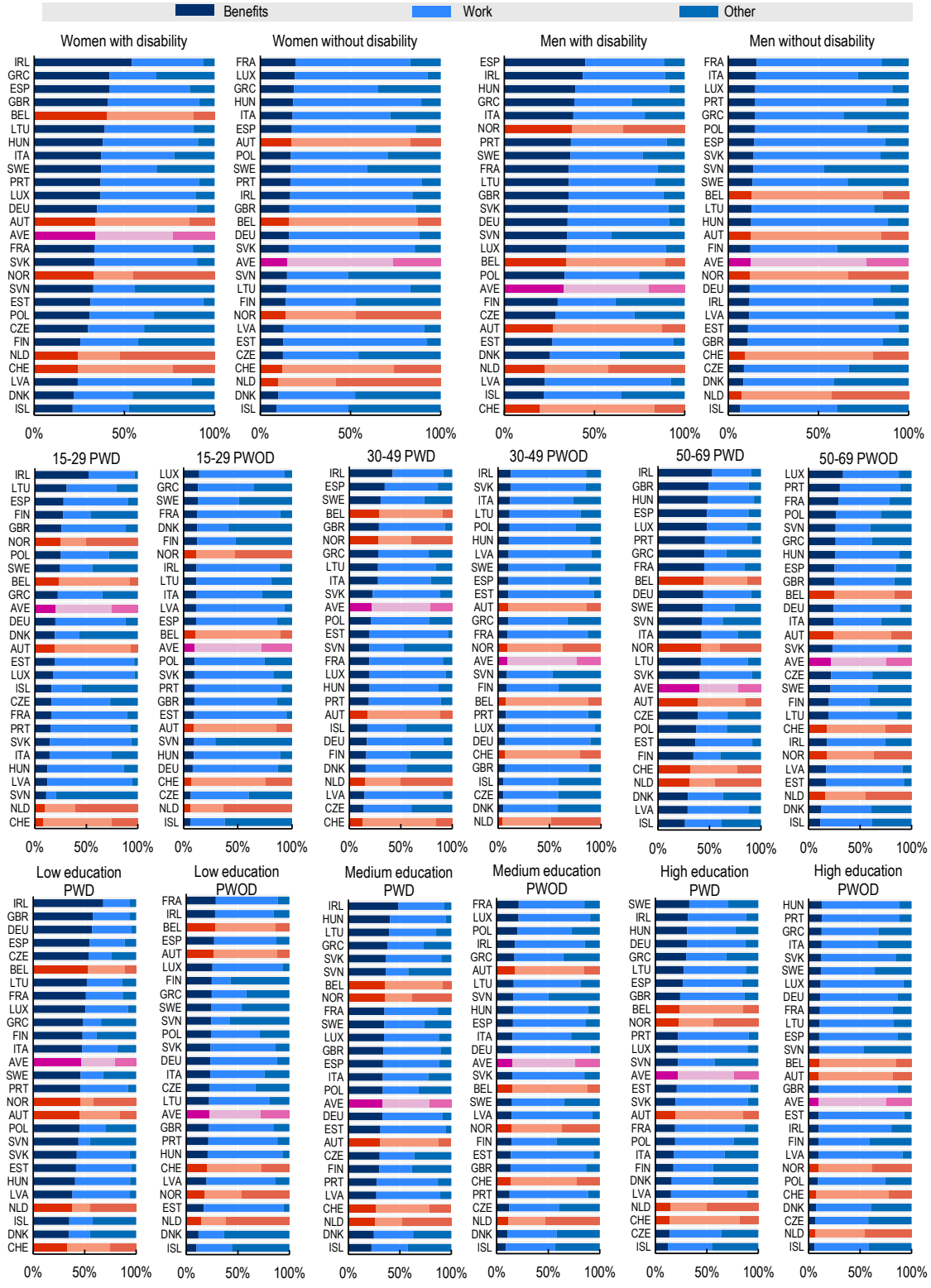
Annex Figure 2.A.4. Distribution of income sources across various characteristics, 2016-19



Note: "Other" refers mostly to capital and personal transfers. AVE (pink bars) are the unweighted averages of the countries shown. Data are the annual average over the period 2016-19.

Source: OECD calculations based on European Union Statistics on Income and Living Conditions (EU-SILC, 2016-19), data not available in 2019 for Belgium, Ireland, Iceland, Italy and the United Kingdom and in 2018 for Estonia.

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3 Supporting all young people in education and into employment

Young people with disability, many of them experiencing mental health conditions, represent an increasingly large and vulnerable share of all people with disability. They require adequate social protection to thrive, but at the same time are very exposed to the work disincentives coming with social benefits. This chapter provides policy recommendations to OECD governments to support all young people with disability during their young age and in their transition to the labour market, in a disability-inclusive way.

In Brief

Young people with disability struggle to complete education and to transition to higher education and eventually the labour market. OECD countries should support them through mainstreaming education, social protection for young people, and school-to-work supports.

- **The incidence of disability among young people has increased over the past decade, driven by a higher incidence of chronic mental health disorders.** The COVID-19 pandemic and its impact on young people's mental health may exacerbate this pre-existing trend. This is particularly worrying as young people with disability are often very vulnerable, frequently facing multiple disadvantages that limit their growth (Section 3.1).
- **Governments need to provide income security for young people with disability, a necessary condition for their growth and progression.** Countries use three approaches to achieving this aim, sometimes in combination: child allowances for young people with disability, disability benefit programmes, and social assistance programmes (Section 3.2).
- **Ensuring income security is important, but finding the right balance between providing protection and incentives to self-sufficiency is equally critical.** With the appropriate employment supports and incentives, income support programmes can be designed to limit the perverse effects of benefit receipt (Section 3.2).
- **A successful transition to the labour market starts with inclusive education**. Inclusive education has become the norm in many OECD countries for primary school age but for many young people with disability, the transition to mainstream secondary schooling, including apprenticeships and vocational schools, and correspondingly also mainstream tertiary education, is difficult. This is the next step to take for many countries (Section 3.3).
- **Countries support education completion and the transition to the labour market for young people with disability through mainstream programmes.** Yet, there is a need for mainstream programmes to have a stronger focus on the identification of barriers to schooling and employment caused by health and disability (Section 3.3).
- **Supporting young people with disability means providing adequate safety nets and supporting their transition from school to the labour market.** This chapter proposes a set of policy recommendations for governments to reform and rethink the way they support young people with disability, organised around four guiding principles: (i) Mainstreaming the social protection of young people with disability (ii) Completing the transition towards inclusive education systems; (iii) Supporting education completion and the transition to the labour market; and (iv) Linking school-to-work supports and social protection (Section 3.4).

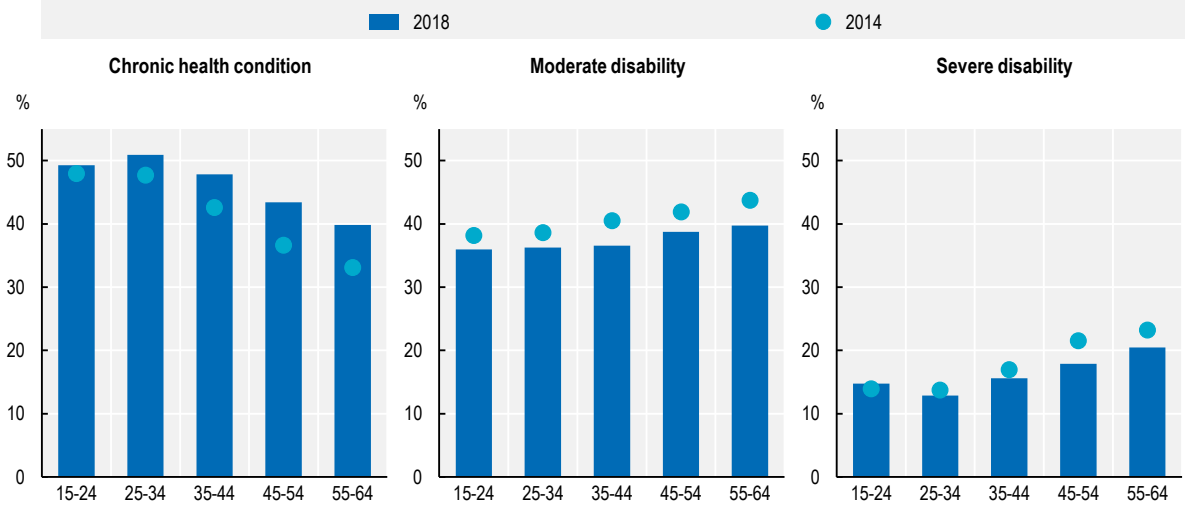
Children and young people with disability (YWD) are a particular risk group, with many of them facing multiple disadvantages. These disadvantages often translate into premature drop out of the education system and difficulties in the transition into the labour market. This chapter is looking in depth at those issues and associated policies in place to address them. The chapter starts by seeking to understand who the YWD are and predicts that, unless governments intervene comprehensively, YWD are likely to be more and more vulnerable. The chapter reviews and assesses the system of social protection for YWD in place in the six countries covered in this report and the impact of associated disincentives to work as well as programmes and policies available to support the transition from school to work and to help YWD thrive in society and the labour market. It concludes that these policies must go hand in hand.

3.1. Who are the young people with disability?

The prevalence of disability among young people has increased by almost 50% over the past decade. Chapter 2 showed that the prevalence of disability among the very young (aged 15-24) converged to that of older age groups (aged 25-34 and 35+). This substantial increase among younger age groups is in stark contrast with a stable incidence of disability among older people. Moreover, when disability occurs among young people, it increasingly appears to be in the form of a severe disability (Figure 3.1). This is striking, as other age groups experienced a decline in the share of severe disability in the last decade among those with a chronic health condition or disability. Understanding why the incidence of disability is increasing in particular for this group, in a context of improved health and access to medicine, is important for shaping adequate policy responses. Disability and health are still linked to lower employment, higher benefit dependency, higher poverty and lower well-being. Young people with disability have a double disadvantage coming from their young age, with a risk of being excluded from the labour market from the very beginning of their working life. This first section looks in depth at the characteristics of this group.

Figure 3.1. Among young people with health issues, severe disabilities seem to be on the rise

Severity of ill health by age: share with non-disabling, moderate and severe condition, 2014 and 2018



Note: Severity of ill health among those reporting a chronic health condition or disability. Sum of the three panels adds to 100% in each age group. People with severe (moderate) disability are identified as those who declared (1) to suffer from any chronic illness or condition and (2) with severe (moderate) activity limitation due to health problems. People with chronic health conditions are those who declared (1) to suffer from any chronic illness or condition (2) without activity limitation due to health problems. The latter group is not considered as people with a disability. Data represent the weighted average of 20 OECD countries: Austria, Belgium, the Czech Republic, Denmark, France, Greece, Hungary, Iceland, Ireland, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain and Sweden.
Source: OECD calculations based on the European Union Statistics on Income and Living Conditions (EU-SILC).

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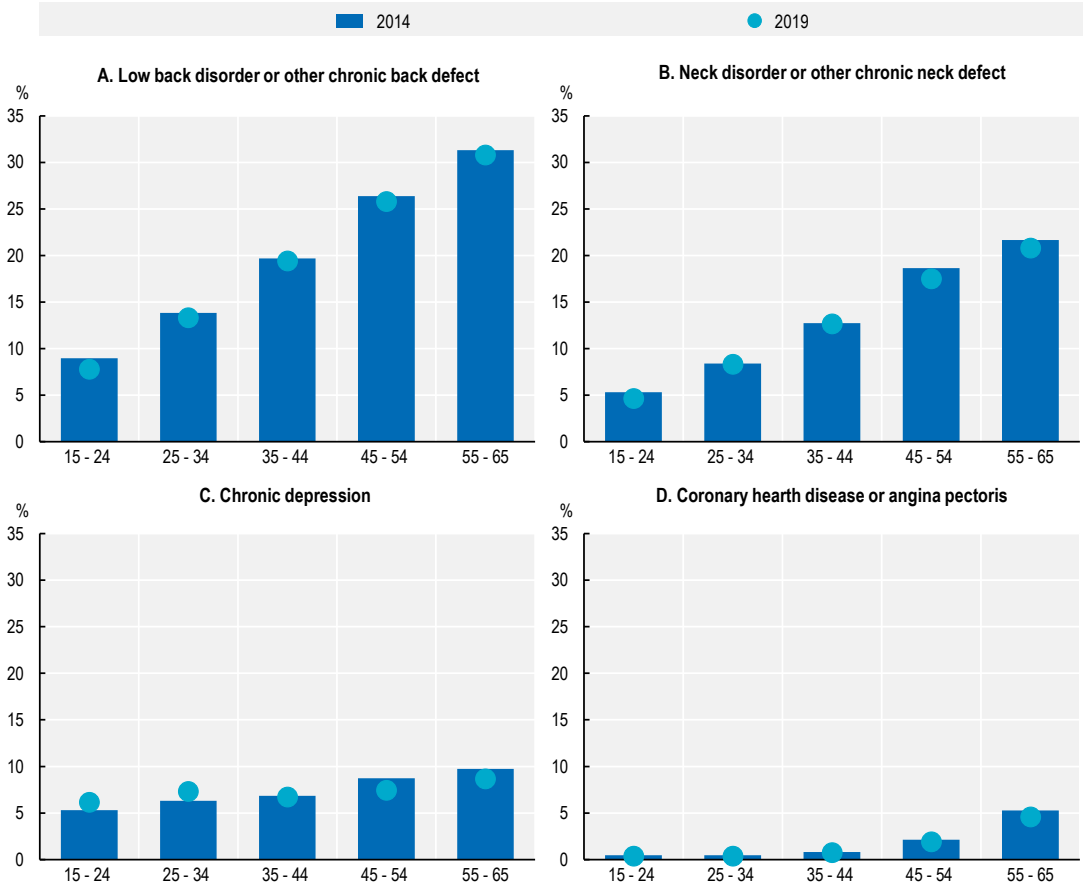
3.1.1. Young people with disability often suffer from mental health disorders

A higher incidence of mental health conditions is behind the increasing incidence of disability among young people. While most chronic diseases have remained constant or even decreased over the past years for all age groups, chronic depression has increased for young people. Figure 3.2 shows contrasting trends across age groups for a selection of chronic health diseases. Musculoskeletal chronic issues, such as back and neck pain, have remained constant over the past five years for all age groups. Coronary chronic health issues, like most other physical health issues, have decreased for those over 55, as a result of improved health treatments and medical innovations while remaining low and stable at young age. Instead, chronic depression has substantially increased among younger people, particularly those under age 25, which have seen the incidence of chronic depression increase by one-fifth. This trend has been accelerated by the COVID-19 pandemic, as mental health has worsened significantly in 2020-21 (OECD, 2021[1]). Chronic depression, in particular in its more severe forms, is a serious and often highly invalidating health condition. Indeed, depressive disorders are the fastest increasing qualifying disability among all mental health disorders, as evidenced for the UK disability pension (Viola and Moncrieff, 2016[2]), the Norwegian disability benefit (Knudsen et al., 2012[3]), and in a multi-country meta-analysis (Ervasti et al., 2017[4]).

Figure 3.2. Mental health conditions drive the increasing disability incidence in young people

Incidence of selected chronic health issues in European countries by age, around 2014 and 2019



Note: Data represent the unweighted average of 25 European countries: Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Portugal, Slovenia, the Slovak Republic Spain, Sweden and Türkiye.

Source: OECD calculations based on Waves 2 and 3 of the European Health Interview Survey (EHIS), https://ec.europa.eu/eurostat/databrowser/view/HLTH_EHIS_CD1E__custom_1683907/default/table?lang=en.

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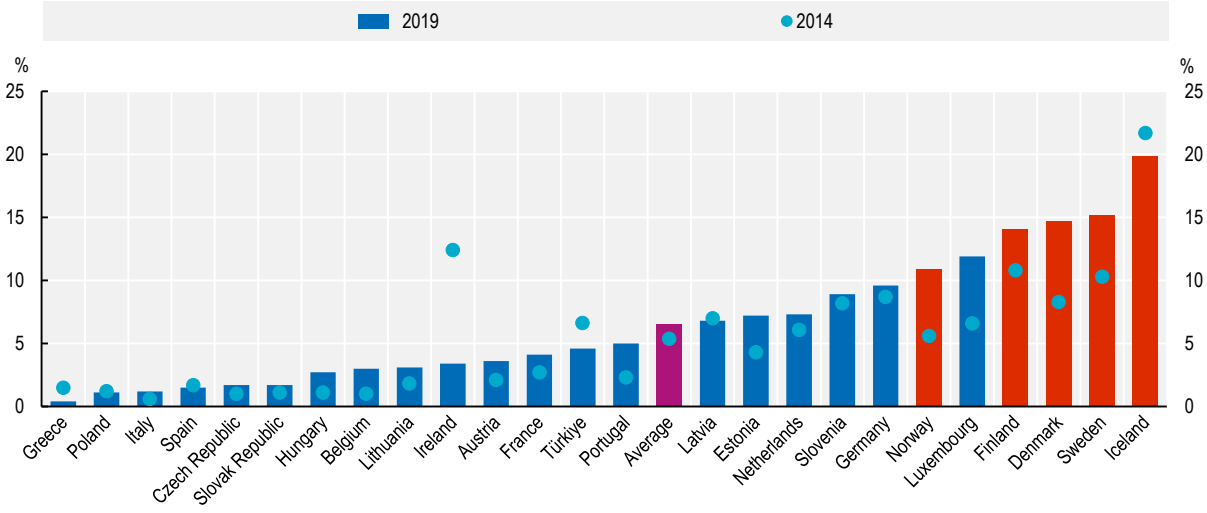
While most countries have experienced increasing trends in the incidence of chronic depression among young people, aged 15-19, Nordic countries have outpaced other countries. Denmark, Norway and Sweden have seen increases in the incidence of depression in young people of over five percentage points between 2014 and 2019 (Figure 3.3). Most other countries observed more marginal increases, while a few countries have experienced decreases. Several factors could be influencing these country differences:

- Differences in the perception of interview questions, mental health awareness and the willingness to report depressive symptoms make comparisons between countries difficult, even if the same measurement instrument is used. Recent research shows that accounting for these factors may eliminate much of the cross-country differences (Scorza et al., 2018[5]).
- Accessibility and quality of mental health services make a difference. Cross-country differences after accounting for measurement differences could be due to the effectiveness of policies in preventing and supporting mental health, in particular depression. A recent OECD publication evaluating Mental Health Systems finds substantial cross-country variation in accessibility and quality of mental health services and policies, in unmet mental health needs, and policies to prevent mental health and support mental well-being (OECD, 2021[6]).
- Exposure to certain environmental factors matters, such as stressors or traumatic events, political repression, rapid cultural shifts, or socio-economic deprivation (Weissman et al., 1996[7]).

Figure 3.3. The incidence of depression among young people is on the rise in most countries

Incidence of chronic depression by country for young people (aged 15-24), around 2014 and 2019



Note: The purple bar represents the unweighted average of the 24 countries shown.
Source: OECD calculations based on European Health Interview Survey (EHIS), https://ec.europa.eu/eurostat/databrowser/view/HLTH_EHIS_CD1E__custom_1683907/default/table?lang=en.

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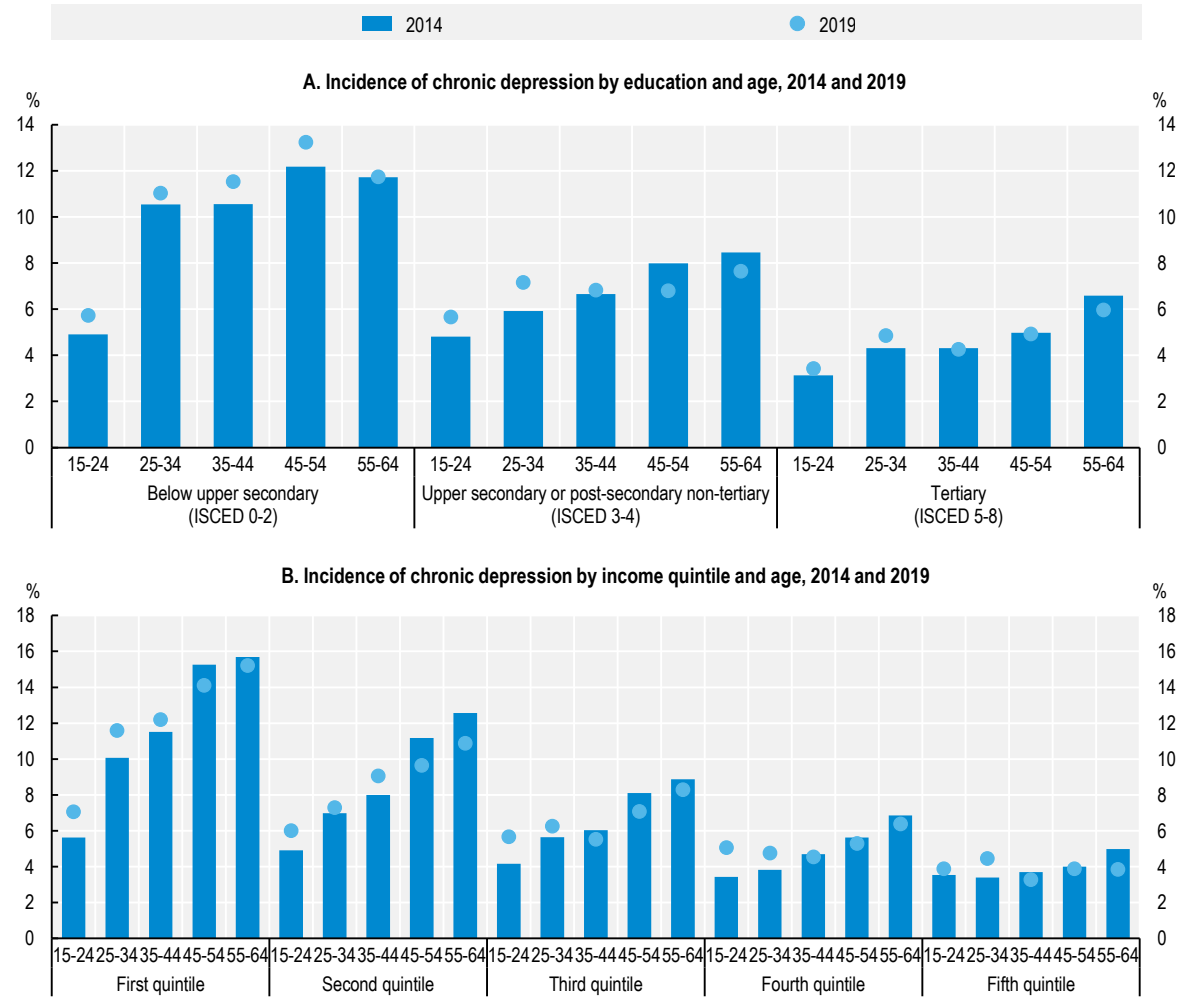
Worsening mental health among young people persists across all education and income groups. Figure 3.4 shows that the increase in incidence of chronic depression is linked to educational attainment (Panel A), but also has an age component. Among young people, the past years have seen an increase in the incidence of chronic depression regardless of educational attainment, although more for lower educational achievement levels. Among other groups, chronic depression shares have increased for those with lower education, but remained stable and even decreased for those with secondary and tertiary education. Similar patterns appear when observing the incidence of chronic depression by age and income quintile (Panel B): income impacts mental health incidence, but the age component appears stronger.

Figure 3.4. Mental health in young people has worsened across all education and income groups



Note: Data represent the unweighted average of 25 European countries: Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Portugal, Slovenia, the Slovak Republic Spain, Sweden and Türkiye.
Source: OECD calculations based on Waves 2 and 3 of the European Health Interview Survey (EHIS), https://ec.europa.eu/eurostat/databrowser/view/hlth_ehis_cd1i/default/table?lang=en.

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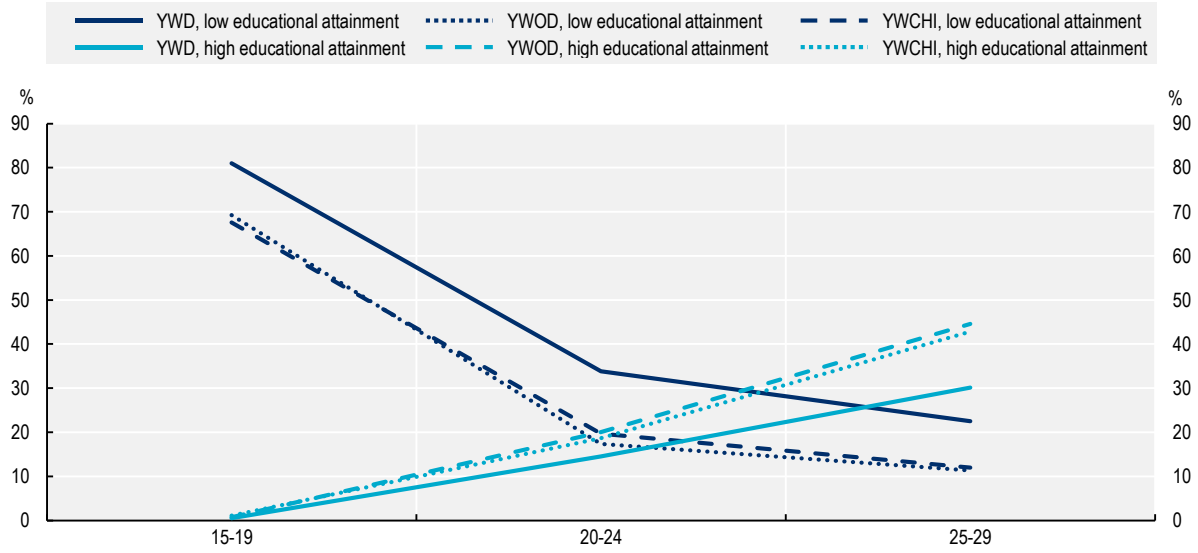
3.1.2. The educational gap starts early for young people with disability

Chapter 2 showed that one in five YWD between ages 15-29 is an early school leaver and one in three does not study or work (NEET). The large share of NEET among YWD, and their high early school-leaving rate result in a substantial educational gap between YWD and YWOD. Figure 3.5 shows that this gap starts early and does not fade over time. At ages 15-19, there is already a substantial education gap between YWD and YWOD: 80% of YWD have low educational attainment, compared with 70% of their peers without disability or with chronic health issues. From this young age on, trends in educational attainment remain parallel, reaching the age of 25-29 with the same educational gap as ten years earlier, at age 15-19. This is a key message for policy makers that efforts to close the educational gap must be made early on, during primary and secondary schooling. The last section of this chapter describes some of the policy approaches to ensure inclusive education for YWD, a key to closing the educational gap.

Figure 3.5. The educational gap starts early in life making a case for early intervention

Share of young people by disability / health status and educational attainment, 2019



YWD: Young people with disability, YWOD: Young people without disability, YWCHI: Young people with chronic health issues.
Note: Educational attainment is classified according to ISCED 2011: low educational attainment is defined as those with less than primary, primary and lower secondary education, while high educational attainment is defined as those with tertiary education. Data represent the unweighted average of 25 European countries: Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Portugal, Slovenia, the Slovak Republic, Spain, Sweden and Türkiye.
Source: OECD calculations based on Waves 2 and 3 of the European Health Interview Survey (EHIS), https://ec.europa.eu/eurostat/databrowser/view/hlth_ehis_cd1i/default/table?lang=en.

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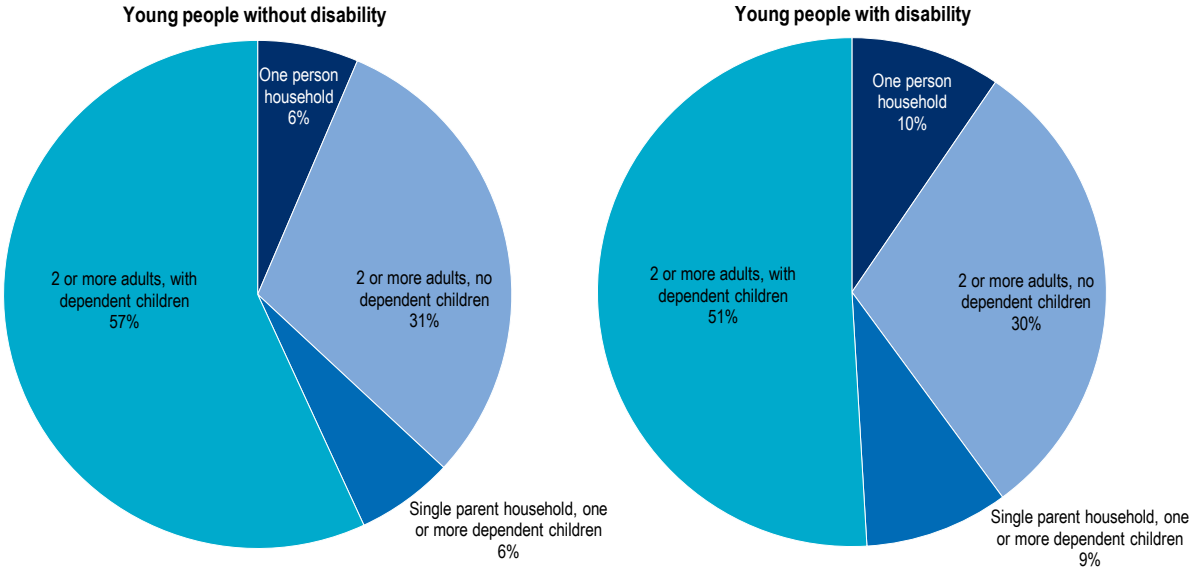
Young people with disability live more often in single-parent and poorer households

YWD live more often in single person or single-parent households. The composition of households in which YWD live is relevant for several reasons. First, families are often the first line of support for YWD, offering financial support and care. YWD living in multi-person households, with several adults, may be more likely to have stronger family support. Second, the household composition may determine the eligibility of YWD to certain benefits. Means-tested benefits are granted accounting for the income of the household, implying that YWD living with their parents or other adults may be less likely to be eligible for minimum income benefits. This is relevant, as discussed in the following section, as minimum income programmes are a key source of financial support for YWD. Figure 3.6 shows that YWD live more frequently in single households (10%, compared to 6% for YWOD), and in single-parent households (9% compared to 6%).

Figure 3.6. Young people with disability more often live in single or single-parent households

Household composition of young people with and without disability, average over 2016-19



Note: All persons aged less than 18 are considered as dependent children, plus those economically inactive aged 18-24 living with at least one of their parents. Data covers 25 European countries: Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.
Source: OECD calculations based on the European Union Statistics on Income and Living Conditions (EU-SILC).

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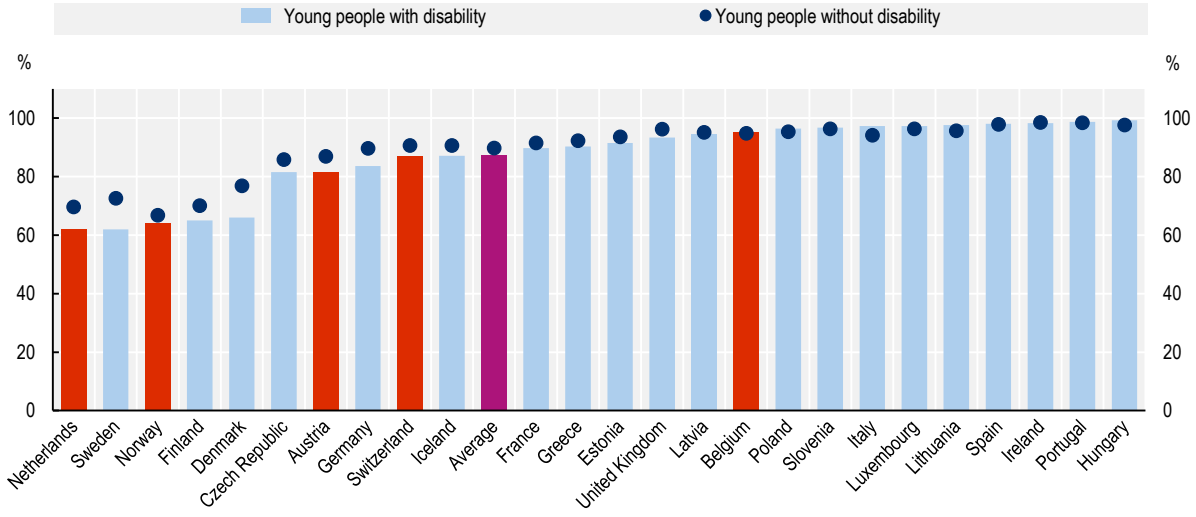
In countries where it is common to leave the family home young, YWD live less often with their parents. Across countries, Figure 3.7 shows that YWD tend to live less often with their parents than YWOD, which confirms the aggregated view presented in Figure 3.6. The difference between YWD and YWOD is largest in countries where young people more generally tend to leave the family nucleus early, like the Netherlands and the Nordic countries. It is possible that the timing of leaving the parental home reflects the fact that YWD can achieve a higher degree of financial independence in these countries, or have more facilities to find appropriate housing. These aspects are explored in the next section of this chapter.

Figure 3.7. In countries where it is common to leave the family home young, young people with disability live less often with their parents

Share of young people with and without disability living with their parents, average over 2016-19



Note: The purple bar represents the unweighted average of the 25 European countries shown.
Source: OECD calculations based on the European Union Statistics on Income and Living Conditions (EU-SILC).

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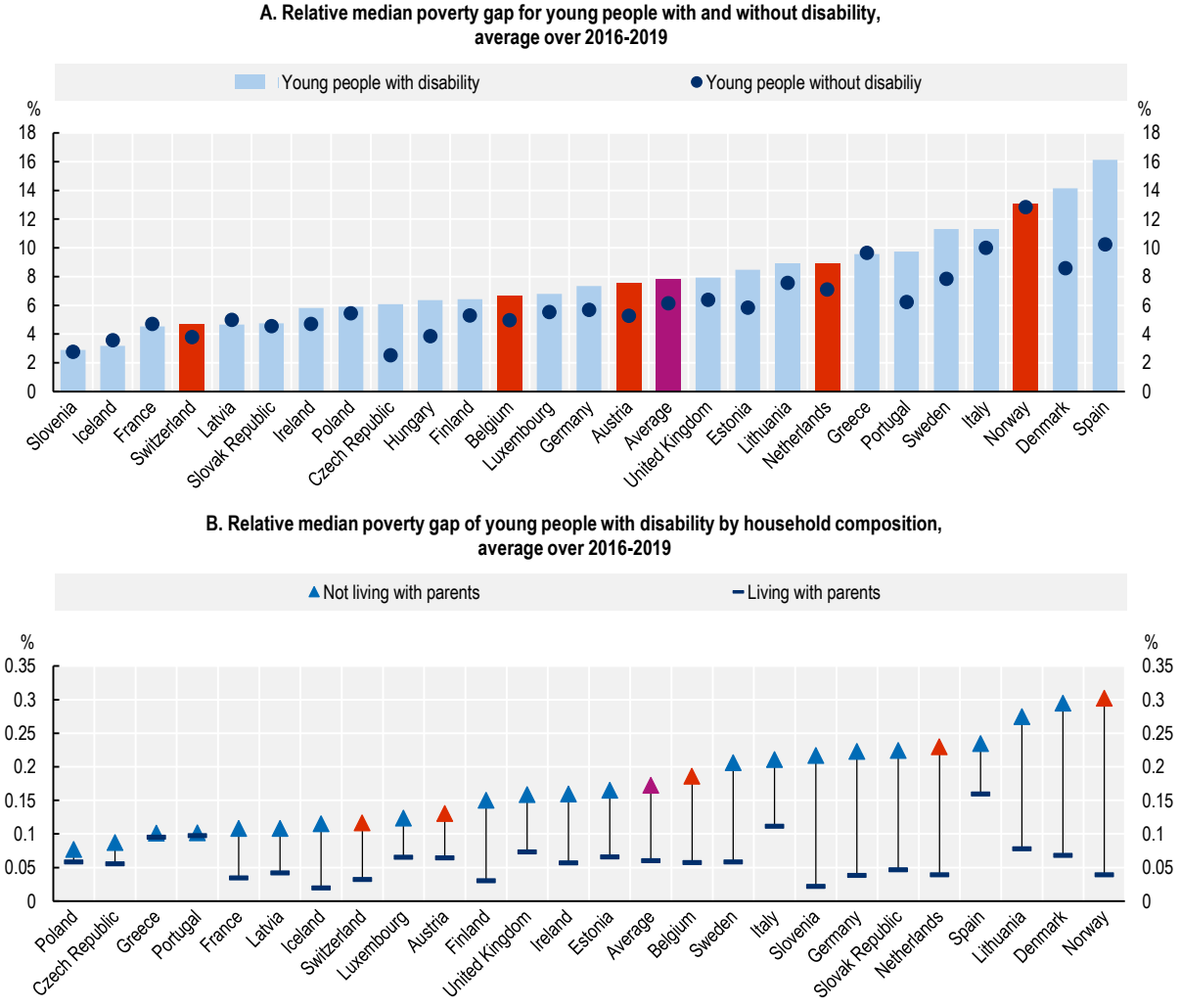
YWD tend to live in poorer households than YWOD. The first panel of Figure 3.8 shows the median poverty gap of households with and without YWD. In most countries, YWD live in poorer households than YWOD. Differences in poverty gaps are particularly large in countries like the Czech Republic and Hungary, but also in Denmark, where the poverty gap is 64% higher in households with YWD. This may seem surprising but is connected to the household composition of YWD. In countries like Denmark, where YWD tend to leave the family early, there are large differences in poverty levels depending on whether YWD live with their parents (Figure 3.8, Panel B). Paired with the fact that a larger share of YWD leave their families, this explains the large differences in the disability poverty gap in countries like Denmark.

Figure 3.8 (Panel B) also shows that for YWD poverty is concentrated among those no longer living with their parents. If one were to reproduce this figure for YWOD, however, a similar story would appear, albeit at a lower poverty level. These high poverty rates of young people may probably not be taken at face value for all countries, making cross-country comparisons difficult. In some countries, like in the Netherlands and Norway, young people moving out of their homes often finance their living through student loans, which are not accounted for in these poverty measures. Young people living on student loans are often classified as poor even though they are not cash-poor (OECD, 2018[8]). In some other countries, youth poverty is probably more closely linked to being poor in cash, with corresponding consequences on consumption choices and productive investments, including human capital investments.

Figure 3.8. Young people with disability live in poorer households in most countries



Note: The median poverty gap is calculated as the difference between the median equivalised disposable income of people below the poverty line (50% of national median equivalised disposable income) and the poverty line, expressed as a percentage of the poverty line. The purple bar and markers represent the unweighted averages of the European countries shown in each panel.
Source: OECD calculations based on the European Union Statistics on Income and Living Conditions (EU-SILC).

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Intergenerational transmission of disadvantages are large for young people with disability

YWD tend to be exposed to disability-related disadvantages. For instance, YWD live more often with adults with disability (24% of the time) than YWOD (19% of the time) (Table 3.1). Unsurprisingly, these differences are reflected in the rate of benefit receipt among the adults in the household: they more frequently live with adults who receive disability benefits, or social support more generally. These differences do not translate into different employment rates of the adults living with YWD but a marginally higher level of inactivity.

Table 3.1. Young people with disability tend to be exposed to disability-related disadvantages

Adults in the household of young persons (ages 15-29) with and without disability, average over 2016-19

	Young people without disability (YWOD) (%)	Young people with disability (YWD) (%)	Difference (YWOD-YWD)
Adult with disability	19.41	26.71	-7.30***
Adult receiving disability benefits	5.86	7.75	-1.89***
Adult receiving any social support	24.44	29.18	-4.73***
Employment rate of adults	65.77	65.73	0.04
Inactivity rate of adults	12.13	12.99	-0.85***

Note: Significance stars correspond to significance of a t-test of equal means between YWoD and YWD. *** p-value < 0.01. Observations are 475 641 for YWOD, and 60 971 for YWD. Data represent 25 European countries: Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.
Source: OECD calculations based on the European Union Statistics on Income and Living Conditions (EU-SILC).

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Intergenerational transmission of disadvantage is very important for YWD. Adults with disability are more likely than other adults to have been exposed to disadvantages during their youth. For instance, Table 3.2 shows that PWD have a substantially higher probability than PWOD to have had a parent with a disability in their teens, just as with current YWD. Several reasons could explain this, including the fact that some disabilities may be genetically transmissible. Other explanations include that having a parent with a disability captures the intergenerational transmission of disadvantages, which are highly correlated with having a disability, such as poverty and low socio-economic status. PWD also have a higher probability of having lived in households in bad or very bad financial situation during their youth (Table 3.2). Another potential explanation is the intergenerational persistence of labour market outcomes (Black et al., 2010[9]) and family welfare cultures (Dahl, Kostøl and Mogstad, 2014[10]).

Understanding the transmission channels of disadvantages is key to designing policies that support YWD and breaking this cycle of transmission. The first policy sphere is that of social protection which is key to supporting YWD, who tend to be from poorer economic backgrounds. At the same time, social protection receipt at a young age, or living in a household that relies on social protection as the main source of income, could create an over-reliance on social support during adulthood. Therefore, striking the right balance between social protection coverage and incentives is of outmost importance. The second policy sphere is that of education and supporting the transition of YWD to the labour market. The educational gap starts early for YWD, so a focus on inclusive education from a young age is paramount. Mainstreaming the access to ALMPs and youth guarantee policies for YWD, to be active in these very crucial years of transition, is key to preventing the potential welfare traps from benefit receipt at that age. The remainder of the chapter focuses on these two policy spheres, social protection and education and transition to the labour market, and closes with a set of policy recommendations to support YWD.

Table 3.2. Intergenerational transmission of disadvantages hits people with disability harder

Parental and financial situation of respondents when aged 14, 2019

	People without disability (PWOD) (%)	People with disability (PWD) (%)	Difference (PWOD-PWD)
Parent permanently disabled and/or unfit to work	1.41	2.27	-0.86***
Father permanently disabled and/or unfit to work	0.87	1.44	-0.57***
Mother permanently disabled and/or unfit to work	0.67	1.02	-0.35***
Living in a household with bad or very bad financial situation	8.98	16.61	-7.63***
Living in a household with moderate financial situation	54.31	55.02	-0.71**
Living in a household with good or very good financial situation	36.70	28.36	8.34***

Note: Parental and financial situation of the respondent when aged 14. Respondents are aged 15 to 59 in 2019. Significance stars correspond to significance of a t-test of equal means between PWoD and PWD. *** p-value < 0.01, ** p-value < 0.05. Observations are 130 706 for PWoD, and 24 943 for PWD. Data represent 25 European countries: Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.
Source: OECD calculations based on the European Union Statistics on Income and Living Conditions (EU-SILC), 019 Ad-Hoc module: "Intergenerational transmission of disadvantages, household composition and evolution of income".

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3.2. Social protection of children and young people with disability

This section evaluates the social protection policies for YWD, focusing on the long-term consequences of benefit receipt during youth. The effects of receiving benefits while young on adult outcomes such as educational attainment, employment, or income are not entirely clear:

- On the one hand, social protection is a necessary condition for YWD to thrive. As discussed in Chapter 1, social protection prevents 54% of households with a member with disability from falling into poverty. This is particularly important for YWD: poverty may prevent productive investments that support YWD, for instance improving their education outcomes (Hoynes, Schanzenbach and Almond, 2016[11]) and easing the transition to the labour market. If benefits are well designed, they can also help provide the right assistance to ensure a smooth transition from education to employment, by tying benefit receipt to participation in education or career-development programmes, counselling, and service delivery.
- On the other hand, benefit receipt from a young age entails stigma and risks perpetuating perverse incentives, which can be detrimental to the transition to employment and adulthood. Benefit receipt can promote a welfare culture, by inhibiting self-sufficiency (Deshpande, 2016[12]) and improving the understanding of welfare programmes (Dahl, Kostøl and Mogstad, 2014[10]). Lastly, eligibility conditions to disability benefits can sometimes create direct disincentives to work and study.

3.2.1. Income support system

YWD are a challenging group to cover through social protection, and countries tend to cover them either as dependent children or as adults. Many YWD have congenital disabilities, often severe and fully invalidating. Others have less severe congenital disabilities, or disabilities acquired later in life, that allow pursuing education (with or without adaptations) and a transition to the labour market. This difficulty also occurs when designing disability benefit programmes more generally, only that protecting all YWD is particularly important to prevent their social exclusion from a very young age. Most governments cover YWD through one or more of three main programmes: child allowances, disability benefit programmes,

and minimum income programmes. Child allowances are targeted to families of YWD and sometimes offer financial support beyond childhood and youth. Disability benefit programmes usually cover YWD from their legal age onwards, treating them like adults. In countries where disability benefit programmes have strict contributory requirements, YWD may be often left to rely on last-resort income support, just like adults with disability. While sensible, this distinction between child and adult needs may fail to meet the needs of YWD, which are particular: the need for financial support during the transition from school to the labour market. This section is organised around these three approaches for YWD, assessing their potential limitations to supporting the transition to the labour market, and their good practices.

Child allowance benefits for young people with disability

Many countries offer to cover additional costs of disability at a young age through child allowance benefits. Families of YWD are supported through child allowance benefits specifically targeted to YWD. These are some of the recurring features of allowances for YWD:

- Means-testing. Similarly to general child allowances, allowances targeting YWD are, in most cases, means-tested. They often have laxer means-testing, which indirectly allows accounting for the higher costs of caring for a child with disability, or forego means-testing altogether. For example, in Canada, the Child Disability Benefit has a laxer means-testing than the Canada Child Benefit and can supplement the latter in cases of disability. Means-testing allowances for YWD, as for any other benefit, introduces an implicit tax rate on working for parents. This is why some countries, like Spain or Sweden, have delinked these allowances from the income of the family, to cover the additional costs of caring for a YWD without work disincentives. When these benefits are not means-tested, the remuneration is often lower to ensure the sustainability of the programme.
- Capping benefits with the age of the child. Most general child allowance programmes support families for as long as children have not reached the legal age (or finished mandatory schooling). In most countries, this is the case for special child-with-disability allowances too. In Austria, Italy and Spain, however, these benefits are granted regardless of the age of the child, as long as the onset of disability was during young age. Removing the maximum age eligibility condition may be justified as families may have to care for YWD beyond their legal age. Yet, these programmes may be inhibiting self-sufficiency, particularly if benefits represent a large share of household income.
- Complementary benefits and services. Allowances for YWD are often tied to complementary benefits, such as education allowances (Estonia, Italy and Portugal), transportation (Denmark and Latvia), or medical coverage (United States). In some countries, like in the United States with health insurance coverage, complementary benefits to child disability allowances make the programmes more valuable than their cash value (Deshpande, Gross and Su, 2021[13]).

Disability benefit programmes

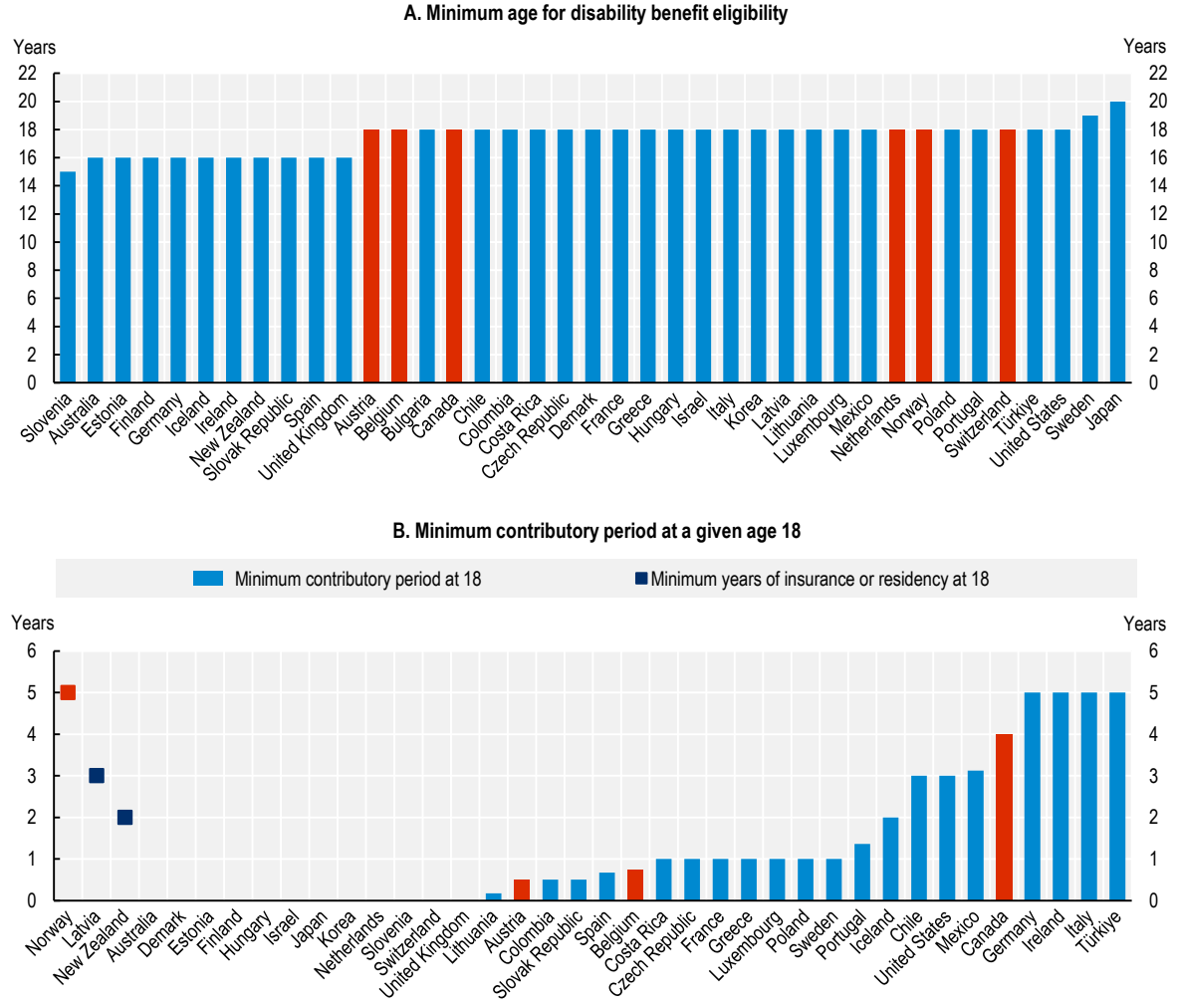
Most countries cover YWD from the legal age in disability benefit programmes, although there is some variation across countries. Figure 3.9 (Panel A) summarises the minimum age for disability benefit eligibility in OECD countries. The vast majority of countries do not cover YWD under age 18, while a few cover them from age 16 years. Japan has a minimum eligibility age of 20 years. There are a few countries that have special programmes to cover YWD. In Australia, YWD are entitled to the Youth Disability Supplement, a top-up payment to their disability pension, or their youth allowance. This payment aims to bridge the gap in disability payments between young claimants (under 21) and claimants above 21, arising from limited earnings histories. In the Czech Republic, those under age 18 with severe disability (70% or more degree of disability) can receive the “Persons Disabled from Youth” benefit, which offers a flat rate payment and has no eligibility requirements. In the Netherlands, those who are born with a disability or develop disabilities during childhood or youth are covered by the *Wajong*, a wholly separated disability

benefit programme, which guarantees a minimum amount of benefits, and has its own financial incentives to promote work. The programme is described in detail in Box 3.1.

Contribution requirements are often laxer for younger claimants, but effectively exclude a substantial share from disability benefit programmes (Figure 3.9, Panel B). Countries can be divided in four categories depending on how disability benefit programmes facilitate the coverage of YWD: (1) No contributory period requirements; (2) Lax contributory requirements; (3) Strict contributory requirements, with exceptions for young people; and (4) Strict contributory requirements, no exceptions. Countries like Australia, Denmark, the Netherlands, or Switzerland do not require a minimum period of contributions to be eligible for disability benefits. Norway requires five years of membership in the National Insurance Scheme, which can be achieved with five years of residence without actual contributions. Other countries have some contributory conditions tied to eligibility, which are not reduced for YWD but are sufficiently lax to allow for their entitlement. This is the case in Belgium, France and Luxembourg, where contributory requirements are low (9 months for Belgium, and 12 months for France and Luxembourg). A large share of countries have rather strict contributory requirements for eligibility to disability benefits, but those are typically relaxed for young applicants. In Austria, the contributory period is reduced from 5 years to 6 months for applicants to disability benefits under 27. In Slovenia, those under 21 do not have any contributory requirements, while those under 30 have to be employed for a quarter of the time since their 21st birthday. Lastly, countries such as Chile (3 years), Canada (4 years), Ireland (5 years), Italy (5 years) and Mexico (4-5 years), effectively make it difficult for YWD to be covered by disability benefit programmes.

The exclusion of YWD from main disability benefits increases the reliance on child allowances, potentially inhibiting self-sufficiency. Chapter 4 shows that over the past decades, disability benefit programmes have been reformed to include more active elements, such as vocational rehabilitation or financial incentives. These reforms trends decrease the work disincentives from benefit receipt, by increasing obligations for claimants and giving them more opportunities to find a job in the open labour market. YWD covered through disability insurance programmes may fare well, if these allow providing social protection while at the same time putting a strong emphasis on their activation. Instead, child support programmes or child allowances are rarely linked to activation elements, as they are designed to cover the costs of care of children. They may create additional disincentives for families to either increase their labour earnings (due to means-testing), or promote the self-sufficiency of YWD (due to eligibility being tied to the household).

Figure 3.9. Most countries cover young people with disability from the legal age in disability benefit programmes, and often face laxer contributions requirements



Note: Panel B: For Mexico the time is 150 and 250 weeks depending on incapacity rate, for Portugal complete incapacity is 3*120 days /22/12 for yearly measure and for the Slovak Republic it is less than a year but too many factors to be accurate.

Source: MISSOC comparative tables, SSA, https://www.ecoi.net/en/file/local/2027238/costa-rica.pdf, https://www.service-public.fr/particuliers/vosdroits/F672, https://www.service-public.fr/particuliers/vosdroits/F672, https://www.angloinfo.com/how-to/south-korea/healthcare/people-with-disabilities.

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Box 3.1. The Dutch Disability Benefit Programme for Young people with Disability: *Wajong*

The Netherlands is unique in that it has a disability benefit programme specifically for YWD. *Wajong* benefits cover those with an onset of disability before age 30. The merits and limitations of this policy have long been debated in the Netherlands, resulting in numerous overarching reforms over the past decade, the last major one in 2015, followed by a smaller reform in 2021. This Box explains the main characteristics of the programme (*Wajong* 2015), the employment arm for those with residual capacity to work (*Participatiewet*), as well as the 2015 reform of the *Wajong* and its impact on YWD.

Young people without residual work capacity: *Wajong*

Since 2015, *Wajong* benefits provide a minimum benefit for YWD with no residual work capacity (focus on work continuously for one hour and work at least two hours a day). *Wajong* covers people who become incapable of work at a young age (before turning 18) or during their studies (school or university) and until age 30. *Wajong* is financed by taxes. Benefit payments correspond to 75% of the statutory minimum youth wage, granted until the legal retirement age, with limited reassessment. Working while receiving a *Wajong* benefit is allowed, and benefits are clawed back by 75 cents for every euro earned. Roughly 2% of *Wajong* recipients (post-2015) work.

Young people with residual work capacity: *Participatiewet*

Since 2015, YWD with residual capacity to work are covered by the social assistance programme, the *Participatiewet*. Social assistance is managed by municipalities, and in addition to income support, has an emphasis on reintegration approaches aimed at work. Obligations for claimants are strong, including a mandatory registration at the PES and an obligation of job search. YWD may receive additional support, such as wage subsidies and sheltered work, job coaching, one-the-job training, and social activation. The *Participatiewet* also includes a no-risk policy for employers hiring YWD, which includes the reimbursement of wages in case of incapacity to work.

Social assistance provides a minimum income, which is lower on average than a *Wajong* benefit. Combining social assistance with labour earnings is possible, with an earnings disregard and a proportional reduction of benefits beyond the earnings threshold, creating a large tax wedge on working for beneficiaries.

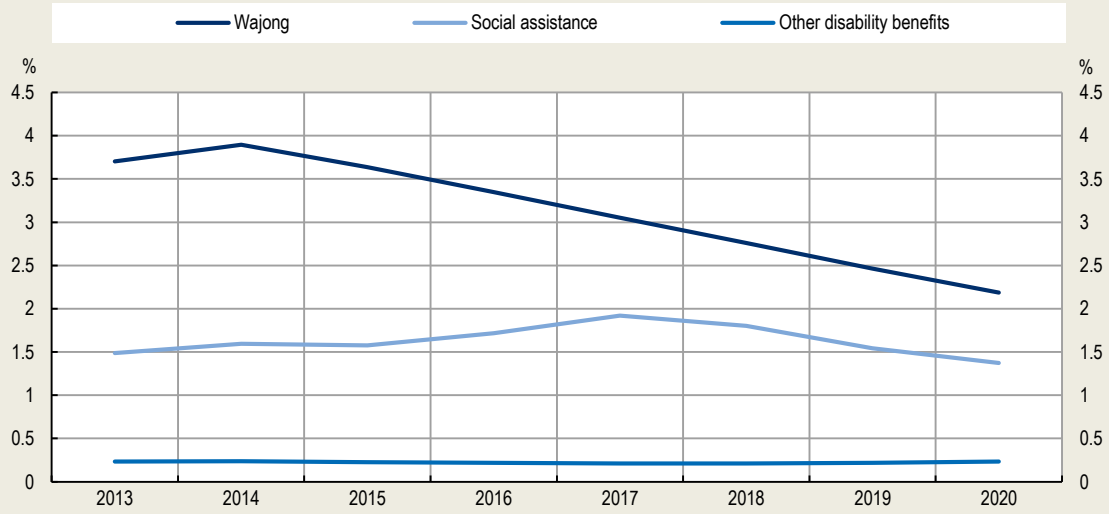
Reforms

Before 2015, the take up and size of the *Wajong* programme was swelling, reaching a receipt rate of almost 4% of every cohort. This was in part due to the overly generous and lenient characteristics of the programme. Broadly, the pre-2015 *Wajong* programme granted benefits to young persons with a degree of disability of at least 25%, both with a disability onset before their 18th birthday, or with a disability onset during their studies. There were limited reassessments and work incentives for *Wajong* recipients, who could stay in the programme from a very young age until reaching the retirement age. The 2015 reform aimed at tackling the growth in the programme by removing the rights to *Wajong* for young people not fully incapacitated. At the same time, social assistance was reformed too to include strong work incentives for YWD.

Figure 3.10 shows that the reform was effective in terms of reducing the reliance on social support among young people, by reducing the receipt rate of *Wajong* from 3.9% to 2.2%. A potential risk of this reform was that tightening *Wajong* would simply cause a reallocation from *Wajong* to social assistance. Figure 3.10 shows a marginal increase in the receipt rate of social assistance benefits in the first years after the reform, followed by a reversal to this growth, showing limited spillovers to social assistance. Receipt of other disability benefits remained constant in the course of the reform.

Figure 3.10. The 2015 reform of the *Wajong* system curbed a fast-growing programme

Share of young Dutch persons receiving social assistance and *Wajong* benefits



Note: *Wajong* and other disability recipients include these recipients aged 18-29, while social assistance recipients include recipients aged 18–27. Receipt rates are calculated using the corresponding population group.
Source: Statistics Netherlands (CBS) open data, https://www.cbs.nl/en-gb/onze-diensten/open-data.

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The reform was less effective in promoting sustainable employment and well-being among YWD. While very effective in curbing the reliance on social support, evaluations of the new *Wajong* system suggest some key findings that may reflect an overly strong pressure on young people:

- YWD are more often employed but often forced to job hopping. Kok et al. (2019[14]) find that YWD who would have been covered by *Wajong* before the reform have higher employment rates than pre-reform. Yet, the programme still fails to provide job security for YWD, who change jobs at a very high rate, much more so than YWOD.
- The income position of YWD has deteriorated. Van Echtelt et al. (2019[15]) conclude that the increase in employment participation, often in low-paid and part-time jobs, and the reliance on social assistance were not sufficient to compensate the loss in income from *Wajong*. Together with the poor quality of jobs that YWD find, this suggests that the reform may have operated on a pure income effect: many young people, removed from *Wajong* support, are forced to take on precarious jobs to compensate the income loss.
- As discussed in Chapter 4, income effects are non-distortionary, and so its removal does not necessarily generate large societal gains. Rather, it may force some YWD to take on jobs that may worsen their health condition (García-Gómez and Gielen, 2018[16]). The worsened income position for YWD already shows some negative consequences on their capacity of affording independent housing (Kok et al., 2019[14]).
- Those with mental health disorders are less able to reap the full benefits of the reformed *Wajong* programme. While the new system allows YWD to find employment, those among them with mental health conditions remain most often jobless and with a much-worsened income position (van Echtelt et al., 2019[15]).

Lessons for other countries

The Dutch social protection system for YWD and its reforms provide some lessons for other countries on critical elements to consider.

- **Cost-benefit analysis of the support measures** is key. The Dutch reform prioritised the use of expensive measures, such as job coaching, wage subsidies and sheltered employment. While they increased employment take up, they were associated with other issues due to the amount of resources they require. First, given the budget of municipalities, less people were able to receive support than under the pre-reform system, where supports and measures were more broadly defined. Second, and closely linked to the resource constraints, municipalities focused on supporting people with higher potential to work, as the payoff of these measures would be higher. For the use wage subsidies, the incentive for municipalities is very clear: by supporting people with higher wage potential, the measure becomes cheaper for each person. As a result, people with severe (often mental) disabilities did not receive any support.
- **Assessing municipalities' capacity** to implement such a programme and giving them the right tools and incentives is important. One of the challenges encountered during the implementation of *Participatiewet* is that municipalities have very different levels of resources and personnel capacity, which caused an uneven implementation of the policy across the country. Assessing early municipalities' capacity, aligning incentives and addressing any resource and capacity gaps is key for the policy to be successful.
- **Focusing on career opportunities** is key to ensuring job retention and progression in the labour market. In addition to a significant hiring gap, PWD often are confronted with poor career progression and opportunities to thrive in the labour market. The Dutch experience shows that focusing job coaching and support programmes for YWD on building a career, not just on finding a job, is the right approach for more sustainable employment.
- **Simplifying of the social support system** is one of the reported benefits of the Dutch reform of the social assistance system. A single programme, covering every young person with capacity to work, addresses the fragmentation issue often found in social protection systems. Because this is a mainstream programme, covering adults with insufficient contributions, such a reform effectively contributes to mainstreaming the support for YWD, which is at the core of the recommendations of this report.
- **Targeting the most vulnerable groups** in a context of mainstreaming social protection is very important: support needs to be given through mainstream programmes, but individualised to each person's needs. The Dutch implementation of mainstream support for YWD found that it was important to flag young people belonging to the most vulnerable groups to ensure that they were targeted by the most adequate supports (jobs agreement programme).

Minimum income programmes

The exclusion from social insurance programmes leaves substantial shares of YWD to rely on social assistance. Just as with adults with disability, lack of coverage for disability benefits leaves a key role to last-resort payments as the sole source of social protection. YWD with low income may qualify for last-resort means-tested welfare payments. Unlike adults with disability, however, YWD may often live with their legal tutors, making eligibility to welfare payments difficult, as they are often means-tested against household income. Some countries make it easier for YWD to qualify for minimum income programmes, e.g. by excluding income of YWD in the household from the means-test calculation, as well as excluding benefits for YWD or PWD in the household more generally.

Social assistance programmes have often behavioural requirements that allow actively engaging young people, yet YWD tend to be exempted. Most countries require working-age recipients to either be enrolled in education or actively engage in job search, for example, by making registration to Public Employment Services (PES) mandatory, tying benefit receipt to accepting suitable job offers, and, in some countries, the development of individualised employment and inclusion plans. Among European countries, Belgium and Norway focus on actively engaging youth on social assistance. In Belgium, participation in individual social integration plans (*projet individualisé d'intégration sociale*, PIIS) is mandatory for social assistance recipients under 25. In Norway, social assistance recipients under 30 go through an individualised assessment by municipalities, and have to comply with an activation condition for eligibility to benefits: they must meet with PES caseworkers, apply for relevant jobs, and participate in training, education and work-oriented courses. Most countries exempt all PWD from job-search requirements while receiving social assistance. While there is a risk of overburdening financially constrained YWD with employment requirements, removing these requirements altogether is also a lost opportunity for engaging with and promoting the inclusion of YWD in the labour market, and more generally, in the society.

3.2.2. Benefit receipt and coverage

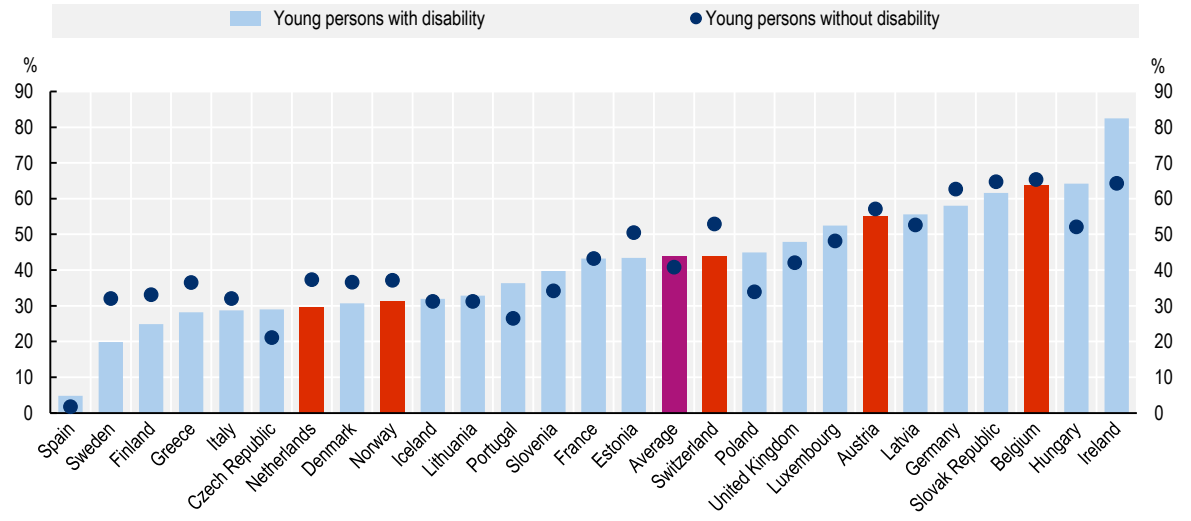
Eligibility rules and programme characteristics determine the extent to which YWD can receive income support. This section looks at what benefits YWD receive, and the targeting and coverage of these benefits.

Benefit receipt rates

Households with YWD receive more often family benefits than households without YWD, but differences are minor and varied across countries. One could expect households with YWD to be more reliant on child allowances, which as shown in the previous section, are more generous for YWD. At the same time, receipt of these benefits depends on the household composition: for YWD to be covered by child allowances they need to live with their legal tutors. Section 1 showed that this is not necessarily the case, as YWD tend to live in single membered households more frequently than YWOD. Additionally, YWD tend to have children somewhat more frequently (a finding that is maybe surprising in and of itself), which could entitle them to family allowances for their children. This would be a measurement error that could bias the descriptive findings, as it is not possible with population survey data to identify or distinguish benefit entitlement at such granular level. Data seem to corroborate that all these factors may be at stake simultaneously. On average across European OECD countries for which data is available, around 40% of households receive family and child allowances, compared to 45% of households with a YWD (Figure 3.11). Differences at that order of magnitude are found in most countries, plausibly because several factors are at stake which counteract each other. Some countries, however, like Ireland, particularly stand out for having substantial differences in receipt rate of child allowances by disability status of young people in the household. This, together with a growing inflow into disability benefits among young people, presents an image of the high dependence of Irish young people on social support (OECD, 2021[17]).

Figure 3.11. Households with young people with disability receive family benefits slightly more often

Share of households receiving family or child benefits, average over 2016-19



Note: The purple bar represents the weighted average of the 26 European countries shown.
Source: OECD calculations based on the European Union Statistics on Income and Living Conditions (EU-SILC).

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Across OECD countries, about 40% of YWD receive social support. However, there is substantial variation: in Luxembourg and Portugal, about 20% of YWD receive a social benefit, while in Lithuania, over 70% do (Figure 3.12). There is also large variation in the composition of the support received. In most countries, health-related benefits represent the largest source of income support for YWD. Norway stands out among countries for the widespread receipt of health-related benefits, compared to a relatively small share of social assistance and unemployment benefit receipt. In the Netherlands and Switzerland, for instance, the opposite is true: health-related benefits represent a small share of social support, only about 20% of the total benefits received.

Programme characteristics are reflected in benefit composition differences in take-up of social benefits across countries, with early intervention measures being key to reducing disability benefit take-up:

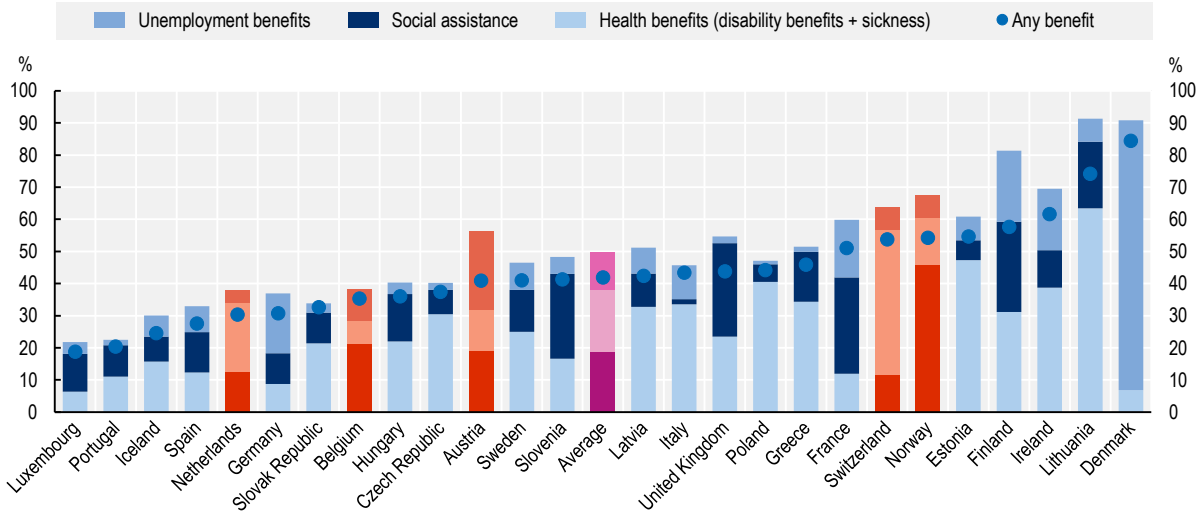
- Norway, with a high large take-up rate of health-related benefits (mainly disability benefits) among young people, has a generous disability benefit system, lenient eligibility requirements, and a high sensitivity of benefit take-up to the economic cycle (OECD, 2018[8]). Additionally, rehabilitation efforts are tied to benefit receipt (through the transitional disability benefit, AAP), resulting in receipt rates among young people comparable to those observed among adults.
- In Switzerland, instead, the Disability Insurance Authority puts great emphasis on financing early intervention measures before granting disability benefits to young people. YWD can be profiled as early as at the end of their 13th year and are followed thoroughly through early intervention measures to ensure that they pursue an education. For young people under 25 who are at risk of becoming disability claimants, a set of reintegration measures aim at providing them vocational training, career guidance, and career preparation (AHV-IV, 2022[18]). These measures can explain the low disability benefit take-up rate through two mechanisms. First, they may be effective at promoting the self-sufficiency of young people at risk to transitioning to the disability programme, thus reducing the need for disability benefits. Second, they make it more difficult to claim disability benefits, as there are many intermediate steps to take. The large share of YWD relying on social assistance make it unclear whether the Swiss approach helps promote self-sufficiency (and thus

reduces social support reliance) or instead just makes it more difficult to claim disability benefits. A longitudinal analysis of these cohorts of YWD would be needed to understand their reliance on social support as adults.

- In the Netherlands, the duality of the system depending on the capacity to work for young people results in low recipiency rates. Figure 3.12 shows that YWD in the Netherlands have a fairly low reliance on social support (around 30%), with most of them relying on social assistance. This is the result of the 2015 reform of the special disability benefit programme for young people (*Wajong*), as explained in Box 3.1 which limited the entitlement to this programme to those with full incapacity only. This resulted in a sizable reduction of the size of the programme, and a minor increase in the receipt of social assistance. However, the low recipiency rate does not necessarily reflect greater financial independence without social support of YWD, but instead, according to recent research, a worsened income position and potentially well-being (van Echtelt et al., 2019[15]).

Figure 3.12. About 40% of young people with disability receive social support from governments

Share of 15-29 year-olds with disability receiving social support, average over 2016-19



Note: The purple bar represents the weighted average of the 26 European countries shown.
Source: OECD calculations based on the European Union Statistics on Income and Living Conditions (EU-SILC).

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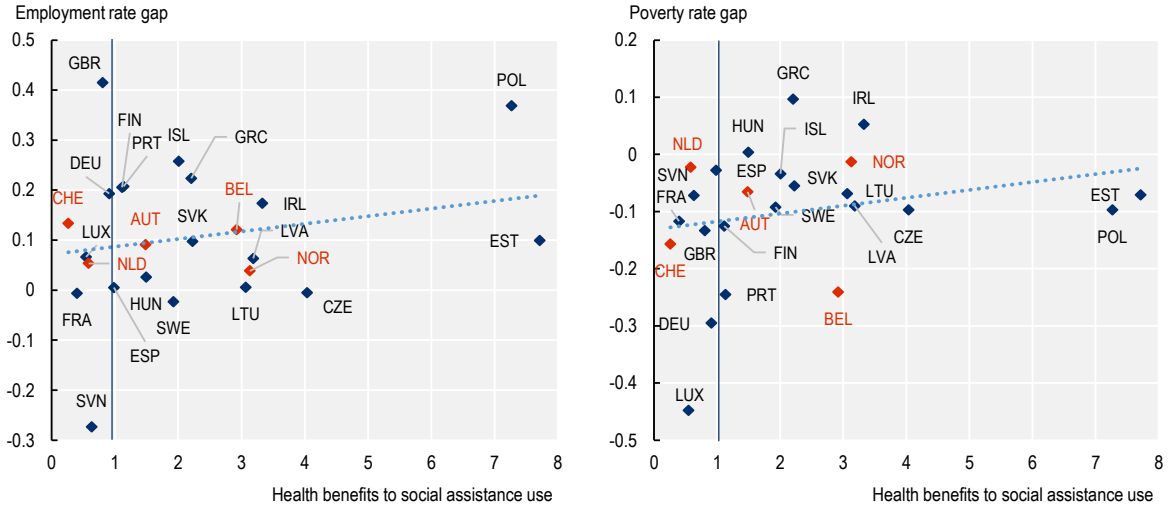
The Dutch example raises a more general question on the way in which YWD should be supported: is it preferable to cover YWD through mainstream programmes (such as social assistance benefits) or disability programmes? The tendency to mainstream support for YWD is evident. It has been established as the key to success in education and activation policies (see Section 3.3 of this chapter). Is mainstreaming of social protection also the way to go or should some persons with disability, as with the Dutch example, continue to be covered by non-mainstream benefit programmes? To answer this question, one can look at two main outcomes: employment rates and poverty rates. Figure 3.13 shows a positive correlation between a greater coverage of YWD through mainstream social assistance and the employment participation of those receiving social support. Instead, there is a negative impact on poverty: YWD are found below the poverty threshold more often in countries that rely on social assistance primarily. These observations are closely in line with the evaluations of the Dutch system for YWD, where social protection was mainstreamed for many: employment may improve, but income (and poverty) clearly deteriorates.

Figure 3.13. Mainstreaming the social protection for young people with disability may improve their labour market outcomes, but also risks jeopardising their income

Disability employment and poverty gap per country by ratio of health benefits to social assistance use, average over 2016-19



Note: Employment rate gap is calculated as the difference in young people with disability' employment rate between those who do receive social support compared to those who receive any type of social support (unemployment insurance, social assistance or health benefits). Positive values thus indicate a higher employment rate among those who do not receive social support. Poverty rate gap is calculated analogously: positive values indicate a higher poverty rate among those not receiving social support. Health benefits to social assistance use is a measure of mainstreaming, equivalent of the ratio of disability benefit receipt and social assistance receipt for young people with disability. A rate below 1 indicates greater use of social assistance than disability benefits to cover young people with disability. Italy has a rate of health benefits to social assistance use of 21, and so is an outlier. The country has been dropped for presentation of the results.
Source: OECD calculations based on the European Union Statistics on Income and Living Conditions (EU-SILC).

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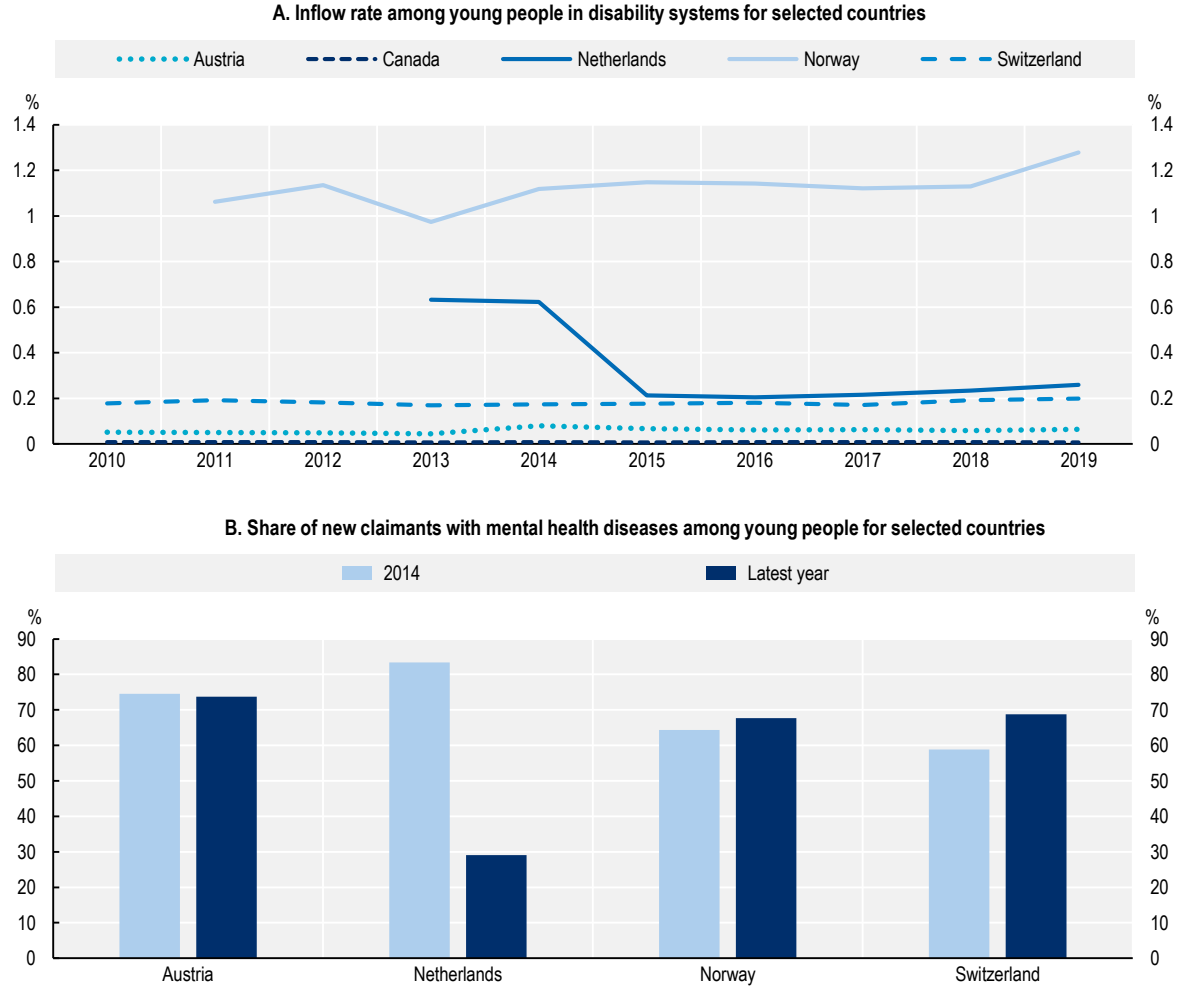
Disability programmes in selected OECD countries

This section focuses on a set of countries for which administrative data are available that allow observing flows in and out of the programme, disaggregating trends observed by specific disability programmes, and exploring relevant characteristics of claimants, such as the type and degree of disability.

The inflow of young people into disability programmes has increased in countries where mental health conditions represent an increasingly large share of all qualifying disabilities. Figure 3.14 shows increases in the inflow rate to disability systems among young people in Norway, and to a lesser extent Switzerland. These increases seem to be linked to an increasing share of inflow among young people due to mental health disorders (Panel B). The Netherlands provides a strong case in the opposite direction: through the 2015 reform, the government massively curtailed the inflow into the programme, including a large drop in the share of new claimants with mental health conditions. Many young people with mental health disorders were no longer eligible for disability benefits under the new system, as eligibility required full incapacity that cannot be improved through medical treatment, a condition that is often not met among people with psychological disability. Mental health conditions seem thus to be closely related to increasing trends in disability benefit receipt among young people. This raises a critical point, especially given the fast-growing prevalence of mental health conditions among young people accelerated by the COVID-19 pandemic: it is essential to get disability programmes ready to face growing applications to the programmes of young people with mental health conditions.

Figure 3.14. Increasing inflow into disability programmes for young people goes hand in hand with a shift towards mental health conditions



Source: OECD calculations based on data provided by the Federal Ministry of Social Affairs, Health, Care and Consumer Protection of Austria, the Canada Pension Plan, the Dutch Employee Insurance Agency (UWV), the Norwegian Labour and Welfare Administration (NAV) and the Office fédéral des assurances sociales for Switzerland.

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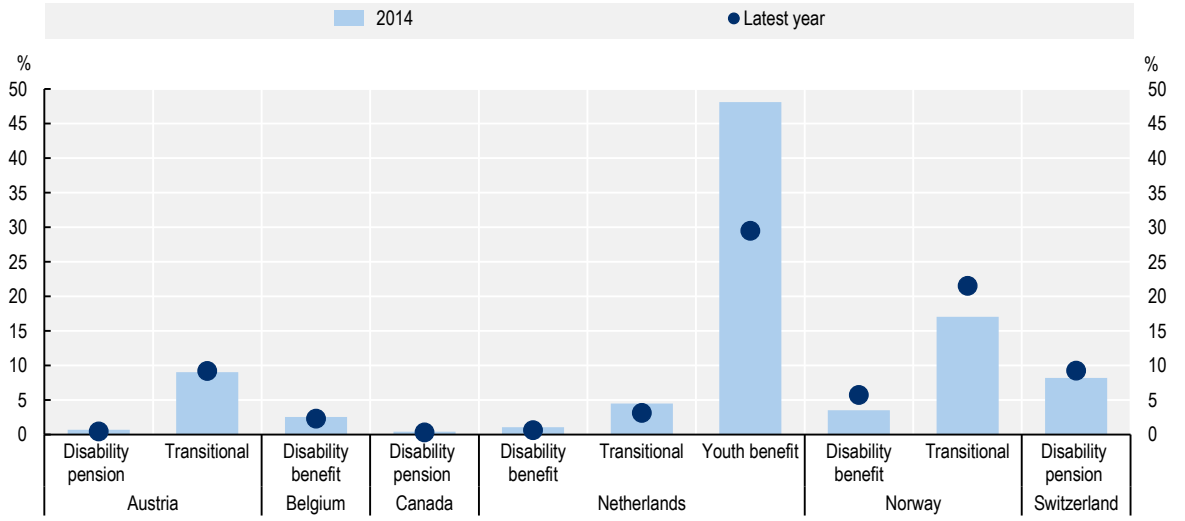
Young disability beneficiaries differ from other age groups in several ways. Figure 3.15 shows the share of claimants in each disability programme who are aged 15-29. Some key messages arise:

- YWD tend to be more often claimants of transitional disability programmes. Section 3.3 evaluates such programmes in more detail, showing higher employment rates for its claimants through the provision of vocational rehabilitation and financial incentives. An overrepresentation of YWD in transitional (rather than more permanent) disability programmes is therefore potentially positive for their self-sufficiency.
- The share of young people receiving a quasi-permanent disability pension is low. In countries like Austria and Canada, where disability pensions have strict eligibility requirements, the share of young recipients is extremely low. In Austria, YWD may be receiving transitional benefits instead. In Canada, YWD may be left uncovered from disability policies, and reliant on child allowances or provincial social assistance programmes.

- The rate of YWD receiving disability benefits in Norway is alarmingly high: 22% of transitional disability beneficiaries are under 30, a share that has increased by one-fourth over the past years. This reflects a significant overrepresentation considering that YWD represent around 10% of all PWD (see Chapter 2). However, much of the recent increase in transitional benefit claims among YWD is compensated by a decline in long-term sickness claims (Kann and Grønlien, 2021[19]). This is the result of the transitional programme being more generous than the sickness programme, particularly for people with low income. This could be positive for labour market inclusion, as the transitional programme has more active components than the sickness programme. However, transitions from transitional benefits to quasi-permanent disability benefits from which there is no return to the labour market are also frequent. Box 3.2 explores the Norwegian case in more detail.
- The 2015 reform of the Dutch *Wajong* benefit, which limited eligibility to YWD without any residual work capacity, has been effective at reducing the number of new claims. Accordingly, the share of young recipients among all *Wajong* recipients dropped very fast.

Figure 3.15. Young beneficiaries often remain excluded from quasi-permanent disability pensions

Share of young recipients (aged 15-29) by type of programme for selected countries, 2014 and latest year



Note: Transitional programmes refer to these programmes that precede the receipt of disability benefits, and second, introducing financial incentives to work while on disability benefits. In Austria that is the *Rehabilitationsgeld and Umschulungsgeld*, in the Netherlands the WGA, in Norway the AAP. The Young people benefit in the Netherlands refers to the Wajong. The Canada disability pension excludes Quebec.
Source: OECD calculations based on data provided by the Federal Ministry of Social Affairs, Health, Care and Consumer Protection of Austria, the Canada Pension Plan, the Dutch Employee Insurance Agency (UWV), the Norwegian Labour and Welfare Administration (NAV) and the Office fédéral des assurances sociales for Switzerland. Data were extracted from the Institut national d'assurance maladie-invalidité de Belgique, https://www.inami.fgov.be/fr/statistiques/indemnites/Pages/default.aspx, for Belgium.

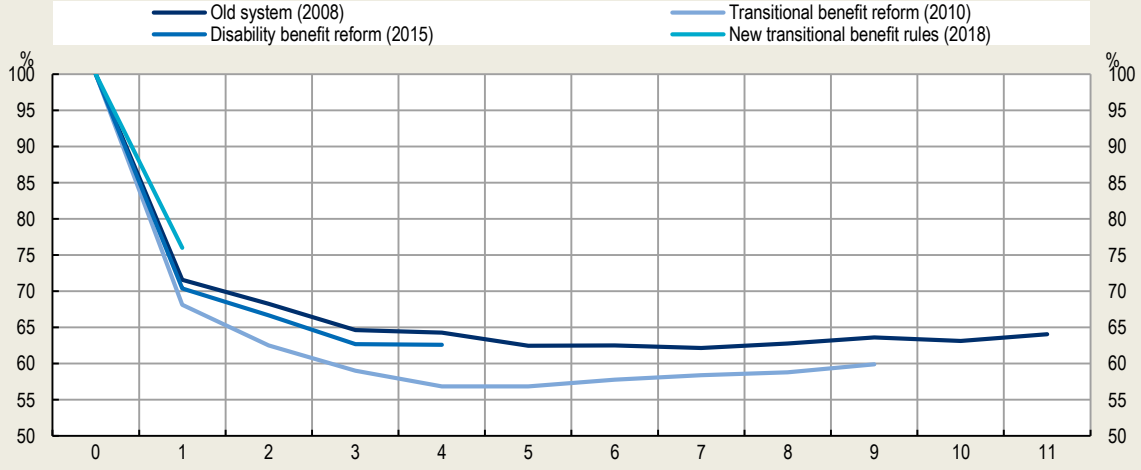
StatLink https://stat.link/ecyx12

Box 3.2. The social protection for young people with disability in Norway

Norway shows significant increases in disability benefit receipt among young people, which appear to grow despite several reforms of the system over the past decades – reforms that appear to have been effective at curbing the size of claims among adults (see Chapter 4) and boosting their employability. Most notably, these reforms appear not to have had any impact on the outflow from disability programmes among YWD, in turn implying no increases in transitions to employment among young people. Figure 3.16 shows the survival probability to stay on disability benefits (transitional and permanent programmes combined) among young people, at different reform times. In the pre-reform disability system of 2008, the probability to remain on disability benefits after one year was 72%. The survival probability decreased substantially with the introduction of the transitional benefit in 2010, which boosted the outflow rate by capping the maximum stay on transitional benefits. The subsequent 2015 and 2018 reforms did not boost the exit rate from disability, rather the opposite: for 2018 young claimants, the one-year survival rate is higher than it has ever been in the past decade.

Figure 3.16. Reforms in Norway have not been effective at boosting the outflow from disability benefits among young people

Survival probability to stay on disability benefits of young disability claimants (aged 15-29) at reform times in Norway, by years since reform



Note: Survival probability measures the probability of staying in the disability system (including disability benefits/pension and transitional benefits, and vocational rehabilitation benefits). Each line represents the survival probability at a different time relative to a reform of the system: 2010 refers to the termination of the vocational rehabilitation benefit and the introduction of the transitional benefit (AAP), 2015 refers to the reform from disability pension to disability benefit (*uføretrygd*), and 2018 refers to the capping of the AAP to three years.
Source: OECD calculations based on SSB Norway data on labour force transitions, https://www.ssb.no/en/statbank/table/12427.

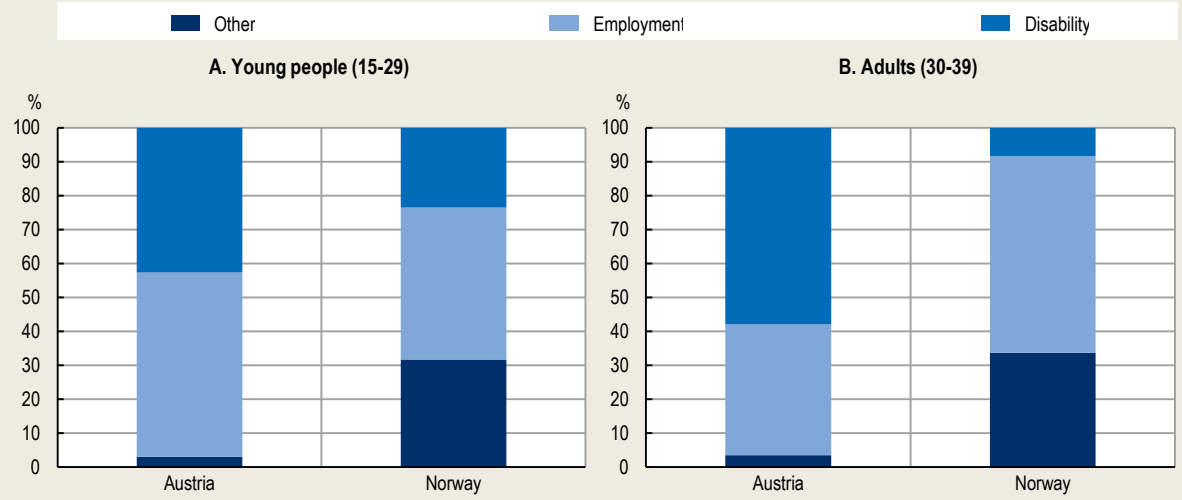
StatLink https://stat.link/hwgupb

Vocational rehabilitation results in fewer transitions to employment among YWD in Norway than in other countries with comparable policy settings, such as Austria. Comparing Austria and Norway, reveals a number of differences. First, the effectiveness of vocational rehabilitation in fostering employment among YWD is larger in Austria than in Norway (54% against 45%). Second, in Austria the effectiveness of vocational rehabilitation diminishes with age, while it increases with age in Norway (Figure 3.17). Third, the share transitioning elsewhere (including ordinary education) is much larger in Norway than in Austria: vocational rehabilitation could thus be a platform for pursuing further education in Norway but as a platform

to transition to work in Austria. This could be the result of the focus of the vocational rehabilitation approach in Austria, with a large role for the PES in supporting PWD, which is better suited to supporting YWD in their transition to work. It could also suggest that YWD covered by the Norwegian disability programme have lower employment expectations. However, as the minimum degree of disability for eligibility into transitional programmes is much higher in Austria than in Norway, this should not be the case.

Figure 3.17. Vocational rehabilitation results in fewer transitions to employment among young people in Norway than in Austria

Composition of exits after vocational rehabilitation in Austria (2020) and Norway (2019) by age group



Notes: The large share of "Other" in Norway is mainly due to a large number of transitions into inactivity after vocational rehabilitation, which in Austria appear to be captured by the disability pension system. With the data at hand, it is not possible to deduct the share of those in education out of this inactivity share, or whether this period of inactivity is temporary and will be absorbed by the disability benefit system in Norway. Data for outflows out of the transitional and permanent disability programme in Norway, however, suggest that one-in-four young people exiting the system transition to ordinary education, https://www.ssb.no/statbank/table/12427/. This is suggestive that the share of ordinary education in the category Other is non negligible.
Source: OECD calculations based on data provided by the Federal Ministry of Social Affairs, Health, Care and Consumer Protection of Austria and the Norwegian Labour and Welfare Administration (NAV).

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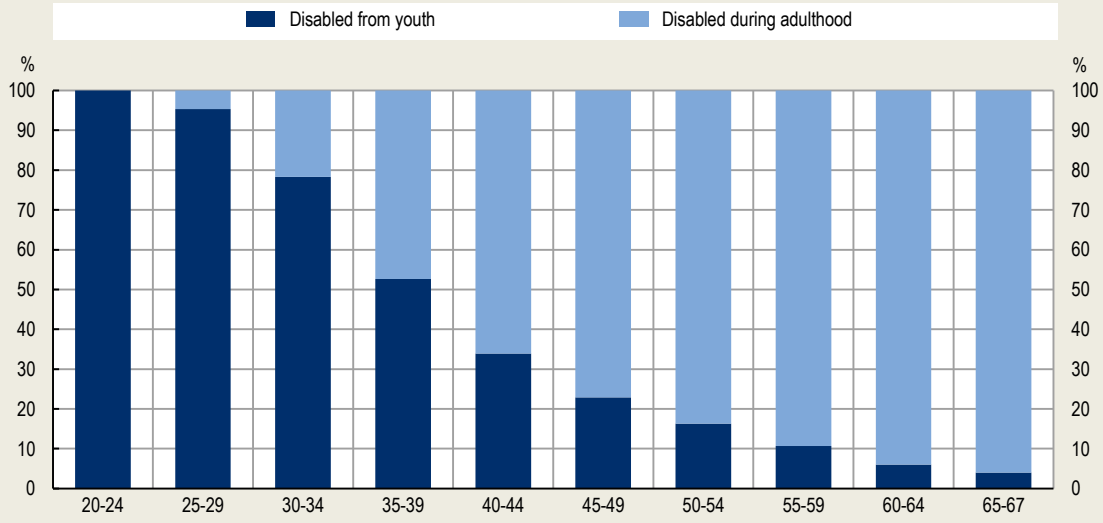
The consequences for Norway of not tackling growing disability benefit receipt among young people successfully are persistent. Figure 3.18 shows that YWD represent a large share of current claimants at older ages. Among those aged 35-40, over 50% entered the programme during their youth. This share decreases with age, but a substantial 18% of claimants aged 50-55 entered the programme during their youth. This illustrates that not tackling the problem when people are young, by providing supports that allow them to be self-sufficient and less reliant on disability benefits, has long-term consequences.

Figure 3.18. People with disability onset early in life represent a large share of current claimants in Norway also at older ages

Share of disability beneficiaries by age and onset of disability in Norway, 2019



Note: Disabled from youth captures these people becoming disability beneficiaries between ages 20-26.
Source: OECD calculations based on NAV data on young disabled, https://www.nav.no/no/nav-og-samfunn/statistikk/aap-nedsatt-arbeidsevne-og-uforetrygd-statistikk/tabeller/mottakere-av-uforetrygd-med-beregnet-ytelse-som-ung-ufor-etter-kjonn-og-alder-.pr.31.12.2011-2020-.antall.

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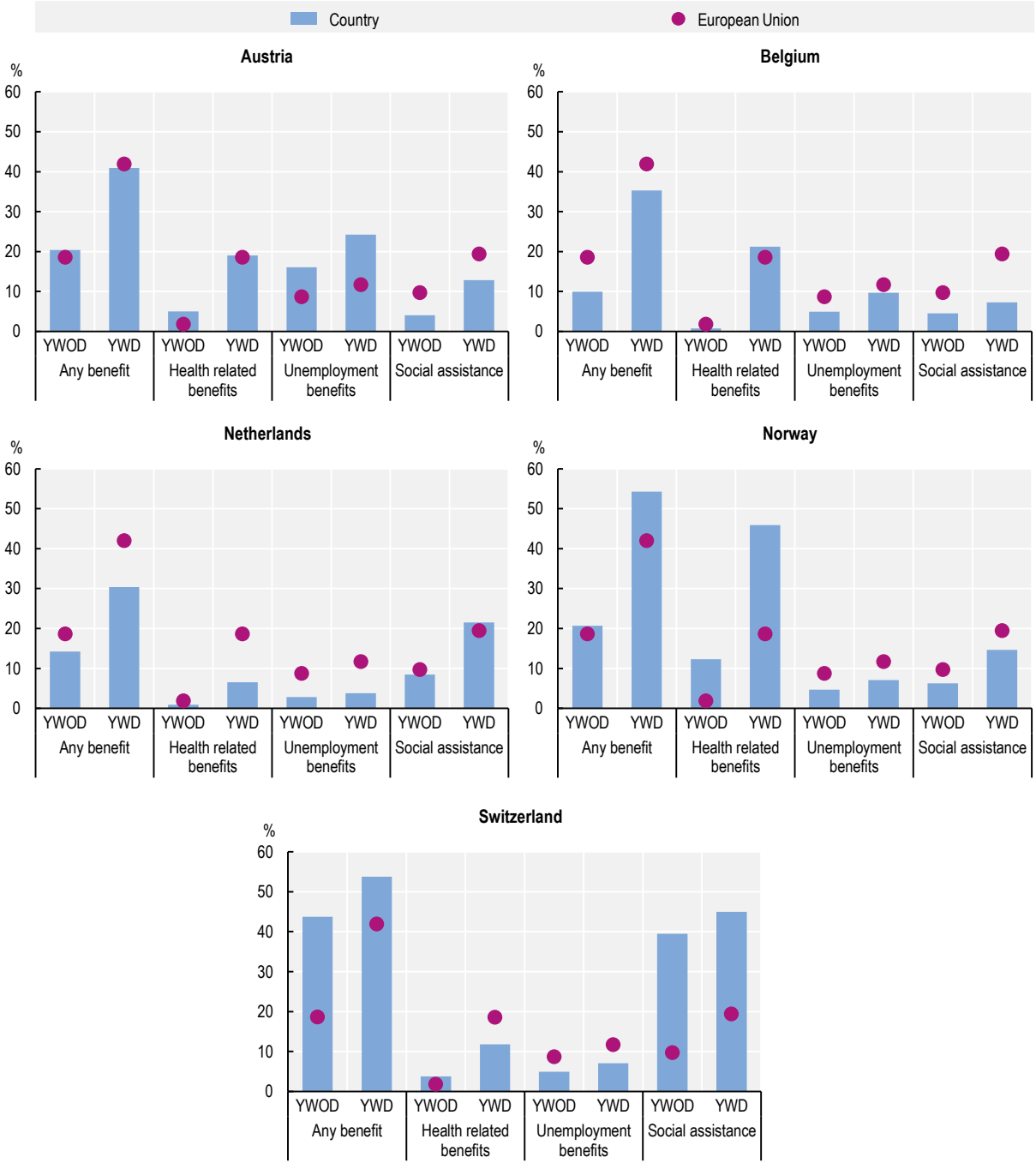
Targeting and benefit coverage

YWD are more likely to be covered by benefits in Norway than across European OECD countries on average. Figure 3.19 shows that over 50% of YWD receive social support in Norway, compared to 40% across those countries on average. This implies better targeting of the Norwegian social protection system, as the benefit receipt rates for YWOD are comparable to those of the country average: YWD in Norway are almost three times more likely to get support than YWOD, while on average across the countries they are about two times as likely to receive support. Effective targeting of the Norwegian benefit system for young people also applies to NEETs, not just YWD (OECD, 2018[8]). The Belgian benefit system also seems to target YWD better than elsewhere (they are 3.5 times more likely to get social support than their peers without disability), but overall the benefit receipt rate is substantially lower than the European OECD average. Austria performs very much like the average, while in the Netherlands and Switzerland, social protection is less targeted towards YWD. This is despite the generosity of the Swiss system, where large shares of YWD receive social support.

Better targeting YWD hinges on generous and accessible disability benefits. In countries with a good coverage of YWD, many of them receive health-related benefits, mainly disability benefits. Unsurprisingly, these benefits appear to be well-targeted towards YWD. Otherwise, young people appear to rely more frequently on social assistance, which is generally less well-targeted towards YWD. Across European OECD countries, YWD are twice as likely to receive social assistance as those without a disability. In the selected sample of countries, most countries seem to show a similar, except Belgium and Switzerland, where YWD and YWOD have similar shares of social assistance receipt.

Figure 3.19. Young people with disability are more likely to be covered by benefits in Norway than across Europe on average

Share of young people (aged 15-29) with and without disability receiving social support, by benefit type for selected countries, average over 2016-19



YWD: Young people with disability, YWOD: Young people without disability.
Note: The European Union is a weighted average.
Source: OECD calculations based on the European Union Statistics on Income and Living Conditions (EU-SILC).

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3.2.3. How does benefit receipt at young age affect outcomes later in life?

Benefit receipt at a young age may impact earnings in adulthood through several channels: household resources, perverse incentives to qualify for benefits, and adult benefit receipt (Deshpande, 2020[20]).

- Benefit receipt at a young age increases household resources in poor households, positively affecting adult earnings. Benefit receipt increases household income, and/or the time parents can spend with their child, ultimately promoting children's human capital development. Benefit receipt at a young age could thus have positive effects on a child's adult earnings.
- Tying benefit eligibility to the condition of disability of a child or young person may create perverse incentives to qualify for a payment, leading to negative effects in adult earnings. By creating incentives to present a child or young person as having a disability, benefit receipt could discourage educational achievement and human capital development, ultimately decreasing the child's earnings in adulthood.
- Benefit receipt in childhood could increase the likelihood of benefit receipt in adulthood, decreasing adult earnings through income and substitution effects. This hypothesis is similar to that of welfare families and benefit traps discussed in the first section of this chapter. By learning more about welfare programmes and associating benefit receipt to a stable source of income, those receiving benefits during their youth are more likely to seek social support during adulthood.

Evidence from the US Supplemental Security Income (SSI) programme for children suggests a large lifetime income loss, and a negative effect on adult earnings, partly due to increased benefit receipt in adulthood. Evaluations of the long-term consequences of SSI receipt during childhood find persisting negative effects on labour market outcomes in adulthood. Deshpande (2016[12]) finds that those whose benefit was terminated at age 18 are able to increase their earnings by one-third of the SSI income loss. While some are able to find full-time, stable jobs, most young people with prematurely terminated SSI benefits face large reductions in lifetime income and increased income volatility over their lifecycle. Levere (2019[21]) finds stronger negative effects on long-term earnings from SSI receipt during youth and an increased probability of claiming disability benefits during adulthood, thus supporting the welfare family hypothesis. The differences in the extent of responses of both papers may come from the different econometric approaches. While Deshpande (2016[12]) estimates the effect of benefit removal upon reaching age 18, Levere (2019[21]) estimates the effect of exposure to more lenient eligibility, particularly for those with mental health disorders.

More research is needed to disentangle the household resource and perverse effects of benefit receipt during childhood for those with disability. Research has established that government programmes aiming at alleviating poverty in youth improve health and labour market outcomes in adulthood by allowing for productive human capital and health investments (Hoynes, Schanzenbach and Almond, 2016[11]; Brown, Kowalski and Lurie, 2020[22]). It is unlikely that the household resource channel is muted for children with disability: preliminary research shows that siblings of YWD who lived in households that had SSI support removed have lower adult earnings, directly speaking to the household resource channel (Deshpande, 2020[20]). Yet, for YWD, the consequences of perverse eligibility effects may be stronger because of the stigma associated with being labelled as having a disability. For young people of school age, this may cause underperformance in schooling due to the stigma brought by the disability label, eventually leading to lower educational attainment (Shifrer, 2013[23]). For young people transitioning to the labour market, having a disability label creates an additional disadvantage to finding employment (Levere, 2019[21]). This again speaks to the merits of mainstreaming income support programmes for YWD, as well as to mainstreaming schooling and career support services, as discussed in the following section.

With the appropriate support and incentives, income support programmes can be designed to limit the perverse effects of benefit receipt. Income support programmes targeted to YWD often fail to support them in transitioning to the labour market. Either the programmes are designed with limited incentives and

support to pursue education or transition to the labour market, or the barriers to accessing such supports are large. For example, the US Social Security Administration provides vocational rehabilitation services for SSI young claimants, job coaching, academic inclusion, post-secondary education support, and career and technical education, all of which have been proven to promote the employment of claimants. Yet, there are large information gaps about these programmes, and only a small share of SSI claimants ever engage in schooling and transition-to-work support (Summit Consulting, LLC, 2020[24]).

3.3. Helping young people with disability transition from school to employment

This section focuses on how governments can best support YWD in their transition from school to work. As the education gap between YWD and YWOD arises very early, policies that support YWD must also start early. This section discusses the importance of inclusive education and a supported transition to the labour market, and looks at ways to prevent inactivity, reach out to YWD, use PES expertise effectively for YWD, and engage employers. The section closes by discussing how policies and services can effectively be combined with income support programmes to alleviate poverty while limiting the long-term adverse effects of benefit receipt during youth.

3.3.1. Education of young people with disability

Education for YWD has evolved from special to inclusive. Providing YWD with the best possible education while including them, and without dismissing others, is a challenging task worth pursuing. Well applied, inclusive education benefits everyone, in and outside of classrooms. In 2006, the UN General Assembly adopted the Convention on the Rights of Persons with Disabilities (CRPD) and, in doing so, drastically changed the approach countries should apply regarding the involvement of PWD in society. The CRPD recommends the application of inclusive or mainstreamed education; that is, the process of doing everything possible so that all children can be in the same classes as opposed to segregating children with disability. The European Agency for Special Needs and Inclusive Education (EASNIE) describes inclusive education as the way to provide everyone with equal opportunities. Most programmes mentioned in this chapter reflect this approach to inclusion and, thus, target both PWD and PWOD equally. To compensate, these programs may adapt certain conditions for PWD, for instance, the age requirement for eligibility might be widened or programme duration be extended.

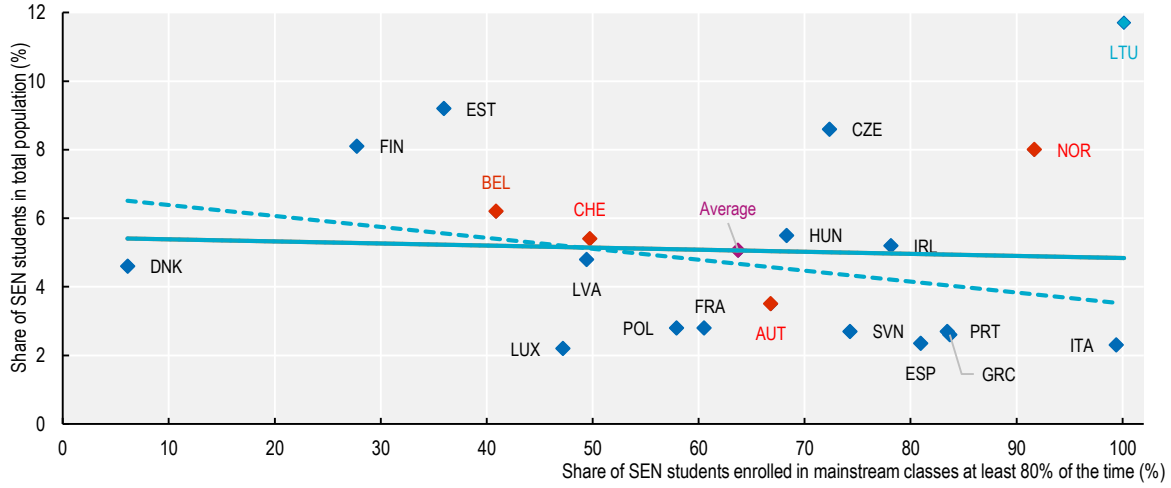
The percentage of children classified as having special educational needs varies substantially across countries, illustrating large differences in the policy approach. Figure 3.20 shows that the share ranges from 2% in Italy, Luxembourg and Spain to 12% in Lithuania, with an average across OECD European countries of 5%. These differences, however, should not be interpreted as differences in the incidence of special educational needs. Ultimately the share is the result of two factors: assessments used to identify special educational needs and the financing capacity or willingness, as identified needs are linked to the higher resources. In many countries, funding is capped to a certain share of the student population, matching the shares observed. Thus, the share of special educational needs (SEN) students should be seen as a proxy for the attention governments pay to the issue of special educational needs.

Figure 3.20 also shows large variation in the proportion of SEN students enrolled in mainstream education: from less than 10% in Denmark to 100% in Italy and Lithuania. The figure shows a negative correlation between the number of SEN pupils identified and the share of them enrolled in mainstream education. Many special needs are not binary conditions but a spectrum and the threshold for being recognised as SEN is highly subjective. In some way, all children have special needs. Inclusive education requires individualised educational planning and understanding the needs of every child, SEN pupils or not. Thus, when inclusive education is generalised and well applied, a diagnostic is no longer necessary. Although it is important to identify children with the most significant needs and flag them for other purposes, such as support for the transition to the labour market once they are old enough, setting the identification threshold

too low may have negative effects. Guralnick et al. (2008[25]) found that too many students per class carrying the official SEN label may increase stigma and harm social integration. A comprehensive and effective mainstreaming approach does not necessarily require SEN labelling.

Figure 3.20. Countries take different approaches in including SEN students in mainstream classes

Number of SEN students as percentage of total population by proportion of students diagnosed with SEN who are enrolled in mainstream classes for at least 80% of the time, 2018 or latest data



SEN: Special Educational Needs.
Dotted line: correlation including Lithuania. Straight line: correlation excluding Lithuania.
Note: Data refer to 2016 (France, Ireland, Portugal). Data for Denmark, Norway and Switzerland do not include grades above ISCED 2. Data for Belgium refer to Flanders.
Source: European Agency for Agency for Special Needs and Inclusive Education, https://www.european-agency.org/data/data-tables-background-information.

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Advocates of mainstreaming expect inclusive education to provide all children with equal access to quality education among their peers. The hope is that exposure to one another at a young age will improve YWD's interaction with the rest of society and society's inclusion of YWD. At the same time, better education would ease access to the labour market. Overall, inclusive education aims to facilitate YWD becoming active members of their community. Or, citing EASNIE, "all learners of any age are provided with meaningful, high-quality educational opportunities in their local community, alongside their friends and peers".

There are benefits to inclusive education for all students (see (Brussino, 2020[26]) for an in-depth review of the literature). Evaluating inclusive education is complicated by different typologies of mainstream settings (Ruijs and Peetsma, 2009[27]). Yet, it is essential to ensure that inclusive education has a positive effect on academic results and students' welfare for all students both with and without SEN. Several reports find that SEN students perform better in mainstream settings than their peers in special education (Hehir, Pascucci and Pascucci, 2016[28]). These results are found at every education level (Justice et al., 2014[29]; Markussen, 2004[30]; Myklebust, 2007[31]). Benefits of inclusive education do not seem to impact students without SEN in the same class, most evidence find either a neutral effect (Kalambouka et al., 2007[32]) or a positive effect (Florian, Black-Hawkins and Rouse, 2016[33]; Demeris, Childs and Jordan, 2007[34]). Mainstreaming commits teachers to pay more attention to curricula drafting which may explain the benefits of inclusion of SEN students (OECD, 2003[35]).

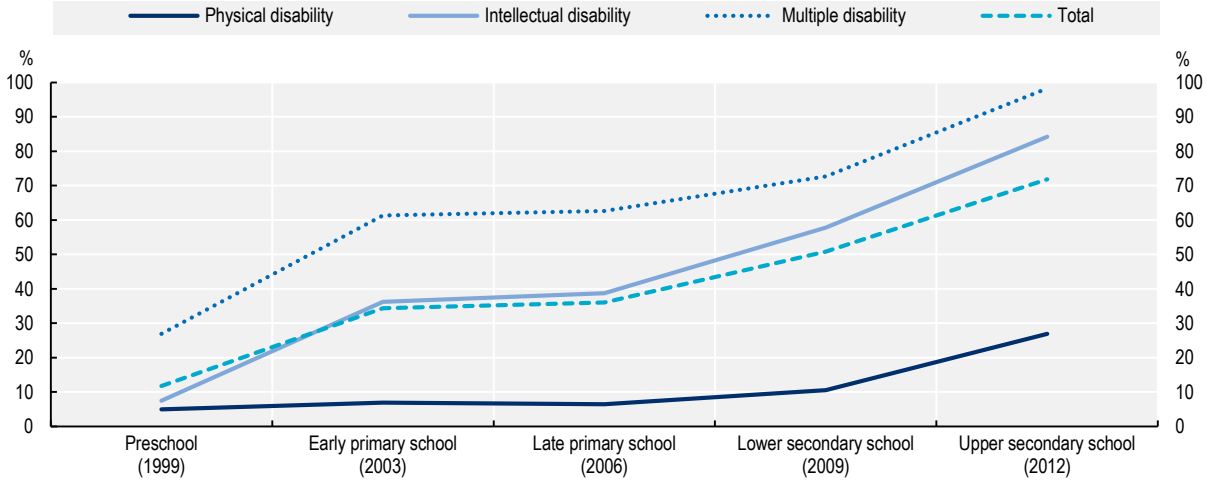
Inclusive education improves social skills and psychological well-being of students. In a study in Canada, SEN students in mainstream schools performed better in friendship, loneliness, depression, self-esteem

and overall social skills than their peers in special education (Wiener and Tardif, 2004[36]). The literature on pupils with development disabilities is consistent with results on prosocial behaviour improvement (Katz and Mirenda, 2002[37]). Mainstreaming can help reduce prejudices between students with and without SEN (NESSE, 2012[38]). Keslair and Mcnally (2009[39]) find that excess of special support in special schools (separated from mainstream schools) could increase stigma and harm future improvement; while the effect of inclusion and students without SEN seems to be neutral, if not positive (Guralnick et al., 2008[25]).

More efforts could be made to keep SEN students in mainstream education for longer, particularly for those with non-physical disability. Wendelborg (2014[40]) ran a longitudinal study of Norwegian families of children with disability between 1997 and 2012 allowing the author to follow children from a very young age. Figure 3.21 summarises the results of this study. It shows that there are substantial efforts to include SEN students in mainstream education in pre-school, and to a lesser extent, in primary school. The proportion of SEN students in mainstream education dramatically drops in secondary school, particularly for children with intellectual disability, while those with physical disability appear to be included in mainstream education throughout their educational pathway.

Figure 3.21. The inclusion of SEN students in mainstream classes drops sharply with age

Proportion of students not in mainstream class by age and disability, longitudinal data, Norway, 1999-2012



Note: n=558 (1999), n=448 (2003), n=392 (2006), n=364 (2009), n=241 (2012).
Source: Longitudinal study by Wendelborg, C. (2014), "Fra barnehage til videregående skole – veien ut av jevnaldermiljøet [from preschool to upper secondary school – the road away from peers]", in J. Tøssebro and C. Wendelborg (eds.), *Oppvekst med funksjonshemming: Familie, livsløp og overgange.*

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Inclusive education is applied similarly in the six countries covered in this report, with a priority to place all children in mainstream education. Where this is impossible due to the severity of the child's disability, special schools enter into play. There are some differences across countries in the approaches to partial inclusion of SEN students which can include the following:

- Single integration, where only one SEN student is enrolled in a mainstream class and receiving additional tutoring. This is used in all six countries.
- Integration classes, where a few SEN students are enrolled in a smaller mainstream class and receive additional support such as a specialised teacher working with the primary teacher. This is used in Austria where two teachers, one specialised and one not, lead the class together.

- Co-operative classes, which consists in having a small class with only SEN students in a mainstream school where they join other pupils for certain classes and during breaks. This is used in both Austria and Norway.

Canada, the Netherlands and Switzerland do not have a national policy on taking responsibility to include children with disability: as policy is decentralised, some localities may be exceptions. Schools in Belgium are required to make reasonable arrangements, however, the definition of reasonable is left vague.

All different approaches to inclusion have benefits and flaws. The appropriate approach depends strongly on the type of special needs or disability experienced by the pupils and their age. At an early age, school highlights strongly the need for social interactions. Therefore, the single integration and integrative class options should be prioritised to maximise time spent among all peers. As children grow, certain cognitive disabilities will become significant obstacles to keeping up with the rest of the class, at this point integration and co-operative classes seem preferable so that no pupil finds themselves alone and confused. Co-operative classes remain the solution with the least exposure and should be used in cases of most severe disabilities. Although integration classes appear to be the most versatile solution, it would also be the most costly as it requires more teachers. Moreover, integrative classes are not adapted to all types of special needs; students experiencing motor disability do not all require a specialised teacher and may fare as well as their peers in a single integration setting while feeling less stigmatised. Overall, educational systems face the challenge of being flexible enough to adapt to all children and all types of needs, including co-ordinating with other local schools to better allocate resources. Box 3.3 describes the exemplary case of the Canadian province of New Brunswick, for successful inclusive education.

Countries also differ in the extent of specialisation of their specialised schools. In Belgium, specialised schools are divided into eight categories, such as schools for children with behavioural disorders and different schools for children with physical deficiencies. The Netherlands distinguishes four categories of disability such as communication impairment or mental disorders. Again, there are pros and cons to a higher degree of specialisation. On the one hand, the more specialised a school is, the easier it is to cater to special needs. For instance, a specialised school for pupils with speech impairment can teach entirely in sign language, which cannot be done with pupils experiencing visual impairments. On the other hand, the more diverse a school is, the better students can benefit from peer learning and improve their social skills, an important goal of compulsory schooling. For example, students with speech impairments are more likely to learn lip reading in a more diverse school, which would be useful for them in their daily life.

Box 3.3. A model of inclusive education: The case of New Brunswick, Canada

History of the province's inclusive education

The province of New Brunswick introduced in 1986 a bill declaring that all schools had to include all children within the system regardless of their health and abilities (Bill 85); this was the first step toward New Brunswick's inclusive system. For the following three years, schools and their staff learnt to adapt so that the reform could be fully implemented. Between 1989 and 2012, the provincial government initiated four reviews of their education system. Each of these reports was critically analysed and used to improve the system.

Today, every child learning in the province is enrolled in mainstream school with their peers. More impressively, if New Brunswick was considered a nation in the PISA ranking, it would rank 7th in reading, 19th in mathematics and 10th in sciences. The dropout rate for the entire province during the school year 2019-20 was 0.8%, far below the OECD average of 10% for YWOD and it is consistently decreasing since 2008. Evidence that New Brunswick's approach to inclusion is successful includes a measure of well-being too; the Health Council's Student Wellness Survey is taken every three years, the last one in 2018-19. Although it is to be expected that students with SEN report lower scores than their peers, 86% of students with SEN had a high level of school connectedness against 92% for the province as a whole and 81% had a high level of pro-social behaviour (85% for the province).

Takeaway lessons

New Brunswick's success is attributed to several simultaneous reforms of its education system. The following two key aspects of the province's strategy can be used as examples of good mainstreaming practices.

- Mainstream education should be a multi-actor collaboration. After the inclusion of YWD in mainstream schools, specialised staff and classroom teachers began working in parallel with the same students but not systematically together. The specialised staff spends two-thirds of their time supporting classroom teachers so they can take better care of all students, instead of helping directly individual students. Collaboration must also happen between teachers of different classes such as the "Teachers Helping Teachers" process through which several teachers discuss a problem faced by one of them while the discussion is moderated by a facilitator. This collaboration must extend between establishments too. The Action Plan launched the "Triad Inclusion Team" project: groups of three high schools with comparable demographics send a delegation each including the principal to share their solutions to problems faced. The government funds at least three meetings a year, including travel costs, and sends a facilitator.
- Frequent evaluations and re-evaluations: once the goal established and Bill 85 launched, New Brunswick's government mandated four evaluations of the educational system (1989, 1990, 2006 and 2012). Each of these evaluations paid special attention to areas of improvement. For instance, some of the most impactful consequences of the 2006 report include a ministry definition of "inclusive education", and the clarification that inclusion does not mean all student in the same classroom at all times, among other things. The 2012 report had a more micro focus and led to the creation of a three-year long Action Plan to improve pedagogical methods. Although a leader in inclusive education (United Nations, 2019[41]), the province continues to try to improve.

Source: Porter and Towell, 2017 ([42]) "Advancing inclusive education: Keys to transformational change in public education systems", https://inclusiveeducation.ca/wp-content/uploads/sites/3/2013/07/Porter-and-Towell-Advancing-IE-2017-Online-FINAL.pdf; AuCoin, Porter and Baker-Korotkov, 2020 ([43]), "New Brunswick's journey to inclusive education ", https://doi.org/10.1007/s11125-020-09508-8; New Brunswick Department of Education and Early Childhood Development ([44]) "Dropout statistics: 2018–2019" and ([45]), "New Brunswick 2018–2019 student wellness survey—Grades 6-12".

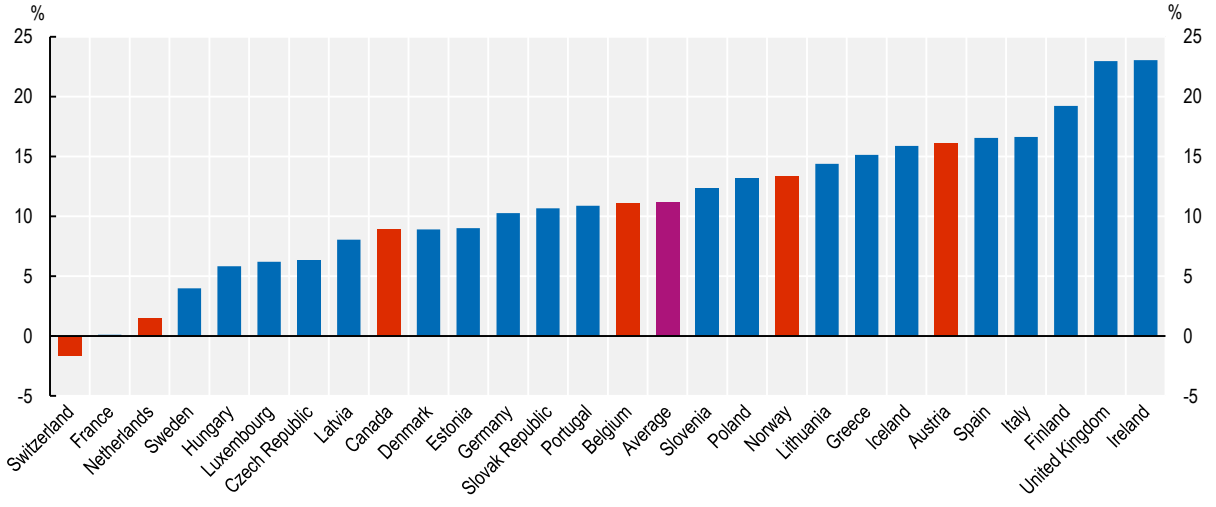
3.3.2. Entering the labour market

The transition from school to work is hard on most young people, but it is harder for YWD, most of whom struggle to pursue their education past compulsory school, leaving them with an educational attainment gap. YWD are also more likely to leave school early and become NEETs, as shown above. Pupils' challenges at school are compounded by their condition, which can create additional burden, including frequent absences, stress, treatment and its side effects, attention deficits and possible hospitalisation depending on the severity of the health condition. Moreover, certain mental disorders are hard to diagnose among young people and since they also prevent from seeking help, these disorders often go undetected (Brussino, 2020[26]). The consequences of leaving school early are serious for everyone, and being neither in employment nor in education or training can generate psychological distress, physical and mental health problems (Sveinsdottir et al., 2018[46]). Yet, here again, disabilities worsen these consequences, increasing the struggle to join the labour market, thereby potentially aggravating already existing conditions.

Figure 3.22 shows that the disability gap in employment rates is already substantial for young people across almost all OECD countries. On average in the OECD, the employment rate of YWD is about 12 percentage points lower than for YWOD. For reference, the OECD average employment gap for the entire working-age population is around 27 percentage points (see Chapter 2). To promote the employment of YWD, governments should prevent young people from dropping out of school as much as possible in the first place. Prevention requires relevant actors to be better trained, support to be more accessible and, most importantly, better co-ordination between different institutions. Whilst perfectly successful prevention should be the aim, it most likely cannot be reached. Thus, measures reaching out to early school leavers are necessary. Finally, the government should ease the transition from school to the labour market. This section discusses how to prevent leaving school early, how to reach out to those who do leave nevertheless, and how Austria, Belgium, Canada, the Netherlands, Norway and Switzerland help YWD transition from school to the labour market.

Figure 3.22. The employment gap is already considerable for young adults in most countries

Employment rate gap between young persons (aged 15-29) with and without disability



Note: The disability employment rate gap is calculated as the percentage point difference between PWoD and PWD. The purple bars represent the unweighted average of the countries shown.
Source: Data provided by Employment and Social Development Canada based on the Canadian Income Survey (CIS, 2019) and OECD calculations based on the European Union Statistics on Income and Living Conditions (EU-SILC, 2019).

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Preventing inactivity

Education is the best approach to preventing YWD from becoming unemployed or inactive. High school graduates fare far better on the labour market (OECD, 2021[47]). In the absence of a comprehensive adult learning system, a high school degree is proof of a number of skills required in the majority of jobs such as reading proficiency. Albeit it is not a guarantee, preventing YWD from dropping out of school or the Vocational Education and Training (VET) system is the surest way to help them remain active. Efforts should involve multiple actors simultaneously.

Teachers are the main actors in student's life. Especially early on, they may be spending more time with children than their parents. As a consistent, regular presence in a student's life, they are an essential lever governments can push. Critical teacher-directed measures can include the following:

- Training for teachers is key to prepare them to support students with special needs (Njeru and Gachau, 2021[48]), especially in mainstream schools where a specialised educator might not be present. Not only would it improve the quality of SEN students' education and improve their inclusion, Khusheim (2021[49]) finds that better trained teachers are more confident and have a better attitude towards teaching SEN students.
- Peer-learning platforms for teachers to support them when facing a particular need for the first time, while fostering innovative teaching methods.
- Mechanisms for teachers to report health or other barriers to pursuing education. Teachers are frequently monitoring students' progress throughout the year on top of seeing them almost every day. Thus, they are in a unique position to notice behavioural changes that may be indicative of mental illnesses, or any other barrier to pursuing education.

Vocational and career counsellors should be available in schools and kept up to date with formations and trainings accessible to YWD. Advice given should take into account updated projections about future occupation shortages for which demand will be strongest. Raising students' awareness to their options and helping them find suitable career plans would give them a goal and the necessary steps required to achieve it. Career counselling helps students exploring their interests and strengths, and in turn reduce skills mismatch by orienting them toward programmes that interest them and for which they are well suited. Additionally, partnerships with local employers can help match companies offering apprenticeships with apprentices. Counselling can and should come from peers as well, such as older or former students who can help mentor others. All this can be important for all students but especially so for those with additional challenges stemming from a health problem or disability.

Supplementary programmes aiming specifically at bridging skill gaps would prevent students from leaving because they cannot keep up with their classmates. The transition to upper secondary education not being mandatory, presents the greatest risk of dropping out and therefore, would benefit the most from transition programmes helping SEN students catch up on their peers when needed. Additional tutoring and summer schools would give students additional time to learn to manage their difficulties while building confidence that their efforts are worthwhile. As a result, some students will take more time to finish school, and financial incentives and social protection programmes should be flexible enough to allow extra time.

Co-ordination with third parties enables keeping track of students at risk. Young people's future involves different actors, none of which have all information required. School staff can notice changes in behaviour or see if students fall behind their classmates but they are not able to address health needs, unlike health services. If schools provide career counselling and support in exploring students' interests and strengths, the PES is best able to match students with potential employers. Yet, the PES can only do so if students are registered in the first place, something that can be easily remedied at school. Co-ordination between these three actors (schools, PES and the health care sector) would improve the effectiveness of each of them. Belgium's PES already acts as a co-ordinator between health services (OECD, 2020[50]) and housing

while the Netherlands's Regional Registration and Co-ordination Centre fulfils this role between schools, PES and municipalities (International Labour Organisation, 2017[51]).

Reaching out to NEETs with disability

Outreach involves four steps: identify, contact and engage, deliver appropriate service, monitor and adjust (International Labour Organisation, 2017[51]). Prevention is essential but certain individuals will continue to fall through. Reaching out to them can prove to be a challenge for governments. Yet, governments must take the first step; disengaged young people often mistrust agencies like the PES and lack self-confidence to believe being proactive will lead to concrete results. When referring to disengaged young people, none of these steps is straightforward. However, each of these four steps have in common the need for functional co-ordination between several stakeholders.

Identifying NEETs is the first step. It is particularly challenging for young people unregistered to the PES. Several approaches exist, all of which could be used simultaneously.

- Tracking and data sharing is usually done through communication between the PES and schools, municipalities or social security. For instance, Dutch students have a personal reference number which the PES can use to follow through, the information between both agencies are co-ordinated by the Registration and Co-ordination Centres mentioned above. Because YWD are likely to receive more frequently health care, hospitals and general practitioners should be involved in the co-ordination loop as is done in Belgium. Finland handled issues related to data protection by amending its Youth Act in 2011 to allow for sharing of data between the relevant agencies in the context of potential NEETs. Austria requires teachers suspecting a potential detachment to ask parents for permission before discussing problems with youth coaches for the Youth Coaching programme explained in the previous section (International Labour Organisation, 2017[51]). These solutions to privacy issues can be extended to health services especially if it is only until distance to the labour market is sufficiently reduced.
- Non-targeted awareness promotion campaigns also have their benefits and their implementation is simple. Plain advertisement emphasising the next steps can help in guiding NEETs toward the relevant service providers. Campaigns are often wide reaching, including different messages for different target groups. As explained in Chapter 2, PWD are a heterogeneous group and cannot all be reached with one message. Campaigns can also be led on social media as done in France, although this requires a more tuned message and language adaptation.
- Partnerships with local communities and NGOs can also be of precious help, especially with young people distrustful of the government or lacking hope for improvement. These partnerships are even more useful in the next stage, taking contact with young people.

Contacting and engaging young people requires trust. Disengaged young people in general are prone to having witnessed violence and abuse leading to overall trust issues. YWD are more likely to be bullied, and to struggle with social interactions and other facilitating prosocial behaviours (Schwab et al., 2015[52]) which would only worsen trust. After falling through the cracks of the system, trust towards government employees and everything they represent may be a problem. Therefore, contact is best started through NGOs and local communities who pass more easily as peers. PES offices in Brussels and Flanders, in Belgium, rely on associations and NGOs to go to the street and meet NEETs in sport-clubs, concerts etc. They can proceed to befriend NEETs to gain their trust at which point they can start rebuilding enough self-confidence to start believing efforts would indeed lead to improvement. Both NGOs and municipalities can also organise peer-to-peer support like the project "Dreamteams" in the Netherlands which involves young people acting as role-models while receiving career advice and training. These role-models also represent young people in meetings with stakeholders and employers (European Commission, 2014[53]).

Once young people are willing to re-join the labour market, the PES must deliver appropriate services. Programmes must be individually tailored and immediately address the barriers young people are facing

before focusing on the labour market. Because a multitude of factors have to be taken into account, a multitude of agencies are involved, not only the PES. One-stop-shops are registration centres where all relevant service providers are present, which allows visiting all stakeholders at once and facilitating young people's initiatives, and simplifies co-ordination. For programmes to be individually tailored, beneficiaries have to go through profiling: assessing the person's specific needs and strengths and gathering information on their socio-economic background. Individuals' needs often depend on a multitude of factors, and this is particularly true for YWD who might need medical assistance as well as social and communication assistance. Thus, multi-stakeholders partnership are overall more successful (European Commission, 2016[54]). They allow handling all aspects of YWD's reinsertion, addressing medical, professional, psychological and social needs, among others. The UngKOMP in Sweden provides a good example of this approach; this partnership between the PES and municipalities provides claimants with an employment and an education advisor, a psychologist and a social worker. This partnership had a 63% success rate between 2015 and 2017 and involved 29% YWD compared to 18% YWD registered at the PES (European Commission, 2018[55]). Multi-stakeholder partnerships are necessary to address complex needs and develop individualised integration pathways. Yet, they increase the risks of miscommunication between the different parties and must be led by a central case manager to handle the information flow. When poorly managed, clients can find themselves filling the same assessment questionnaires for each organisation involved and end up being discouraged. Designated case managers in charge of a beneficiary's entire case can oversee fluid communications and a reliable information flow. The PES is a good actor to play this role, maintaining the engagement with the young client, and involving additional actors as needed for the delivery of individualised services, while handling the information flow.

Continuing to monitor and adjust services is important to better understand the profile of young people with special needs and thus, to better help them in the future. However, monitoring must be done carefully. Some beneficiaries might not be ready to get back to the labour market regardless of the quality of support provided. Assessments should not only consider whether one returned and stayed in the labour market but rather how much improvement was made. An individual can progress toward the goal of reintegrating the labour market while not yet being ready to go back. Outcome monitoring will underestimate the effect of the assessed programmes, which will be seen as less useful and more vulnerable to budget change.

School-to-work transition programmes

During the transition from school to work, governments often take the role of facilitators and collaborate with local organisations or local governments. Municipalities and local PES are better aware of nearby jobs and training opportunities, local associations may have a better understanding of the type of support YWP need, and schools a better grasp on the specificities of each individual (Immervoll, 2010[56]). Governments facilitate the efforts of these actors through several methods: funding, supporting employers, and matching the different services and actors.

Facilitating by funding. National governments can give local governments autonomy and provide funding for local third-party organisations.

- The Austrian Ministry of Social Affairs funds NEBA, a service provider offering six programmes by collaborating with coaches, schools and potential employers. Their programme "Youth Coaching", for instance, targets young people aged 15-24 (15-19 for those without disability or special needs) and offers career guidance and helps searching an internship with the PES. Their "Education Fit" programme also targets young adults and helps them becoming fit to work and finding vocational training. In 2020, these two programmes had respectively 30% of 54 000 participants and 67% of 5 000 participants with at least one disability or impairment.
- Canada's Employment and Social Development Department created the Opportunities Fund for Persons with Disabilities, which funds projects on a national or regional scale. One of these projects, Ready, Willing and Able (RWA), a national strategy delivered by the Canadian Association

for Community Living and the Canadian Autism Spectrum Disorder Alliance, aimed at increasing the participation of people with intellectual disorders and people on the autism spectrum to the labour force. RWA significantly improved co-operation between national and provincial/territorial partners and third-party agencies. It fostered the employment of recipients through encouraging potential employers to make concrete hiring commitments, and providing employment support to participants such as job coaching or short-term training (Employment and Social Development Canada, 2018[57]). RWA's effort led to the hiring of over 2 400 candidates with intellectual disability between 2014 and 2019 (RWA, 2019[58]).

Facilitating by supporting employers. Employers may not hire PWD due to the inherent fears and harmful stigma, or the lack of experience in managing PWD. The following three methods are used to encourage employers: offering wage subsidies, fighting stigma, or helping with workplace adaptation.

- Wage subsidies, sometimes specific to young people, are implemented in Canada, Norway and the Netherlands, whose *Wajong* programme is described in depth in Box 3.1 above. The Youth Employment and Skills Strategy (YESS) programme in Canada funds programmes aimed at ensuring young people gain sufficient skills and experience to successfully transition to the labour market. YESS has achieved more than 50 000 job placement positions. One of the programmes funded by YESS is Youth of the Future, a 22-week long programme, created by the Canadian Council on Rehabilitation and Work (CCRW). Youth of the Future provides daily job training for eight weeks and subsidises 75% of a participants' wage over 14 weeks of professional experience at a job they can hope to continue working indefinitely. Overall, the CCRW helped over 1 500 YWD find meaningful employment or education in 2018 (CCRW, 2019[59]). Norway's PES also provides financial support to employers under several types of programmes, of which the grant for summer jobs target young people specifically, and subsidises 75% of YWD's wage (50% for participants with full working capacity) for up to four weeks.
- Information campaigns in Austria and Canada help to fight stigma, which can be a significant barrier to employing PWD. The Canadian Employment and Social Development Department supports employers by providing myth-busting information and advice on their public website. Austria's NEBA network includes an Operational Service to contact companies and actively promote the hiring of PWD, and offer financial and legal advice for hiring PWD.
- Assistance on creating a suitable workplace, on the recruitment process and more services to help with workplace adaptation is offered in Canada and Norway. Canada's Disability Confident Employer Program, in partnership with the CCRW, joins in the process of simplifying transitions through an online training platform for managers. In the same spirit, Norway's PES offers grants to workers to help jobseekers who need mentoring, grants to help make the workplace more inclusive and expert help to better support employers with employees frequently on sick leaves. These programmes financially support employers and, in doing so, reduce employers' risks and initial investment when trying to make their workplace more inclusive.

Facilitating by matching is another service governments provide. Bridging the distance between YWD on the one hand and potential employers, proper support, the relevant PES office, or applicable education and training programmes on the other is essential for a successful transition. Austria guarantees young people finishing compulsory education an apprenticeship through the Inter-company apprenticeship training, which connects young people including YWD to employers as well as trainers and social pedagogues. This three-year long programme also offers participants a monthly grant of EUR 354 during the first year and EUR 817 during the second and YWD can take an extra year to finish the programme. The Austrian PES offers a similar programme helping young people, including those with disability, find vocational education with the Education-up-to-18 programme. Belgium also plays matchmaker through INAMI for people with the "work incapacity status during their reinsertion programme as mentioned in Chapter 4. Canada's Student Work Placement programme connects educative institutions with employers and students to yet again smoothen the transition to the labour market.

Ensuring access to vocational education is also a way to prepare young people in transitioning to the labour market. For YWD facing concrete challenges in the labour market, vocational training or work-focused interventions in general, improve the employment outlook (Bailey et al., 2018[60]). Switzerland offers training leading to a certificate of professional formation (AFP) or a federal certificate of capacity (CFC). In addition to the federal certificates, there are practical formations for PWD organised by associations, which can prepare participants to enter vocational education. In Austria, the last year of compulsory school can be done in a prevocational school, which can prepare young people for vocational training later.

3.4. Support to help young people with disability thrive in the labour market

Children and young people with disability often face several disadvantages, many of which start early in life. For instance, they are more likely to have parents with disability and to live in income-poor households. Supporting them to thrive in the labour market, and more generally, supporting their social inclusion, is key to not losing them from a very young age and stopping the perpetuation of their disadvantages. As this chapter shows, supporting them includes providing adequate safety nets through social support to be able to make productive human capital investments and cover the additional costs of disability. However, social benefit receipt from a young age also risks fostering a welfare culture and inhibiting self-sufficiency. The second crucial element to supporting YWD is thus to support their transition from school to the labour market. This section proposes a set of policy recommendations for governments to reform and rethink the way they support YWD, organised around four guiding principles:

1. Mainstreaming the social protection of young people with disability
2. Completing the transition towards inclusive education systems
3. Supporting education completion and the transition to the labour market
4. Linking school-to-work supports and social protection

1. Mainstreaming the social protection of young people with disability

Young people, with or without disability, should be supported through mainstream social protection with a strong activation component, such as unemployment benefits or social assistance. Case-studies like that of the Netherlands, where YWD and work capacity are covered by the mainstream social assistance programme, illustrate the positive impact of this approach on employment, compared to disability benefits which were used in the Netherlands until a few years ago. In Switzerland, where efforts are concentrated in supporting young people through social assistance and employment supports rather than through disability benefits, the employment rate of YWD is high. Governments should make several key considerations when mainstreaming the social protection of YWD, two of which are discussed in more detail further below: ensuring the adequacy of benefits provided, and providing individualised support of needs while dropping the disability label.

In many countries, YWD are de facto covered through social assistance, i.e. a mainstream programme. This is the result of an institutional factor (YWD like many PWD do not have sufficient contributory periods to be covered by disability insurance) rather than a deliberate decision to mainstream disability policy. This results in an incomplete transition towards mainstreaming as understood in this report: it is not enough to avoid the use of special programmes for people with disability, but there is a need to make mainstream programmes disability inclusive and disability accountable. At present, mainstream social protection is often not disability inclusive enough, resulting in low coverage and low adequacy for YWD. Data indeed suggest that the risk of poverty is higher for YWD in countries where social assistance is more frequently used than disability benefits. The Dutch experience corroborates this: YWD covered by social assistance have lower incomes than those covered by disability benefits. Countries thus need to be cautious with making social protection disability inclusive to tackle the adequacy of mainstream programmes for YWD.

- One important consideration is that eligibility to social assistance is means-tested at the household income level, which makes it an imperfect substitute of a single working-age benefit. While it is beyond the scope of this chapter to discuss the optimal approach to means-testing of benefits, these are important considerations to make when social assistance becomes, or is, the primary social protection programme for YWD.
- Another consideration to make is that the poverty line of YWD (and of PWD more generally) may be higher than that of PWOD, given the additional costs associated with having a disability. It is crucial that benefits from mainstream social protection can be complemented with top-ups or supplementary benefits to cover the additional costs of disability, in line with the proposal of presented in MacDonald, Prinz and Immervoll (2020[61]).

Providing individualised support within mainstream social protection is a key element to mainstreaming: support needs to be given through mainstream programmes but targeted to the needs of each person. Countries may take several approaches to providing individualised support of needs.

- Letting go of the label of disability for YWD (and PWD more generally). In many cases, activation could be separated from the official recognition of disability. Disability certification causes two main issues. First, as most countries exempt PWD from job search requirements without an assessment of the actual capacity to work, there is an incentive to obtain a disability recognition, with the stigma it entails. The second issue is that the recognition of disability in many countries still fails to incorporate functional elements that measure the capacity to search for jobs and work. The approach taken by Germany is to put requirements only to the extent that these are reasonable given health constraints, in line with an assessment of health and environmental factors. By linking it to the actual capacity to work, a disability does not immediately become discriminatory.
- Assessing health barriers to employment and accounting for functional capacity and assessments of cases with complex needs. Not certifying disabilities does not imply not assessing health barriers to employment, quite the contrary. Countries should make more efforts to assess health barriers to employment at an early stage, as well as social and other barriers. One of the key lessons from the 2015 reform of the Dutch disability benefit for young people is the need to add signalling mechanisms to identify vulnerable groups (van Echtelt et al., 2019[15]). As a result, currently, a disability assessment may result in two additional signals, which provide additional information to municipalities on how to support young people in finding adequate employment.
- Developing individualised pathways that respond to the needs assessments. Not all YWD are able to transition to the job market, nor participate in education or training. Transitionary pathways that allow to focus on social inclusion, by for instance helping them acquire basic skills, or develop a routine, may be very useful. In Italy, receipt of the guaranteed minimum income requires accepting to participate in an individualised employment plan, and if not possible, in an individualised social inclusion plan. One of the key elements is the assessment of recipient's needs, and the deployment of multidisciplinary teams to assess the needs of more complex cases. In Slovenia, the Centres for Social Work in each municipality also provide social rehabilitation to social assistance recipients who may face health barriers.

2. Completing the transition towards inclusive education systems

Countries have made considerable efforts in the direction of an inclusive education system: first, through the identification of special education needs, and second through the enrolment of YWD in mainstream classes. Efforts should continue to achieve a greater inclusion of YWD in mainstream classes, not through labelling YWD, but by implementing inclusive education principles, which rely on individualised educational planning and understanding the needs of every child. As with social protection, dropping the disability label and addressing the barriers to education more generally for disadvantaged groups of the population will

also help YWD. There are some additional good practices that countries may take to further strengthen the inclusiveness of education.

- Mainstream education should be a multi-actor collaboration. Teachers need more support to be able to understand and cater for the needs of disadvantaged groups. In the Canadian province of Brunswick, for example, specialised staff spends two-thirds of their time supporting classroom teachers (the other third they spend with students), so that teachers can take better care of all students' needs. Collaboration must also happen between teachers of different classes, through for example discussions moderated by an expert facilitator. Collaboration must extend between establishments too. The province of Brunswick also launched the "Triad Inclusion Team" project: groups of three high schools with comparable demographics send a delegation each including the principal to share their solutions to problems faced. The government funds at least three meetings a year, including travel costs, and sends a facilitator.
- Frequent (re-)evaluation is essential to continuous improvement. Inclusive education policies need some trial and error, and the only way to improvement is to monitor policies and conduct impact evaluations. Inclusive education policies should be accompanied by government mandated impact evaluations, and a promise to continuous improvement on the basis of their findings.

Inclusive schooling has become the norm in many countries at primary school age but not at higher levels of education. For many YWD, the transition to mainstream secondary school, including vocational schools and apprenticeships, and correspondingly also mainstream tertiary education, is still difficult. To complete the transition towards inclusive education systems, countries need to focus their efforts on ensuring that secondary and tertiary education is also inclusive.

3. Supporting the transition to the labour market

NEETs face a considerable risk of experiencing persistently poor labour market outcomes and becoming long-term unemployed or inactive. The high share of YWD among them suggests that this is a field where disability policy has not been involved enough. Mainstream programmes to identify, reach out to and help NEETs must have a stronger focus on barriers caused by their health and disability. The same holds for mainstream programmes facilitating the transition to the labour market, which tend to be most effective if involving schools, local actors and institutions, and employers.

PES should be a key actor in supporting the transition to employment of all young people, including YWD. In most European OECD countries, PES are the main implementers of Youth Guarantee programmes. Their experience makes them the right actor to mainstreaming this support for YWD. The Austrian approach, where beneficiaries of transitional disability programmes participate in PES services and measures, shows that this could indeed be a successful approach to support their employability. There are some good practices for PES to support YWD:

- Equipping PES staff to assess health barriers to employment is essential to be able to design the right supports and services for YWD, to activate them without compromising their health and well-being. This can be achieved through training of PES staff, or through co-operation with vocational rehabilitation specialists or occupational doctors.
- Providing job coaching is the first necessary step to supporting YWD in their transition to the labour market, both to find the opportunities that can be right for the jobseeker but also to support job retention. The Dutch experience supports the importance of job coaching as the first measure.
- Focusing on opportunities is key to ensuring job tenure and progression in the labour market. In addition to the employment gap, PWD often face fewer opportunities to thrive in the labour market. The Dutch experience shows that focusing job coaching and other employment support programmes for YWD on building a career, not just on finding a job, is the right approach for more sustainable employment.

- Assessing municipalities' capacity to implement such a programme and give them the right tools and incentives. One of the challenges encountered during the implementation of the Dutch reforms is that municipalities have very different levels of resources and capacity, causing a highly uneven implementation of the reform across the country. Assessing municipalities' capacity early, aligning incentives and addressing any gaps, while respecting their competencies for policy implementation, is key for the policy to be successful.

4. Linking school-to-work supports and social protection

Social protection needs to be complemented with strong school-to-work supports and services. On its own, social protection for YWD may result in lower employment during adulthood, by giving rise to perverse incentives and a welfare culture. On the other hand, school-to-work supports and services alone are not sufficient for many YWD, as they do not provide the safety net necessary to enable investments in human capital for young people. Combining social protection and school-to-work supports and services is the key to enabling YWD to thrive. There are some policy approaches that countries can adopt to enable this link:

- Making the registration with the PES mandatory for all young people who are not in education or in employment, including YWD. At the same time PES should have the competences and adequate resources necessary to help YWD and refer them, as necessary, to vocational services.
- Making supports permeable and flexible is critical, to allow YWD to transition into the labour market while receiving benefits and to return to benefits when employment integration has failed. This also includes counting months and years spent in apprenticeships as contributory periods for insurance benefits, to ensure there are no disincentives to participation.
- Making benefit receipt conditional on participation in training, apprenticeships, or employment, in line with the individual's capacity.
- Reducing the barriers of YWD to access training and other school-to-work supports, by making the system more inclusive and accessible. Supports for all young people, including YWD, should be targeted to individual needs, to address people's individual barriers. This could include the introduction of remedial programmes that would allow addressing learning gaps by teaching basic skills. It could also include building services based on Universal Design principles (see Chapter 5) so that persons with various types of disability can use them effectively.

Assessing the barriers and needs of YWD should come without disability labelling. One approach is to delink the assessment of special needs and supports from the disability assessment. Special needs and supports should be assessed with a functional view, taking into account what the person can do and how support could overcome the barriers to school and work. Disability labelling is not a requirement but possibly a hindrance.

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4 Designing employment-compatible social protection for all

Disability benefit programmes have seen reforms in many OECD countries. Changes have in some cases led to a halt or turnaround in the increase in the disability benefit caseload but the effects on the employment of people with disability have remained limited. Policy efforts should focus on earlier intervention, by preventing people from getting to a stage from which there is no sustainable return to work.

In Brief

Social protection is key to supporting people with disability but may also create disincentives to work and self-sufficiency. OECD countries should focus on earlier intervention to promote a quick return to work, as soon as health barriers to employment become visible in workers or unemployed.

- **Disability benefit programmes have gone through reforms.** Many countries have been and are in the process of reforming their disability programmes, by tightening their generosity and eligibility and/or by increasing the activation elements of disability programmes. These policy changes have had effects in curtailing the size of disability programmes in many countries. Yet, there appears to be a limited correlation between these reforms and higher employment rates for people with disability (Section 4.1).
- **Policy efforts to promote the employment of PWD must be oriented towards preventing people from getting to a stage from which there is no sustainable return to work.** This can be supported by policies promoting the early identification of barriers to employment, giving a greater role to the stages preceding application to disability benefits – sickness insurance and unemployment insurance – as well as creating intermediate stages before entering permanent disability benefits, i.e. various forms of transitional benefits (Section 4.2).
- **Exits from disability benefits are rare, and when they occur, often result in transitions to other social protection programmes**. Reforms need to be conscientious of spill-overs across social protection programmes, and be considered within the social protection system of a country in its entirety (Section 4.3).
- **Social protection is necessary to prevent people with disability from falling into poverty**. Benefit adequacy considerations must take a complete view of the benefit system in its entirety, as many PWD depend on top-ups provided through social assistance or, more often, on social assistance payments altogether (Section 4.4).
- **Countries should reform social protection programmes to include early intervention and adequate incentives, in a disability-inclusive way.** This chapter proposes six guiding principles: (i) making disability systems a non-final state; (ii) implementing mandatory early intervention approaches; (iii) introducing adequate work incentives; (iv); taking a holistic approach to reforming social protection; (v) tackling the fragmentation of social protection; and (vi) addressing poverty through mainstreaming social protection (Section 4.5).

Social protection is a key policy tool, as it helps break the link between disability and poverty. At the same time, social protection creates disincentives to work and self-sufficiency, thereby trapping people with disability (PWD) in poverty. As advanced in OECD work about 20 years ago, it is important to design disability benefit programmes with a focus on tailored early intervention, capacity-adjusted activation, adequate work incentives, and stronger responsibilities for employers and public authorities. The reality, however, is that reforming disability programmes is complex because it targets a wide range of people, including some with very limited or no work capacity; disability benefits must offer a safety net to PWD with no work capacity while promoting and supporting the employment among PWD who can work. Finding the right balance between activation and adequacy of benefits is at the core of the policy debate on social protection for PWD, and is captured throughout this chapter.

4.1. Disability benefit systems

Disability benefit systems are the cornerstone of social protection for PWD. In most countries, these are part of the social insurance system, providing social insurance against the risk of earnings loss due to disability. Systems also depend on their eligibility criteria, such as contribution requirements. Disability systems that are closely linked to pensions, for instance, have strict contribution requirements and may thus exclude PWD with limited work histories. Many countries respond to this by providing means-tested disability benefits alongside disability insurance. This section focuses on disability benefit systems, by describing their trends in take up, and explaining (part of) them by looking at (1) system characteristics, (2) inflows and outflows, including levels and changes in acceptance rates, and (3) reforms of the system, which mostly operate through new benefit claims. The section covers OECD countries to describe the size of disability systems and reforms, but goes in depth into the disability system characteristics and outcomes of six countries: Austria, Belgium, Canada, the Netherlands, Norway and Switzerland. These six countries are useful in providing lessons for all other OECD countries, as they all have different disability systems, with their own peculiarities, which are often found in other OECD countries as well.

4.1.1. Institutional details and disability benefit outcomes

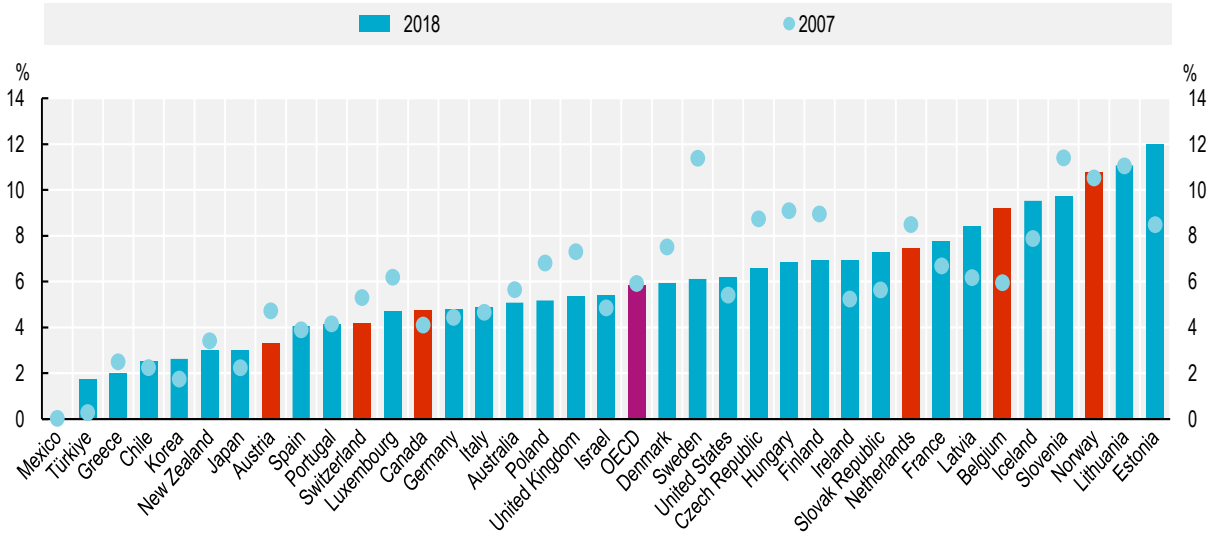
This subsection serves two main objectives. First, providing descriptive statistics on disability benefit caseload trends across OECD countries. Second, understanding trends in key outcomes for the selected group of countries, such as new claims, acceptance rates and outflows, using administrative data, and explaining the observed trends by looking at the characteristics of disability benefit systems.

Variation in disability benefit receipt

There is large variation in disability benefit receipt rates across OECD countries and over the past decade**.** Figure 4.1 shows that, on average across OECD countries, 5.9% of the working age population aged 20-64 received disability benefits in 2018. This share has remained constant over the past decade. There is great variation, however: in 2018, at the bottom of the distribution, Mexico reported receipt rates lower than 0.5%. At the top of the distribution, there is Estonia, with 12% of the population, many of which are in-work claimants through the new Work Ability Allowance. There is also great variation in the change over time. Some countries experienced decreases of more than 2 percentage points, like the Czech Republic, Hungary and Sweden. Others saw an increase in the receipt rates, including Eastern European countries (Estonia, Latvia, the Slovak Republic), Belgium, Iceland and Ireland. These countries have experienced substantial increases in the disability receipt rate of over 1.5 percentage points.

Figure 4.1. Large variation in disability recipient rates across OECD countries and over time

Disability benefit receipt rate in 2007 and 2018 in OECD countries



Note: Disability benefit receipt over population aged 20-64. Disability benefits include contributory and non-contributory programmes specifically targeted to people with disability. It also includes permanent disability programmes and transitional disability programmes. OECD is an unweighted average excluding Colombia and Costa Rica. Data for 2007 refer to 2009 (Chile) and 2018 refer to 2016 (Estonia, Germany, Italy, United States). For Canada, data include federal insurance as well as provincial assistance benefits.
Source: Calculations based on the *OECD SOCR database* https://www.oecd.org/social/social-benefit-recipients-database.htm and the *OECD Historical Population database* http://stats.oecd.org//Index.aspx?QueryId=88956.

StatLink https://stat.link/w5omyq

To understand these trends, it is necessary to disaggregate further the data, to answer some of the following questions: Did the inflow to the disability programme change? Or were the outflows different? More generally, how did reforms to the system impact the size of disability programmes? The following sections focus on the six funding countries of the project, to assess the interplay of (1) system characteristics, (2) programme inflows and outflows, and (3) reforms of the system.

Inflows to the programmes

This section breaks down information on the entry to the main disability programmes in Austria, Belgium, Canada, the Netherlands, Norway and Switzerland: these descriptive statistics allow understanding the acceptance rates to the programmes, and how these relate to their characteristics, as well as the trends in inflows, and which factors affect these trends.

Before assessing acceptance and inflow rates to the disability programme, it is good to recall the characteristics of the main disability programmes. The main disability programme is a contributory programme in most countries, with the aim of insuring workers against the incapacity to work due to disability. It can take different forms in different countries. In some countries, like Austria, Canada and Switzerland, the main disability programme is a disability pension which shares many characteristics with the old-age pension system. In Belgium, the Netherlands and Norway, the main disability programme is a disability benefit, independent from the old-age pension programme. Table 4.1 summarises the main characteristics of each of the programmes. Some key conclusions emerge:

Table 4.1. Main disability programme characteristics differ across the six countries in focus

Characteristics of main disability benefit programmes, by country

	Austria	Belgium	Canada	Netherlands	Norway	Switzerland
Main disability benefit	Work incapacity pension (Berufsunfhigkeits-pension)	Disability benefits (Indemnités d'incapacité de travail/ Invaliditeits-uitkering)	Canada Pension Plan Disability (CPP-D) and Quebec Pension Plan Disability (QPP-D)	Disability benefits (WIA): Income Provision for Fully Disabled Persons (IVA) and Return to Work Scheme for the Partially Disabled (WGA)	Disability benefit (Ufretrygd) Occupational Injury Insurance (yrkesskade-forsikring)	1st pillar: Invalidity Insurance (VG/AI) 2nd pillar: Professional provision (BVG/LPP)
Type	Pension	Benefit	Pension	Benefit	Benefit	Pension
Responsible organisation(s)	Pension insurance authority	National Institute for Health and Disability Insurance (INAMI)	Employment and Social Development Canada (ESDC, for CPP-D)	Employee Insurance Agency (UWV)	Labour & Welfare administration (NAV) Private insurance companies	1st pillar: Disability Insurance offices (cantonal) 2nd pillar: Pension schemes
Eligibility						
Age	18 to 65 (women: 65 as of in 2033)	16 to 65	18 to 65	18 to 66 (67 in 2024)	18 to 67	18 to 65 (64 for women)
Calculation of disability	Medical	Medical	Medical	Income loss due to disability	Income loss due to disability	Income loss due to disability
Minimum degree of disability	Full disability often interpreted as 50%	66%	Inability preventing substantial gainful activity	IVA: 80% WGA: 35%	50% (40% via transitional benefit, 30% occup. injury)	40%
Minimum contributory period	5 of last 10 years (prolonged for 50+)	9 of last 12 months	4 of last 6 years	None	Last 5 years	3 years
Generosity						
Replacement rate or average monthly payment	Decreasing function of age of disability onset	From 40% to 65%	EUR 701.73	IVA: 75% WGA: between 28% and 70%	66% Topped up by occupational insurance	1st pillar: 822 + 13/600*basis (for higher income: 1 155 + 8/600*basis) 2nd pillar: 6.8%*accumulated contributions
Increased generosity	Contributions Dependent household members	Dependent household members	Contributions	WGA: Disability rate, working at least 50% of capacity	Degree of disability Being younger for occupational insurance	Degree of disability
Benefit base	Whole insurance career (max ceiling EUR 5 670/month)	Last income Ceiling (EUR 55 784/year, with exceptions)	Basic payment amount of CAD510.85 (EUR 388) + Contributions	IVA: Last income WGA: Last income or minimum wage	Last income OR average income over best three in last five years	Revalued income from paid employment Bonuses for child child-raising and care-taking
Minimum and maximum benefits	No min No max	Min EUR 36.88-62,08/day, depending on several factors No max	Min CAD 510.85 (EUR 388) Max CAD 1 413.66 (EUR 1 074)	No min Max EUR 222.78/day	Min NOK 242 590 (EUR 23 631) Max NOK 421 340 (EUR 41 043)	1st pillar: Min: CHF 1 195 (EUR 1 208) Max: CHF 2 390 (EUR 2 415) 2nd pillar: none
Maximum duration of benefits	Transition to old age at 65 for men 60 for women	Transition to old age at 65	Transition to old age at 65	No	Transition to old age at 67 1 year for Occupational Insurance	Transition to old age at 65 (64 for women)

Note: The table summarises the main characteristics of disability benefit programmes for standard workers. Disability programmes for workers in non-standard employment and self-employed are discussed In Chapter 5. Austria and the Netherlands the minimum (or basic) pension is ensured through compensation supplements (EUR 1 030.49/month if single in Austria and EUR 1 145/month if single in the Netherlands). The table reports the main system for employees and unemployed workers for Belgium; the self-employed are covered under a different system. The exchange rate used for Canada corresponds to that on 18 July 2022 (CAD 1 = EUR 0.7591).

Source: Countries' responses to OECD questionnaire; MISSOC comparative tables; Austria Social Benefits, https://www.sozialleistungen.at/buch/pr342997_2968685/Invaliditaets-oder-Berufsunfaehigkeitspension-fuer-ab-1964-Geborene; SSA; Swiss AHV/IV, https://www.ahv-iv.ch/fr/Assurances-sociales/Assurance-invalidit%C3%A9-AI/Rente-dinvalidit%C3%A9; INAMI ([1]); Service Canada, https://www.canada.ca/en/services/benefits/disability.html; EC- Employment, Social Affairs & Inclusion, https://ec.europa.eu/social/main.jsp?catId=1122&langId=en&intPageId=4990.

- Disability assessment varies from country to country in the extent of the importance of medical and functional aspects for determining the degree of disability, as well as the importance of the income loss due to disability. Countries like Austria and Belgium use a largely medical definition of incapacity. Instead, in Canada, the Netherlands, Norway and Switzerland, the key factor in measuring the degree of disability is the extent of income lost due to disability.
- Across countries with similar approaches to assessing disability, the minimum degree of disability required for benefit entitlement is quite uniform. For instance, in Switzerland and Norway a 40% loss in income capacity is required for benefit eligibility, compared to a 35% in the Netherlands. More precisely, the Dutch disability system, which separates partial and temporary incapacity from full and permanent incapacity, requires 80% incapacity to access the IVA (disability benefit for full incapacity), and 35% to access the WGA (Return to Work Scheme, partial/temporary incapacity). In Norway, usually the minimum degree of disability to be eligible for disability benefits is 50%, but for applicants coming from the transitional disability programme (Work Assessment Allowance, AAP, see Section 4.3.1), the minimum degree of disability is 40%. Transitions from the AAP to the disability benefit programme account for the large majority of inflows into the programme (73.6% in 2021); thus, de facto, the minimum degree of disability is 40%.
- Stricter contribution requirements for eligibility may leave groups with limited work histories out of the main disability programme. In all countries but the Netherlands and, de facto, Norway, sufficient contributory periods are a requirement for eligibility to the main disability programme. These requirements are stricter in Canada (four years of contributions out of the last six years, or three years for those with 25 years of contributions) and Austria (five years for those under 50), as these disability programmes are closely linked to the old-age pension system. After reaching age 50, the required contribution period in Austria increases by one month for every additional month and the corresponding valid period by two months. As such, a 60-year-old employee would need 15 years of contribution in the last 30 years instead of five in the last ten years. Austria and Canada are also the only countries among the six to require a minimum level of contributions to be insured, although in Austria voluntary opting in is possible.
- The amount of the benefit can be either a specific replacement rate, or a function closely linked to old-age pensions, resulting in substantial differences in generosity. Overall, the six countries in focus use three different calculation methods. Belgium, the Netherlands and Norway provide claimants with a percentage of the benefit base, or a replacement rate. This rate in Belgium varies between 40-60% based on the composition of the claimant's household while the rate is higher in the Netherlands and Norway (75% and 66%, respectively). The second method, used in Austria and Canada, consists in determining a fixed amount and increasing it based on contributions; in Austria, for example, the annual pension amounts to 1.78% of each insured year's revalued contribution (in case the disability happens before the age of 60, additional months are imputed to avoid financial disadvantages). Finally, the Swiss method is somewhat more complex; the first pillar combines both the fix amount and the replacement rate calculations whereas the second pillar takes into account assets at the time of disability and a projection of assets at the time of retirement. Switzerland's first pillar disability transfer payment is the sum of the minimum old-age pension, which is fixed, and a fraction of the benefit base. Both this fixed amount and the percentage of the benefit based that is used depend on whether the benefit base is above or below a certain threshold. The second pillar is a percentage of the sum of assets (contributions and interests) at the time the invalidity begins and of the projected assets up to retirement age (contributions only). Together, these two pillars form the benefit amount. The percentage of that amount that the claimant will actually receive depends on how incapacitating their disability is, and is since January 2022 a linear function of the degree of disability.

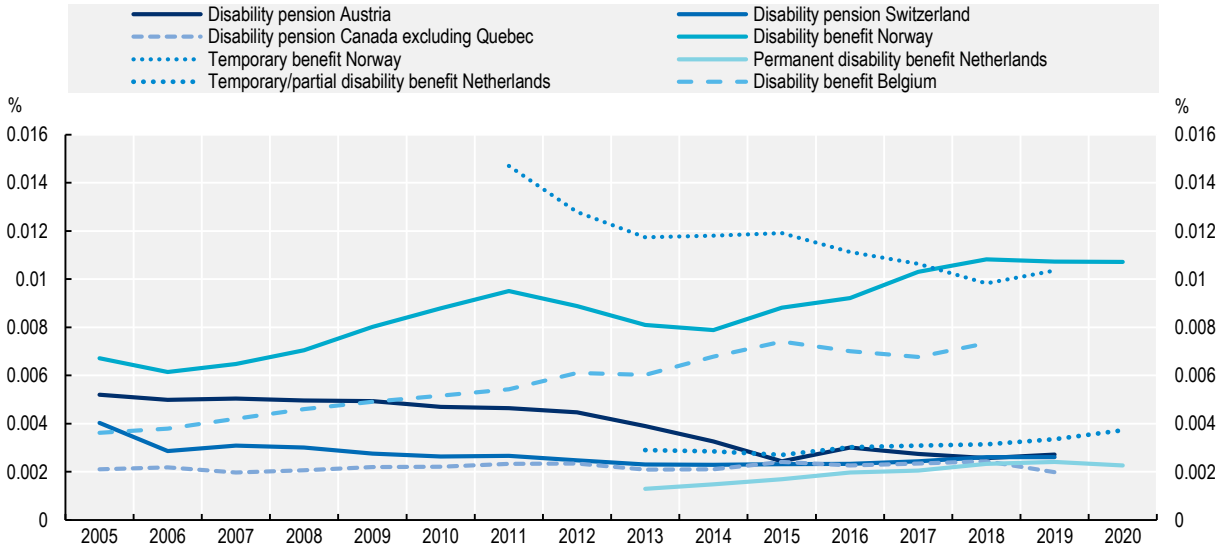
- The benefit base itself is calculated differently depending on the country, again impacting the generosity of the system. Belgium and the Netherlands use the last income earned by the claimant, whereas Norway uses an average of the years before incapacity. In Austria pension calculation is based on the whole insurance career while in Norway the average of the best three in the last five years is used. Switzerland uses the average annual revalued income from either paid employment or voluntary contribution, including bonuses for child-raising. Canada uses the average of the best-insured years during the contributory period (from age 18 to the start of benefits) and considers dropping out years for caring for children and previous receipt of disability benefits. The benefit base can have a large impact on the generosity of the benefit. Because income generally increases with age both using the last income and the average of several recent years favour older claimants. Thus, benefit bases must be compared across claimants of the same age. Theoretically, using last income as a base sounds more generous: since income increases with age, last income should be the highest. This logic is generally true for old-age pensions: the fewer years are taken into account in the base, the more generous the resulting pension is. However, in the case of PWD, it is common to experience health issues long before receiving disability benefits. Therefore, the most recent income is no longer the most likely to be the highest; thus, the link between benefit base and generosity is unclear. However, when the averaging system is selected, it usually involves re-evaluating the income as Austria does. If the re-evaluation is unfair, averaging over too long a period becomes much less generous than at first glance. Overall, in the case of PWD the most generous system seems to be using an average of best years over a relatively short period of time.

Inflow rates into disability programmes display very different levels in the selected countries, ranging from 0.15% of the working population entering the Canada Pension Plan Disability benefits (CPP-D) every year, to over 1% of in Norway (Figure 4.2). Whether a country has a high inflow rate closely corresponds to the characteristics of disability benefit systems. Systems similar to the pension system, like in Austria, Canada or Switzerland, have lower inflow rates, due to the strict contributory requirements. Countries with disability benefit systems like Belgium have higher inflow rates into their disability programmes. In Norway and the Netherlands, a large part of the inflow into the system is channelled through temporary/partial disability programmes (73.6% in 2021 in Norway, and 50% in 2020 in the Netherlands). Despite this similarity, as well as the low contributory requirements in both countries, the inflow into the Dutch disability system is substantially lower than that of Norway. The Dutch disability system has several peculiarities, such as a two-year long employer-paid sickness period, and a special disability programme for youth (*Wajong*, see Chapter 3), all of which contribute to a lower inflow rate into the general disability benefit systems.

Figure 4.2 shows the inflow to the main disability programme over the working age population in all six countries. Austria, which displays fairly contained acceptance rates to the programme, has seen its inflows reduced by one-third over the past 15 years, from 0.42% of the working age population in 2005 to 0.27% in 2019. As explained in more detail in Box 4.1, this is largely due to the introduction of a transitional disability benefit, which absorbed a large share of the inflow into the disability pension. Similar dynamics explain the fluctuations in inflow rates into the Norwegian disability benefit: in 2011, with the introduction of a new transitional benefit (AAP), which replaced three existing transitional programmes (the Temporary Disability Benefit, the Medical Rehabilitation allowance and the Vocational Rehabilitation allowance), a maximum duration on transitional benefits was imposed. Upon reaching the maximum duration (usually three years, extended to five years for many), many claimants transition to the main disability programme. This explains the large increase in inflow into the programme from 2014 onward. At the same time, the attractiveness of transitional benefits decreased, resulting in a decreasing inflow. The overall inflow rate into the system declined in Norway, from 2011 to 2019 (from 2.42% to 2.11% of the population).

Figure 4.2. Inflows into disability programmes seem to increase with more lax acceptance rates

Inflow rate to main disability benefit as a share of the working-age population, 2005-20



Note: Inflow rate calculated as inflow to main disability benefit programme over population aged 15-69. For permanent disability benefits in the Netherlands and Norway, inflows also include transitions from transitional disability benefit programmes to permanent disability benefits.
Source: Data provided by the Federal Ministry of Social Affairs, Health, Care and Consumer Protection of Austria, the Canada Pension Plan, the Dutch Employee Insurance Agency (UWV) and the Office fédéral des assurances sociales for Switzerland. Data were extracted from the Institut national d'assurance maladie-invalidité (INAMI) de Belgique statistiques d'indemnités, https://www.inami.fgov.be/fr/statistiques/indemnites/Pages/default.aspx; the UWV Monitor Arbeidsparticipatie, https://www.uwv.nl/overuwv/Images/uwv-monitor-arbeidsparticipatie-2017.pdf, 2017 for the Netherlands and the Norwegian Labour and Welfare Administration (NAV) disability statistics, https://www.nav.no/no/nav-og-samfunn/statistikk/aap-nedsatt-arbeidsevne-og-uforetrygd-statistikk/uforetrygd/arkiv-uforetrygd_kap.

StatLink https://stat.link/0id29e

Inflow rates in Belgium have doubled between 2005 and 2018, reaching 0.7% of the working age population in recent years. This is largely due to spill-overs across social protection programmes: Box 4.1 shows that the 2012 unemployment insurance reform in Belgium has generated large spill-overs from unemployment benefits to disability benefits, partly explaining the increasing trends in the latter. Canada, the Netherlands and Switzerland present rather stable inflow rates into their (permanent) disability benefits, but in the Netherlands, this constant inflow masks a significant increase in inflows into the temporary/partial programme over the past years. The inflow rate in Norway is the highest among all countries reviewed, as a result of a steady increase in the past five years. This is despite the short-lived curtailing effects of some of the reforms to the system, such as the introduction of a new transitional programme in 2011 with a strong focus on vocational rehabilitation.

There are many co-factors that can impact inflow rates, other than the acceptance rate to the programme. While the comparison between acceptance rates and inflow rates may seem straightforward, it is only one side of the story. A number of factors could be driving the trends in the inflows:

- **Disability prevalence, partly due to demographic changes**. The prevalence of disability has been increasing due to the ageing of the population but it has not increased to the same extent in all countries: as shown in Chapter 2, in Austria and Belgium the disability prevalence has steadily increased over the past decades, possibly contributing to the increased inflow into disability benefits in Belgium.

- **Economic and labour market conditions**. The literature shows that in many OECD countries, disability benefit applications are countercyclical, rising during recessions and thus resulting in higher disability benefit take up (Autor and Duggan, 2006[2]; Duggan and Imberman, 2009[3]; Koning and Lindeboom, 2015[4]; Mueller, Rothstein and von Wachter, 2016[5]; Maestas, Mullen and Strand, 2021[6]; Benítez-Silva, Disney and Jiménez-Martín, 2010[7]). One potential reason is that worsening economic and labour market conditions change the relative value of disability programmes by affecting their effective "replacement rate" (i.e. benefits relative to potential labour market earnings) (Autor and Duggan, 2003[8]). Countries reviewed in this chapter were hit very differently by the Global Financial Crisis (GFC), and their employment levels experienced different recovery pathways. For instance, the Dutch employment rate grew more quickly and strongly after the GFC than for the other countries reviewed, which could contribute to explaining the contained inflow to disability benefits. The disability benefit "replacement rate" should also be measured against other income replacement programmes, such as unemployment benefits and social assistance: the higher disability payments are compared to other social protection programmes, the more likely it is to have a countercyclical effect (Benítez-Silva, Disney and Jiménez-Martín, 2010[7]). Another factor is the approach to assessing disability, which like in the United States, may include actual labour market opportunities (Maestas, Mullen and Strand, 2021[6]), contributing to the pro-cyclicality of disability benefit take up.
- **Changes in acceptance rates**. Acceptance rates vary widely across countries, which naturally impacts the inflow rate. Table 4.2 shows that the rate of acceptances ranges from 43% in the Austrian disability pension, to 90% in the Norwegian disability benefit. These acceptance rates can be further decomposed between the first instance acceptance rate and the successful appeals rate. This set of six countries suggests a surprising negative correlation between first-instance acceptance rates and successful-appeals rates, as one would expect initially stricter programmes to see higher successful appeals. In Norway, where the first-instance acceptance rate is very high, almost one in three appeals are successful, compared to only 7% in Austria with its low initial-acceptance rate. Differences in acceptance rates relate to differences in eligibility and generosity conditions: countries with stricter degree of incapacity requirements have lower acceptance rates. Austria and Canada, the two countries with the lowest acceptance rates, are also the only two countries among the four presented in Table 4.2 to require minimum years of contributions.
- **Changes in the composition of disability benefit inflows, and the growth in mental health disorders**. The increasing prevalence of mental health disorders and the greater relative importance of mental health conditions as a cause of disability benefit receipt has been documented in previous OECD reports (OECD, 2010[9]). But the impact of the increasing prevalence of mental health conditions on growing disability benefit rates is still a relevant issue, particularly in the context of COVID-19 and the associated spike in the prevalence of mental health conditions (OECD, 2021[10]). Figure 4.3 confirms the positive correlation (R square=0.36) between the inflow to the main disability programme and the share of new claimants with mental health conditions in recent periods. The figure also shows substantial variation across countries in the share of new claimants with mental health disorders: for Canada, this share fluctuates between 22-25%, while it is well over 40% in Switzerland.
- **Reforms of the disability benefit system**. Disability systems have been reformed in the past decades in ways that affect the inflow to the main programme. One such reform is the introduction of a transitional benefit in Austria in 2014, which added an additional step before being granted a disability pension for claimants with potential to be rehabilitated or retrained, discussed in Box 4.1. The introduction of these transitional programmes reduced the inflow to disability pensions, as much of the bulk of accepted applicants to the disability system were granted transitional benefits instead. While there was no change in the inflow to the disability system overall, there was a relocation to transitional payments. The impact of disability reforms on the size of the programmes is addressed in more detail in Section 4.1.2.

- **Reforms to social protection more generally**. Social protection systems are interconnected, and spill-overs (e.g. indirect effects from other social protection reforms that impact disability benefit take up) from one programme to another programme are frequent (Lindner, 2016[11]; Lawson, 2015[12]; Borghans, Gielen and Luttmer, 2014[13]; Garcia-Mandicó et al., 2020[14]). The 2012 reform of the unemployment insurance system in Belgium provides a good example, illustrated in Box 4.1. The reform led to a sudden drop in unemployment beneficiaries from 2014 on and, in parallel, a much faster increase in the disability benefit caseload. Spill-over effects between social protection programmes are discussed in more detail in Section 4.3.

Table 4.2. Acceptance rates into the main disability programme vary widely across countries

First acceptance rate, appeals rate, final acceptance rate and inflow over applicants, 2014-19

	First instance acceptance rate	Successful appeals rate	Final acceptance rate
Disability pension Austria	38%	7%	43%
Disability pension Canada, excluding Quebec	46%	12%	52%
Disability benefits Netherlands	-	-	67%
Disability benefit Norway	85%	32%	90%

Note: First instance acceptance rate measures the share of applicants granted benefits without appeal. Successful appeals rate indicates the share of all appeals with a positive outcome. Final acceptance rate measures the share of applicants granted benefits with or without appeal. All figures are averaged over five years (2014-19).
Source: Data provided by the Federal Ministry of Social Affairs, Health, Care and Consumer Protection of Austria, the Canada Pension Plan and the Norwegian Labour and Welfare Administration (NAV). Data for the Netherlands are taken from UWV Jaarverslag 2020, https://jaarverslag.uwv.nl/uwv-in-cijfers/sociaalmedisch-beoordelen/uitkomsten-claimbeoordelingen-wia.

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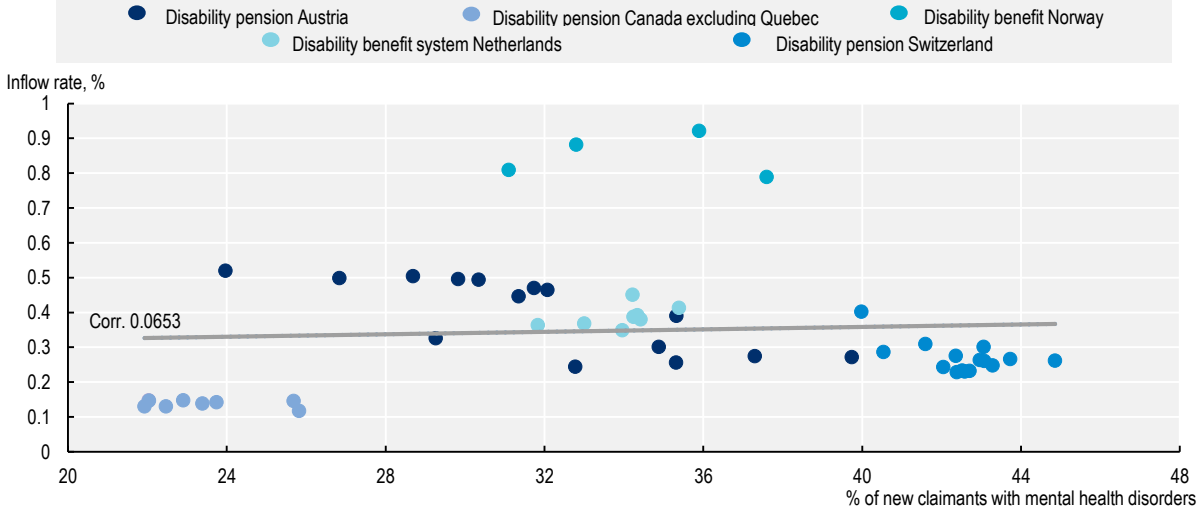
Figure 4.3. Higher inflows to disability insurance correlate with higher shares of mental health

Inflow to main disability insurance programme by share of inflow with mental health disorders, by country



Note: Each dot on the chart represents a country-year observation. The year coverage ranges from 2005-19 for Austria and Switzerland, while it only covers 2013-16 for Norway, 2011-19 for Canada and 2013-20 for the Netherlands.
Source: Data provided by the Federal Ministry of Social Affairs, Health, Care and Consumer Protection of Austria, the Canada Pension Plan, the Dutch Employee Insurance Agency (UWV), the Norwegian Labour and Welfare Administration (NAV) and the Office fédéral des assurances sociales for Switzerland.

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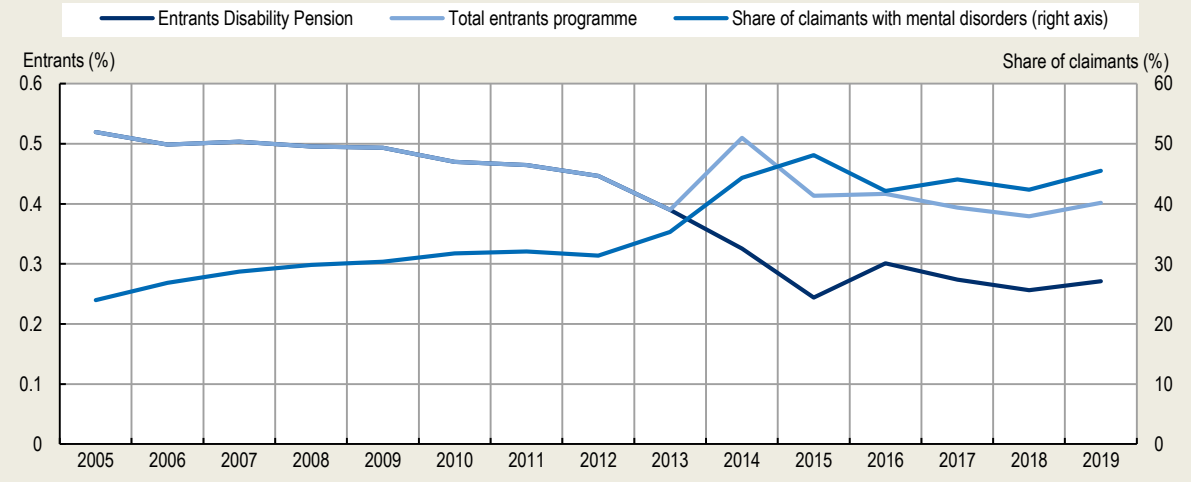
Box 4.1. Spill-over effects from social protection reforms on the inflow to disability insurance

Inflow into the Austrian disability system: The introduction of a transitional programme

In 2014, the Austrian Government introduced two new transitional payments, hoping to reduce the inflow into disability pensions, which are a pathway to retirement. The new payments aim to promote retraining and rehabilitation of potential applicants to disability pensions, or to exhaust all potential before granting a disability pension. The reform initially targeted those younger than 50 on 1 January 2014, and provided a rehabilitation allowance administered by the health insurance (an extended sickness benefit) or a retraining allowance administered by the PES (an increased unemployment benefit). Figure 4.4 shows the effects of the introduction of this policy on the inflow to disability pensions, and to the disability system generally. Unsurprisingly, the reform was effective at reducing the inflow into disability pensions, as many applicants were redirected to the transitional programmes. The inflow to the disability system as a whole has remained largely constant despite the policy, however, with a small spike in the year of the introduction of reform. The reform also went hand in hand with a significant increase in the share of new claimants with mental health conditions. The reason for the latter is unknown but it is a trend also observed in many other OECD countries and is likely to be related to a lower stigma of mental health conditions and a better understanding that it is people's mental health rather than their physical health that impacts work ability most, as across OECD countries many claimants present with co-morbid conditions. The strong focus of the reform on rehabilitation and retraining may also indirectly lead to larger attention to mental health conditions in rehabilitation and retraining programmes. The long-term impact of such a change remains to be seen as in the past, claimants with mental health conditions were furthest away from the labour market and most likely to exit the labour force and remain on disability benefit until reaching the retirement age.

Figure 4.4. The Austrian disability system: The introduction of two transitional programmes

Inflow to disability pension and the entire disability programme, including transitional benefits, as a share of the working age population (left axis) and share of new claimants with mental disorders (right axis)



Note: Inflow rate to disability pension and disability system (pension and transitional disability benefit) in the left axis, and share of all system entrants qualifying with mental health disorders (right axis).
Source: Data provided by the Federal Ministry of Social Affairs, Health, Care and Consumer Protection of Austria.

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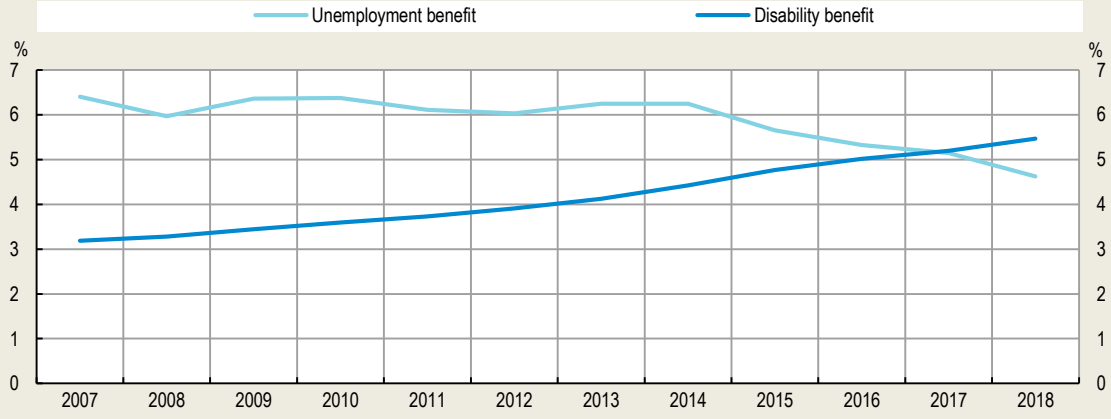
Inflow into the Belgian disability programme: Unemployment insurance reform

The unemployment benefit in Belgium was reformed in 2012. Particularly, its generosity for long-term unemployment claimants was reduced, by making payments independent of previous earnings. The system moved towards a system aiming to provide a minimum level of income over the long-term, rather than smoothing income variations per se (Hijzen and Salvatori, 2020[15]). Figure 4.5 illustrates the impact of this reform on the number of unemployment beneficiaries. With a two-year lag after the reform (probably as it affected longer-term claimants' payments most) the unemployment benefit caseload started steeply declining, from over 6% of the working population in 2014 to less than 5% in 2018. Data suggest that the total number of jobseekers has remained largely stable over that same time period. Instead, there is an increase in the number of disability beneficiaries from 2014 on, when the pace of increase in the size of the programme picks up. It is likely that by tightening the generosity of the unemployment system for the long-term unemployed, the relative generosity of disability benefits has increased, generating spill-overs from unemployment to disability benefits.

Figure 4.5. The Belgian disability programme: Unemployment insurance reform

Share of unemployment beneficiaries and disability insurance beneficiaries over the working-age population in Belgium, 2007-18



Note: Share of unemployment and disability beneficiaries over working age population in Belgium.
Source: Calculations based on the OECD SOCR database https://www.oecd.org/social/social-benefit-recipients-database.htm.

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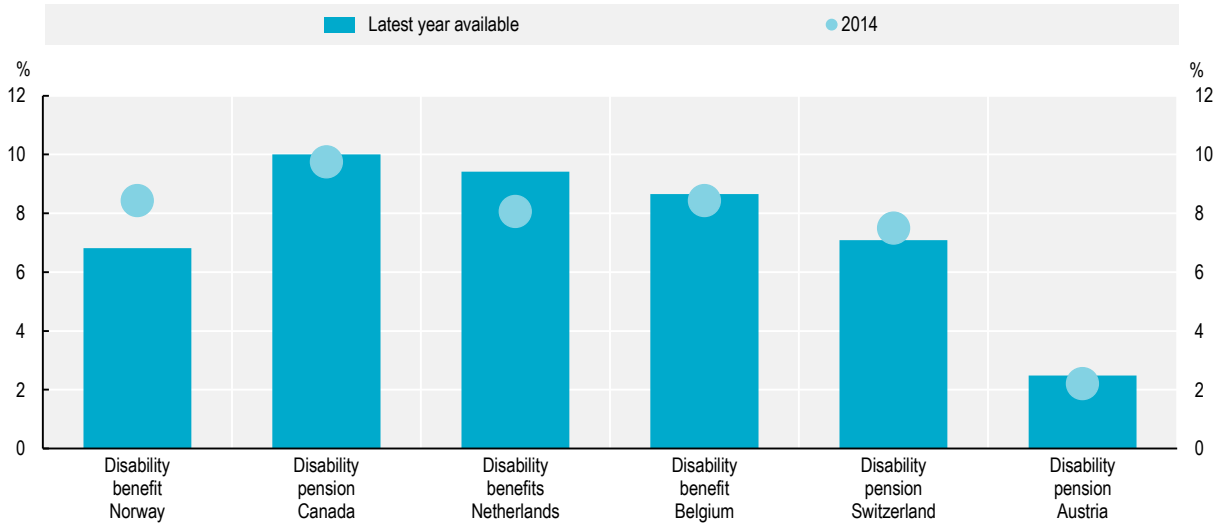
Outflows from disability programmes

The outflow from disability programmes is fairly low, with limited changes over time. Reforms affecting the inflow to disability insurance programmes do not seem to translate into variation in the exit rate from the programme for most countries (Figure 4.6). The exit rate includes claimants who either deceased, entered the labour market, or transitioned to another inactivity status (in many cases old-age pensions). Annual exit rates are around 8-10% of all claimants for Belgium, Canada, the Netherlands and Switzerland. Austria has a much lower outflow rate from disability pensions, at 2%, driven by the introduction of transitional payments for people with remaining work capacity. Norway has an exit rate between that of Austria and the other four countries and, most notably, has experienced a sharp drop in this rate in the past five years. This decline in Norway is driven by claimants aged 62 and older. Part of the decline in exits among older disability claimants is explained by a greater use of disability benefits as a retirement pathway since old-age pension reform in 2011, which made early retirement less attractive and thereby made it more attractive to exit the labour market via disability benefits.

Figure 4.6. The outflow from disability programmes is fairly low, and unchanged over time

Outflow as a share of main disability programme claimants in a given year, 2014 and latest data available



Note: Latest data available are: 2021 (Norway), 2020 (Netherlands, Switzerland), 2019 (Austria, Canada) and 2017 (Belgium). Only permanent programmes are included in this calculation: that means that for Norway the outflow refers to outflow from disability benefits, Austria from disability pension, and the Netherlands from permanent disability benefits (IVA). The outflow rate from the Netherlands may be underestimated compared to other countries presented on the figure, as partial claimants (whose employment possibilities are potentially higher) are excluded. Outflow rate is the share of exits from the programme in a given year over the number of programme claimants in that same year. Calculating the outflow rate as the exits for two years over claimants in those same two years yields similar results.
Source: Data provided by the Federal Ministry of Social Affairs, Health, Care and Consumer Protection of Austria, the Canada Pension Plan, the Dutch Employee Insurance Agency (UWV) and the Office fédéral des assurances sociales (Bundesamt für Sozialversicherungen) for Switzerland. Data extracted from the Crossroads Bank of Social Security (BCSS) Mobilité Socio-Economique à court terme, https://www.bcss.fgov.be/samikt/homePage.xhtml, for Belgium and the Norwegian Labour and Welfare Administration (NAV) disability statistics, https://www.nav.no/no/nav-og-samfunn/statistikk/aap-nedsatt-arbeidsevne-og-uforetrygd-statistikk/uforetrygd/arkiv-uforetrygd_kap.

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4.1.2. Reforms of disability programmes

Reforms to the disability system have had moderate impacts on the benefit caseload. Over the past two decades, OECD countries have consistently reformed their disability programmes in two directions: by decreasing the compensation of the programme, and by increasing activation (OECD, 2010[9]).

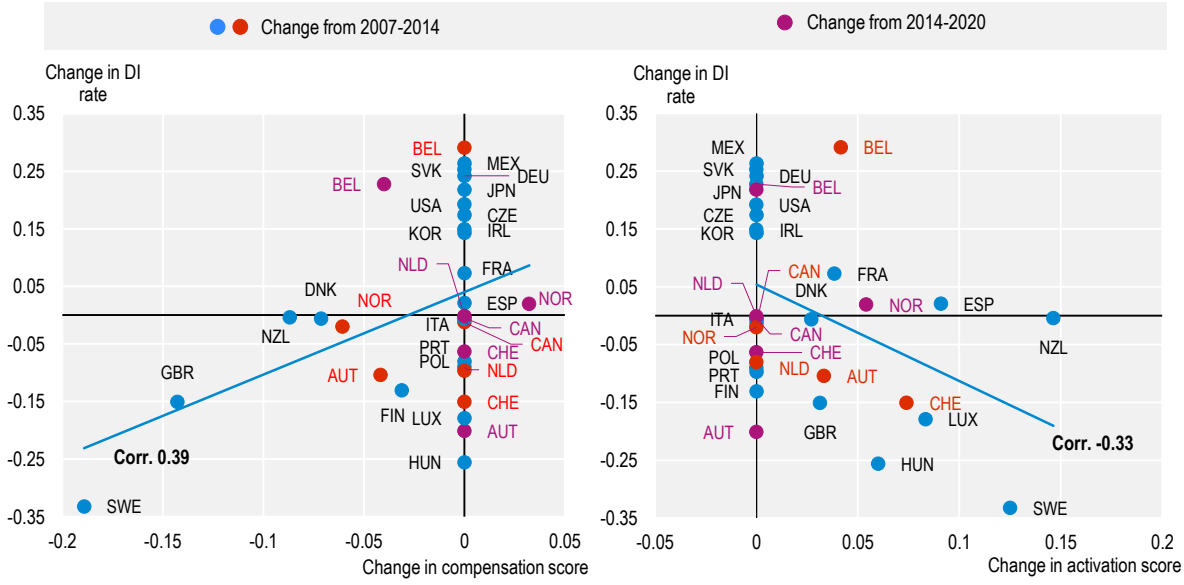
- Compensation policy scores published by the OECD more than a decade ago are lower for less generous disability systems, and with stricter eligibility criteria (OECD, 2003[16]; OECD, 2010[9]). They also decrease with a less generous and strictly monitored sickness insurance programme, capturing the interconnectedness between sickness and disability systems and policies. The left panel of Figure 4.7 plots changes in disability recipient rates against changes in the compensation score from 2007 to 2014 (drawing from earlier work), and from 2014 to 2020 for the set of six countries. While only a few countries have reformed disability systems in a way to decrease their compensation score, a fitted line shows a positive correlation between the change in compensation and the change in disability benefit caseloads (R square of 0.39).
- Activation policy scores are higher for disability systems which include a number of employment and vocational rehabilitation programmes for disability claimants, and stronger financial incentives to work (OECD, 2003[16]; OECD, 2010[9]). The right panel of Figure 4.7 shows the correlation between changes in the disability caseload and changes in the activation score. Many countries have reformed disability systems in a way that increased their activation score, more frequently

than reforms affecting the system's compensation score. There is a clear negative correlation between the change in activation scores and the change in disability caseloads (R square of -0.33).

These findings align with OECD evidence published prior to the GFC: the overall compensation features of disability systems are positively related to the number of disability beneficiaries and reforms thereby reduce the caseload. Instead, activation components seem largely unrelated to changes in the disability benefit caseload in a country. One explanation for the insignificant effect of integration policy reforms is that such reforms may take longer to unfold their impact on disability caseloads (OECD, 2009[17]).

Figure 4.7. Disability reforms have had moderate impacts on the observed benefit recipient rates

Change in disability benefit (DI) receipt rate against change in compensation (left) and activation (right) score



Note: Each point in the figures represents the change in disability benefit receipt rate over the last years (vertical axis) with the change in the compensation/activation score (horizontal axis, left/right chart). The lower the change in compensation score, the less generous and accessible the benefit system has become (left chart). The higher the change in activation score, the more developed the rehabilitation and employment stance of the policy has become (right chart). Correlations between change in compensation/activation scores and change in DI receipt rate. Fitted linear line to the data.

Source: Change in compensation and activation scores from 2007-14 are constructed using Böheim, R. and T. Leoni (2018[18]), "Sickness and disability policies: Reform paths in OECD countries between 1990 and 2014", http://dx.doi.org/10.1111/IJSW.12295 which follows the OECD (2010[9])., *Sickness, Disability and Work: Breaking the Barriers: A Synthesis of Findings across OECD Countries*, https://doi.org/10.1787/9789264088856-en, methodology. Extension from 2014 to 2020 for selected countries following aforementioned source. DI receipt rate data from the OECD SOCR data, https://www.oecd.org/social/social-benefit-recipients-database.htm.

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4.1.3. Reforms and the impact on the employment of people with disability

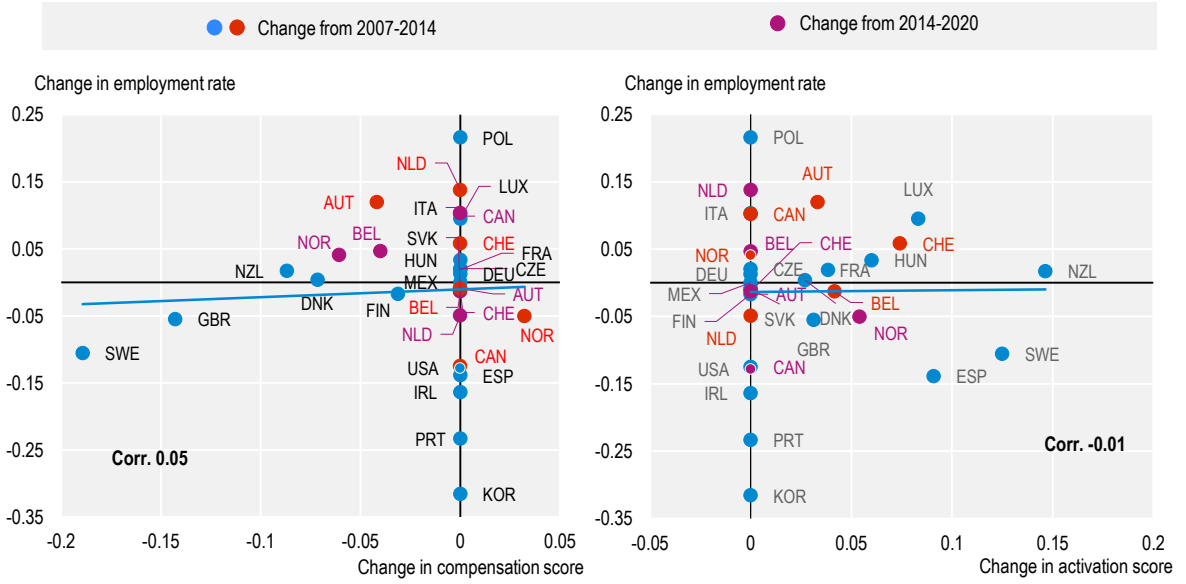
Economic theory suggests that benefit receipt creates disincentives to work through income and substitution effects. Disability benefits, or any social insurance benefit more generally, may cause both income and substitution effects, which induce its recipients to work below their working capacity. Disability benefits provide a large permanent income boost in the case of assessed disability, which may reduce labour supply purely through an income effect (e.g. higher income from benefit receipt and thus less need to work to sustain consumption). From a theoretical point of view, income effects are non-distortionary, meaning they do not create efficiency losses. The extent of the income effect depends on the generosity and strictness of the programme and other options available to recipients. Substitution effects instead are

distortionary, and arise from the design of disability benefit programmes. The benefit schedule creates tax wedges and kinks by which, if earning above a certain earnings threshold, beneficiaries may lose all or part of their benefit entitlement. Some beneficiaries may work below their capacity to avoid losing disability benefit income, which is inefficient and creates welfare traps for disability benefit recipients.

Changes in compensation and activation scores due to reforms of the disability system do not correlate with changes in the employment rate of PWD. Figure 4.8 mimics the previous Figure 4.7 in showing the correlation between changes in the employment rate of PWD and changes in the compensation and activation scores. Unlike for the disability caseload, which strongly correlated with reform-induced changes in the compensation and activation scores of disability systems, the data do not show any significant association with the employment rates of PWD.

Figure 4.8. Disability reforms are not correlated with higher employment rates

Change in employment rate of people with disability against change in compensation (left) and activation (right) score



Note: Each point in the figures represents the change in the employment rate over the last years (vertical axis) with the change in the compensation/activation score (horizontal axis, left/right chart). The lower the change in compensation score, the less generous and accessible the benefit system has become (left chart). The higher the change in activation score, the more developed the rehabilitation and employment stance of the policy has become (right chart). Correlations between change in compensation/activation scores and change in the employment rate. Fitted linear line to the data.

Source: Change in compensation and activation scores from 2007-14 are constructed using Böheim, R. and T. Leoni (2018[18]), "Sickness and disability policies: Reform paths in OECD countries between 1990 and 2014", http://dx.doi.org/10.1111/IJSW.12295 which follows the OECD (2010[9])., *Sickness, Disability and Work: Breaking the Barriers: A Synthesis of Findings across OECD Countries*, https://doi.org/10.1787/9789264088856-en, methodology. Extension from 2014 to 2020 for selected countries following aforementioned source. Employment rate from OECD calculations based on European Union Statistics on Income and Living Conditions (EU-SILC, 2005-19) for European countries; the Household, Income and Labour Dynamics in Australia Survey (HILDA, 2005-17); Chile's Encuesta de Caracterizacion Socioeconomica Nacional (CASEN, 2006-17); Mexico's Encuesta Nacional de Ingresos y Gastos de los Hogares (ENIGH, 2010-16); the Korean Labour & Income Panel Study (KLIPS, 2008-18) and the American Community Survey (ACS, 2008-18). Data for Canada provided by Employment and Social Development Canada based on the Canadian Income Survey, 2013-19.

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The lack of association between reforms of the disability system and the employment rate of PWD is also shown in Table 4.3. This table shows the estimates from a regression on a panel of 25 countries between the log of the employment rate of PWD, the log of the compensation score and the log of the activation

score, from 2005-18. Specifications presented in columns (1) and (2) of Table 4.3 include year fixed effects, as well as the country-year age dependency ratio (measuring demographic change) and the country-year GDP per capita. Column (2) includes also country fixed effects. In neither specification appear significant effects of activation or compensation scores on the employment rate of PWD.

Table 4.3. Higher activation and compensation scores do not correlate with higher employment of people with disability

	(1)	(2)
Compensation score (log)	0.091	-0.038
	(0.204)	(0.234)
Activation score (log)	0.177	0.132
	(0.136)	(0.175)
Demographic change	X	X
GDP per capita	X	X
Country fixed effects		X
Countries	25	25
Observations	239	239

Note: Point estimates from OLS regression of the log employment rate of PWD on the log compensation and activation score for a panel of 25 OECD countries covering 2007-20. All specifications include year fixed effects. Specification (2) includes a measure of demographic change (age dependency ratio: percentage of population aged 65 and older over total population), specification (3) includes in addition GDP per capita (PPP), specification (4) includes in addition country fixed effects, interacted with age dependency ratio and GDP per capita. Standard errors are clustered at the country level.

Source: Change in compensation and activation scores from 2007-14 are constructed using Böheim, R. and T. Leoni (2018[18]), "Sickness and disability policies: Reform paths in OECD countries between 1990 and 2014", http://dx.doi.org/10.1111/IJSW.12295 which follows the OECD (2010[9]), *Sickness, Disability and Work: Breaking the Barriers: A Synthesis of Findings across OECD Countries*, https://doi.org/10.1787/9789264088856-en, methodology. Extension from 2014 to 2020 for selected countries following aforementioned source.

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The lack of significant correlation between disability programme components and employment rates of PWD seems to contradict substantial micro-level empirical literature finding strong income effects from benefit receipt, suggesting that tightening the eligibility and generosity of disability programmes induces higher employment (Autor and Duggan, 2007[19]; Deuchert and Eugster, 2019[20]; Gelber, Moore and Strand, 2017[21]; Marie and Vall Castello, 2012[22]). Likewise, micro-level empirical literature usually finds strong employment effects from greater activation, for example by introducing financial incentives to work (Campolieti and Riddell, 2012[23]; Deuchert and Eugster, 2019[20]; Kostøl and Mogstad, 2014[24]; Ruh and Staubli, 2019[25]). Why are these micro-level employment effects not visible at the macro-level?

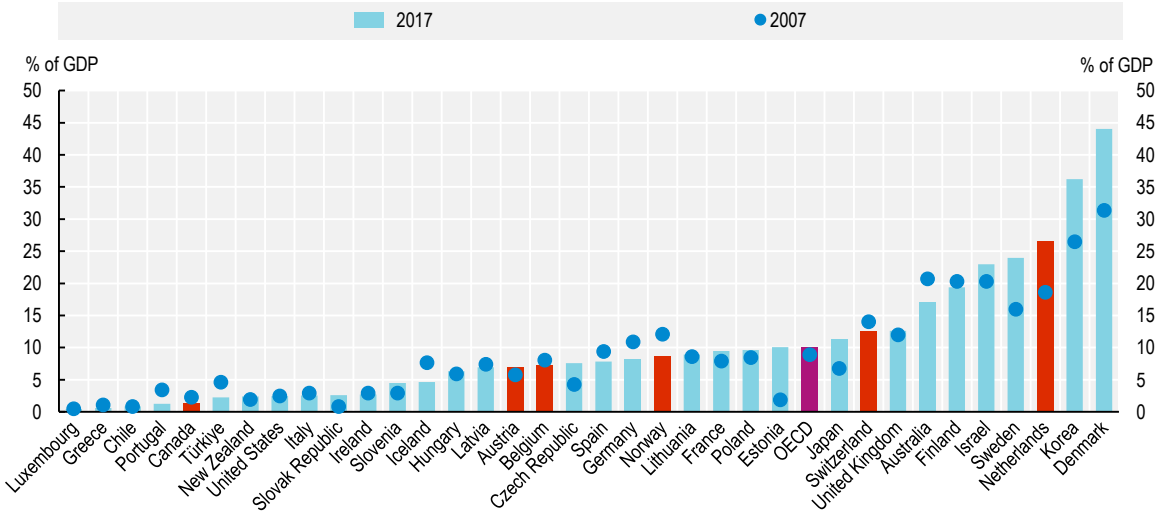
- A first argument is that active spending (rehabilitation and employment-related measures) in total spending on incapacity across OECD countries continues to be low (9% in 2007, 10% in 2017). Despite numerous reforms in OECD countries aimed at increasing active components of disability programmes, the balance between compensation and activation has barely changed. Should there ever be a more substantial increase in the resources spent on promoting greater activation within disability programmes, one could expect a stronger correlation between the activation component of disability systems and the employment of PWD.
- A second aspect is that microeconomic empirical work in most cases focuses on the short-term employment responses of reforms to tighten eligibility for and generosity of disability benefits. To promote sustainably higher levels of employment that are reflected in overall higher employment levels for PWD, the employment effects need to be accompanied by increased job quality and job retention. Improved employment characteristics can be achieved through activation elements in disability programmes (e.g. vocational rehabilitation, job support, counselling, see for example

(Thomas and Morgan, 2021[26]), or through demand-side interventions (for example, through supporting reasonable workplace accommodation (European Commission, 2020[27])).

- Lastly, most reforms have focused on changes in disability systems, and thus could be coming too late to truly promote the employment of PWD. Early intervention is key to preventing labour market detachment from benefit receipt (Garcia-Mandicó et al., 2020[14]; Moore, 2015[28]). For many, however, by the time they reach the stage of applying for disability benefits, the decision to exit the labour market has been taken, as they often will have been navigating the sickness and welfare system for years. Early intervention should happen well before reaching disability benefits, during employment, unemployment or sickness insurance, to prevent labour force exit.

Figure 4.9. Active spending on incapacity across OECD countries has barely increased

Active public spending on incapacity as a share of total public spending on incapacity, 2007 and 2017



Note: OECD is an unweighted average of the countries shown. Incapacity benefits include: disability pensions, occupational injury pensions, sickness allowances, rehabilitation services, other cash and in-kind benefits related to disability and all disability-related programmes offered by the public employment service (PES).
Source: OECD database on Social Expenditure (SOCX), http://stats.oecd.org//Index.aspx?QueryId=4549 and OECD database on Labour Market Programmes (LMP), http://stats.oecd.org//Index.aspx?QueryId=8540.

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4.2. Designs to improve the employment of people with disability

The longer people rely on benefits without working, the more their skills depreciate and the distance to the labour market increases, making it increasingly difficult for them to return to the labour market. To promote the employment of PWD, policy makers should design disability benefit systems and, more generally, social protection policies that aim at identifying health barriers to work early and intervening quickly. There is a range of options to design disability benefit systems, which are broadly categorised into three kinds in this section. First, policy designs that foster early intervention and help maintain the employability of PWD. Such policies rely on early identification of barriers to employment, giving a great role to the stages preceding application to disability benefits – namely sickness insurance and unemployment insurance and, thus, the PES – and on creating intermediate stages before entering permanent disability benefits (transitionary benefits). Second, policies that motivate PWD to work while receiving benefits, such as the introduction of financial incentives. Lastly, policies that limit the income effect from benefit receipt, by reducing the generosity of, or tightening the eligibility to, these programmes.

4.2.1. Early intervention: Maintaining the employability of people with disability

This section discusses the approaches the six countries have taken, and their effectiveness, in promoting early intervention to maintain the employability of PWD. One key distinction in the approaches countries have taken is the timing of intervention: on approach is to focus on improving the employability of PWD before claiming disability benefits (with a strong gatekeeping role for paid sick leave systems and the PES) while another one is to postpone permanent disability benefit claims (by using transitional and vocational rehabilitation programmes).

Gatekeeping disability insurance *by promoting a swift return to work from paid sick leave*

Paid sick leave is the standard pathway to disability insurance for many workers, and in most of the countries in focus early intervention happens at the sickness stage**.** The standard pathway is represented illustratively (and with considerable simplifications) as a timeline for each country in Figure 4.10, looking at the timing and interaction of four key steps from the moment of falling ill until granting a disability benefit: wage continuation by employers; sickness insurance; rehabilitation; and disability insurance.

- Continued wage payment by employers (sick pay), which happens at most two days after a worker falls ill. This period varies widely in the countries in focus, from 16 days in Norway to two years in the Netherlands. The payment period may also not be fixed. In Austria, the period of 100% wage continuation varies between 6 and 12 weeks depending on the employee's tenure, followed by four weeks at 50% of the wage, while in Switzerland, employers (or the optional daily sickness allowance insurance if employers are enrolled) must continue paying wages for at least three weeks and up to 40-six weeks in certain cantons, again depending on the length of employment. Canada is the only exception in this group of countries as continued wage payment by employers is not mandatory in all provinces (other OECD countries are equally diverse and some do not have such a payment period at all).
- Sickness benefits often start after the period of mandatory wage payment and are paid until the application for disability benefits. This is the case in Belgium, Canada and Norway, where benefits are granted for one year in Belgium and Norway, and for 15 weeks in Canada (temporarily extended to 25 weeks in the course of 2022). In the Netherlands, wage continuation and sickness insurance are two parallel programmes with very similar characteristics, the latter being exclusively granted to jobseekers or workers without an employer. Sickness insurance benefits (or wage continuation) are granted from the onset of sickness for two years. In Austria, sickness benefit begins after three days of sickness, to top up continuation of wage up to 100% of gross income, and may run up to a year and a half. Switzerland's daily (sickness) allowance insurance is private and optional, therefore the maximum length depends on the specific insurance contract, but the mandatory minimum length is 720 days out of 900 and it replaces continued wage payment by the employer if the insurance payment is equal to the previous wage. Switzerland's private insurances typically reimburse 80% of the wage for a longer period and up to 100% initially. Some employers (mostly large enterprises) choose not to insure but to continue wage payments. In Austria, the overlap between wage continuation and sickness benefit complicates benefit entitlement calculations: sickness insurance amounts to 50% (60% after 43 days) of worker's gross income up to 100% if cumulated with employer's payments.
- Early intervention during the sick pay period is common in most countries, with the aim to bring PWD back into the labour market, but differs greatly in nature and timing. While most countries try to assess and activate sickness claimants, some have additionally put in place transitional programmes to activate PWD before they can be granted a quasi-permanent disability benefit. Canada does not provide mandatory early identification and intervention measures: vocational rehabilitation is only available to disability pension claimants. Persons insured through voluntary disability insurance may receive vocational rehabilitation through long-term disability insurance,

but again, this is after the short-term sickness phase ends. Countries that identify potential disability claimants during the sickness phase act sooner, and have more chances to succeed in the return to work of workers who are sick or have acquired a disability.

- Transitional programmes exist in Austria, the Netherlands and Norway. These programmes have broader objectives than temporary disability programmes, as they engage claimants in vocational rehabilitation (Austria, Norway) or provide strong incentives to work (Netherlands).
- The last step is the transition to disability benefits, which in many countries is the last step before retirement (Austria, the Netherlands, Norway) or itself a (quasi-)retirement programme. In Belgium and Canada, where no transitional programmes are in place, one can still benefit from rehabilitation programmes while on disability benefits. In all countries, claimants are allowed to work under specific conditions: in Austria, Belgium, Norway, the Netherlands and Switzerland, claimants can work part-time and receive a partial pension, while in Canada working is only allowed under certain thresholds.

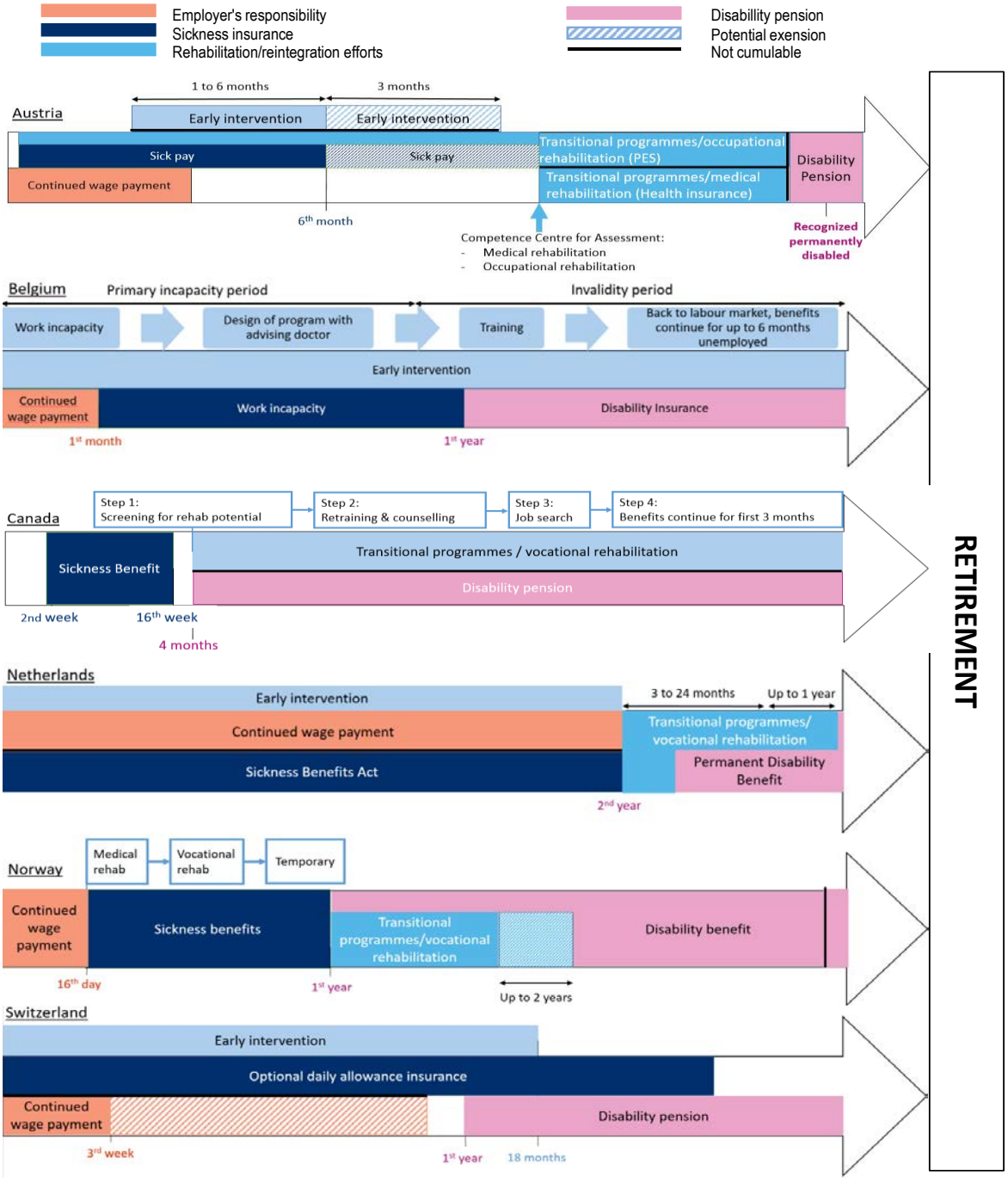
Transitions from sick pay to the disability system are frequent. In Norway, for example, about 6% of all sickness claimants exhaust their benefit entitlement, and over two-thirds of them transition to the disability system (either through the AAP or to disability benefit directly). This is about 44 000 people every year (NAV, 2015[29]). Focusing on rehabilitating sickness claimants before they transition to the disability system is therefore a strategy with potential: the longer people rely on benefits without working, the more their skills depreciate and the distance to the labour market increases, making it increasingly difficult to return to work. Acting early is key to ensuring the swift return to work of sick-listed people. There are several approaches to acting early:

- Efficient return-to-work (RTW) strategies. Such strategies ensure an early identification of potential disability claimants and the use of rehabilitation and activation strategies for them. These policies can e.g. take the form of regular meetings with caseworkers and employees, rehabilitation with medical components (courses on handling one's own situation, psychological consultations, nutritional counselling, and exercise including back exercises and other physical training), or traditional activation (vocational guidance advice and courses aimed at enhancing skills, together with internships and on-the-job training).
- Strict monitoring and screening. These approaches aim at monitoring sick-listed individuals more closely, by regularly reassessing them, and involving employers in the monitoring process.
- Setting limits to the sickness scheme. The most direct limit is a strict maximum duration of sickness benefit payments, which most countries have (Slovenia and Sweden are notable exceptions, see Box 4.2 for more details).
- Graded return-to-work. This involves working part-time and receiving a partial sickness benefit for the hours off work, on top of a partial salary. Some countries allow such partial sickness from the first day while others (including Austria and Finland) only at a later stage in the sickness period.

The following subsections assess the efforts of early intervention in the six countries, by focusing on the features of their approaches and strategies, and their effectiveness at fostering the RTW of sick-listed claimants, and ultimately, the (continued) employment of PWD.

Figure 4.10. The standard pathway to disability insurance differs across the six countries

Illustration of the standard pathway to disability insurance benefits for workers falling ill (via sickness insurance)



Note: See Annex Table 4.A.1 for programme names. For Canada, the figure represents federal benefits outside Quebec.
Source: Countries' responses to OECD questionnaire; MISSOC comparative tables; Austria Social Benefits, https://www.sozialleistungen.at/buch/pr342997_2968685/Invaliditaets-oder-Berufsunfaehigkeitspension-fuer-ab-1964-Geborene; SSA; Swiss AHV/IV, https://www.ahv-iv.ch/fr/Assurances-sociales/Assurance-invalidit%C3%A9-AI/Rente-dinvalidit%C3%A9; INAMI; Service Canada, https://www.canada.ca/en/services/benefits/disability.html; EC- Employment, Social Affairs & Inclusion, https://ec.europa.eu/social/main.jsp?catId=1122&langId=en&intPageId=4990.

Return-to-work strategies

RTW approaches start from the first day of sick leave in many countries, but in other countries are bound to determining a long-term sickness absence. These differences in when to start RTW measures reflect a key issue in early intervention: how and when to identify the right group that would benefit from RTW measures. Not all sickness claimants need or would benefit from RTW measures, and so identifying the right group who would is key. Some countries, like Austria, tie RTW to a minimum duration of sick leave (see Table 4.4). Yet in some cases, the need for RTW may be evident from the beginning of the sick leave. Other countries thus allow RTW to start from the first day of sick leave. Canada does not have a federally organised RTW strategy before receiving a disability pension, but RTW may be supported through private insurance (long-term disability insurance has rehabilitation provisions, but these would start no earlier than disability pension provisions), and provincial supports. Because sick pay and sickness benefits last shorter in Canada than in other countries, and transitions to the disability system may occur sooner, the lack of a RTW strategy linked to sickness benefits does not delay intervention as much as it would in other countries. RTW strategies linked to disability pension receipt are reviewed below.

Some RTW strategies rely on a mandated active role of employers and employees, with the main goal of bringing sick-listed workers back to their former job. Table 4.4 summarises the different RTW approaches of the six countries. Some countries have laid out measures aimed to bring sick-listed workers into their former job (Austria, Norway), others do not target a specific employer (Belgium, Switzerland), while others target the former job first before expanding to the broader labour market (Netherlands):

- In Norway, the employer is required to follow up with the employee: within the first four weeks, the employer and employee must have discussed if an improvement of the working environment could remedy or mediate the situation and draft a plan for the employee's return to work; subsequent meetings are required throughout the first year of illness.
- In the Netherlands, per the Gatekeeper Improvement Act, Dutch employers must continue paying at least 70% of their employee's wages during the first two years and most Collective Labour Agreements state full payment for the first year. All this time, employees should take part in graded or therapeutic work. Moreover, after a doctor's assessment in the sixth week, the employer must use the assessment report to draw a detailed RTW plan which is due in the eighth week. Employer and employee must work together on a report detailing their effort toward reintegration at the end of both the first and second year. In order to facilitate RTW, employers can even pay claimants while they work at a different company which will share the wage costs. If the employer's efforts are considered insufficient, they must pay the claimant a third year of sick pay.
- In both Norway and the Netherlands, employees' sick pay is conditional on their involvement as well and a lack of effort on their behalf can result in a suspension, reduction or cut off their payments. De facto, however, in Norway the suspension of payments is extremely rate.

The Austrian RTW provided by Fit2work providers is twofold. Fit2work offers both counselling on how to maintain one's ability to work and part-time reintegration. The approach is unique insofar as it is not mandatory, nor binding through penalties for either employers or employees. Effectively, Austria complements a graded sickness insurance (see below for more details) with regular meetings with employers and caseworkers, on a voluntary basis. In some countries, RTW is not limited to the previous employer, and thus focuses on acquiring new skills or updating current ones. In Belgium and Switzerland, the disability authority offers formations and training (vocational rehabilitation, VR) but does not necessarily involve the previous employer. In Switzerland, workers are obliged to actively participate in reintegration processes to reduce the duration of sick leave. One way to do so is through the early-disability risk-detection programme, by which workers on repeated or long-term sick leave can apply to the disability insurance office for early registration. The measures provided include training and vocational rehabilitation. Belgium's national sickness insurance partners with external actors specialising in reinsertion and employability. Furthermore, both Belgium and Switzerland emphasise internship opportunities with

partnering employers. In the Netherlands, sick-listed claimants who do not have an employer are also subject to this approach ("*Vangnetters*"). As shown in previous OECD work for the Netherlands, however, de facto *vangnetters* participate in reintegration support substantially less often than employed sick-listed claimants, and as such, very few resume work after long-term sick leave (OECD, 2014[30]).

The last key element is the requirement of participating in RTW. In the Netherlands and Norway, participation is mandatory for all sickness claimants, and in Switzerland sickness claimants have incentives to register with the disability office for reintegration, given that the waiting period for disability insurance is six months. Once registration has taken place, however, participation in measures for Swiss sickness claimants is mandatory (Leoni, 2020[31]).

Table 4.4. Countries have introduced early return-to-work provisions within their sickness programmes

Characteristics of RTW measures linked to the period of sickness

	Austria	Belgium	Canada	Netherlands	Norway	Switzerland
Measures or supports to promote an early return to work	Part-time Reintegration (WIETZ)	Occupational reintegration	None at the federal level	Reintegration	Follow-up of sickness claimants	Early intervention measures
Responsible organisation	Austrian Health Insurance Fund (ÖGK)	Inami, Mutualités	N/A	UWV	NAV	IV
Timing and duration of RTW support	After at least six weeks of sick leave Up to nine months	Immediately after sickness onset No maximum length	N/A	Immediately after sickness onset Up to two years	Immediately after sickness onset Up to one year	Upon declaration of long-term sickness
Mandatory measures or supports to promote early return to work	Voluntary	Voluntary	N/A	Mandatory	Mandatory	Mandatory
RTW limited to same employer	Yes	No	N/A	Yes (unless unemployed)	Yes	No
Penalties for claimants not supporting RTW	No	No	N/A	Yes	Yes	Yes
Penalties for employers not supporting RTW	No	No	N/A	Yes	Yes	No
Financial incentives for employers	No	No	N/A	No	No	Yes
Design of RTW measures	• RTW plan	• RTW plan • VR	N/A	• RTW plan • VR	• RTW plan	• RTW plan • VR
Can paid sick leave be combined with earnings from work?	Yes, clawback proportional	Yes, clawback, less than proportional	Yes, clawback proportional	Yes, clawback less than proportional	Yes, clawback, proportional	Yes

Source: Countries' responses to OECD questionnaire; MISSOC comparative tables; Austria Social Benefits, https://www.sozialleistungen.at/buch/pr342997_2968685/Invaliditaets-oder-Berufsunfaehigkeitspension-fuer-ab-1964-Geborene; SSA; Swiss AHV/IV, https://www.ahv-iv.ch/fr/Assurances-sociales/Assurance-invalidit%C3%A9-AI/Rente-dinvalidit%C3%A9; INAMI; Service Canada, https://www.canada.ca/en/services/benefits/disability.html; EC- Employment, Social Affairs & Inclusion, https://ec.europa.eu/social/main.jsp?catId=1122&langId=en&intPageId=4990.

Evidence on the effectiveness of early intervention return-to-work programmes is not conclusive. It is unclear whether all early intervention in the form of rehabilitation services is effective. Pilot policies across several countries have failed to promote the employment of sick-listed individuals and prevent their transition to disability. One example is the Job Retention and Rehabilitation Pilot (JRRP), performed by

the Department for Work and Pensions in the United Kingdom for a period of two years, which included health, occupational and workplace interventions to facilitate the return to work of people on sick leave for six to 20-six weeks. The policy was not effective at bringing people back to work, particularly for people with mental health conditions (Farrell et al., 2006[32]). Another example is a pilot implemented in Sweden for six weeks, where individuals sick-listed for two to five weeks regularly meet with caseworkers and their employer. These policies initially reduced the outflow from sickness absence (locking-in effects) and, in subsequent periods, led to more disability benefit receipt (Engström, Hägglund and Johansson, 2017[33]). These findings are confirmed by an 18-week RTW pilot in Denmark, which considered vocational rehabilitation and activation for sick-listed individuals on sick leave for nine to 13 weeks (Rehwald, Rosholm and Rouland, 2018[34]). They are also confirmed by the meta-analysis of Vogel et al. (2017[35]) whereas Everhardt and de Jong (2011[36]) find strong positive impacts for long-term (nine months) sick employees in the Netherlands in terms of their likelihood of returning to work after a year-and-a-half long programme. These pilots differ in almost all settings, from the duration of sick leave before joining to the nature of the intervention. Even the definition of success differs as, for instance the Dutch experiment does not distinguish between part-time and full-time RTW, whereas the Danish experiment finds positive outcomes of graded (or partial) RTW but reports negative or insignificant outcomes on full-time return. Such important differences prevent us from drawing conclusions with certainty.

Economic theory can help extract lessons for policy makers from failures in RTW policies. Engström, Hägglund and Johansson (2017[33]) explain that RTW policies for sick-listed individuals may fail if they give disincentives to reveal their true health state if they have a low willingness to work. This could be creating lock-in effects for certain groups with low willingness to work (or limited opportunities in the labour market), such as the unemployed. Keeping this in mind, policy makers should design RTW policies that prevent these behavioural responses, by:

- Focusing on returning to the current employer but expanding to the entire labour market as soon as return to the previous employer is unviable. Most RTW programmes have as a primary focus to return to the previous employer, building on the employer-employee match which is oftentimes easier than finding a new match. However, after a certain period, it may become clear that an employee-employer match does not work. From that moment, rehabilitation efforts should focus on the labour market more broadly. One example of such policies is the Swedish rehabilitation chain for sick-listed workers, which initially focuses on going back to the previous job, then broadens the focus to another job in the same company and finally explores possibilities within the labour market more broadly (see Box 4.2 for more details).
- Encouraging individuals to return to work without waiting for a more complete health recovery. Waiting for a complete recovery may oftentimes just delay intervention. Well-designed RTW programmes should give incentives to sick-listed individuals to pursue vocational rehabilitation, or work, alongside health rehabilitation. In turn, graded (or partial) sick leave is an effective measure to promote employment and limit transitions to disability benefit programmes.
- Encouraging own initiatives to return to work and finding new employment. One of the risks of overly standardised RTW programmes is that they may discourage employers' and employees' own initiatives to facilitate a RTW, if they are overburdened by mandatory steps of RTW policies. It is also key that own initiatives to find new jobs are encouraged, as many times the previous employment relationship may be unsustainable.
- Providing security for individuals who attempt to return to work. Systems should be designed to provide the right incentives to return to work (e.g. benefit alone should not be higher than partial benefit and partial wage together), yet provide security if the RTW fails. One approach is for example to maintain the insurance rights of a worker while they attempt to return to work, so that they can go back to the benefit in case it is not viable due to their health condition.

Box 4.2. Countries without a maximum duration to the sickness insurance scheme

While most countries have a set maximum duration for sickness insurance payments, a few countries, including Slovenia and Sweden, allow for an unlimited duration of such payments. By not capping the duration of payments, sickness insurance becomes effectively a social insurance programme against the risk of (certain types of) disability. This can create perverse effects, if sickness insurance and disability benefits are not well aligned. Sickness insurance payments are more generous than disability insurance payments, and may not involve the same kind of RTW measures, as they are conceived to cover a short-term risk and allow for medical recovery. As shown in a recent OECD report on sickness and disability policies in Slovenia, these characteristics paired with an unlimited duration of payments provoke: (1) a long-term sickness issue, (2) a late intervention in supporting PWD in returning to work, and (3) a dysfunctional sickness and disability insurance system (OECD, 2022[37]).

Sweden's sickness insurance programme also does not have a maximum duration currently, as it has been reformed back and forth over the past decade, partly for political reasons, introducing a maximum duration and removing it again. In exchange, Sweden's sickness insurance relies on substantial RTW efforts, which hinge on frequent work-capacity assessments along a so-called rehabilitation chain:

- During the first 90 days, claimants' capacity is assessed against their regular work, or other temporary work that the employer can offer;
- From 90-180 days, claimants' reduction in work capacity is also assessed in relation to other work that the employer can offer following reassignment;
- After 180 days, the employee is only entitled to sickness cash benefit if they are unable to perform any job that normally occurs in the labour market.

This very flexible approach could potentially promote the RTW of sick-listed persons, particularly as the PES plays a key role in supporting sickness insurance claimants who cannot return to their previous employer, whether employed or unemployed. De facto, however, the rehabilitation chain is not strictly implemented, resulting in long sickness claims and limited job change for many.

Stricter monitoring and screening of sick-listed individuals

Most countries monitor sick-listed individuals, but there is no specific approach to doing so. Individuals falling ill usually need to obtain a sickness certificate immediately at the onset of the sickness spell. One exception is Norway, where employees can use a self-certification for the first 16 days of illness (during the wage continuation period). Sickness certificates are verified and can be overruled by the sickness authority in all countries but Switzerland, where sickness insurance is privately provided. This monitoring, however, takes place on a case-by-case basis in most countries. Austria uses randomly assigned verifications by insurance doctors from the first week of absence while in Norway, all sickness certificates longer than two weeks are verified systematically. Employers can request an additional verification in the Netherlands and Switzerland, and to a lesser extent in Austria and Norway.

There is evidence that increasing the monitoring and screening of sick-pay claimants has positive RTW impacts. De Jong and Van Der Klaauw (2011[38]) assess the increased screening of sick-listed workers under the Gatekeeper Act in the Netherlands, and find direct effects of stricter screening on work resumption during the period of sickness absence and for self-screening by potential disability insurance applicants. In Sweden, Hartman, Hesselius and Johansson (2013[39]) show that postponing the requirement for a doctor's certificate increases the length of sickness absences, resulting in higher public expenses for the sickness insurance system. Also in Sweden, Hägglund (2013[40]) estimate the positive effects of stricter monitoring in boosting the exit rate from sickness insurance.

Graded return to work

In all six countries sickness payment can complement earnings from work but with different incentives. In Austria, Canada and Norway, sickness payments decrease proportionally with labour earnings, while Belgian and Dutch workers see their benefit decrease less than proportionally as their earnings increase.

Measures exist to facilitate claimants' return to work. Austria allows employees to come back and work between 50% and 75% of full time while continuing sick pay with a proportional clawback system. The Netherlands and Norway also use a clawback system to compensate for the loss of income. However, they also implement measures to help employers and employees. The Netherlands reimburse employers and employees for adaptation fees such as changes in the workplace (e.g. installation of a lift or adapted chair) and the unemployment office also provides them with expertise to help in designing a successful reintegration plan. Norway requires doctors to recommend part-time work unless it is impossible given claimants' medical condition. A trial in the county of Hedmark introduced discussion workshops during which the social worker in charge presented the claimant's file to advisory doctors and psychologists from the regional NAV office (the Norwegian PES). These workshops, chaired by competent supervisors, ensure adequate follow-up. Combined with additional information, this model led to a decrease in sickness absence of 8%. Based on the positive results, the Hedmark model was tested in three other counties too. Implementing the Hedmark model in other counties had mainly an effect for caseworkers in local offices, through more equal treatment of activity requirements and systematic earlier follow-up, but no significant improvements in the claimant's transition to work (PROBA, 2017[41]).

Countries show a substantial variation in the use of partial sick pay, but RTW after the programme is large. As many as 62% of sick-pay claimants in the Netherlands are working while receiving benefits, while this share is only 21% in Norway. There are some aspects to keep in mind both when comparing the use of partial sick pay across countries and its effectiveness. In the Netherlands, all those receiving sick pay still receive wage payments from their employer, making it easier to negotiate graded sick pay and part-time work. Dutch employers have strong incentives to agree to part-time arrangements, as they are responsible for financing sick pay. But RTW after partial sick pay is high in all countries: in Austria, the Netherlands, and Norway, almost 90% of the participants return to work at the end of the programme.

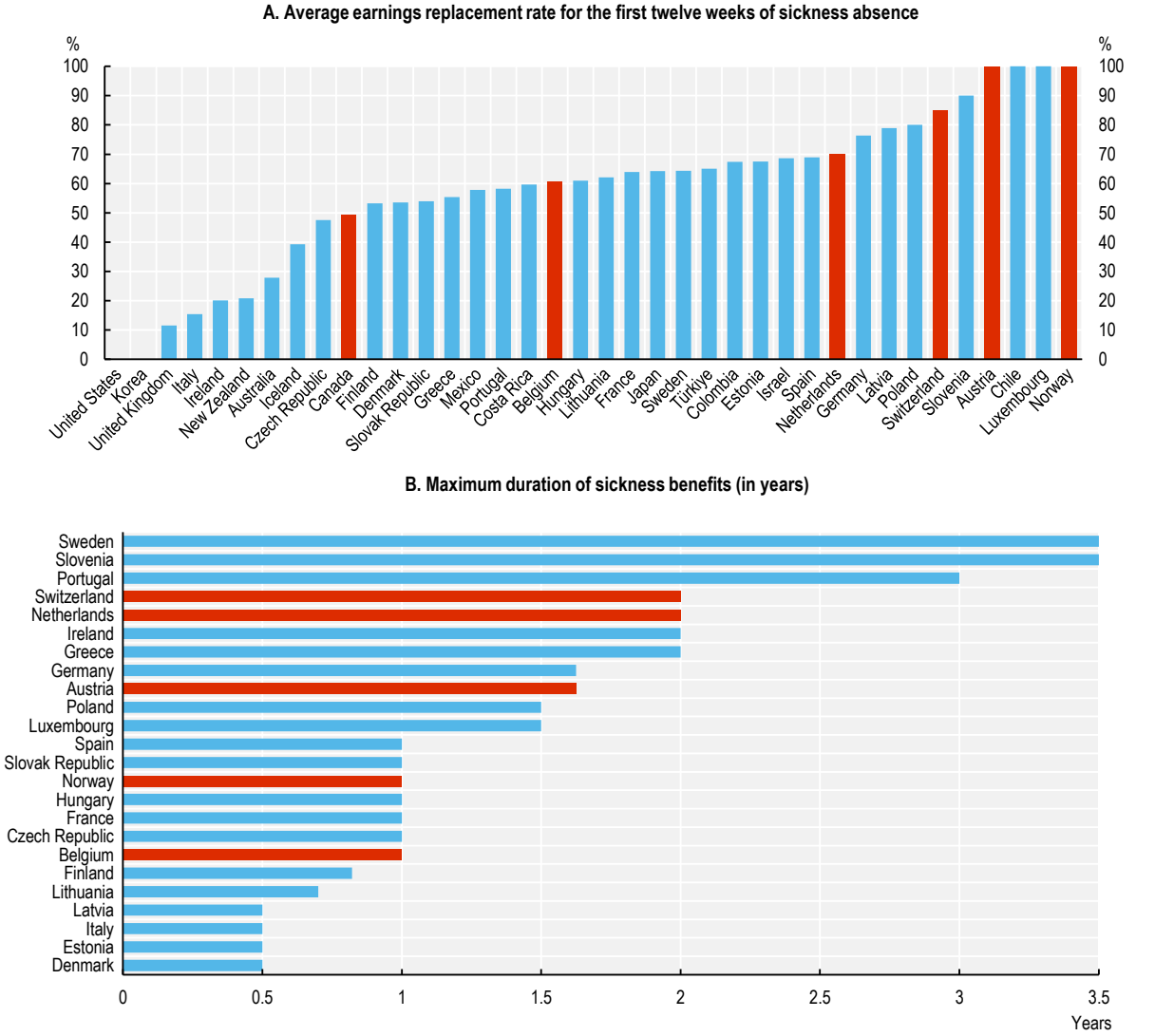
Assessing the effectiveness of partial sick pay requires formal impact evaluations. Since participation in partial sick pay is voluntary, there is a selection into these programmes, by which they are rehabilitating claimants with higher willingness to return to work. Participants may also differ from non-participants in key characteristics: they may be more often employed, or may have higher incentives to return to work. Rigorous evaluations with corresponding counterfactual (i.e. had they not participated in partial sick pay) is rare. Meneses-Echavez, Baiju and Berg (2018[42]) conducted a meta-analysis of evaluations of graded RTW programmes in Nordic countries and found only modest effects on the probability to return to work. Kools and Koning (2019[43]) found significant short-term effects on the RTW probability of the graded RTW system in the Netherlands but effects disappear in the long term, suggesting the programme rehabilitates claimants who may have returned to work in any case. Their work allows for further establishing the importance of early intervention when it comes to graded RTW: starting graded RTW early is the single most important factor determining a higher probability to rehabilitate. Markussen, Mykletun and Røed (2012[44]) find that graded sick leave in Norway is a promising strategy toward reducing sick-pay costs and combating labour market exclusion.

Generosity of sickness insurance programmes

Overly generous sickness insurance programmes may be jeopardising the gatekeeping role of the programme. In many OECD countries, sickness insurance programmes have replacement rates above 80% of previous earnings (see Figure 4.11, Panel A). More importantly, such high replacement rates are granted for long periods of time in many countries, and sometimes indefinitely (see Figure 4.11, Panel B). High replacement rates paid indefinitely are a recipe for ballooning long-term claims (OECD,

2022[37]). This does not contribute to a good gatekeeping of the disability benefit programme, as RTW is very unlikely after a period of sickness absence of five to six months (OECD, 2015[45]). Countries like Norway, with a high rate of sickness absence partly due to a high replacement rate (100%) paid for a long time (one year), may want to consider a step-down compensation of the replacement rate after a few months of sickness (OECD, 2019[46]). It may also consider extending continued wage payment of the employer to rectify the incentives of the major stakeholders. The Dutch system is an extreme version in that sense, with payment of sickness leave by the employer for up to two years. Dutch reforms effectively contributed to a decrease in inflow rates to disability benefits (Koning and Lindeboom, 2015[4]), by changing the behaviour of both employers and workers during sick leave, but raised concerns about the costs and financial risks borne by employers, and call for further research on the optimal design of incentives in the sickness system.

Figure 4.11. Sickness insurance programmes are generous, often for extended periods of time



Note: Panel A: Mandatory paid sick leave replacement rates. Figures include sickness insurance benefits and employer sick pay, when applicable. Panel B: For Germany and France, the maximum duration of benefits is calculated over a period of three years. For Slovenia and Sweden, there is no maximum duration of benefits.

Source: *OECD* (2022[37]), *Disability, Work and Inclusion in Slovenia: Towards Early Intervention for Sick Workers*, https://doi.org/10.1787/50e655b3-en (Figures 2.1 and 2.2).

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Aligning sickness and disability programmes

One success factor in gatekeeping disability benefits through sickness benefits is the degree of alignment between the two programmes. For instance, if both programmes are managed by the same organisation, information transferring and data sharing become much more automatic, allowing for a proper follow-up and understanding of sickness claimants and their trajectories to disability benefits. In countries like Austria and Switzerland, where sickness and disability are managed by different institutions, it is also more difficult to align corresponding assessments. This is important, particularly if there is an aim of rehabilitation during sick pay. However, a joint management of sickness and disability programmes is not a sufficient condition for aligning sickness and disability assessment. Table 4.5 shows that in Belgium, despite being managed by the same organisation, sickness assessment is based on a purely medical definition while disability assessment includes work-capacity elements. In Switzerland, the sick-leave programme (under the responsibility of employers or private insurers) and the disability programme (under the responsibility of the disability authority) are aligned through the early disability risk-detection programme, which provides early intervention measures for potential disability insurance claimants.

Table 4.5. Alignment of sickness and disability programmes differs across countries

Key characteristics of sick pay programmes in the six countries under study

	Austria	Belgium	Canada	Netherlands	Norway	Switzerland
Main paid sick leave programme	Sickness Benefit (*Krankengeld*)	Work incapacity (*Incapacité de travail/ Arbeidsongeschiktheid*)	Employment Insurance (EI) Sickness Benefit	• Continued wage payment (*Loondoorbetaling*) • Sickness Benefit (*Ziektewet*)	Sickness Benefit (*Sykepenger*)	Continued wage payment
Managing organisation	Austrian Health Insurance Fund (ÖGK)	National Institute for Health and Disability Insurance (INAMI)	Canada Employment Insurance Commission	• Employers • Employee Insurance Agency (UWV)	Norwegian Labour and Welfare Administration (NAV)	Employers and private insurance companies
Same organisation as disability benefit	No	Yes	No	Yes (UWV)	Yes	No
Sickness assessment is purely medical?	No	No	Yes	No	No	Yes

Source: Countries' responses to OECD questionnaire; MISSOC comparative tables; INAMI; Service Canada, https://www.canada.ca/en/services/benefits/disability.html.

The role of Public Employment Services

A substantial share of claimants do not enter disability programmes through the standard pathway of sickness insurance. Table 4.6 shows that as much as 45% of the inflow to the Austrian disability system comes from the unemployment system, and 20% in Norway. In the Netherlands, 23% are registered as unemployed while effectively receiving sickness insurance benefits. In Belgium, with a focus on uniforming the pathway to disability benefits from sickness insurance, 9% of the cases come from the unemployment system. The Belgian case is a suitable example of the difficulty of streamlining the entry to disability insurance for effective targeting and early interventions.

Disability claimants not following the standard pathway will typically not be able to benefit from standard early intervention measures, giving a larger role to other institutions. Jobseekers have an obligation to register with the PES in all countries reviewed. The PES is thus in a good position to identify and support those jobseekers with health barriers to employment, who may end up receiving disability benefit if they are not activated quickly. In some countries (Austria, Canada, the Netherlands, Norway), recipients of

social assistance also need to register with the PES, giving it again a key role in identifying (prospective) PWD. In many countries (Austria, Belgium, Norway, Switzerland) social assistance recipients are in contact with local welfare offices and are, thus, better identified at an early stage by their caseworkers.

Table 4.6. A substantial share of claimants do not enter disability programmes through the standard pathway of sickness insurance

Percentage of all inflow from unemployment (benefits or registered jobseekers), latest data

	% of inflow from unemployment
Austria disability system	45
Belgian disability benefit*	9
Netherlands disability system	23
Norway disability system	20

Note: Data for 2020 for the Netherlands, 2019 for Austria and Norway, and 2018 for Belgium. Austria, the Netherlands and Norway include both inflow to the transitional programmes and permanent disability benefits, although the latter is almost not relevant initially. Belgian data allow observing only transitions from a pre-stage which excludes employment and sickness insurance to disability insurance, excluding partial disability insurance (i.e. working and receiving disability benefits). This excludes about 1/3 of the inflow to disability benefits, and the results presented here have to be interpreted in this context.
Source: Austria: administrative data from the Austrian Federal Ministry for Social Affairs, Health, Care and Consumer Protection BMGSPK for the OECD. Belgium: BCSS data Mobilité Socio-Economique à court terme, https://www.bcss.fgov.be/samikt/homePage.xhtml. the Netherlands: administrative data from UWV for the OECD. Norway: NAV disability statistics, https://www.nav.no/no/nav-og-samfunn/statistikk/aap-nedsatt-arbeidsevne-og-uforetrygd-statistikk/uforetrygd/arkiv-uforetrygd_kap.

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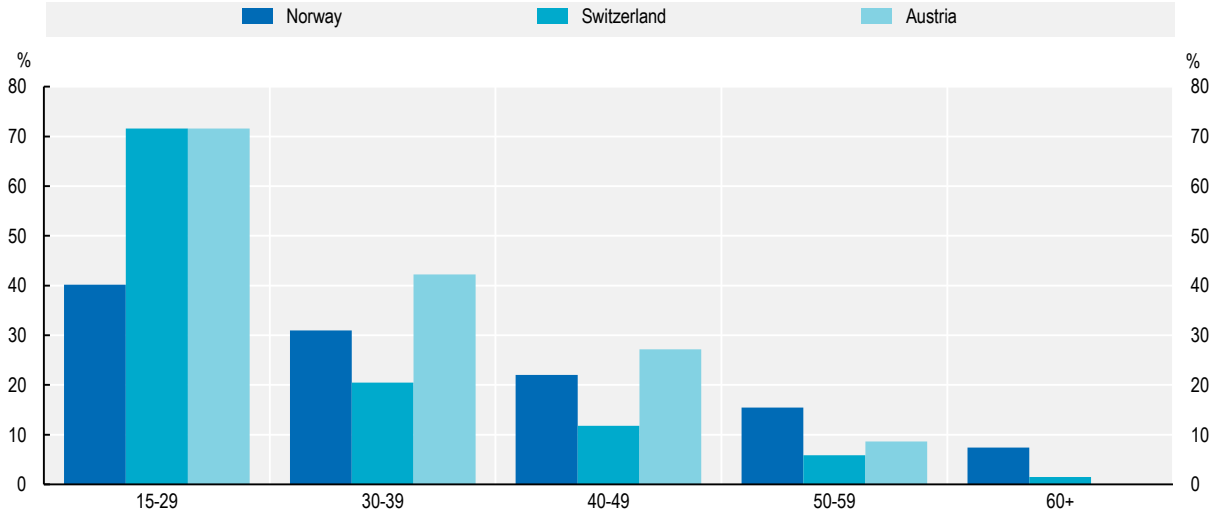
Vocational rehabilitation for disability benefit claimants

Vocational rehabilitation (VR) can take many forms. In Switzerland, for example, rehabilitation measures are provided by the disability insurance authority, and their nature depends on when the claimant makes the request. Early intervention measures focus on reorganisation of the workplace, job coaching and discussions with the claimant's employer regarding a job trial in a different position, if necessary. Early intervention measures can also include formations and training, with more freedom to choose the topic than is allowed later on. If early intervention is unsuccessful, claimants move on to professional measures to prepare them for a different job, rather than prioritising the claimant's previous job. These VR measures can include placements, reclassification, career counselling or investment into entrepreneurial projects if the project and claimant are eligible. In Norway, VR includes all measures to get to work (Tiltak), taking many different forms such as work-oriented rehabilitation, work trial periods, subsidies, counselling, training, or workplace adjustment. In Canada, Canada Pension Plan Disability recipients can be supported to return to work through a VR programme including an individualised rehabilitation plan, pre-vocational training, a work trial period of three months, and a reassessment of work capacity. Upon a successful assessment of work capacity, Canadian claimants can return to employment, with a two-year automatic reinstatement and a five-year period fast-track application to a disability pension.

Substantial shares of disability benefit claimants engage in VR, mostly young people. Figure 4.12 shows that a very large share of young claimants engage in VR: in Austria and Switzerland, about 70% of disability claimants under 30 participate in VR, compared to 40% in Norway. In all three countries, the engagement in VR steeply declines with age. The decline is steepest in Switzerland: less than 5% of claimants aged 50-59 participate in VR. VR policies are maybe used in young claimants predominantly, as their potential to rehabilitate seems higher and/or economic returns from VR seem larger. In the Norwegian programme where VR is granted in the context of a transitional programme, with a duration up to three to four years, observed differences in take-up of VR by age are much smaller than in the other two countries.

Figure 4.12. Substantial shares of young claimants engage in vocational rehabilitation

Share of participants in vocational rehabilitation (VR) relative to disability benefits claimants by age, 2019



Note: For Norway VR participation is measured only within the context of the transitional programme (Measures to get to work, *Tiltak)*, and so the denominator measures AAP claimants. For Switzerland, this figure includes the sum of the several interventions offered (training, insertion measures, work counselling, work trial, etc.).
Source: Data provided by the Austrian Federal Ministry of Social Affairs, Health, Care and Consumer Protection, the Norwegian Labour and Welfare Administration (NAV) and extracted from https://www.pxweb.bfs.admin.ch/pxweb/de/px-x-1305010000_061/px-x-1305010000_061/px-x-1305010000_061.px of the Swiss Federal Statistical Office.

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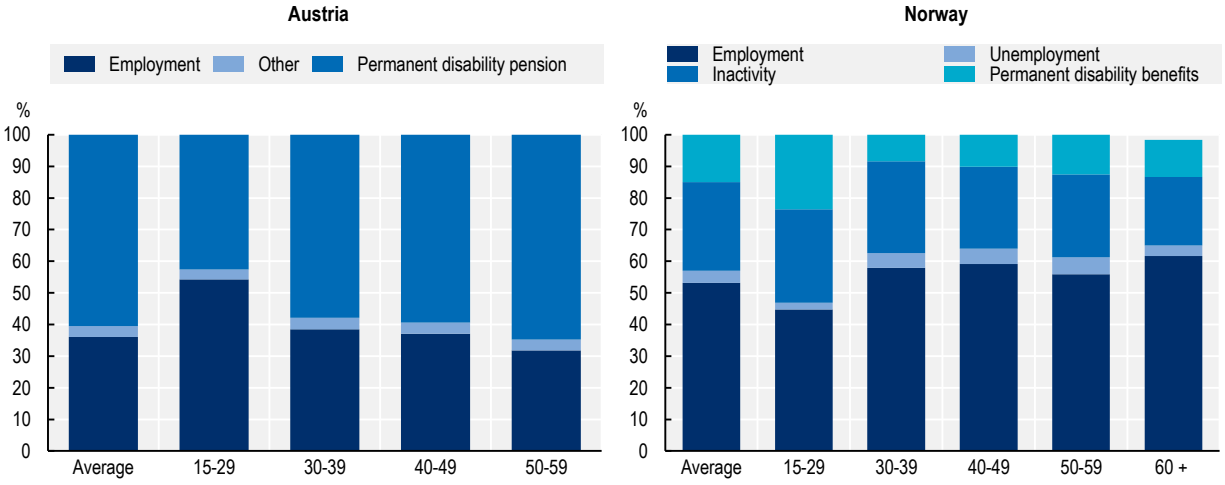
The effectiveness of VR in promoting RTW is, however, quite similar across age groups. Despite a much higher concentration of VR participants among young claimants, VR does not show better outcomes for young claimants. Figure 4.13 shows that in Austria, where the age gradient is very strong, younger claimants have a higher employment rate at exit from VR, and a lower transition rate to permanent disability benefits. In Norway, where the gradient is less pronounced, younger claimants have relatively lower transitions to employment than older age groups. They also experience more transitions to permanent disability benefits. It is not clear that age alone is driving these results: there could be a selection, by which only claimants with high potential to rehabilitate are being selected from older (or indeed all) age groups.

Austria's 2014 disability benefit and VR programme reform replaced the temporary disability programme by either one of two schemes: medical rehabilitation, to get claimants ready for work or training, and retraining, to make claimants ready for the labour market even if it is not in their initial profession. The two new VR programmes have no time limit, but yearly reassessments to ensure reinsertion is still appropriate. The goal of this VR overhaul was to improve the reintegration of people with health problems in the labour market. Haller, Staubli and Zweimüller (2019[47]) find through a before-after cohort comparison that this reform had little to no effect on the labour market: the decline in the number of claimants to temporary disability benefits corresponds, at least so far, more or less, to the increase in the number of claimants in medical rehabilitation or retraining. The impact on the labour market, three years after applying, was similar for both cohorts. These results do not bode well for the long-term success of such type of reform.

Figure 4.13. Vocational rehabilitation promotes return to work similarly across all age groups

Composition of exits from vocational rehabilitation (VR) in Austria and Norway by destination after VR, 2019



Note: For Norway VR participation is measured only within the context of the transitional programme (Measures to get to work, *Tiltak)*.
Source: Federal Ministry of Social Affairs, Health, Care and Consumer Protection of Austria, Norwegian Labour and Welfare Administration.

StatLink https://stat.link/wgak3c

Employers, in particular, are a key actor. Until 2014, Dutch employers had no financial cost if an employee at the end of their contract, or a temporary employee, fell sick. The Modernization Sickness Benefits Act changed this by increasing employers' contributions for these workers depending on the economic sector and the size of the company. The contribution rates are high enough that it is more beneficial for employers to self-insure as the 72% increase in self-insurance by employers shows. This new law puts the financial burden on employers rather than on taxpayers. It also gives employers incentives to prevent their employees from falling ill in the first place and to help them recover as soon as possible. The reform also implemented a mandatory reassessment after one year of receiving sickness benefit (van Deursen and Schreuder, 2018[48]). A before-after cohort comparison shows that overall this act led to better reintegration at work (4 percentage point increase), faster recovery (3 point increase) and a lower intention to apply for disability benefits (14 point decrease) (Dumhs, Rijnsburg and van Deursen, 2018[49]).

However, all actors must be held accountable. In 2004, Norway switched to a graded work system requiring claimants to be professionally active (either working or in formation) to be still eligible for sickness benefits after eight weeks. Although this change significantly reduced the number of disability benefit claims, the Hedmark province noticed a much weaker effect than other provinces. A more careful assessment in the Hedmark province in 2013 showed that the previous measure was poorly implemented due to a lack of follow-up from all actors: employers, the PES and doctors. The reaction of the province was twofold. First, they provided claimants and doctors with more information, including information about possible benefit suspension. Second, they established case discussion workshops so that case managers would discuss appropriate follow-up with advisory doctors and psychologists from the NAV office. The Hedmark model led to an 8% decrease in sickness absence (Kann, Lima and Kristoffersen, 2014[50]). Belgium also involved doctors further in the rehabilitation process by changing the format of its work incapacity certificates so that doctors must include the expected expiration date of the certificate. To prolong the incapacity period, claimants now have to go back to the doctor for a reassessment and possible extension of the certificate. This simple modification decreased the median length of incapacity by 7.6% (von Rauch, 2019[51]).

Transitional disability programmes

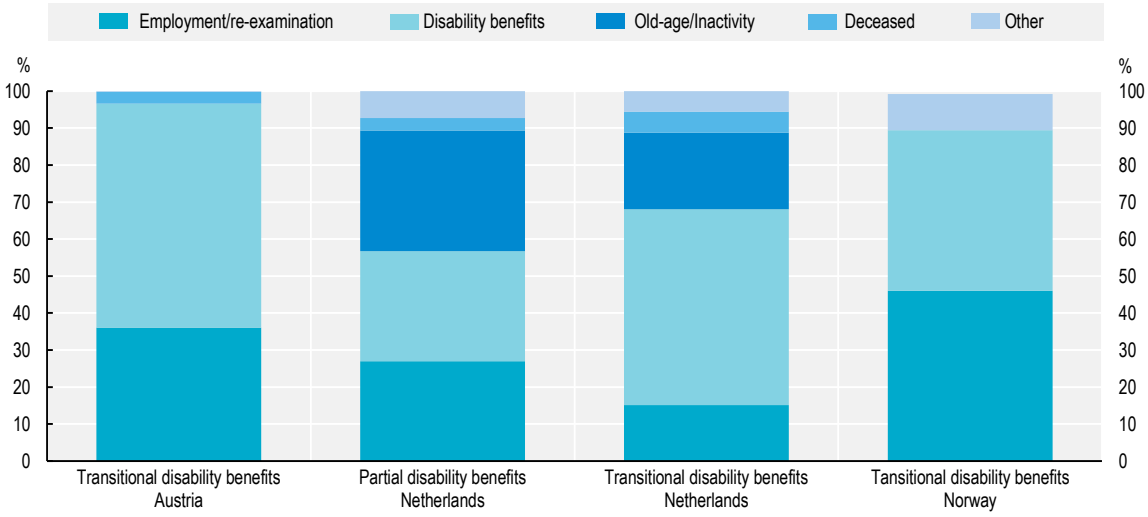
More recently, countries have been reforming their systems to introduce transitional benefits. As seen in Austria, the Netherlands and Norway, the emphasis was put on rehabilitation efforts before granting permanent disability benefits. Austria reformed its system in 2014 and replaced the temporary disability benefit system with two transitional benefits. Claimants can only receive disability pension if these transitional benefits failed. "*Rehabilitationsgeld*" focuses on medical rehabilitation and getting someone fit for work while "*Umschulungsgeld*" focuses on retraining the claimant for their previous profession or for a new one. Norway, in 2010, merged its three benefits (vocational rehabilitation, medical rehabilitation and time limited disability benefit) into one, the Work Assessment Allowance (AAP). This put a maximum time spent in rehabilitation of four years, later reduced to three years in 2018, in both cases with a potential extension of up to two years given certain legal provisions. Norwegian claimants can only receive a disability pension after going through the AAP unless it is deemed inappropriate. The Netherlands' WIA reform from 2006 is similar. When applying for disability benefits claimants are assigned either to the IVA, the permanent disability benefit, or the WGA, the benefit for partial and temporary incapacity.

Transitional benefits are effective at maintaining the employability of PWD. Figure 4.14 shows that a substantial share of claimants of transitional benefits recover, with many of them exiting the programme after recovery/re-examination and reporting a transition to employment. This share is highest in Norway, where over 50% of the claimants recover, 35% in Austria, and around 15-30% (depending on the system) in the Netherlands. However, these rather positive shares must be interpreted with caution: there are substantial selection issues, by which participants in VR programmes and transitional benefit claimants are more likely to transition to work than those entering permanent disability programmes. This is why, in an evaluation of causality, Haller, Staubli and Zweimüller (2019[47]) find no positive effects on employment from the transitional programme in Austria. This is an aspect to take into account when interpreting the results presented thorough this chapter: no causality can be established from looking at average outcomes, and selection and underlying factors may play a substantial role. It is thus the work of this chapter to complement the descriptive statistics with empirical evidence from the literature, whenever possible.

Figure 4.14 also shows, however, that transitions from transitional benefits to permanent benefits, including old-age pensions, are large, often substantially larger than the transition to employment. In Austria, about 60% of claimants from the temporary programme end up receiving a disability pension. This share is smaller in the Netherlands and in Norway, but differences narrow when taking into account transitions to old-age programmes. Beneficiaries from transitional programmes are (still) younger in Austria where transitions to old-age were not possible during the period in question (because the reform was introduced gradually and initially only concerned people under age 50), while much of the outflow from transitional programmes in the Netherlands and Norway goes to old-age pensions. This figure highlights one of the key difficulties in designing a disability system that promotes the employment of PWD: it requires understanding the dynamics of disability and the interactions across social protection programmes.

Figure 4.14. Transitional benefits are effective at maintaining the employability of people with disability

Composition of outflow from transitional disability programmes, latest data available



Note: Recovery/re-examination can be mainly associated to employment in most countries, given the limited existence of checks and balances on disability claimants. Disability benefits refer to disability pension in Austria, permanent disability benefits in the Netherlands, and permanent disability benefits in Norway. Old-age is not a relevant category for Austria, as only those below 50 can enter the transitional disability programme.

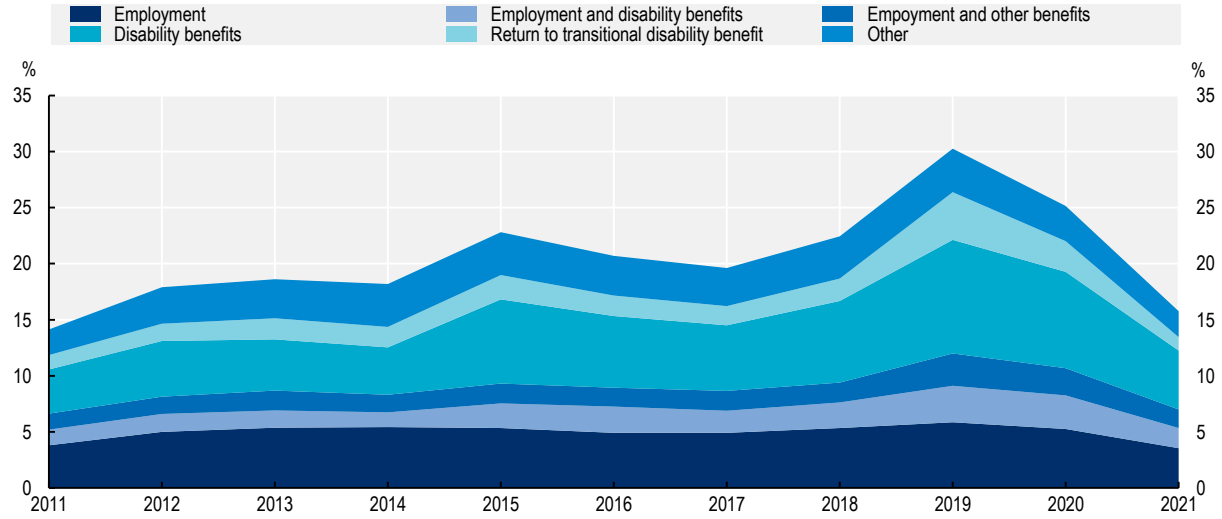
Source: Data provided from the Federal Ministry of Social Affairs, Health, Care and Consumer Protection of Austria, the Canada Pension Plan and the Office fédéral des assurances sociales for Switzerland. Data were extracted from the Institut national d'assurance maladie-invalidité de Belgique, https://www.inami.fgov.be/fr/statistiques/indemnites/Pages/default.aspx, for Belgium; the UWV Labor Participation Monitor 2017 https://www.uwv.nl/overuwv/Images/uwv-monitor-arbeidsparticipatie-2017.pdf for the Netherlands and the Norwegian Labour and Welfare Administration https://www.nav.no/no/nav-og-samfunn/statistikk/aap-nedsatt-arbeidsevne-og-uforetrygd-statistikk/tabeller/status-etter-avgang-fra-aap.avgang-2.kvartal.status-4.kvartal-2011-2021.antall-og-andel.

StatLink https://stat.link/w50rc7

Tightening the duration of transitional disability benefits has limited effect on reducing the dependence on social transfers. One can argue that transitional benefits are not as effective as they could be, because they are often flexible in their temporary aspect. In Austria and the Netherlands, there is no maximum duration of transitional (disability) benefits. In fact, most claimants in the Netherlands are in the programme for 4-9 years. The duration of the Norwegian transitional programme was tightened in 2018: from four years and the possibility to repeatedly extend the programme, to three years with a maximum extension of two additional years. Figure 4.15 shows that this tightening increased the outflow from the programme, from 35% in 2018 to 45% in 2019. Most of this outflow, however, can be explained by an increase in the outflow to disability benefits and, to a lesser extent, a return to the transitional disability programme. There were no changes in the transition to employment, but it is important to keep in mind that this result could be in part due to the difficulties to find a job due the COVID-19 restrictions. More research is needed to evaluate whether curtailing the duration of the programme, without changing its characteristics, has substantial and long-lasting employment and fiscal impacts.

Figure 4.15. Tightening the duration of transitional disability benefits in Norway had limited effect on reducing the dependence on social transfers

Outflow and decomposition from the Norwegian transitional disability benefit programme, 2011-20



Note: Share of transitional disability programme (AAP) claimants exiting the programme over total AAP claimants in a given year.
Source: Administrative data shared by the Norwegian Labour and Welfare Administration (NAV).

StatLink https://stat.link/zpi7eh

4.2.2. Combining work and disability benefit receipt: The role of financial incentives

There are two approaches to allowing disability beneficiaries to combine labour earnings with benefit receipt (see Table 4.7). Some countries take a clawback approach, allowing for complementing work and disability benefit receipt by reducing disability benefits for beneficiaries earning above a certain threshold. This is the case in Austria, where the earnings threshold is EUR 485.85 per month in 2022 (half the size of the minimum disability pension), and in Canada, with a threshold of CAD 5 700 (EUR 4 326) per year (close to the minimum disability pension). Other countries allow for partial categories of disability, meaning that each category of disability has its own threshold, calculated on the basis of the residual capacity to work. This is the case in Norway and Switzerland, as well as in the Netherlands, where partial disability is covered in a separated programme altogether. Disability benefit claimants in Canada cannot earn above the earnings threshold and keep their pension. A claimant earning above the threshold must report this return to work to the department, and can be offered support for maintaining the job. After a work trial of three months, eligibility to pension is reassessed, and benefit ceased upon successful return to work.

Earnings thresholds create an implicit tax on labour earnings, which countries smooth out by introducing financial incentives to work. By decreasing disability benefits upon crossing the earnings threshold, this policy creates a discontinuity in the total income (labour earnings and disability benefits): a claimant earning just below the earnings threshold may have a higher total income than a claimant earning just above. This can be seen as an implicit tax on labour earnings, generating incentives for beneficiaries to keep their earnings just below the earnings threshold. Some disability benefit recipients may thus work below their capacity to avoid losing disability benefit income, which is inefficient and creates welfare traps for disability benefit recipients. Countries have adopted various policies that relax this implicit tax:

- Reducing disability benefits less than proportionally to earnings increases. This approach can smooth out the income discontinuity that occurs from working above the threshold, and allows claimants who work to gain higher total income than with benefits only. These financial incentives to work can be linear with labour earnings, as in the Netherlands and Norway, where for each euro

above the earnings threshold, disability benefits are reduced by 0.66 to 0.70 cents. They can also be non-linear, as in Austria: financial incentives are highest for low-income groups and decline with income (see note to Table 4.7). This approach is more progressive than a linear decrease of disability benefits.

- Trial work periods while guaranteeing disability benefit entitlement. Another approach to relax the disincentives to work is to allow beneficiaries to return to their previous disability benefit entitlement in case they cannot sustain their work schedules. This acts as a guarantee for those beneficiaries who would like to work, but are not sure to be able to sustain themselves through work in the long-run. The implementation of these guarantees varies in the duration of the trial period, ranging from three months in Canada to five years in the Netherlands.

Table 4.7. Earnings thresholds create an implicit tax on labour earnings, which countries smooth out by introducing financial incentives to work

Programme characteristics regarding the combination of work and disability benefit receipt

	Austria	Belgium	Canada	Netherlands	Norway	Switzerland
Coverage of partial benefits in main programme	Yes, clawback	Yes, clawback	No	Yes, clawback and separated programme	Yes, partial categories	Yes, partial categories
Earnings thresholds	EUR 5 830/year	N/A	CAD 6 100/year (EUR 4 637/year)	N/A	NOK 41 886/year (EUR 4 080/year)	N/A
Less than proportional reduction of earnings	Yes, nonlinear	No, proportional	N/A	Yes, 70%	Yes, 66%	Yes, nonlinear
Maintaining benefit entitlement rights	No	Yes, 6 months	Yes, 3 months	Yes, 5 years	Yes, 12 months	Yes, 3 to 5 years

Note: The Austrian policy reduces disability pension payments differently depending on the total income (labour earnings and disability pension): for total income between EUR 1283.29 and EUR 1925.01, payments are reduced by 30%; for total income between EUR 1925.01 and EUR 2566.57, payments are reduced by 40%; and for total income above EUR 2566.57, payments are reduced by 50%.
Source: Countries' responses to OECD questionnaire; MISSOC comparative tables; Austria Social Benefits, https://www.sozialleistungen.at/buch/pr342997_2968685/Invaliditaets-oder-Berufsunfaehigkeitspension-fuer-ab-1964-Geborene; SSA; Swiss AHV/IV, https://www.ahv-iv.ch/fr/Assurances-sociales/Assurance-invalidit%C3%A9-AI/Rente-dinvalidit%C3%A9; INAMI; Service Canada, https://www.canada.ca/en/services/benefits/disability.html; EC- Employment, Social Affairs & Inclusion, https://ec.europa.eu/social/main.jsp?catId=1122&langId=en&intPageId=4990.

Precisely assessing the degree of disability of disability beneficiaries allows countries to graduate the disability benefit pay-out structure. In countries like the Netherlands, Norway and Switzerland, disability assessments result in a specific degree of disability, ranging from 0% to 100%. A specific degree of disability is a powerful tool to individualise the financial incentives of disability claimants to work, depending on their degree of disability. There are different approaches to this tuned-in individualisation:

- **Specifying different categories of disability within the main benefit level.** In Norway, the system considers claimants with a permanent incapacity rate higher than 50% to be eligible for disability benefits. This threshold rate is lowered to 30% if the disability is of occupational cause and 40% if the claimants received Work Assessment Allowance (AAP) before applying for a disability benefit. In Switzerland, before 2022, claimants received a share of the full pension depending on their earning incapacity rate: for a quarter pension a minimum incapacity of 40% was required, 50% for a half pension, 60% for a three-quarter pension and a full pension for anyone being more than 70% incapacitated. The new system in place since January 2022 offers a linear benefit payment schedule in line with the degree of disability, maintaining a minimum of 40% of invalidity for entitlement and of 70% for a full pension, therefore smoothing the kinks in the benefit schedule and reducing the substitution effects from it. The Dutch disability system before 2006

(under the WAO) allowed for seven categories of disability, each with a different replacement rate and possibilities to combine disability benefits and labour earnings.

- **Designing a separated partial disability benefit programme**. This is the approach taken by the Netherlands since 2006: claimants qualifying for benefits with residual work capacity now enter a special programme, the WGA. This programme is transitional for claimants with no residual work capacity, and permanent for those with partial remaining work capacity. If the disability assessment shows a capacity to earn at most 65% of the claimant's previous wage, the claimant is eligible for one of three types of WGA benefits: Wage-related, Wage-supplement and Follow-up benefits. Each type of WGA is more generous than the next; its eligibility is also stricter. Claimants who worked 26 in the last 36 weeks receive **Wage-related benefits**. Claimants who are not eligible or have exhausted Wage-related benefits will receive either Wage-supplement or Follow-up benefits. **Wage-supplement benefits** are restricted to claimants working at least 50% of their remaining earning capacity, as assessed by the PES. Similarly to Wage-related benefits, Wage-supplement depends on claimants' past income. Instead, those working less than 50% of their disability rates, are entitled to **Follow-up benefits** which are linked to the minimum income; this represents a significant drop in generosity relative to the two other programmes. The aim of this rather complex setup is to provide clear incentives for recipients to work. In the first type, they receive 100% of the benefit base if they work, against 75% if they do not. Later on, working at least half of what they can distinguishes between receiving a benefit based on their last income or a minimum wage: a potentially considerable loss, except for claimants earning the minimum wage.

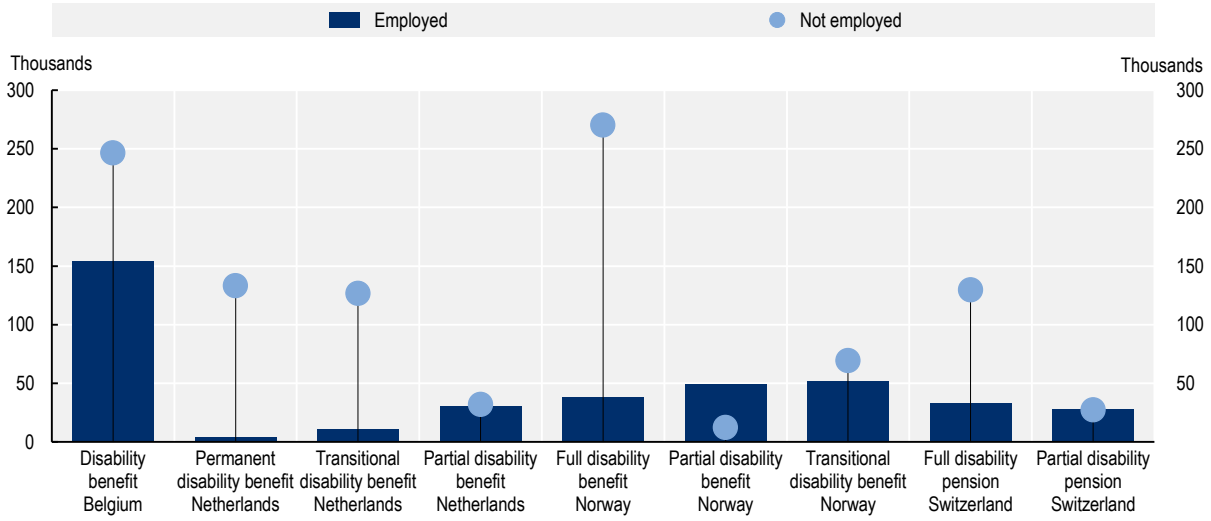
Graduating the disability benefit pay-out structure, by specifying categories of disability like in Norway and Switzerland, or by designing a separated programme like in the Netherlands, is not a silver bullet solution. Introducing an additional category of disability means that a group of claimants may find themselves at a lower bracket of payments, and creates a new earnings threshold. This has theoretically conflicting effects. On the one hand, the income effect is likely to increase labour supply because the loss in disability benefits must be compensated by an increase in earnings. The substitution effect, however, is likely to reduce the incentives to work because a reduction in earnings signals an increase in disability and therefore can lead to a preservation of the full disability benefit (Deuchert and Eugster, 2019[20]). This is one of the reasons why since 2022, new claimants of the Swiss disability pension will face a linear payment schedule, smoothing out the income thresholds from different categories of disability, and allowing for a more individualised incentive to work.

Claimants in partial programmes are more often employed, regardless of the design of the partial programme. Figure 4.16 shows that in the Netherlands and Switzerland, there are as many partial disability claimants employed than not employed, whereas in Norway, there are almost three times as many employed as not employed. In Switzerland, unsurprisingly, the ratio of employed to non-employed increases as the degree of disability decreases (not depicted on the figure). From these comparisons there is not a clear conclusion on whether it is better for employment to have a separated programme for partial benefits like in the Netherlands, or bundle it together with the main benefit like in Norway and Switzerland. Data from all countries show that a significant share of people on partial benefits do not work and simply rely on a payment that is lower than a full benefit.

Financial incentives are effective at increasing the employment of disability claimants. There is substantial literature establishing the income and work participation effects of introducing financial incentives for disability insurance claimants. Impact evaluations of the Austrian, Canadian, Norwegian, and Swiss systems find large earnings and employment responses to the introduction of financial incentives (Campolieti and Riddell, 2012[23]; Deuchert and Eugster, 2019[20]; Kostøl and Mogstad, 2014[24]; Ruh and Staubli, 2019[25]). The earnings effects of financial incentives in the Dutch disability insurance system are modest (Koning and Van Sonsbeek, 2017[52]). Disaggregating the features of financial incentives that have an impact on the propensity to work, Campolieti and Riddell (2012[23]) find that increasing the earnings threshold is effective, while trial periods are not.

Figure 4.16. Claimants in transitional and partial programmes are more often employed, but that does not lead to higher employment rates overall

Claimants employed and not employed by disability programme, latest data available



Note: Count of employed and non-employed claimants by programme. The sum of these two figures gives the total claimants for each programme. Pink bars refer to main disability programmes, dark purple bars to transitional programmes and light purple bars to partial programmes. For the Netherlands, claimants in partial and transitional programmes (both WGA) are separated by their degree of disability: those in the transitional programme are fully disabled (and thus are best compared to permanent disability claimants) while those receiving partial disability benefits have a partial work capacity. In Norway and Switzerland those receiving partial benefits/pensions are those claimants receiving an established fraction of the full pension. There are no data available for Austria.
Source: Data provided by the Dutch Employee Insurance Agency (UWV), the Norwegian Labour and Welfare Administration (NAV) and the Office fédéral des assurances sociales for Switzerland. Data were extracted from the Crossroads Bank for Social Security, https://www.bcss.fgov.be/samigc/homePage.xhtml, for Belgium.

StatLink https://stat.link/cl2h6e

Responses to financial incentives are heterogeneous. In Austria, women, younger people, and recipients with low benefits are most responsive to financial incentives in the form of an earnings threshold and a clawback of disability benefits (Ruh and Staubli, 2019[25]). In Norway, the impact on earnings seems to be driven from the labour demand side: young men with higher education or more labour market experience, and living in areas with low unemployment, are most responsive (Kostøl and Mogstad, 2014[24]). In the Netherlands, responses are concentrated among young claimants (Koning and Van Sonsbeek, 2017[52]).

Financial incentives do not encourage disability claimants to leave the benefit rolls completely. One of the potential benefits of financial incentives, particularly trial periods, is to eventually have disability claimants resume their work without financial support. Yet, impact evaluations from several countries agree that this does not occur (Campolieti and Riddell, 2012[23]; Koning and Van Sonsbeek, 2017[52]; Weathers and Hemmeter, 2011[53]). Perceived uncertainties linked with benefit exits seem to create too high a barrier for such policies to succeed.

Lastly, there is a risk that partial disability benefits may make the programme more generous, inducing higher entry into the programme. For instance, Ruh and Staubli (2019[25]) conclude that allowing for partial work among disability claimants in Austria is potentially increasing the fiscal costs of the programme. In introducing financial incentives, it is important to make a cost-benefit analysis accounting for the positive labour supply responses from financial incentives, as well as the additional fiscal costs created by the possible increase in the number of disability beneficiaries.

Untying financial incentives from disability benefits may be a better approach to increase work without increasing benefit caseloads (Hoynes and Moffitt, 1999[54]). One example of such non-programme based financial incentives are tax credits, such as the Canadian Disability Tax Credit (DTC). The DTC is a non-refundable tax credit that helps PWD or their supporting persons by refunding up to approximately CAD 8 662 (EUR 6 500 per year). This reduction in income tax does not depend on work status or receipt of disability pension but requires solely proof of long-term impairment. While there are substantial barriers to accessing the programme, including its complexity (Senate Committee on Social Affairs, 2017[55]), delinking disability benefits and financial incentives may be a good approach. It is an approach that many countries use, in one way or the other.

4.2.3. Tightening disability insurance

Some countries have resorted to policies reducing the generosity of or tightening the eligibility for disability programmes. Such restrictive reforms have a direct impact on the size of disability programmes by curbing the inflow to the programme (reducing their attractiveness, and making it more difficult to become eligible). They can also reduce the size of the programme by boosting the outflow of the programme if the new rules apply also to current claimants (e.g. involving reassessments of current claimants under a stricter criteria). Policy makers adopting such reforms aim at reducing the financial costs of disability programmes.

- Cutting benefit generosity. There are only a few examples of countries reducing the generosity of disability benefits outright, possibly due to the political unviability of such reforms. Countries that have disability systems linked to the old-age pension system, however, are more likely to see cuts in their benefit generosity, sometimes substantial cuts, even if hidden in old-age pension reform. One example is the 2004 pension reform in Austria, which reduced the potential benefit level for most old-age and thus also disability claimants. Another example is a systematic reduction of the replacement rate of disability pensions in Slovenia, from 2010 to 2017, in line with pension reform in 2001 lowering the old-age pension replacement rate.
- Tightening eligibility rules. Many more countries have taken this approach, again particularly in disability systems linked to the old-age pension system, where the contributory requirements to the programme are frequently reviewed. Other countries, like the Netherlands in 1993 and 2004, have tightened eligibility rules and reassessed current claimants under the new stricter criteria. These reassessment reforms are particularly effective at reducing the disability caseload via boosting the exit from the programme (Garcia-Mandicó et al., 2020[14]; Moore, 2015[28]).

The overall fiscal effects of tightening reforms are not clear, if these generate spillovers from disability insurance to other social benefit programmes. While the costs of restrictive reforms for PWD are clear, it is not clear that reforms that push people out of disability benefits without equipping them for the labour market have clear fiscal effects, given the strong spillovers between social protection programmes. The following section discusses these interactions in more detail.

4.3. Spillovers from disability insurance to other programmes

Exits from disability benefit systems are not very frequent, and when they occur, often result in transitions to other social protection programmes. Transitions from transitional to permanent disability programmes are frequent, and reforms in other social protection programmes have an impact on disability benefits, as reflected e.g. in the Belgian reform of unemployment insurance. This section addresses in more detail the spillover from disability benefits to other social insurance and social welfare programmes and in particular the interactions between disability, unemployment, old-age, and social assistance benefits.

Disability benefits are a pathway to early retirement in all countries, to a varying degree. There are several mechanisms to this and various measures explaining this. First, increases in legal retirement ages, the

phasing-out of early retirement and cuts in the generosity of old-age pensions all increase the relative generosity of disability benefits for individuals. Duggan, Singleton and Song (2007[56]) find strong effects of increasing the retirement age on disability benefit applications in the United States. Staubli and Zweimüller (2013[57]) find more modest effects of a similar reform in Austria, although retirement effects through disability benefits are concentrated among low-paid workers. Wise (2016[58]) shows evidence for 12 countries establishing the key role of disability benefits as a pathway to retirement. Second, employers may have incentives to let go of older workers through disability programmes rather than early retirement or unemployment benefits. For the Netherlands, Koning and Lindeboom (2015[4]) found strong incentives for employers to let go of older employees through disability benefits as a consequence of high severance payments for older workers, worth up to three to four years of annual salary.

Disability benefit programmes can also sometimes hide long-term unemployment. It is widely documented that disability benefit applications are countercyclical: they tend to rise during economic recessions (Autor and Duggan, 2006[2]; Duggan and Imberman, 2009[3]; Koning and Lindeboom, 2015[4]; Mueller, Rothstein and von Wachter, 2016[5]). Higher applications cause a growth in the inflow to disability insurance during recessions. One potential explanation for the countercyclical movement of applications and inflows to disability insurance is that workers with marginal disabilities who would work in good economic conditions instead, when times are bad, might tend to apply for disability benefits. As Mueller, Rothstein and Wachter (2016[5]) explain, there are several mechanisms for this:

- Disability screening may take into account economic conditions. In some countries, labour market conditions, i.e. the actual availability of suitable jobs, are taken into account when assessing eligibility (and determining the generosity) to disability benefits. In these countries, or regions, eligibility to disability benefits is often laxer during economic downturns. For instance, in Norway, labour market conditions are taken into account on a case-by-case basis by contrasting the applicant's age, abilities, education, occupational background and labour market opportunities in the local labour market. In the Netherlands, assessment of the degree of disability takes into account the jobs available in the economy.
- Employers may be less willing to accommodate PWD when the labour market is weak. Recessions may also break existing job matches for PWD, making it harder for them to obtain necessary work and workplace accommodations.
- Wage declines increase the relative generosity of disability benefits, leading workers with marginal disabilities to prefer benefit receipt over work (Autor and Duggan, 2003[8]). As explained in Koning and van Vuuren (2007[59]; 2010[60]), without substitution between unemployment and disability programmes, average wages and sectoral growth levels should affect only the numbers of those needing unemployment insurance and not the numbers needing disability insurance. However, these variables also affect inflows to disability benefit receipt: the authors estimate that about one-quarter of the inflow into disability benefits in the Netherlands from 1993 to 2002 consisted of hidden unemployment.
- Job-search durations rise in recessions, and so jobseekers may turn to disability benefits upon exhausting their unemployment benefit entitlement. In this case, unemployment benefit extensions may enable some workers with marginal disabilities to find jobs before they turn to disability insurance. The evidence on these spillovers, however, is not conclusive. Mueller, Rothstein and Wachter (2016[5]) find that extensions of unemployment benefits do not affect the probability to claim disability insurance benefits. The authors find little overlap between the two populations (unemployment claimants and disability claimants) for the United States: only 28% of disability insurance awardees had any labour force attachment in the year prior to benefit application, and therefore would have had any eligibility to unemployment insurance. Instead, Lindner (2016[11]) and Lawson (2015[12]) find that higher unemployment benefits lead to lower disability benefit applications in the United States, suggesting strong interactions between the programmes.

- Counteracting the unemployment-disability spillover requires strong activation elements in disability programmes**.** One of the perils of disability systems' hiding of long-term unemployment is precisely that the exit rate from disability insurance is very low, so the programme is equivalent to retirement for many. It is thus key to ensure that disability claimants are activated and their work capacity reassessed accordingly, to break this link. Disability programmes in the six countries in focus are taking these approaches, just as reforms in many other OECD countries which aim at strengthening the activation elements in disability benefit programmes.

The nexus between disability programmes and social assistance is determined by the characteristics of both programmes**.** Some PWD are excluded from disability programmes if they do not have sufficient social security contributions, leaving them to rely on social assistance and welfare as their sole source of income. Other PWD may be included in the disability system (through non-contributory disability benefits) but not covered by sick pay, and thus may have to rely on social assistance in the period before they are granted disability benefits. Even when eligibility is ensured, disability benefits may be too low and social assistance may play a key role in supplementing disability payments. There is evidence for the Netherlands showing that about one in three claimants removed from disability benefits due to a tightening of the eligibility criteria transition to social assistance (Borghans, Gielen and Luttmer, 2014[13]; Garcia-Mandicó et al., 2020[14]). In some countries, like Canada, provincial social assistance schemes are there to capture the large share of PWD who do not meet the strict disability pension contributory requirements (OECD, 2010[61]). This raises questions on the adequacy of disability benefits, both in terms of their coverage and the level of payments, which is discussed in the following section.

A welfare culture can also be intergenerational, meaning that children of disability claimants may be more likely to claim social protection**.** In a recent study, Dahl et al. (2021[62]) show that children of parents whose eligibility to disability insurance is reduced are less likely to receive disability benefits themselves. They are also more likely to complete schooling, have a lower probability of serious criminal arrests and incarceration, and take fewer mental health drugs as adults.

4.4. Adequacy of social protection for people with disability

The value of social protection for PWD is large, and reforms need to be conscious of not jeopardising their well-being. Reforming disability policies is complex because they target a wide range of people, including some with very limited or no work capacity, and they need to offer coverage and a safety net to PWD with no work capacity while promoting work among PWD who do have work capacity. This section focuses on assessing the adequacy of social protection for PWD, first by evaluating the coverage of disability benefit programmes to identify which PWD are left out, and second, by evaluating the level of payments.

4.4.1. Coverage of disability programmes

Disability systems in some countries exclude PWD with insufficient contributions. Exceptions to this are the Netherlands, which have no minimum contribution requirements for eligibility to the programme, and Belgium, which has a non-contributory (means-tested) disability programme. In the other countries, as shown in Table 4.8, PWD with insufficient contributions may risk to be excluded from disability benefits. The strictness of the requirement varies by country, both on the minimum contributory period and on whether this minimum can be relaxed in some cases. For instance, Austria has a minimum required contributory period of five years but requires only six months of contributions for applicants below age 27. Canada, which has fewer exceptions to the minimum contribution period of four years, does not cover a large share of PWD through the contributory disability programme, but rather through provincial assistance programmes. Switzerland operates a three-pillar system, with a first pillar that covers all residents with three years of contributions to the federal social security. However, contributory requirements in Switzerland are only applicable for ordinary disability pensions; PWD who do not meet the minimum contributory requirements are still entitled to an extraordinary pension.

Table 4.8. Disability insurance tends to leave out all those with insufficient contribution records

Groups uncovered by the disability benefit system, 2021

	Austria	Belgium	Canada	Netherlands	Norway	Switzerland
Groups uncovered by disability benefits system	• Earners earning less than EUR 485.85/month (*Geringfügigkeitsgrenze*) • Persons with insufficient contributions	None	Persons with no or insufficient contributions	None	Persons with insufficient contributions	Persons with insufficient contributions
Contributions mandatory for all residents	No	No	No	No	No	Yes
Minimum contributory period	5 of last 10 years (prolonged for 50+)	None	4 (3) of last 6 years (if at least 25 years of contributions)	None	Last 5 years	3 years for an ordinary invalidity pension
Relaxation of eligibility conditions	Young claimants Older claimants Childcare Occupational disabilities	None	Childcare	N/A	None	Young claimants (Child)care

Source: Countries' responses to OECD questionnaire; MISSOC comparative tables; Austria Social Benefits, https://www.sozialleistungen.at/buch/pr342997_2968685/Invaliditaets-oder-Berufsunfaehigkeitspension-fuer-ab-1964-Geborene; SSA; Swiss AHV/IV, https://www.ahv-iv.ch/fr/Assurances-sociales/Assurance-invalidit%C3%A9-AI/Rente-dinvalidit%C3%A9; INAMI; Service Canada, https://www.canada.ca/en/services/benefits/disability.htm; UVW, https://www.uwv.nl/particulieren/ziek/index.aspx.

PWD represent a substantial share of social assistance claimants. As disability systems tend to have less strict requirements than any other social insurance programme, people excluded from disability benefits in most cases rely on last-resort programmes such as social assistance. In Austria, recent administrative data suggest that one in ten social assistance recipients have a disability. In Belgium, 20% of all welfare recipients are receiving means-tested non-contributory disability benefits. Data from population surveys show shares much higher than this for people identifying with a disability (see Chapter 2).

The difference in poverty level between PWD and PWOD is substantial, mainly driven by compositional differences in the type of social support they receive. Table 4.9 shows the poverty rate in EU countries by main source of social support, on average and for PWD. Several conclusions can be drawn. First, welfare recipients face more than double the incidence of poverty than social insurance recipients. This is not surprising as the two groups probably have very different labour market attachment and histories. The difference in poverty level between PWOD and PWD is substantial, but it is not higher for welfare recipients than for social insurance recipients and driven predominantly by the composition across types of payments: PWD more often receive payments with a higher poverty risk. The consequences of these findings are unclear, not least because social assistance programmes in some countries tend to provide a higher minimum payment than social insurance programmes, which often do not have such a specified minimum. This is in line with the ultimate goal of social assistance, of guaranteeing a basic level of income, while social insurance is tied to protecting people against income losses from disability.

Table 4.9. It is not clear what the impact from exclusions from disability insurance is on poverty among people with disability

Poverty count (60% median wage) by main income source by disability status, 2019

Main income source	People without disability	People with disability
Total across social support	**0.24**	**0.33**
Social assistance/exclusion	0.51	0.53
Housing	0.41	0.44
Child benefits	0.17	0.23
Social insurance	**0.11**	**0.15**
Disability benefits	0.19	0.20
Sickness benefits	0.10	0.11
Unemployment benefits	0.21	0.27
Old-age benefits	0.07	0.10
Survivor benefits	0.13	0.16

Note: The data represent the unweighted average of the countries shown in Figure 4.17.
Source: European Union Statistics on Income and Living Conditions (EU-SILC).

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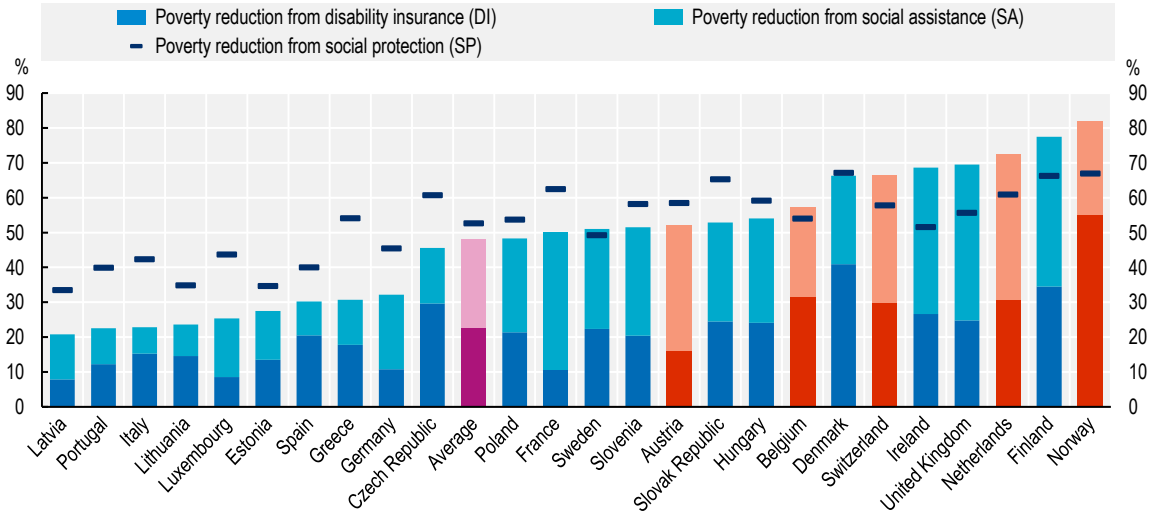
Across European OECD countries, social protection prevents 54% of PWD from falling into poverty. Figure 4.17 shows the poverty reduction effects from receiving disability benefits, social assistance and social protection as a whole. On average across countries, about 23% of PWD are prevented from falling into poverty thanks to disability benefits, and about 26% are prevented from falling into poverty through social assistance. Overall, social protection lifts out of poverty about one in two PWD (54%). There are differential impacts of disability benefits and social assistance. The receipt of social insurance benefits may also prevent the occurrence of extreme events in the case of disability: Deshpande, Gross and Su (2021[63]) show that receipt of disability benefits reduces the likelihood of bankruptcy, foreclosure, and home sale, which reflect reductions in financial distress.

Social assistance has a greater impact on the poverty reduction of PWD than disability insurance in countries where disability insurance has strict eligibility conditions. In Mediterranean countries and most Nordic countries, disability insurance has a greater poverty alleviating effect than social assistance. In some other countries, like the Netherlands and Switzerland, the opposite is true. These differences are partly the result of PWD relying more heavily on social assistance as the main benefit in many countries, because main disability benefit programmes cover only PWD with substantial contributory periods (e.g. Austria and Canada). In the Netherlands, for example, social assistance plays a key role in covering young PWD, who are an extremely vulnerable group. In other countries, disability benefits could be low and have to be topped up by means-tested support. Also in these countries, the poverty lifting effect could be driven by social assistance.

Figure 4.17. In European OECD countries, social protection prevents 54% of people with disability from falling in poverty

Change in poverty headcount pre- and post-social transfers, 2019



Note: Poverty headcount among people with disability is defined using 60% of median equivalised income as poverty line. All poverty reductions are calculated as the actual poverty headcount minus the hypothetical poverty headcount resulting using a pre-transfer (DI, SA or SP) share of income. Pre-transfer income is calculated following Ravaillon (2008[64]), "On the Welfarist Rationale for Relative Poverty Lines", https://openknowledge.worldbank.org/handle/10986/6466. This approach assumes that in the absence of social insurance, individuals will self-insure (work more, intra-household substitution etc.), but only partially compared to social insurance. For social assistance, it assumes two behavioural responses:

- Pre-DI income is measured by subtracting to the equivalised income 50% of the equivalised income from disability benefits.
- Pre-SA income is measured by subtracting to the equivalised income 100% of the equivalised income from social assistance. SA includes cash-based means-tested programmes (e.g. social assistance, child support, any other social exclusion programme).
- Pre-SP income is measured by subtracting to the equivalised income 50% of the equivalised income from social insurance and 100% of the equivalised income from social assistance.

Because some claimants receive both social assistance and DI, and poverty headcount relies on a binary measurement of poverty, the total reduction from social protection may be smaller than the sum of the poverty reduction from social assistance and DI.
The purple bar represents the unweighted average of the countries shown.
Source: OECD calculations based on the European Union Statistics on Income and Living Conditions (EU-SILC).

StatLink https://stat.link/wnuo9c

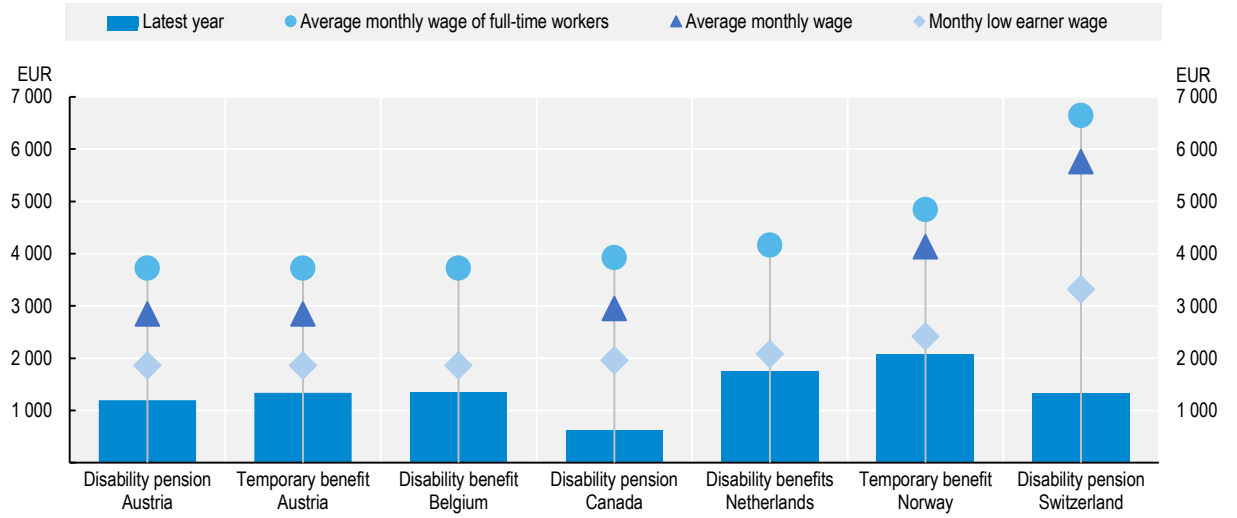
Level of payments

Disability payments are only a fraction of the average wage, which could generate adequacy issues if benefits are granted on their own. Figure 4.18 shows the average disability payment per country (including transitional disability programmes), the average wage for full-time full-year workers, and where available, the average wage in the country. In Austria, Belgium and the Netherlands, disability pensions are around 30% of the average full-time full-year wage (42 to 47% of the average wage in Austria). In Norway it is higher (40% of the full-time full-year wage, 50% of the average wage), and it is much lower in Canada (12% of the full-time full-year wage, 22% of the average wage). In Switzerland, the first pillar benefit is around 18% of the average full-time full-work wage (23% of the average wage), but this comparison is misleading, as the second pillar benefit (available to all employees with sufficient contributions) should bring the disability payments much closer to the average wage. Given these figures, it is clear that disability payments are low. The question is whether they are insufficient, and to establish this, it is key to take a step back and look at social protection more comprehensively. Countries that have disability assistance programmes, or social assistance, supplementing disability pensions and benefits may not face adequacy

issues even if disability payments are very low. Instead, countries with higher disability payments, but preclusion of complementing them with additional social transfers, may face greater adequacy challenges.

Figure 4.18. Disability payments amount to only a fraction of the average wage

Average disability benefit payments and average monthly wages, in euros, latest available year



Note: Data refer to 2017 (Belgium); 2018 (Norway); 2019 (Austria, Canada, Switzerland); and 2020 (Netherlands (combined benefits)). Data for average monthly wages of full-time workers are the average annual wages per full-time and full-year equivalent employee in the total economy divided by 12. Average annual wages per full-time equivalent dependent employee are obtained by dividing the national-accounts-based total wage bill by the average number of employees in the total economy, then multiplied by the ratio of average usual weekly hours per full-time employee to average usually weekly hours for all employees. Conversion to euros is based on the average exchange rate for the year in question. Low-earner wages correspond to 50% of the full-time full-year wage.

Source: Data provided by the Federal Ministry of Social Affairs, Health, Care and Consumer Protection of Austria, the Canada Pension Plan, the Dutch Employee Insurance Agency (UWV), the Norwegian Labour and Welfare Administration (NAV) and the Office fédéral des assurances sociales for Switzerland. Data were extracted from the Institut national d'assurance maladie-invalidité (INAMI) de Belgique statistiques d'indemnités, https://www.inami.fgov.be/fr/statistiques/indemnites/Pages/default.aspx. Average wages taken from the *OECD Average annual wages dataset*, http://stats.oecd.org//Index.aspx?QueryId=25148 and average monthly wages from the *OECD database on earnings distribution* (unpublished).

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Comparing average disability payments with average full-time full-year wages may be misleading as to the true earnings replacement rate of social benefits for PWD. A majority of PWD earn well below the average full-time full-year wage, and even the average wage: differences between their potential earnings and their benefits received are much smaller. Figure 4.18 also compares the average disability benefit received to the low-earner average wage (calculated as 50% of the average wage). In some countries, like in the Netherlands and Norway, disability payments amount to around 85% of the wage for low earners. In Belgium and Austria, the replacement rate is around 72% (64% for the Austrian disability pension). This is in line with MacDonald, Prinz and Immervoll (2020[65]), who find that the disability benefit replacement rate for low-earners is high in most countries, specifically 70% of the low-earner wage in Belgium and 82% in the Netherlands. The high replacement rate, and its increase over time with a downward pressure on low-paid wages, is an argument often used as one of the main reasons behind the growth in disability rolls in many countries, like in the United States (Autor and Duggan, 2003[8]).

In all countries reviewed, the disability payments presented in Figure 4.18 are supplemented by additional payments to guarantee a minimum income for PWD and cover disability-related expenditures. Table 4.10 summarises the different policies in place. All countries but Austria and the Netherlands have established a minimum payment for their main disability benefit. In countries without a minimum benefit, a minimum level

is ensured through compensation supplements, compensating the difference between the disability benefit entitlement and a minimum income or poverty level. Compensation payments vary by living situation and are means-tested in most cases. Effectively, countries with compensation supplements cover risks very similar to those covered with a minimum disability payment, which also often varies by living situation. For countries that guarantee a minimum disability payment, this minimum may fall short of the minimum income. Therefore, countries may allow for social transfers to supplement low disability payments. In Switzerland, a means-tested compensation supplement may complement first-pillar payments. In Canada and Norway, a minimum income is ensured through welfare meaning that disability beneficiaries with low entitlements can claim social assistance or other welfare programmes on top. In Canada, welfare programmes are administered at the regional level and can take different forms, explored in some degree in OECD (OECD, 2010[61]). In Belgium, the non-contributory, means-tested disability benefit can serve the purpose of guaranteeing a minimum level of income. The supplement in Austria has a similar effect and is also means-tested and, therefore, more often granted to persons living alone. Most countries also cover additional disability expenses through separated programmes, such as in the form of payments for care or for personal assistance. In addition, to ensure a minimum income through income replacement programmes, Belgium and Norway cover (part of) the disability-related expenses for transportation and medical equipment.

Table 4.10. All countries guarantee a minimum income for people with disability, but the approaches vary

	Austria	Belgium	Canada	Netherlands	Norway	Switzerland
Minimum income guaranteed for disability recipients	Yes, through compensation supplement (*Mindestsicherung*)	Yes, through non-contributory disability benefits (ARR)	Yes, through regional welfare programmes	Yes, through compensation supplement (*Toeslagenwet*)	Yes, through welfare (økonomisk sosialhjelp)	Yes, through compensation supplement (EL)
Coverage of additional disability expenses	Yes, assistance (*Pflegegeld*)	Yes, expenses and assistance (AI)	Yes, expenses and assistance (regional)	No	Yes, expenses and assistance (*Grunnstønad, Hjelpestønad*)	Yes, assistance (Helplessness allowance and home assistance allowance)

Source: Policy questionnaires for the OECD, Austrian Government website, https://www.oesterreich.gv.at/themen/soziales/armut/3/2/Seite.1693914.html; Sécurité sociale belge, https://www.socialsecurity.be/citizen/fr/handicap-invalidite/interventions-et-allocations/allocation-de-remplacement-de-revenus; McColl et al. (2017[66]), A Review of Disability Policy in Canada; UVW, https://www.uwv.nl/particulieren/overige-onderwerpen/toeslag-van-uwv/index.aspx; Social Affairs and Inclusion-Norway, https://ec.europa.eu/social/main.jsp?catId=1123&langId=en&intPageId=4714; Social Affairs and Inclusion-Switzerland, https://ec.europa.eu/social/main.jsp?catId=1131&langId=en&intPageId=4830.

A substantial share of disability claimants receive additional benefits to supplement their disability payments (Table 4.11). This is the case particularly in Switzerland, where first-pillar benefits are fairly low compared to the average wage: almost one in two claimants receive a supplementary benefit – a benefit that is quite high, as shown below, and thus changes entirely the adequacy assessment of the programme. In Austria, about one in four claimants receive supplementary benefits to complement disability pensions. Similarly, taking Ontario as an example of a Canadian province, about 40% of disability pensioners receive provincial social support for PWD through the Ontario Disability Support Programme (ODSP). The ODSP offers coverage of basic needs and shelter (in addition to health care coverage) that may amount up to CAD 1 169 (EUR 888) per month for a single-member household, which is substantially more than the average disability pension paid. More generally, in Canada, provincial social support programmes play a key role in providing adequate social protection to PWD. The shares of disability claimants receiving supplementary benefits are lower in the Netherlands and Belgium. Table 4.11 also shows the share of disability beneficiaries receiving additional benefits to cover additional costs of disability (data are only available for Belgium and Switzerland). These benefits take the form of personal assistance in Switzerland

(*Allocation pour impotents* – helplessness allowance*)* and assistance allowance to continue living home (*Contribution d'assistance*) or more generally to cover any additional costs of disability like in Belgium (*Allocation d'intégration* – integration allowance*).* About 13% of disability beneficiaries receive additional benefits in Belgium, and almost 16% receive personal assistance allowance in Switzerland.

Table 4.11. A substantial share of disability claimants receive additional benefits to supplement their disability payments

Share of disability claimants using supplementary benefits and programmes covering their disability costs, latest data available

	Supplementary benefit (%)	Coverage costs of disability (%)
Austria	24.9	
Belgium	5.1	13.0
Canada (Ontario)	39.9	
Netherlands	12.0	
Switzerland	48.1	15.8

Note: Supplementary benefit refer to Ausgleichszulage in Austria, ARR in Belgium, the Ontario Disability Support Programme in Canada, the Tegemoetkoming arbeidsongeschikten (allowance for disabled persons) in the Netherlands, and the Ergänzungsleistungen allowance in Switzerland. The coverage costs of disability refers to the AI in Belgium, and the Helplessness allowance in Switzerland.
Source: Data provided by the Office fédéral des assurances sociales for Switzerland. Statistik Austria, https://www.statistik.at/web_de/statistiken/menschen_und_gesellschaft/soziales/gender-statistik/pensionen/index.html, for Austria, Banque Carrefour de la Sécurité Sociale, https://www.bcss.fgov.be/samigc/error.xhtml, for Belgium, CBS, https://www.cbs.nl/nl-nl/cijfers/detail/84121NED, for the Netherlands, and Monthly statistical report Ontario, https://www.mcss.gov.on.ca/documents/en/mcss/social/reports/ODSP_EN_2017-03.pdf.

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Disability systems have to be carefully designed to not create work disincentives. Taking two examples, Norway and Switzerland, Table 4.12 compares the average disability payments by degree of disability (full vs. partial), the average labour earnings of the recipients in different benefit categories, and the resulting average income. In both countries, partial disability payments are a specified fraction of the full benefit, and the average benefit paid corresponds closely to these fractions. Labour earnings decrease with the degree of disability, as expected, particularly so in Norway, where claimants of full benefits barely receive earnings from work. The two income elements – benefits plus earnings – result in a total income difference between partial and full disability claimants of about 28% in Switzerland and 25% in Norway.

Without supplementary benefits, the average income is similar among partial disability claimants in Switzerland, regardless of their degree of disability, which could be generating work disincentives. Supplementary benefits having a different impact in the two countries: in Switzerland, these benefits help those with full pensions most and increase the differences between partial benefit categories, thus reintroducing work incentives. In Norway, instead, additional sources of welfare add little to those with full benefits and more to those with partial benefits as it is rare for full disability pensions to fall below the subsistence level; as a result, mostly partial beneficiaries receive social assistance. In both countries, those with full benefits have on average less total income than those with partial benefits, with the difference being larger in Norway. As in any country, it is likely that the average disability benefit recipient is not an average earner, but rather a low earner, implying that actual replacement rates are higher.

In conclusion, in the selected group of OECD countries, disability payments alone may be low, but when supplemented with top ups and social assistance, they offer a decent income certainly in comparison with low-wage earnings. Take up of supplementary programmes is quite large, indicating that most disability beneficiaries are well covered. Access to main disability benefit programmes is limited, as it excludes those with limited work histories, giving a large role to social assistance as a sole or additional source of social

support for many PWD. This results in a large poverty alleviating role for social assistance for PWD. Even so, social protection is insufficient to close the poverty gap between PWD and PWOD.

Table 4.12. The disability system has to be carefully designed to avoid creating work disincentives

Average monthly disability payments (in Euros), labour earnings and income by type of benefit entitlement in Switzerland and Norway, latest data

	Values in EUR/month	Average disability benefit	Average labour earnings	Income from disability benefit and work	Income including other welfare payments	Total income as percentage of average wage
Switzerland disability pension (pre-2022 system)	Full pension	1 511	816	2 358	4 292	64
	Three-quarter pension	1 186	1 653	2 875	4 487	67
	Half pension	792	2 237	3 065	4 887	73
	Quarter pension	395	2 611	3 023	5 022	75
Norway disability benefit	Full benefit	2 837	115	2 952	3 465	71
	51-99 degree of disability	1 977	1 515	3 492	4 236	87
	0-50 degree of disability	1 376	2 309	3 685	4 561	94

Note: Average wage was EUR 4 854 per month in Norway and EUR 6 671 in Switzerland in 2019. Since 2022, the Swiss system follows a linear schedule, thus abolishing the quarter, half and three-quarter pensions.
Source: Administrative data provided by national authorities.

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4.5. Towards social protection for people with disability that promotes their employment

Disability benefit systems have undergone substantial transformations over the past decades, generally towards more active and less generous systems. Although reforms have taken the right direction to support the employment of PWD, their employment rates remain low and the disability employment gap large. One part of the reason is that reform has failed to address one of the key components of social protection for PWD, highlighted thorough this chapter: social protection for PWD needs to be viewed and reformed holistically. Social protection is not limited to disability benefits but encompasses the full set of social insurance and minimum income programmes. Early intervention oftentimes fails, as it reaches PWD late, after years of navigating the welfare system and being detached from the labour market.

This section proposes a set of policy recommendations for governments to reform and rethink social protection for PWD, organised around six guiding principles:

1. Make disability programmes a non-final state.
2. Implement mandatory early intervention approaches.
3. Introduce work incentives in disability and other social protection programmes.
4. Tackle the fragmentation of social protection.
5. Take a holistic approach to reforming social protection.
6. Address poverty through mainstream social protection.

1. Make disability programmes a non-final state

Disabilities are dynamic over the lifetime of a person: they can worsen, improve, or fluctuate. PWD may experience periods of good health, where working is possible, despite sometimes experiencing periods where working is not possible (Morris et al., 2019[67]). Disability systems need more flexibility to reflect such fluctuations. Accordingly, entitlements to disability benefits should in many cases not be permanent.

Flexibility of disability systems can be promoted by introducing work trial periods where disability benefit entitlement is maintained for extended periods of time. As discussed in this chapter, disability systems in the six countries reviewed have work trial periods, but insurance rights are maintained for only a short amount of time, most often less than one year. An exception is the Netherlands, where insurance rights are guaranteed for five years. Given the fluctuations of disability, which can sometimes have longer on-and-off phases, it would be advisable to maintain insurance rights for a considerable period of time.

Greater flexibility must come alongside a change in thinking of disability systems as a pathway to facilitate the exit from the labour force. One way to approach this is by implementing checks and reassessments of disability beneficiaries. As Table 4.13 shows, most of the six analysed countries consider the periodic reassessment of disability benefit entitlements, although the frequency of such reassessments and the approach to initiating them vary. Some countries, like Austria and Norway, have strict transitional benefits, whose claimants are reassessed every year as these benefits are granted for a maximum duration. Other countries, like Canada, the Netherlands and Switzerland, are more flexible, and rely on beneficiaries reporting changes in their health status or work capacity. These two approaches rely on very different incentives, and may generate reassessment processes that will be more or less binding.

Table 4.13. Most programmes consider reassessments of disability claimants

Periodic reassessments of current disability entitlements and their frequency

	Austria	Canada	Netherlands	Norway	Switzerland
Conducts regular reassessments of disability claims?	Disability pension: No Transitional benefit: Yes	Disability pension: Yes Regional benefits: Yes	Permanent benefits: No Transitional benefits: Yes	Permanent benefits: No Transitional benefits: Yes	Disability pension: Yes
How often?	Every year	No fixed interval	No fixed interval	Every year	No fixed interval
Who initiates reassessments?	Benefit authority	Benefit authority or beneficiary	Benefit authority or beneficiary	Benefit authority	Benefit authority or beneficiary

Source: Policy questionnaires for the OECD.

Reassessment of disability claimants, particularly in the context of work trials and flexibility of insurance rights, is key to aligning programmes to the dynamics of disabilities. Garcia-Mandicó et al. (2020[14]) show that a systematic reassessment of disability claimants in the Netherlands taking place in 2004 to 2009, purely based on revising the health status of claimants, would result in the disqualification and reduction in benefit entitlement for the large majority of beneficiaries. This would be particularly striking for those claimants classified as having full incapacity: 35% of them would be disqualified from disability benefits, and 45% would fall in a lighter category of disability. There are several reasons for this:

- Periodic reassessments were not binding in the Netherlands before, particularly for claimants with full incapacity, under the assumption that they cannot recover. In fact, the average claim duration was 1.5 years longer for full incapacity compared to partial incapacity.
- There was a much higher share of claimants with mental health conditions among claimants with full compared to those with partial incapacity. Mental disabilities are frequently fluctuating, much more dynamic, with on-and-off periods of invalidating health problems.

Reassessment policies may be necessary for many disability claimants, but it is crucial to recognise that there is a risk of over-assessing. Reassessments can be distressful experiences, which together with the fear of losing social support can have consequences on people's health and well-being (García-Gómez and Gielen, 2018[68]). People may also become too preoccupied with demonstrating their disability, pushing them away from attempting to work and from the labour market (Policy Lab et al., 2020[69]) – thereby perpetuating a behaviour needed to create benefit entitlements in the first place, for initial applications.

Entitlement reassessments need to be aligned with a greater flexibility, thus combining the possibility of reducing social support and promoting the participation in active labour market programmes during periods of well-being, with that of guaranteed return to support in periods of poor health.

2. Implement mandatory early intervention approaches

Early intervention is critical, and needs to take place before skills depreciate, before a detachment from the labour market, and before the mind-set of people has shifted towards inactivity. Timing is key in determining the success of activation and vocational rehabilitation for PWD. Policy makers and countries are aware of this, and have invested considerable resources and efforts in promoting earlier intervention in disability benefit programmes. While this is welcome, it is not sufficient, as it fails to recognise that PWD applying for a disability benefit will often have had fragile and interrupted employment experiences and may have been navigating the welfare system for years. There are several approaches to this, including putting greater emphasis on social protection programmes that precede disability insurance, especially sickness insurance and unemployment insurance, and strengthening the role of the PES.

- Making early intervention efforts during sickness insurance mandatory. Sickness insurance is a common pathway for many disability insurance applicants, and a natural choice for focusing early intervention efforts. As reviewed in this report, many countries have set early intervention mechanisms during sickness absence, such as graded RTW or partial sick leave, vocational rehabilitation, or regular employer-employee meetings, sometimes also including the treating doctor. While these measures are effective, they are often not mandatory, which results in limited take-up. Early intervention approaches, and in particular, the sufficient involvement of employers and employees in RTW planning during sickness insurance, need to be closely monitored and enforced, to ensure that the momentum for returning to work is not lost.
- Increasing the incentives of employers to support the return to work of their sick-listed employees. Graded RTW during sick leave can be an effective approach to maintaining the employment of PWD and preventing their transition to disability benefits. While graded RTW is possible in many countries, the incentives of employers are not always aligned. The Netherlands offers an interesting example of how to do that, by mandating a long employer-paid sickness period combined with experience-rated contributory disability payments, thus penalising employers who have failed to support the return to work of their sick-listed employees. These strict policies could have a negative impact on hiring for PWD, as research has pointed out (Koning, 2004[70]). Finding the right balance between employer incentives and hiring disincentives is a challenge that policy makers need to address by looking at the labour market and social protection holistically.
- Giving a role to the PES in supporting jobseekers with health barriers to employment. PWD with insufficient contributory periods, or who are unemployed, may not be eligible for sickness insurance benefits in many countries. They may rely on unemployment benefits, or perhaps social assistance, which often warrants registration with the PES. This gives the PES a key role in identifying jobseekers with health barriers to employment, and supporting them with targeted, individualised rehabilitation programmes as early as possible. Such role for the PES is described in detail in a recent OECD report for Slovenia, where unemployed workers are uncovered by sickness insurance and the PES plays a key role in supporting their return to work (OECD, 2022[37]).

Early intervention success hinges on separating intervention from the certification of a disability. Disability assessment requires a formal application to disability benefits or a formal/legal disability status, a lengthy procedure that is focused predominantly on the medical aspect of a disability. Early intervention should be possible among sickness benefit claimants and jobseekers with a health barrier to employment, upon identification of a need for special support to return to work. This need does not need to be related to the certification of disability, and should be evaluated on the functional capacity of a person, to promote the take up of special support, while eliminating the disability labelling of participants. The assessment of needs for support of sickness claimants could be a joint responsibility of the sickness and disability benefit authority, or, like in Switzerland, a responsibility of the disability benefit authority alone, where early intervention is managed by the disability authority upon referral of sickness claimants.

3. Introduce work incentives in disability and other social protection programmes

Work incentives need to be carefully designed to promote the employment of PWD, to prevent a simple delayed exit from the labour market or claims of partial disability benefits. The chapter discusses at length work incentives in disability systems, in the form of transitional disability programmes, financial incentives to work for disability recipients, or guaranteed benefit entitlements irrespective of work status. For instance, Austria and Norway have introduced transitional programmes with strong focus on vocational rehabilitation and training, where a large focus is on gaining (partial) employment. Transitional programmes are effective at maintaining the employability of PWD when paired with vocational rehabilitation interventions; however, people seem to stay on such transitional programmes for a long time, and many transition to permanent benefits eventually.

Many countries also make considerable use of partial disability benefits to provide flexibility and more possibilities to combine work and benefit receipt. Such programmes allow persons with partial capacity to work while receiving a partial benefit, even on a permanent basis. However, partial benefits may also provide incentives for some people to shift from full-time to part-time employment; hence, the overall labour market impact is unclear, as suggested by the higher overall disability benefit caseload in countries that have such partial benefits.

Untying financial incentives from disability benefits may be a better approach to increasing labour market participation without increasing disability caseloads (Hoynes and Moffitt, 1999[54]). Such financial incentives may take the form of tax credits, like in Canada, a deduction of disability expenses, like in Austria, or raising the threshold between non-taxable and taxable income, like in Belgium.

4. Tackle the fragmentation of social protection

Disability benefits by themselves are often low measured against the earnings from work in a country, typically representing around 30% of the average wage. However, many people will receive additional payments. These payments include top-ups for high-income groups for instance regulated in collective agreements designed to replace a higher share of the past wage, or top-ups for low-income groups designed to make ends meet. In some countries, like Switzerland, take-up of these benefits reaches up to 50% of all benefit recipients, but take up is low in many other countries. In addition to top ups, people may receive other benefits specifically designed to cover disability-related costs, including the costs of care for people with severe disability in need of constant attendance but also other payments, such as mobility allowances. In addition, countries may have more than one disability benefit programme which can be combined, e.g. basic benefits and contribution-based payments.

Many countries distinguish temporary and permanent disability benefits, full and partial disability payments, or means-tested and contribution-based payments, and often these payments are different benefits with differing entitlement criteria. Overall, it appears that disability systems are fragmented, which may result in adequacy issues when take up of supplementary payments is low. The difficulty of

navigating fragmented systems may be large for PWD, resulting in PWD having to go through various assessments for different payments and not receiving the support they need. System simplification could contribute to more benefit adequacy, in turn tackling the poverty of PWD, which remains high compared to that of PWOD.

5. Take a holistic approach to reforming social protection

Social protection for PWD needs to be viewed and reformed holistically. First, because of the spillovers that occur between social protection programmes. This chapter has shown how reforms in old-age pensions, unemployment benefits or social assistance have unintended consequences on disability benefit take up, and vice-versa. Policy makers need to be aware of the interconnectedness of social protection when envisaging policy reform. Second, because of the large safety net role of social assistance for PWD. As shown in this report, many PWD fall between the cracks of contributory disability benefits, due to intermittent work histories and insufficient social security contributions. A substantial share of PWD is left to rely on social assistance as their main source of social support and income. Reforms of disability benefits that do not take into account the large share of PWD uncovered by these benefits can be the source of greater inequalities and inadequacies of the system. Taking an overarching view of the social protection for PWD is key before reforming any of its elements.

6. Address poverty through mainstream social protection

The value of social protection for PWD is large, as shown in this report: social protection prevents over 50% of PWD from falling into poverty across European OECD countries (comparable data are not available for other countries but would likely be very similar). The large value of social protection is not confined to the value of disability benefits, rather the opposite: in most countries, social assistance plays a greater role than disability benefits in preventing the income of PWD from falling below the poverty line. Mainstream programmes, such as social assistance and unemployment benefits, play a key role in providing a safety net for PWD. Governments and countries need to recognise this fact, and design policies in a way to accommodate access to mainstream social protection programmes.

Mainstreaming social protection, together with addressing the fragmentation of social protection, fit into the much broader debate on how to optimally design social protection. What role should social insurance have, compared to social assistance? The rising numbers of non-standard workers pose a problem for traditional contributive social insurance as, just as with many PWD, they do not fit into the framework of social insurance (OECD, 2018[71]). The need to make social protection future ready has brought the idea of a universal basic income back to the centre of the debate (Gentilini et al., 2020[72]). The OECD has long promoted the idea of a single working-age benefit for everyone who is not in employment, with top-up payments to cover the additional costs of disability, which are independent of the person's employment status (OECD, 2010[9]). While there is limited empirical evidence on how such a programme could look like and be delivered, countries should acknowledge that the increasing role that social assistance is playing is bringing most social protection programmes to a state which is, conceptually, not too far away from that of a single working-age payment, but with numerous unintended inequalities and poverty traps. A real change will require shaking up the existing system, and thinking about policy differently.

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Annex 4.A. Additional table

Annex Table 4.A.1. Programme names by country in national languages

	Austria	Belgium	Canada	Netherlands	Norway	Switzerland
Sickness Benefit / Work incapacity / Sick pay / Sickness insurance	Krankengeld Versehrtenrente	Indemnités d'incapacité de travail/ Uitkeringen bij arbeidsongeschiktheid	Employment Insurance	Ziektewet	Folketrygden	Optional daily allowance insurance
Early intervention measure	Wiederein-gliederungsgeld	Réinsertion socio-professionelle/ Socioprofessionele re-integratie		Gatekeeper Improvement Act		Mesures d'ordre professionnel/ Massnahmen beruflicher Art Détection précoce/ Früherfassung Mesures de réinsertion/ Integrations-massnahmen
Transitional programme / Vocational rehabilitation	Rehabilitationsgeld (DI) Umschulungsgeld (PBS)		Vocational Rehabilitation Program for CPPD/ QPPD	WGA	Arbeids-avklarings-penge (AAP)	
Disability pension / Disability Benefit	Invaliditätsrente Berufsunfähigkeits-rente Erwerbsunfähigkeits-rente	Indemnités d'invalidité/ Invalideitsuitkering	CPPD/ QPPD	IVA	Uføretrygd	Assurance Invalidité/ Invaliden-versicherung

Source: Countries' responses to OECD questionnaire; MISSOC comparative tables; Arbeiterkammer Wien, https://www.sozialleistungen.at/buch/341421-24.0_pr342997_2968685/Invaliditaets-oder-Berufsunfaehigkeitspension-fuer-ab-1964-Geborene; Swiss AHV/IV, https://www.ahv-iv.ch/fr/Assurances-sociales/Assurance-invalidit%C3%A9-AI/Rente-dinvalidit%C3%A9; INAMI ([1]), https://www.inami.fgov.be/fr/Pages/default.aspx; Service Canada, https://www.canada.ca/en/services/benefits/disability.html; EC- Employment, Social Affairs & Inclusion, https://ec.europa.eu/social/main.jsp?catId=1122&langId=en&intPageId=4990.

5 Harnessing the promise of the Future of Work for all

The rapidly changing world of work offers promising potentials to make work more accessible and more inclusive for people with disability. Work may become healthier for all as well. However, these promises will only materialise if countries take the necessary policy actions. This chapter proposes a set of five principles to help governments to do so.

In Brief

The Future of Work offers potential to permanently improve the labour market situation of people with disability – but this is not a given. OECD countries have an imperative to steer towards a healthy and inclusive Future of Work for all.

- **The world of work is changing at rapid speed**. Technological progress, artificial intelligence (AI) and globalisation are reshaping our labour market. Non-standard forms of work have emerged and expanded, including platform work, own-account and dependent self-employment, and employees on on-call and zero-hour contracts. The way we work is permanently evolving as well, most notably because of the large rise in teleworking accelerated by the COVID-19 pandemic that is likely here to stay.
- **The changing world of work may increase or decrease the prevalence of disability**. While technological change, AI and globalisation have lowered the physical toll of work, they also contribute to increased labour market security with repercussions for physical and mental health. Non-standard forms of work, much like self-employment, can offer health benefits through more autonomy and flexibility. However, their elevated labour market insecurity and worse access to health, social protection and employment supports can compromise worker health. Teleworking can provide an accessible workspace for many people with disability (PWD) and facilitate a better work-life balance, but can worsen health by lengthening working hours and increasing occupational health and safety risks (Section 5.1).
- **Similarly, the changing world of work can be a boon or a bane for PWD**. Technological progress, AI, globalisation, more flexibility and autonomy and more teleworking all have the potential to make work more accessible and inclusive by accommodating health problems. At the same time, if managed poorly, PWD may experience a further aggravation of their labour market disadvantage. PWD are slightly more exposed to risks of job loss due to automation. Those in non-standard forms of work and self-employment face inferior job quality. Teleworking is somewhat less an option for PWD. Moreover, any negative effects of the changing world of work on health will be more harmful for people with pre-existing disability (Sections 5.2, 5.3 and 5.4).
- **It is largely in the hands of OECD countries to harness the promise of a healthy and inclusive Future of Work for all – including those with disability.** This chapter proposes a set of five guiding principles to steer towards inclusion: (i) invest in skills and digital access; (ii) build inclusive public employment services; (iii) improve job quality of dependent employment by mainstreaming flexibility; (iv) improve job quality of non-standard forms of work and self-employment; (v) pivot advancements in innovation and technology towards inclusion (Section 5.5).

5.1. The impacts of a changing world of work on prevalence of disability

The world of work is changing at rapid speed. Technological progress, artificial intelligence (AI) and globalisation are reshaping our labour market: tasks that can be automated (routine tasks) lose importance, non-routine tasks are of growing importance. Additionally, new organisational business models have contributed to a rise in non-standard forms of work. These forms of work share certain characteristics of self-employment, including potentially more autonomy and flexibility, but also more labour market insecurity and less access to health, social protection and employment supports. The COVID-19 pandemic seems only to have accelerated these trends. Moreover, the pandemic has brought about a mass social experiment in changing working practices in the form of teleworking, which is likely here to stay (OECD, 2021[1]).

The changing world of work will impact prevalence of disability and worker health by its effects on job quantity and job quality. Job quality, as defined in the OECD Job Quality Framework (Box 5.1), refers to the attributes of a job that affect worker well-being, including earnings quality, labour market security and the quality of the work environment. This section provides a broad overview of the state-of-the-art evidence of how technological change, AI and globalisation (Section 5.1.1), non-standard forms of work and self-employment (Section 5.1.2) and teleworking (Section 5.1.3) may influence worker health.

Box 5.1. The OECD Job Quality Framework

Job quality refers to the attributes of a job that affect worker well-being. Job quality is inherently multi-dimensional. The OECD Job Quality Framework focuses on three key dimensions that have been shown to be particularly relevant for well-being:

- **Earnings quality**. This refers to the extent to which the earnings received by workers in their jobs contribute to their well-being. Earnings quality accounts for both the level of earnings and their distribution across the workforce.
- **Labour market security**. This encompasses both the risk and the employment and financial consequences of losing a job. The latter includes the expected duration of non-employment as well as coverage and generosity of income replacement when encountering job loss.
- **Quality of the work environment**. This relates to the nature and intensity of work, the organisation of work and the working atmosphere. The quality of the working environment depends crucially on whether workers have the job resources to meet the job demands. Important job resources include decision latitude, learning opportunities and good relationships with colleagues. Job demands include for instance time pressure at work and physical health risk factors.

Source: OECD (2014[2]), "How good is your job? Measuring and assessing job quality", https://doi.org/10.1787/empl_outlook-2014-6-en; Saint-Martin, Inanc and Prinz (2018[3]), "Job Quality, Health and Productivity: An evidence-based framework for analysis", https://doi.org/10.1787/10.1787/a8c84d91-en.

5.1.1. Impacts of technological change, AI and globalisation on health

The effects of technological change, AI and globalisation on the prevalence of disability are intricate. The largest health risks likely come from increased labour market insecurity.

Technological change, AI and globalisation will likely not lead to a large negative impact on job quantity, which would have knock-on effects on health. Working is generally beneficial to health. Negative health effects of job loss tend to be larger for sustained periods of non-employment, which may be the case if the

Future of Work entails more structural labour market adjustment (Classen and Dunn, 2012[4]). However, the available evidence suggests that technological change, AI and globalisation will probably not have a large negative impact on job quantity, though there can be net job declines in certain industries and occupations. The number of jobs actually increased across OECD countries in nearly all occupations over the last decade. There was even job growth in occupations at high risk of automation, albeit lower than in occupations at low risk of automation (Lane and Saint-Martin, 2021[5]; Georgieff and Milanez, 2021[6]). There is also no clear relationship between AI exposure and employment growth. AI is even associated with employment growth in sectors with high computer usage (Georgieff and Hyee, 2021[7]).

Structural and temporal job loss will have much worse health consequences if a country does not provide universal access to health care, out-of-work benefits, reduced work capacity benefits and public employment services. Without universal health coverage, unemployment not only means a decrease in income, but also a loss in access to health if employer-provided health insurance is not replaced by public coverage. Universal health coverage is all the more important for PWD, given their higher need of health care and on average lower incomes (Banks, Kuper and Shakespeare, 2021[8]; Kuper and Heydt, 2019[9]). Studies for the United States, a country without universal health coverage, show that those who lost their job because of globalisation reduce and delay their health care utilisation which worsens their health status (Lang, McManus and Schaur, 2019[10]; Adda and Fawaz, 2020[11]). Consequences of job loss on health will also be larger if persons do not have access to out-of-work benefits, reduced work capacity benefits and public employment services. Out-of-work benefits provide income replacement and reduce the risk of falling into poverty when experiencing job loss. Reduced work capacity benefits – paid sick leave, disability benefits and workers' compensation – are particularly important to protect jobs, income and health of workers experiencing temporary sickness, disability or work-related injuries. Public employment services help people back into employment and towards expanding segments of the economy (OECD, 2018[12]).

Arguably the largest health risk of technological change, AI and globalisation come from increased labour market insecurity. Technological change, AI and globalisation change job tasks and increase job turnover. Exposed workers may also experience lower wage growth (OECD, 2019[13]; Thewissen and Van Vliet, 2019[14]; Thewissen, van Vliet and Wang, 2017[15]). Labour market insecurity causes stress, sleep disturbance, lower job satisfaction and gloomier expectations about the future. This then can lead to mental and physical health problems, with stronger effects for persons with pre-existing health problems (Hummels, Munch and Xiang, 2021[16]; Macchia and Oswald, 2021[17]; OECD, 2012[18]; Mai et al., 2019[19]). Workers directly exposed to globalisation in the United Kingdom, as well as their partners and children, reported lower mental health over the last few decades (Colantone, Crinò and Ogliari, 2019[20]). Globalisation had negative physical and mental health effects for manufacturing workers in routine jobs in the United States, translating into increased hospitalisation and mortality rates (Adda and Fawaz, 2020[11]). Trade liberalisation in the United States also increased mortality and drug overdoses (the so-called "deaths of despair"), as well as an increase in the uptake of disability insurance (Pierce and Schott, 2020[21]). The latter two studies are likely upper bound estimates of the effects of import competition on worker health. The studies focus on the most exposed workers and regions in the United States that does not offer universal health coverage and less generous social protection than most other OECD countries.

Middle- and low-skilled workers disproportionally bear the largest risks of job loss and labour market insecurity. Technological change, AI and globalisation lead to patterns of job polarisation, a decrease in the share of middle-skill jobs, which is mostly the result of upskilling, an increase in the share of high-skill jobs. Drivers of job polarisation are manifold. They include the decline of the manufacturing sector which has relatively many middle-skill jobs, and the more routine and offshorable nature of many middle-skill jobs (Michaels, Natraj and Van Reenen, 2014[22]; Thewissen and Van Vliet, 2019[14]; OECD, 2020[23]; Acemoglu et al., 2021[24]; OECD, 2019[13]).

The effects of technological change, AI and globalisation on quality of the work environment are manifold.

First, technological change and globalisation have made work less physical and dangerous, with potential but also risks for occupational health and safety.

Technological change and globalisation have led to long-term shifts away from physically demanding and dangerous work. Technological change as the engine of economic development has allowed for compositional shifts from agriculture, to manufacturing and more recently to the services sector. This transition has contributed to making work much less physical and dangerous, since work accident rates are considerably lower in the services industry (Tompa et al., 2021[25]; Kaplan and Schulhofer-Wohl, 2018[26]). Certain physical risks, however, may have increased because of more screen time in the services sector. This includes prolonged sitting and higher risk of musculoskeletal symptoms (Coenen et al., 2019[27]). Technological change and globalisation can further lower physical risks work by automating or offshoring physically demanding and dangerous tasks. Dangerous jobs are more often offshored than safe ones in the American manufacturing industry, which has contributed to lower workplace injury and illness rates (Lai, Lu and Ng, 2019[28]).[1] Responsible business conduct demands firms to make tasks less dangerous rather than offshoring them to other countries, as recommended in the OECD Guidelines for Multinational Enterprises.

Technological change and globalisation may lower compliance with occupational health and safety by firms, though they also offer the potential to improve enforcement and efficiency. Increased import competition in the manufacturing industry in the United States can lead firms to allocate resources towards productivity at the expense of safety, translating into higher work injury rates (McManus and Schaur, 2016[29]). On the other hand, technological change and AI can contribute to more efficient occupational health and safety standards and better enforcement (Lane and Saint-Martin, 2021[5]; EU-OSHA, 2018[30]). For instance, the Norwegian Labour Inspection Authority (NLIA) has created a machine learning algorithm to predict non-compliance with occupational health and safety among Norwegian firms. This algorithm can help to better target labour inspections (Dahl, Søberg and Eskov, 2017[31]). Improved occupational health and safety standards are a major contributor to better worker health (Tompa et al., 2016[32]; Levine, Toffel and Johnson, 2012[33]).

Second, technological change and globalisation may affect prevalence of disability by increasing cognitive job demands, but also job resources and decision latitude to cope with these demands. Healthy jobs are characterised by well-balanced job demands and resources (Saint-Martin, Inanc and Prinz, 2018[3]).

There are indications that cognitive job demands have gone up, though the evidence is inconclusive. Technological change and globalisation have led to a long-term trend towards sectors and professions with more cognitive tasks (Kaplan and Schulhofer-Wohl, 2018[26]). Higher average cognitive job demands may explain the poor integration of workers with mental health problems (OECD, 2012[18]). While some studies find that computer use and robotisation contributed to higher work intensity across European countries (high pace of work, tight deadlines and time pressures) (Antón Pérez, Fernández-Macías and Winter-Ebmer, 2021[34]), others do not (Menon, Salvatori and Zwysen, 2020[35]).

Technological change and AI can help extend job resources and decision latitude available to workers to meet increased cognitive job demands. Technological change and AI can increase decision latitude. Computer use gives workers more control over the order, method and speed of their work (Menon, Salvatori and Zwysen, 2020[35]). Employees in British services companies report being appreciative of having fewer repetitive tasks and opportunities to assume more customer-facing responsibilities (Lacity and Willcocks, 2016[36]). Technological innovations can enable PWD to perform jobs better and can grant many workers greater flexibility, autonomy and better work-life balance (Section 5.2.2). New technology may also allow greater use of high-performance work practices that are typically associated with greater job satisfaction. However, certain technological innovations can also reduce workers' autonomy by facilitating closer monitoring of workers.

5.1.2. Impacts of non-standard forms of work and self-employment on health

The changing world of work induces the emergence of non-standard forms of work, which is all work that is different from permanent full-time dependent employment, and include:[2]

- Own-account self-employment: self-employed workers with no employees;
- Platform work: workers who provide services through online platforms. Platform workers often have an employment status as own-account self-employed workers;
- Dependent self-employment: self-employed workers who principally rely on only one client;
- On-call and zero-hour contracts: contracts with no guaranteed and/or unpredictable working hours.

Technological innovations have contributed to the growth in non-standard forms of work, by creating business models in which workers provide services through online platforms and by stimulating the overall demand for working time and workplace flexibility (OECD, 2019[13]).

Non-standard forms of work share several important characteristics with self-employment. Own-account and dependent self-employed are a subcategory of self-employed workers. Platform workers are often (rightly or wrongly) classified as self-employed. All have (to a certain extent) responsibility, autonomy and flexibility over the organisation of their work, as opposed to dependent salaried employment who are subordinate to an employer. Since there is more literature available on job quantity, job quality and health effects of self-employment, this section broadens the perspective and considers the health effects of self-employment as well as non-standard forms of work.

On the whole, it is not trivial to assess the overall impact of self-employment and non-standard forms of work on health and prevalence of disability for multiple reasons:[3]

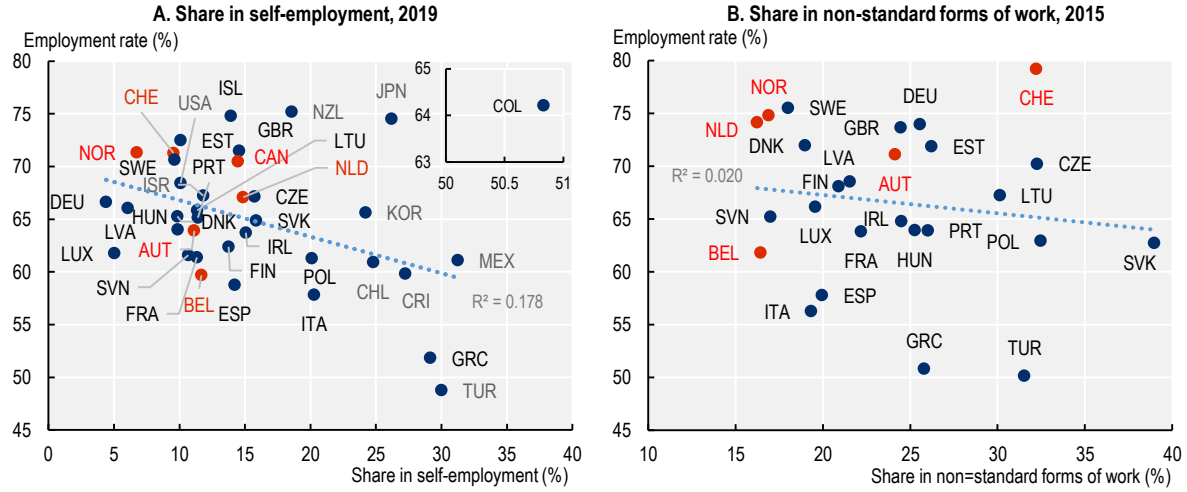
- Self-employment and non-standard forms of work are highly diverse. Self-employment ranges from directors or partners of large firms with employees to own-account and dependent self-employed who principally rely on one client, and from highly specialised to precarious freelance workers. Platform work also varies considerably. It can be divided into *crowd work*, consisting of tasks commissioned and carried out virtually, and *on-demand work*, where purchaser and provider are in physical proximity. Some platform work is specialised, but most work consists of standardised and routine gigs (Bastagli and Hunt, 2020[37]).
- Disability can both be a pull factor or a push factor out of self-employment and non-standard forms of work. On the one hand, PWD may be “pulled” into self-employment or non-standard forms of work, because of its potentially higher autonomy and flexibility. There may also be self-selection of people without disability (PWOD) into self-employment because of higher earnings at the top (e.g. younger or higher educated workers, or those more resilient to stress). On the other hand, PWD may be “pushed” into self-employed or work in a new form of work, for instance because of lower employment barriers compared to dependent employment or out of precariousness (Section 5.4). Such push and pull factors make it more complicated to evaluate whether self-employment or non-standard forms of work themselves have a direct effect on prevalence of disability (Bogan, Fertig and Just, 2021[38]; Levine and Rubinstein, 2017[39]).
- Legal definitions of self-employment and non-standard forms of work, including their entitlements to employment and social protection, differ across OECD countries. Own-account and dependent self-employed workers often find themselves in the “grey zone” between dependent employment and self-employment. Their entitlements to different types of employment and social protection differ per country (OECD, 2019[13]). As discussed previously, labour market insecurity and job loss will have much worse health consequences for workers who do not have access to out-of-work benefits, reduced work capacity benefits and public employment services.

Higher shares of workers in self-employment or certain non-standard forms of work are not associated with more job quantity. If anything, higher shares of self-employment are correlated with lower employment

rates (Figure 5.1, Panel A). A higher share of workers in non-standard forms of work that can be identified in the data – employees working unpredictable hours, or dependent or own-account self-employed – is also not associated with higher employment rates (Figure 5.1, Panel B).[4]

Figure 5.1. Higher shares of workers in self-employment or in non-standard forms of work are not associated with higher employment rates

Correlation between the employment rate and self-employment/non-standard work, workers aged 15-69



Note: Panel A: Share of workers who are self-employed. Data refer to 2018 (Australia, Belgium, Iceland, Ireland, Italy, United Kingdom). Data cover ages 15 and over (Australia, Colombia, Costa Rica, Japan, Korea, Mexico, New Zealand, Türkiye, United States). Panel B: Share of workers who are either (1) working unpredictable hours (i.e. employee who experiences regular working time arrangement changes of which they are informed at most several weeks in advance), (2) dependent self-employed (i.e. principally relying on only one client) or (3) own-account self-employed (i.e. without authority to hire or dismiss employees).
Source: OECD calculations based on EU Statistics on Income and Living Conditions (EU-SILC) and the *OECD Employment Database* https://www.oecd.org/employment/emp/onlineoecdemploymentdatabase.htm (Panel A) and the European Working Conditions Survey (EWCS) (Panel B).

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Chronic labour market insecurity combined with poor access to out-of-work and reduced work capacity benefits are a major health risk for many in self-employment and non-standard forms of work.

Job and income insecurity is high for many self-employed and those in non-standard forms of work. Many self-employed exit within five years (OECD, 2017[40]). Turnover on platforms is high as well (Urzi Brancati, Pesole and Fernandez Macias, 2020[41]). A second source of labour market insecurity is varying availability of work, leading to unpredictable income levels. For instance, varying and unpredictable working hours provoke stress among zero-hour contract workers (Wood, Burchell and Coutts, 2016[42]). Platform workers who provide platform services at least once a month relatively often state that they experience stress (Urzi Brancati, Pesole and Fernandez Macias, 2020, pp. 44-45[41]).

Self-employed and persons in non-standard forms of work often have limited access to out-of-work benefits and employment support to cushion the negative health effects of job loss. Even those who can access out-of-work support tend to receive markedly lower benefit levels. They also often have less access to labour law protections, collective bargaining rights and other benefits such as access to adult learning (OECD, 2019[13]). Certain workers in non-standard forms of work, such as platform workers, may also not be eligible to support from public employment services (PES). The primary mandate of PES is generally to tackle unemployment, meaning that they will prioritise unemployment benefit recipients over those in

non-standard forms of work seeking other employment opportunities. In some countries, only unemployment benefit recipients have access to PES, which excludes many workers in non-standard forms of work. In addition, PES may be less effective in providing advice whether benefit recipients are required to accept platform work and what skills are required for such type of work (ENPES, 2020[43]; OECD, 2019[44]).

Particularly worrying from a health perspective is the limited access to different reduced work capacity benefits, such as paid sick leave, disability benefits and workers' compensation. Paid sick leave, disability benefits and workers' compensation are the principal income replacement sources for workers who experience temporary sickness, disability or work-related injuries. In addition, self-employed workers and those in non-standard forms of work have much less often health insurance in countries without universal health coverage (Berkowitz et al., 2021[45]).

Self-employment and non-standard forms of work come with widely varying quality of the work environment. While some enjoy high wages and autonomy, many others are in more precarious situations with little autonomy and significant health risks.

Most self-employed workers and workers in non-standard forms of work earn less than employees. Self-employed with employees tend to earn on average more than employees, whereas those without employees (own-account workers) earn substantially less, although this may partly be because of underreporting of income (OECD, 2017[40]). Emerging evidence suggests that many platform workers earn very low wages, frequently well below national minimum wage level, although pay varies substantially (OECD, 2018[12]). There may not be always sufficient platform work available to make a living (Eurofound, 2020, pp. 28-29[46]). On-call and zero-hour contract workers tend to get paid only for the hours they worked, without any supplement (Burri, Heeger-Hertter and Rossetti, 2018[47]). Regression analysis shows that employees working unpredictable hours and dependent or own-account self-employed have lower hourly earnings across European countries (Annex 5.A).

Self-employment and platform work can bring health benefits through more autonomy and flexibility, though this is not a given. Autonomy over workload, tasks, working time and workplace is an important job resource to cope with job demands, and is as such an important factor of psychological well-being at work. In addition, autonomy over work content allows individuals to better self-define their role, which can help to overcome stereotypes and can lower attitudinal employment barriers (Martin and Honig, 2019[48]). Working time and workplace flexibility helps workers to flexibility fit work around personal preferences and constraints, in order to achieve a better work-life balance. In turn, this contributes to job satisfaction and worker well-being (Saint-Martin, Inanc and Prinz, 2018[3]).

- *Self-employed workers* report higher autonomy, working time and workplace flexibility than employees. This is less so for dependent or own-account self-employed workers, who often have little bargaining power vis-à-vis their clients and/or intermediaries (Annex 5.A) (OECD, 2017[40]).
- *Employees working unpredictable hours* report less autonomy and flexibility (Annex 5.A). They are dependent on their employer not only on workload, tasks, working time and workplace, but also when they can work (Burri, Heeger-Hertter and Rossetti, 2018[47]). Such lack of autonomy has repercussions on health. Seattle's 2017 Secure Scheduling ordinance that requires employers to provide two weeks' notice of work schedules improved subjective well-being, sleep quality, and economic security (Harknett, Schneider and Irwin, 2021[49]).
- *Platform workers have varying degrees of autonomy and flexibility*. Survey evidence indicates that platform workers can decide generally relatively easily when to work and for how long. Crowd workers providing online gigs also often enjoy workplace flexibility. However, most on-demand platform workers, such as ride hailing or food delivery, do not have autonomy on pay rate and generally have to perform a gig straight away. Most crowd workers have limited bargaining power on pay rate because of the often standardised and routine nature of gigs. Autonomy and flexibility is further decreased by online monitoring and rating systems that help determine who gets offered

a gig first. Autonomy and flexibility is the lowest for those who depend on platform work as their main source of income (Schwellnus et al., 2019[50]; SCP, 2021[51]; EU-OSHA, 2017[52]; etui, 2021[53]; OECD, 2019[13]).

Self-employment and many non-standard forms of work bring larger occupational safety and health risks. Many non-standard forms of work transfer responsibilities from occupational safety and health from the employer to individual workers (OECD, 2019[44]). However, these workers often lack certification, safety equipment and knowledge of relevant regulations. Fierce competition between workers may result in cutting corners and unnecessary risk taking. Certain platforms such as ride sharing apps subsidise drivers to stay on the road. At the same time, labour inspectorates are often not well prepared to cope with these non-standard forms of work adequately. Individuals in non-standard forms of work are often harder to reach, responsibilities and liability are less clear and there is little support from unions (Walters, 2017[54]; EU-OSHA, 2021[55]). Available evidence indeed indicates occupational safety and health risks for platform workers and their clients. The arrival of ride sharing led to an increase of 3% in the number of fatalities and fatal accidents, for both vehicle occupants and pedestrians. Ride hailing driving quality, in addition to increased congestion and road utilisation, likely plays a role (Barrios, Hochberg and Yi, 2020[56]). Platform workers who provide platform services at least once a month relatively often state that their work puts their safety and health at risk (Urzi Brancati, Pesole and Fernandez Macias, 2020, pp. 44-45[41]).

Self-employed and certain platform workers much more often work very long hours and during nights on a regular basis, which can have strong negative impacts on prevalence of disability (Box 5.2). Restricting to full-time workers, about a third work very long hours across European OECD countries on average; about five time as many as employees (Figure 5.2, Panel A).

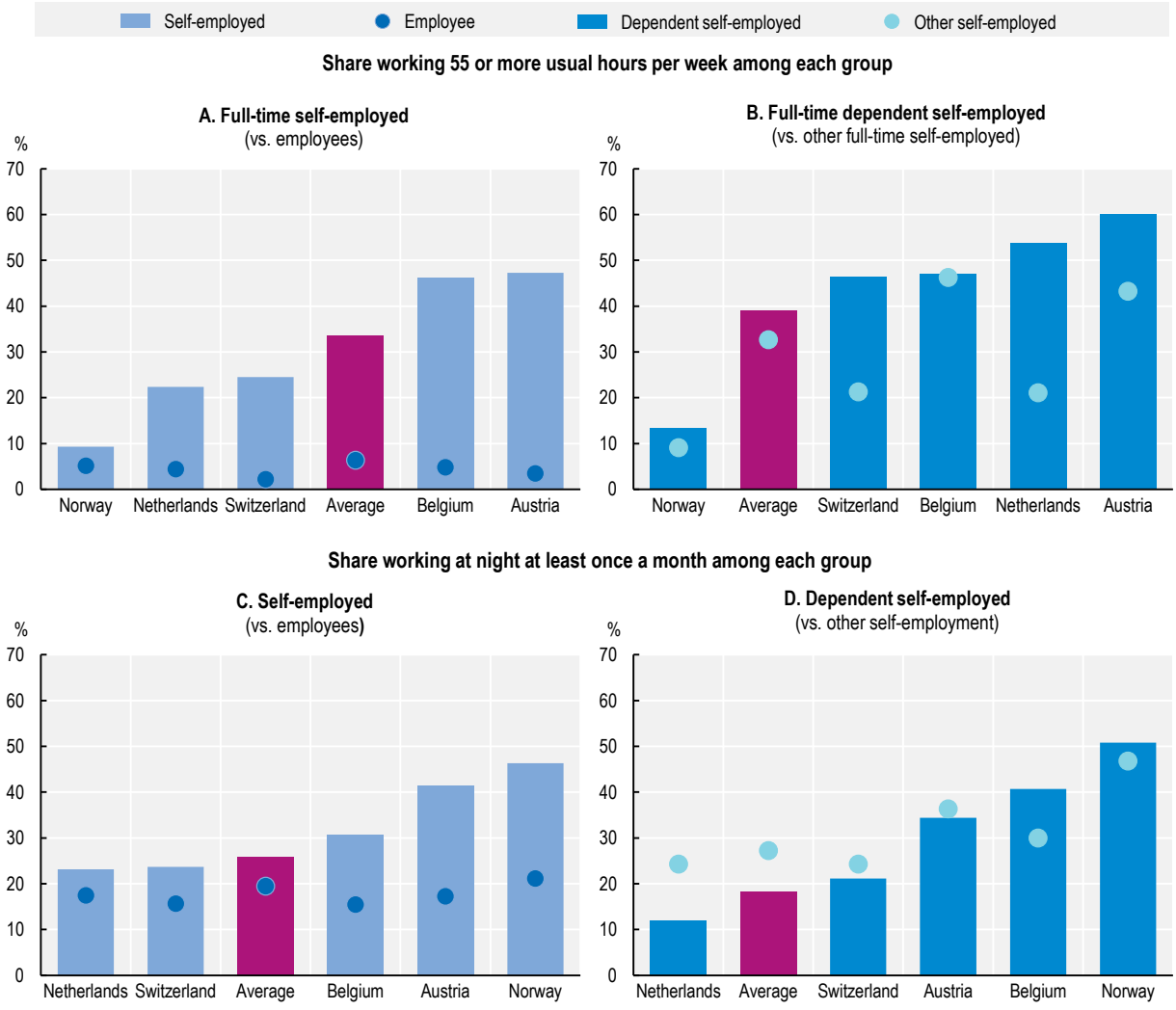
Box 5.2. Working very long hours and night work have strong negative effects on health

Meta-analyses show that working very long hours and night work over prolonged periods has strong negative effects on a range of health factors.

Very long work hours and night work increase the prevalence of work accidents, physical and mental health problems and poor health behaviour, by raising stress and fatigue while reducing the time available for recovery (Hijzen and Thewissen, 2020[57]). The risk of a workplace accident among persons working 12 hours instead of eight hours a day and someone in night compared to day shifts is about twice as high (Wagstaff and Lie, 2011[58]; Wong et al., 2014[59]). Working 55 hours or more a week instead of 35-40 hours is associated with a 30% increased risk of strokes or diabetes among manual workers (Kivimäki et al., 2015[60]). Night workers have a 25% higher mortality rate of cardiovascular disease and lung cancer (Gu et al., 2015[61]). Working 55 hours or more increases the risk of depression by 50% (Virtanen et al., 2018[62]). Switching from day to night shift leads to a 25% higher risk of common mental disorders (Beltagy et al., 2018[63]). Moreover, fatigue and stress as a result of very long working hours and night shift also can result in less healthy lifestyle, including less physical activity, a higher prevalence of obesity, and a higher probability of smoking and excessive use of alcohol (Kivimäki et al., 2017[64]; Virtanen et al., 2015[65]; Ramin et al., 2015[66]).

Figure 5.2. Self-employed workers more often work very long hours or at night

Share among different groups of employed persons (aged 15-69) working long hours or at night, 2015



Note: Panels A and B are restricted to full-time workers (working 30 hours or more per week). Working hours are defined as total usual working hours (sum of working hours across all jobs). Dependent self-employed: self-employed who principally rely on one client. The purple bars represent the unweighted average of 21 European countries: Austria, Belgium, the Czech Republic, Denmark, Estonia, Germany, Finland, France, Ireland, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

Source: OECD calculations based on the European Working Conditions Survey (EWCS), 2015.

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The difference is even larger when including part-time workers. Full-time dependent self-employed even more often work very long hours (Panel B). Self-employed in Austria and Belgium as well as dependent self-employed in the Netherlands particularly often work very long hours. Self-employed also work more often at night than employees (Panel C). Dependent self-employed work less often at night than other self-employed workers (Panel D).[5] Platform workers may work more often very long hours, though there might not be always sufficient work available to do so. Platform workers interviewed in the 2018 COLLEEM II survey, covering more than 38 000 platform workers in 16 EU member countries including the Netherlands, worked on average longer hours (measured as the sum of hours in regular and platform work) (Eurofound, 2020, pp. 28-29[46]). The platform workers work twice as often more than 60 hours per week than standard

workers (Urzi Brancati, Pesole and Fernandez Macias, 2020[41]). Yet, Deliveroo riders in Belgium between 2016 and 2017 worked on average only 23 hours per month, with very few working very long hours (Drahokoupil and Piasna, 2019[67]). Platform workers surveyed in the 2018 COLLEEM II survey were also more frequently involved in unsocial working hours. More than two-thirds worked via platforms at night (Urzi Brancati, Pesole and Fernandez Macias, 2020[41]).

5.1.3. Impacts of teleworking on health

The COVID-19 pandemic brought about a mass social experiment in teleworking. The incidence of teleworking across the OECD surged from 16% in 2019 to 37% of employees in March/April 2020 (OECD, 2021[1]).[6] Firms and workers had to embrace teleworking out of necessity from one day to the other, in order to comply with government containment measures such as social distancing and stay-at-home policies. Workers who managed to telework saw much less of a deterioration in their labour market position throughout the COVID-19 pandemic (Beland, Brodeur and Wright, 2020[68]).

Teleworking practices are likely to stay, albeit not to the same degree as during the COVID-19 pandemic. About two-thirds of employees across 22 European OECD countries reported wanting to continue working from home at least several times a month, even without COVID-19 restrictions, in June/July 2020 and February/March 2021 (Eurofound, 2021[69]). Data from job postings for 20 OECD countries suggest that telework is here to stay, especially in countries with high levels of digital preparedness (Adrjan et al., 2021[70]). Survey evidence among 30 000 American workers suggests that teleworking practices will be four times more prevalent than before the pandemic, with a "new normal" of about one in five full work days supplied from home across the economy (Barrero, Bloom and Davis, 2021[71]).[7] Data collected from a similar survey for the United Kingdom show very comparable patterns (Taneja, Mizen and Bloom, 2021[72]), as well as data from job postings across 20 OECD countries. There are multiple reasons for this large increase in teleworking in the new normal. First, the pandemic pushed aside inertia coming from experimentation costs, pessimistic expectations and workplace culture. Expectations with teleworking have on average been better than expected (Ozimek, 2020[73]). Second, firms and workers are now in a better position to work from home, as they have made the necessary investments in physical and human capital. Third, stigma with teleworking has greatly diminished. Fears of physical proximity may even continue to propel teleworking practices. Fourth, technological innovations that support teleworking have surged. In the United States, the share of new patent applications that advance technologies in support of video conferencing, telecommuting, remote interactivity and working from home has more than doubled from January to September 2020 (Bloom, Davis and Zhestkova, 2021[74]; Barrero, Bloom and Davis, 2021[71]).

Teleworking poses new opportunities as well as challenges for the relationship between work and prevalence of disability.

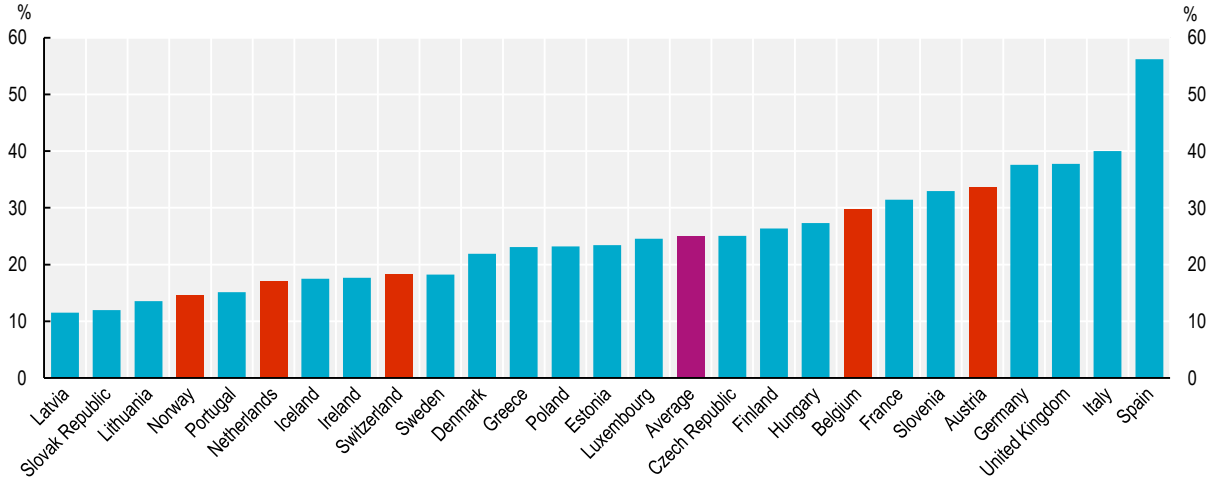
Initial evidence suggests that telework can bring health advantages and can accommodate individual constraints when it is a worker's own choice.[8] First, teleworking provides more autonomy to flexibly plan a workday and allows for better work-life balance (Moon et al., 2014[75]). This makes teleworking an important accommodation to reduce the impact of individual constraints, such as having small children, care responsibilities or health problems, on work. Workplace and working time flexibility helps to reduce employment barriers for PWD and PWOD, contributes to firm performance and costs close to zero. The fact that many employees prefer continuing to telework systematically even without COVID-19 restrictions shows that such autonomy and flexibility is widely appreciated. A pre-COVID-19 study showed that almost half of Belgian teleworkers carry out small errands or domestic chores in between work activities and gear working hours to family needs (Walrave and De Bie, 2005[76]). Second, telework reduces potentially stressful commuting time. Third, telework provides workers the benefit from working from their own home with more control over their environment and potential stressors (Schur, Ameri and Kruse, 2020[77]). Since

potential health advantages all relate to flexibility, they likely only manifest for those who appreciate such factors and prefer to telework.

However, telework can also present health risks, in particular for workers who do not prefer to work from home. First, teleworkers work on average longer hours. Research from prior to the COVID-19 pandemic found that teleworkers spend more hours working than workers in offices across most OECD countries (Eurofound and ILO, 2017[78]). For example, Belgian teleworkers report working almost two hours per week more than their colleagues in the office (Walrave and De Bie, 2005[76]). Second, teleworkers more often work unsocial working hours in evenings and weekends. For instance, 27% of Dutch teleworkers often work in the evening, and 43% sometimes do (CBS and TNO, 2014[79]). Working at night, which are the most taxing unsocial working hours, remains unusual (Eurofound and ILO, 2017[78]). Third, telework may increase social isolation, blurred boundaries between work and home, distance to management and overall detachment from the workplace, although evidence is still inconclusive (Oakman et al., 2020[80]; Schur, Ameri and Kruse, 2020[77]). These factors can worsen mental health, sleep quality and productivity.[9] Fourth, homes are generally less equipped to work from which bring occupational health and safety risks. Employers need information and guidance on the implementation of workplace occupational health and safety (EU-OSHA, 2021[81]). Only one in four European firms with employees regularly working from home include the workplace at home in their workplace risk assessments (Figure 5.3). Again, health risks are likely much larger for workers who prefer not to telework, since they might be more exposed to such risks.

Figure 5.3. Workplace risk assessments rarely cover workplaces at home

Firms with employees who regularly work from home that include workplaces at home in their workplace risk assessments, 2019



Note: Firms with employees who regularly work from home that include workplaces at home in their workplace risk assessments. The purple bar represents the unweighted average of the 26 European countries shown.
Source: European Agency for Safety and Health at Work, (EU-OSHA) (2021[82]), *Teleworking during the COVID-19 pandemic: risks and prevention strategies*, https://data.europa.eu/doi/10.2802/843915.

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5.2. The promises and perils of technological change, AI and globalisation for people with disability

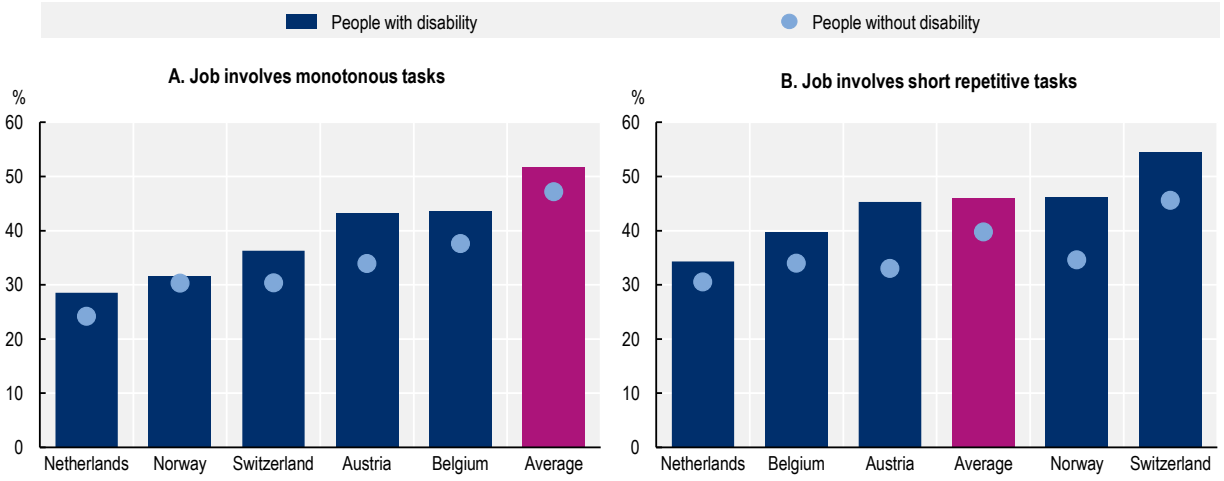
5.2.1. Automation and polarisation are larger job risks for people with disability

Automation and polarisation risk to further increase labour market disparities between people with disability (PWD) and people without disability (PWOD).

PWD more often perform monotonous and repetitive tasks in their work. Machines have a comparative advantage in carrying out monotonous and repetitive tasks, as these can be coded more easily into repetitive and systematic rules. Instead, abstract and interpersonal tasks are more ambiguous and require cognitive or service skills that are difficult to automate (Autor, 2019[83]; Goos, Manning and Salomons, 2014[84]; Thewissen, van Vliet and Wang, 2017[15]; Thewissen and Rueda, 2019[85]). About half the employed with disability indicate that their job contains monotonous and short repetitive tasks on average across European OECD countries (Figure 5.4). The work of employed PWD more often involves monotonous and short repetitive tasks than the work of their counterparts without disability.[10]

Figure 5.4. People with disability more often perform repetitive and routine tasks in their work

Share among employed people with disability vs. people without disability (aged 15-69), 2015



Note: Panel A: main paid job generally involves monotonous tasks. Panel B: job involves short repetitive tasks of less than 10 minutes. The purple bar represents the unweighted average of 21 European countries: Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Ireland, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.
Source: OECD calculations based on the European Working Conditions Survey (EWCS) of 2015.

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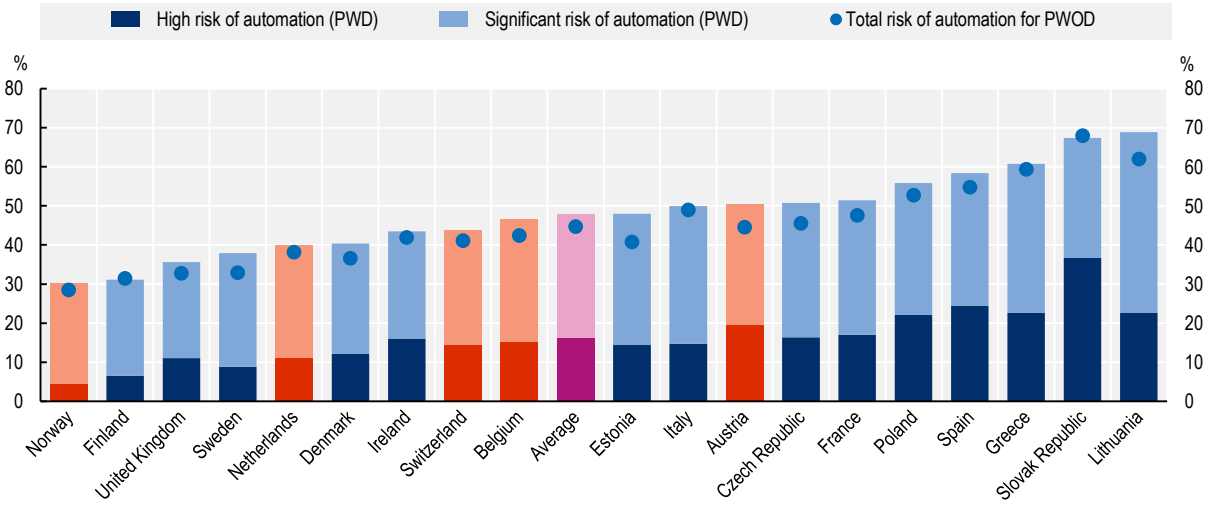
Automation poses an important job risk for PWD across all European OECD countries. An estimated 16% of jobs of employed PWD on average across European OECD countries could disappear because of automation in the next 15-20 years, and a further 32% are likely to change substantially with the automation of job-specific tasks (Figure 5.5).[11] The total risk of job disappearance and substantial change due to automation for PWD is higher in Austria and considerably lower in the Netherlands and Norway. It is important to keep in mind, however, that these calculations only capture potential job destruction and do not account for the (possibly larger) number of jobs that technology generates (Georgieff and Milanez, 2021[6]; OECD, 2019[13]).

PWD face an elevated risk of job loss or profound job change due to automation in most OECD countries. On average across European OECD countries, PWD have a 3 percentage point higher risk of job loss or substantial job change (48% compared to 45% for PWOD) (Figure 5.5). The automation disability gap is higher in Austria and Belgium, and instead lower and not statistically significant in Norway. The on average higher risk comes from the fact that PWD more often have a job with a high share of routine, repetitive and monotonous tasks. This is related to the on average lower levels of education and older age of PWD: accounting for these factors reduces the automation disability gap by two-thirds.[12] This reinforces the importance of investing in education and skills to make sure that PWD are ready for the future of work.

Figure 5.5. People with disability more often work in jobs at risk of automation

Share of jobs held by people with and without disability (aged 15-69), at risk of automation, 2019



PWD: People with disability; PWOD: People without disability.
Note: Year 2018 (Iceland, Ireland, Italy, United Kingdom). The purple bar represents the unweighted average of the 19 European countries shown. Not enough detailed occupational information is available for Germany and Slovenia. No information on risk of automation is available for Hungary, Iceland, Latvia, Luxembourg, Portugal and Switzerland. For Switzerland, the average high and significant scores for risk of automation per occupation across the OECD are used and applied to Swiss labour market data. A variance decomposition shows that 92% of the variation in total risk of automation scores (the sum of high and substantial risk) from Nedelkoska and Quintini (2018[86]), "Automation, skills use and training", https://doi.org/10.1787/2e2f4eea-en, comes from variation between occupations within countries, whereas the remaining 8% of the variation comes from variation between countries within occupations. Thus, the average risk of automation at the OECD level likely is a good predictor of risk of automation in Switzerland. High risk of automation: a job has a probability of at least 70% of being automated. Significant risk of automation: a job has a probability of between 50% and 70% of being automated, implying that a significant share of tasks, but not all, could be automated. Total risk of automation: sum of high and significant risk of automation.
Source: OECD calculations based on the EU Statistics on Income and Living Conditions (EU-SILC).

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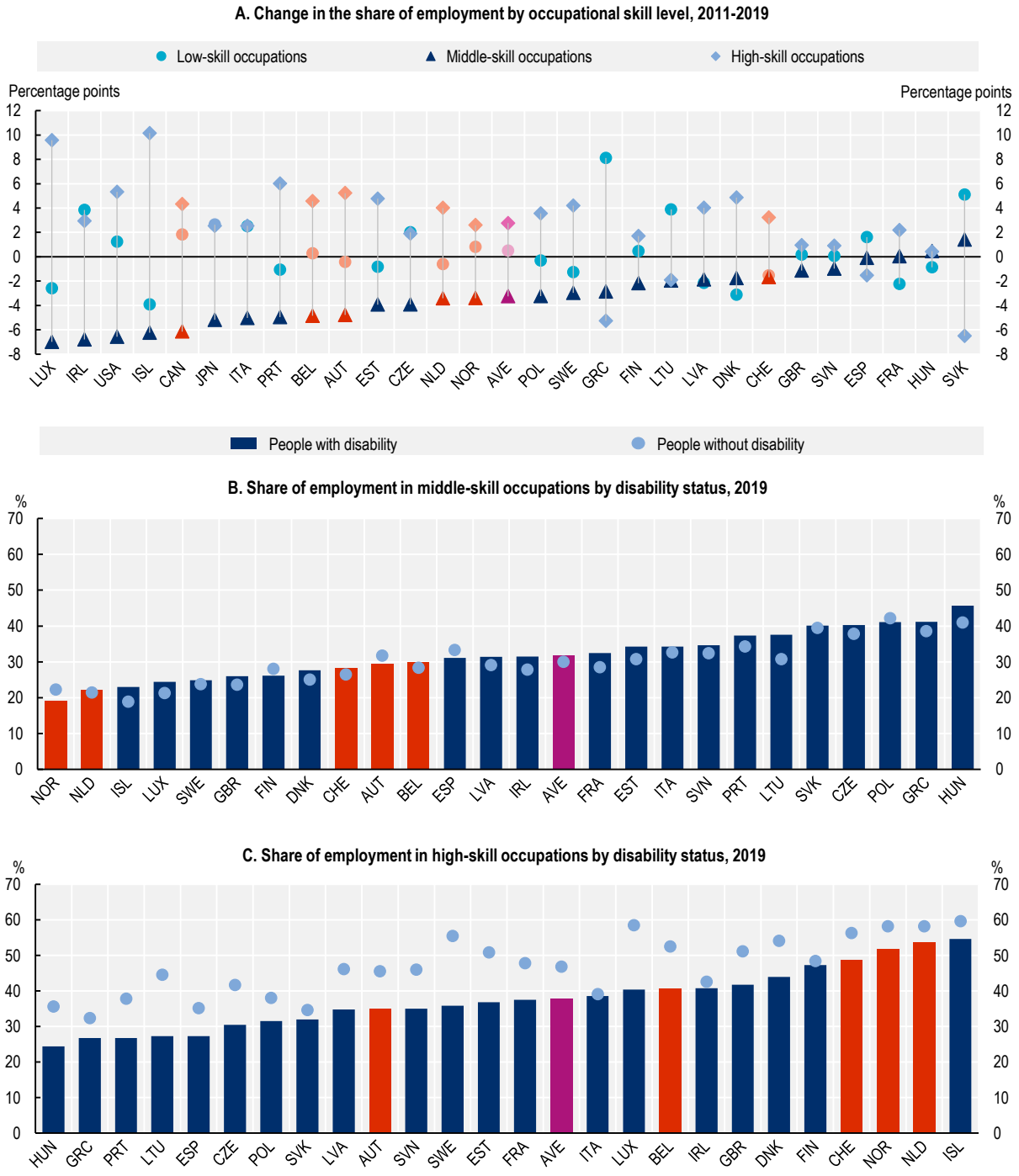
PWD are more exposed to trends in job polarisation and upskilling upending jobs in OECD countries. Job polarisation implies a decrease in the share of middle-skill jobs, compared to an increase in the share of low- and high-skilled jobs. The share of middle-skill jobs decreased on average by 2.9 percentage points between 2011 and 2019 across OECD countries for which data are available (Figure 5.6, Panel A). Most of this decrease was due to upskilling: the share of high-skill jobs increased by 2.6 percentage points on average across OECD countries.

Figure 5.6. Polarisation of the labour market is a larger risk for people with disability



Note: Employed persons aged 15-69. Occupations are classified under the ISCO-08 groups as follows: *High-skilled:* groups 1 (legislators, senior officials, and managers); 2 (professionals); and 3 (technicians and associate professionals); *Middle-skilled* groups 4 (clerks); 6 (skilled agricultural workers); 7 (craft and related trades workers); and 8 (plant and machine operators and assemblers); *Low-skilled* groups 5 (service workers and shop and market sales workers); and 9 (elementary occupations). The purple bars (AVE) represent the unweighted average of the countries shown in each panel. Data for Canada, Japan and the United States show the change between 1995 and 2015 in Panel A.

Source: OECD calculations based on the EU Statistics on Income and Living Conditions and OECD (2017[87]), *OECD Employment Outlook 2017*, https://doi.org/10.1787/empl_outlook-2017-en (Figure 3.A1.1) for Canada, Japan and the United States.

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People with disability have slightly more often a middle-skill job and therefore run a higher risk of job loss due to polarisation (Figure 5.6, Panel B). Moreover, they significantly less often have a high-skill job and thus benefit less from upskilling (Panel C).[13] A country-level study for Austria also finds that automation and offshoring affect important professions for workers with disability. For example, blind and seeing-impaired individuals often work in call centres, which have been outsourced to locations where labour is cheaper. Similarly, deaf and hearing-impaired individuals in Austria more often perform manual work, which is becoming less prevalent (Austrian Sozialministerium, 2019[88]).

5.2.2. Technology and AI can help to accommodate disabilities, but only if geared well

Technological advances and AI have the potential to create a more inclusive and accommodating environment. However, they are by themselves no quick fix for labour market inclusion of PWD. If managed poorly, technological advances and AI may even exacerbate existing disparities.

Assistive technology renders any impairment or functional limitation less disabling, by creating a more accommodating social and physical environment.[14] Disability is an attribute resulting from the interaction between the individual and the environment. A biological difference (an impairment or functional limitation) only becomes disabling if the environment does not allow the person to function according to their capacities (OECD, 2003, p. 179[89]). From this perspective, assistive technology is an "intermediary": it can promote inclusion of PWD by making the environment more accommodating. Accommodation of the workplace and the work environment is a major enabler for PWD to access, stay, perform and advance in a job (further discussed in Section 5.5).

Many major technological innovations have already made a great impact on everyday life for PWD and PWOD. Major technological innovations are so impactful since they allow a large part of the population to perform functions that otherwise would be difficult. Examples are legion. Elevators are an assistive technology for everyone. Smartphones greatly facilitate communication and can accommodate diverse types of constraints through apps and assistance functions. The Internet provides a major source of information, promotes social inclusion and facilitates networking, job search and applying without the need of physical proximity.

There are numerous examples of recent assistive (AI-enabled) technologies that help PWD contribute their skills and talents on the job in more inclusive work environments. Assistive innovations that are integrated into already widely available technologies are likely to be the most impactful for PWD.

- Vision-to-language tools, such as *Microsoft's Seeing AI* app, can describe text and objects aloud for people who are blind or have low vision.[15] This free app will be incorporated in Microsoft products often used on the work floor, like Word, Outlook and PowerPoint. An evaluation by Microsoft researchers showed that the algorithm underlying the Seeing AI app achieved high scores on an image-captioning benchmark test (Hu et al., 2021[90]).
- Text simplification tools such as IBM's Content Clarifier can help people with cognitive disability to understand content.[16]
- YouTube's AI-enabled auto-captioning helps deaf people and those with hearing loss watching recorded or live video.[17]
- Virtual or augmented reality technology can help PWD with the social competency skills needed for a successful job interview. The American disability interest group Administration for Community Living (ACL) has awarded a grant to the Kessler Foundation, an American rehabilitation and disability research centre, to develop a Virtual Reality Job Interview Program to help individuals (re-)enter the workforce after a brain injury.

Furthermore, technological advances and AI can make education and adult learning more accessible (Chapter 6). Technology helps to make learning more independent of place and time. It also helps individuals to change the speed and degree of difficulty of learning (Verhagen, 2021[91]). Examples include

instructional videos via YouTube, Accenture's "Skills to Succeed Academy" with bite-sized, gamified learning modules, or even complete online offers by universities, for instance in Flanders (Tindemans and Dekocker, 2020[92]).

Technological advances and AI have the potential to revolutionise rehabilitation. Promising fields include smart environments, intelligent mobile and wearable devices and the application of robotics designed to maintain or improve the functional capabilities of people (Luxton and Riek, 2019[93]). Machine learning already has many applications in health care and health research, and is starting to find its way into rehabilitation (Anderson, 2019[94]).

However, technological advances and AI do not necessarily improve labour market integration of people with disability and can even widen existing disparities.

First, PWD frequently do not have access to even basic digital technology, which is a prerequisite to make use of most technological advances and AI. About one in seven PWD does not have a computer in their household and one in six does not have access to internet for personal use when needed on average across European OECD countries (Figure 5.7, Panels A and B). This rate is about three times higher than among PWOD. PWD have better access to basic digital tools in the Netherlands, Norway and Switzerland. Affordability is a major factor for lack of access. Around 6% cite affordability as the principal reason for not having access to these tools – again, about three times as often as their peers without disability. Age and education cannot fully explain the digital access gap.[18] Another factor may be that PWD may need specialised equipment or software.

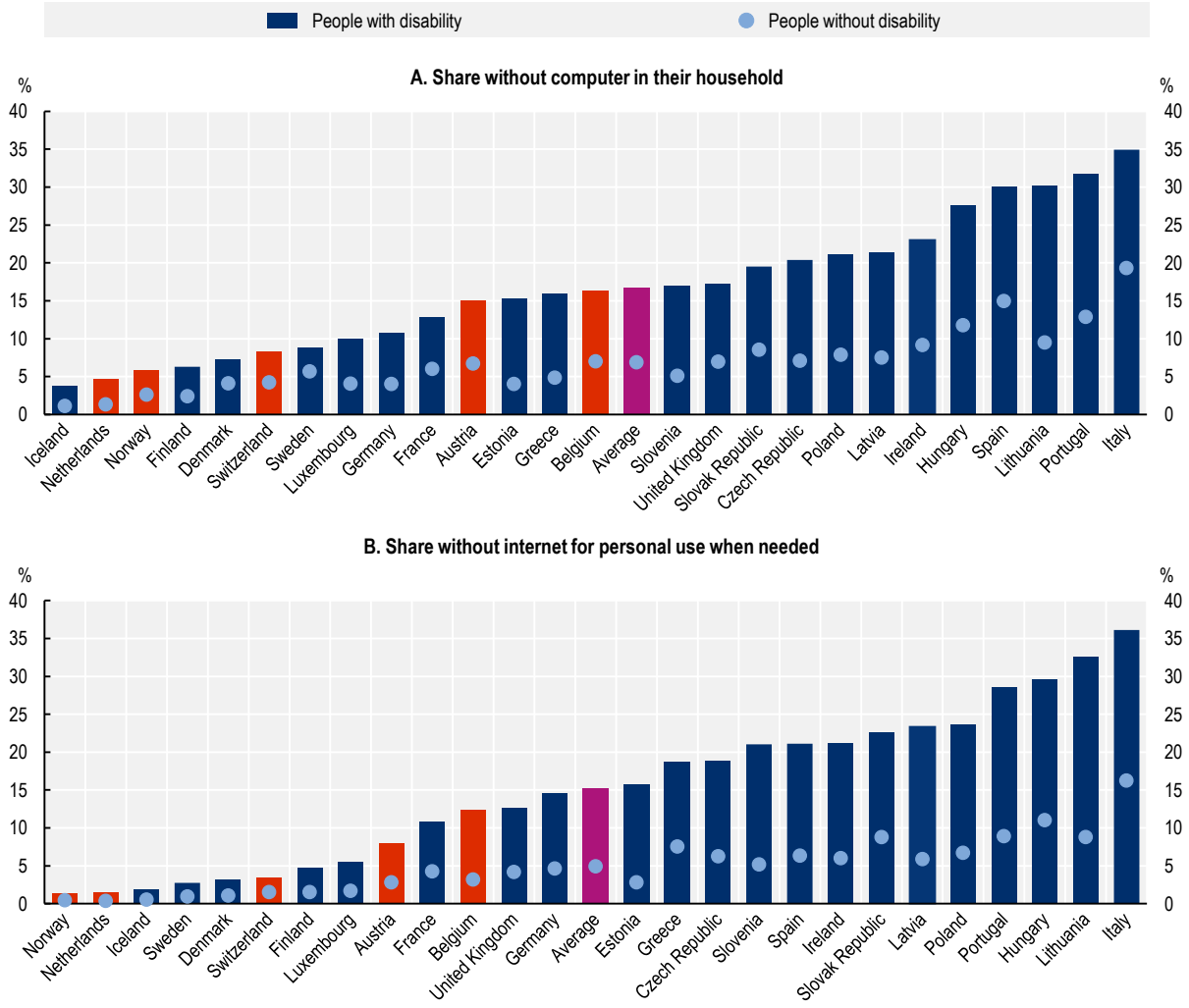
Second, PWD have lower digital skills to use technology and AI in an effective manner. Fewer PWD go online, and those who go online less often make use of online public, private or employment services.

Third, technologies and AI are often not designed with bodies and abilities of PWD in mind. PWD interacting with technology are extraordinarily diverse. For instance, it cannot be assumed that everyone can use a machine, browser or website. Technological and AI innovations that are inaccessible to PWD put them at an even greater labour market disadvantage. For instance, online application processes may place certain PWD at a disadvantage. Job application websites are often inaccessible for persons with visual impairment who use screen readers. People with cognitive disability may require additional time during digital application processes, which can result in an application tool timing out (Tompa, Samosh and Boucher, 2020[95]).

Fourth, AI may further marginalise PWD by reproducing stereotypes. The performance of AI and machine learning algorithms is largely determined by its training data. If the training data does not include particular subgroups, then the algorithm will not reflect their needs accurately or can even inadvertently amplify existing stereotypes. This problem looms particularly large for PWD, because of the wide diversity of ways disabilities manifest themselves and the highly sensitive and not always disclosed nature of disability – precisely because of the potential for discrimination based on stereotypes (Trewin, 2018[96]). For instance, a vision-to-language tool may poorly recognise the utterances of individuals with vision-related disability if they are not well represented in the training data. AI to analyse the candidate's facial expressions in video job interviews may misinterpret and disfavour candidates with mental disability (White, 2019[97]; Hutchinson et al., 2019[98]). On the other hand, machine learning can also be used to detect stereotypes, such as an algorithm detecting ageism in job vacancies (Burn et al., 2021[99]).

Figure 5.7. People with disability often lack access to basic digital tools

Persons aged 15-69, 2019



Note: Data refer to 2018 (Iceland, Ireland, Italy) and to 2016 (United Kingdom). The purple bars represent the unweighted average of the 26 European countries shown.
Source: OECD calculations based on the EU Statistics on Income and Living Conditions (EU-SILC).

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5.3. Non-standard forms of work and self-employment do not necessarily improve the labour market position of people with disability

PWD are overrepresented in non-standard forms of work. Whilst non-standard forms of work, including self-employment, can bring attractive autonomy and flexibility, they do not necessarily improve the labour market position of PWD.

PWD are slightly more often self-employed than their peers without disability. About 14% of PWD are self-employed (Figure 5.8, Panel A). It reaches 18% in the Netherlands, where there are strong incentives to become self-employed due to much lower tax rates compared to employees (OECD, 2019[100]). PWD are slightly more often self-employed than PWOD on average across European OECD countries. The gap is

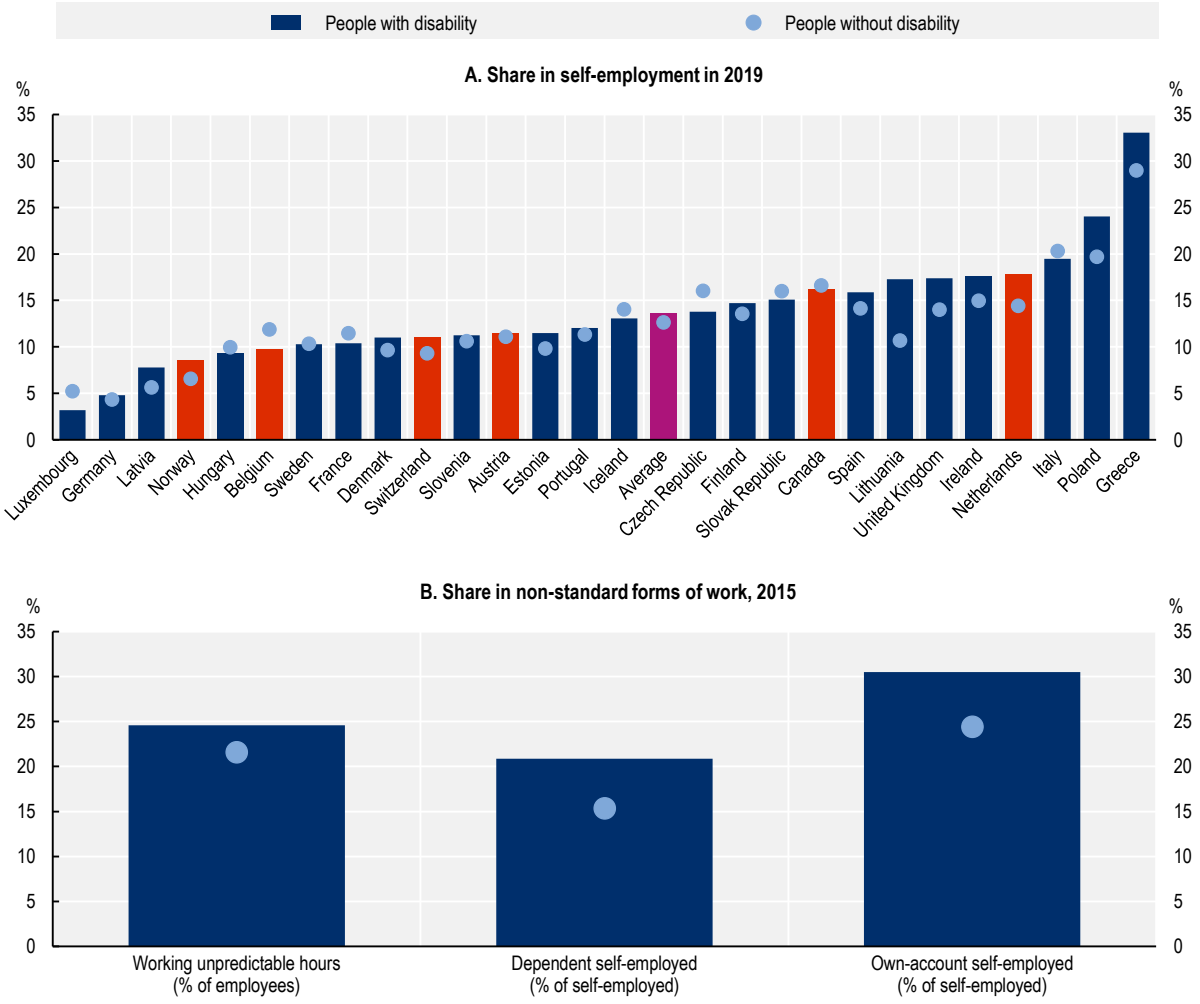
higher in the Netherlands – almost 4 percentage points. The gaps are no longer significant when accounting for differences in education or age.[19]

PWD are overrepresented in certain non-standard forms of new work. Among employees, PWD more often work unpredictable hours (i.e. employees who experience regular working time arrangement changes of which they are informed at most several weeks in advance) (Figure 5.8, Panel B). Among self-employed, PWD are more often dependent self-employed (i.e. principally relying on only one client) or own-account self-employed (i.e. without authority to hire or dismiss employees) on average across European OECD countries.[20]

There is little information whether PWD are more often involved in platform work. It is notoriously difficult to collect data on platform workers, and even more so to identify platform workers with disability.[21] On the one hand, PWD may be underrepresented on platforms, since platform workers tend to be younger and higher educated. These groups have lower disability rates (Eurofound, 2018[101]; Austrian Sozialministerium, 2019[88]). On the other hand, there are some indications that PWD are overrepresented on platforms, in particular on crowd work platforms on which work is commissioned and carried out virtually. About a quarter of platform workers offering services at least once a month said that a motivation for platform work was that it "allows them to work despite health issues or disability" in a large European survey covering both on-demand and crowd work (Pesole et al., 2018[102]).[22] About 19% of crowd workers reported having current physical or mental health conditions or illnesses lasting or expected to last at least 12 months in a 2015 and 2017 survey across 75 countries, with most coming from the United States and India. More than half of these individuals said that their health problems affect the kind of paid work that they can do. Around a fifth said that their health problems strongly affect their ability to carry out day-to-day activities, with crowd work providing an alternative way of working and earning income. About 8% stated that the most important motivation for crowd work is that they "can only work from home". Of these, a quarter said that this was due to their health problems (Berg et al., 2018[103]). A small survey among Amazon Mechanical Turk workers in the United States found that about half the respondents met clinical criteria for social anxiety (Shapiro, Chandler and Mueller, 2013[104]).

The flexibility and autonomy that non-standard forms of work can offer are attractive "pull" factors for PWD. Self-employment and certain non-standard forms of work can in principle offer more flexibility and autonomy over workload, tasks, working time and workplace than dependent employment, though this is not always the case. PWD may value such flexibility and autonomy to accommodate health problems. PWD frequently state that flexibility and autonomy are key reasons to become self-employed (Norstedt and Germundsson, 2021[105]). A study combining in-depth interviews and a small survey among American crowd workers with disability found that working time and workplace flexibility was their main motivation to offer services on a platform (Zyskowski et al., 2015[106]). PWD may also appreciate the decision-making power and voice to shape their job that non-standard forms of work can offer. This can allow PWD to self-define their role, which can be important to overcome societal stereotypes.

Figure 5.8. People with disability are more often self-employed and in certain non-standard forms of work



Note: Panel A: The purple bar represents the unweighted average of the 27 countries shown. Panel B: Working unpredictable hours: employee who experiences regular working time arrangement changes of which they are informed at most several weeks in advance. Dependent self-employed: principally relying on only one client. Own-account self-employed: without authority to hire or dismiss employees. Data represent the unweighted average for 26 European countries: Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

Source: Data provided by Employment and Social Development Canada based on the Canadian Income Survey, 2019 and OECD calculations based on the EU Statistics on Income and Living Conditions (EU-SILC) (Panel A) and the European Working Conditions Survey (EWCS) (Panel B).

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On the other hand, PWD may be "pushed" into non-standard forms of work because of employer discrimination. Self-employed workers do not depend on an employer or a job application process to find work. People generally do not have to disclose their disability in order to offer their services on a platform. In many cases, especially when the work is done remotely, the disability is not known to the customer (SCP, 2021[51]). Avoiding (potential) employer discrimination is a recurring motivation among self-employed with disability (Norstedt and Germundsson, 2021[105]; Jones and Latreille, 2011[107]). Even those with disability who manage to enter dependent employment may experience lower autonomy and flexibility. For instance, one in in four Belgian employees with moderate disability and more than one in three with severe

disability mention having insufficient autonomy in their work, compared to one in six employees without disability (Bourdeaud'hui, Janssens and Vanderhaeghe, 2021[108]).

In addition, self-employment and platforms are not barrier-free for PWD.

- PWD face disadvantage to become self-employed because of informational, financial and attitudinal barriers. First, a prosperous business requires information, analysis and business organisation to find demand and generate a concept that satisfies the demand. PWD may be at a disadvantage because of a smaller network to draw from, digital barriers, lower levels of education and job-related skills (Chapter 6). Second, PWD more often lack the financial resources necessary to start a successful business because of lower income and savings (Chapter 4) (Vaziri et al., 2014[109]). Third, self-employed PWD may still experience discrimination from customers and other important partners, such as funders, collaborators and employees. Successfully starting a business also demands confidence in own capabilities. PWD more often report lower self-esteem, for instance due to experienced discrimination or difficulties in education or previous work (OECD, 2012[18]). Fourth, self-employed persons may face higher costs to accommodate their health problems.
- PWD may experience specific barriers on platforms. While platform work has much lower informational and financial start-up costs than self-employment, it also generally offers less flexibility and autonomy and may not necessarily empower PWD to the same extent. For instance, certain workplaces such as cars for taxi drivers may still not be accessible for all PWD. Worktime flexibility may be limited for certain on-demand applications for which demand is highly time-dependent. Attitudinal barriers may still exist through reputation and rating, which may discriminate against PWD for instance if a person takes longer to complete a task. Furthermore, PWD may face additional employment barriers to access platforms. PWD may not have the digital tools and skills to access platforms. In addition, platforms may not be built using a Universal Design and can therefore inadvertently thwart participation. For instance, crowd work websites generally do not allow participants to filter gigs for accessibility (Zyskowski et al., 2015[106]).

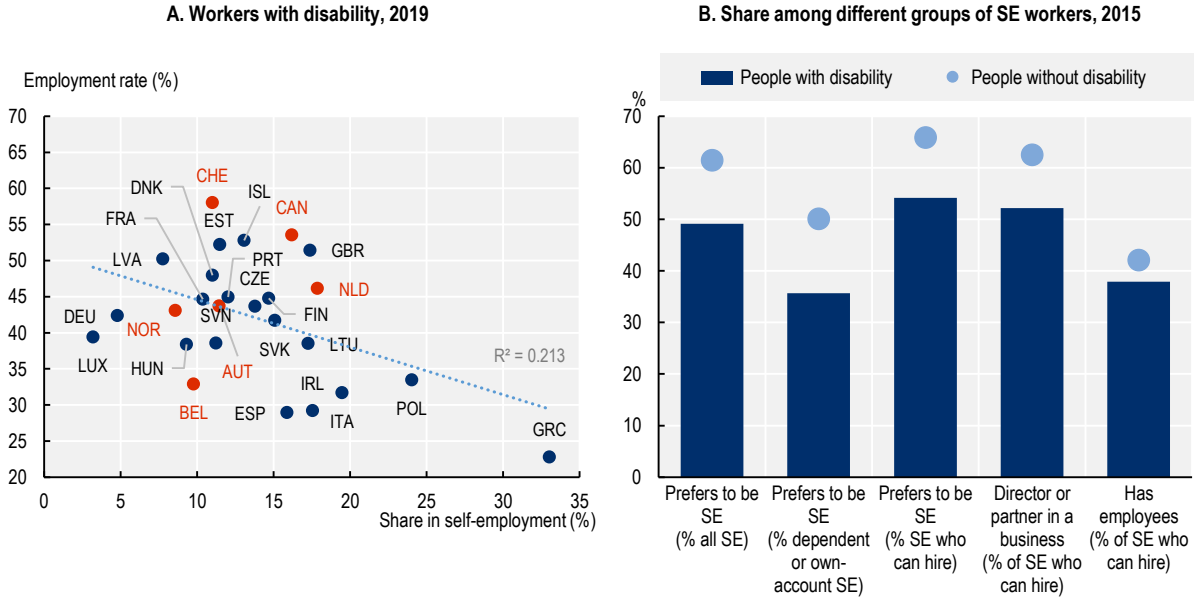
While it is difficult to conclude to what extent PWD are pushed or pulled into non-standard forms of work, the available evidence suggests that non-standard forms of work do not necessarily improve the labour market position of PWD.[23]

First, self-employment is not associated with higher employment rates among PWD. If anything, there is a negative association between share of workers in self-employment and employment rates among PWD (Figure 5.9, Panel A).[24] It is not possible to conduct such an analysis for shares in other non-standard forms of work due to small sample size.

Second, PWD less often prefer to be self-employed, suggesting that they are more often pushed rather than pulled into this type of employment than PWOD. Self-employed PWD less often state that self-employment was their preferred choice (Figure 5.9, Panel B). In fact, only a third of own-account or dependent self-employed with disability prefer to work as self-employed.[25]

Third, PWD in non-standard forms of work seem to face inferior job quality. Self-employed PWD are also less often director or partner and less often actually have employees (Figure 5.9, Panel B). Additional analysis shows that PWD who work unpredictable hours or who are self-employed have lower hourly earnings and more often work unsocial hours, although they also report more workplace flexibility (Annex 5.A). Working unsocial hours on a regular basis and working at night has significant negative health consequences. Unfavourable employment and working conditions are likely to be even more harmful for those with pre-existing disability.

Figure 5.9. Self-employment and other non-standard forms of work do not seem to improve the labour market position of people with disability



SE: Self-employed.

Note: Panel A: Share of employed people with disability (aged 15-69) who are self-employed. Data refer to 2018 (Belgium, Iceland, Ireland, Italy, United Kingdom). Panel B: Data show the unweighted average for 26 European countries: Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

Source: OECD calculations based on EU Statistics on Income and Living Conditions (EU-SILC) and the Canadian Income Survey (CIS, 2019), provided by Employment and Social Development Canada (Panel A) and the European Working Conditions Survey (EWCS) (Panel B).

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5.4. Teleworking can be an important enabler for people with disability

Much like technology, prevalent teleworking practices can be great push to break down some of the employment barriers that PWD face, but are not a silver bullet for labour market integration. Teleworking has to be the autonomous choice of the employee rather than enforced by the employer in order to be an accommodator.

The advantages of teleworking are particularly promising for PWD. First, the fact that teleworking provides more autonomy to flexibly organise a workday and work-life balance allows PWD to more easily plan medical appointments, breaks or rehabilitative exercises. Second, reducing commuting time and expenses is particularly beneficial for PWD who may find it difficult, costly or stressful to travel. Third, PWD can benefit from working from their own home, where they have more control over their environment and potential stressors, and where they are close to medical equipment and therapeutics at home (Schur, Ameri and Kruse, 2020[77]).

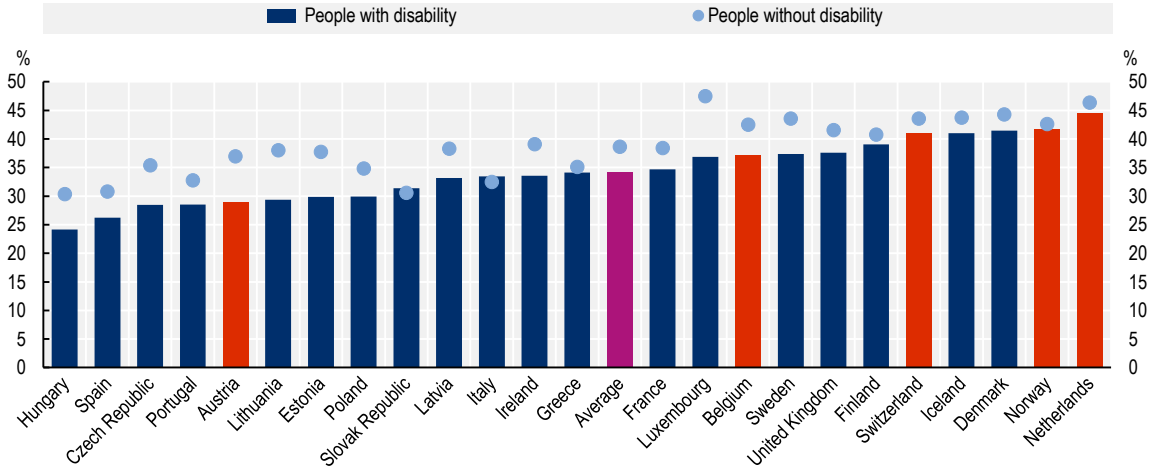
More mainstreamed teleworking practices are a helpful facilitator for PWD. Mainstream availability reduces the stigma that comes with requesting or receiving accommodation. Being allowed to telework in a setting where working from home is rare can even be perceived as preferential treatment (Tompa et al., 2015[110]). Furthermore, mainstreamed teleworking prevents the need to disclose disability to make a case for teleworking. In particular people with unobservable disability, such as mental health problems, may not want to or may find it hard to disclose their disability and should not be forced to do so to receive accommodation.

However, mainstreamed teleworking does not necessarily boost labour market integration of PWD. First, disadvantages of teleworking may weigh more heavily on PWD too. Any negative health effects of teleworking will likely be more taxing for those with pre-existing disability. In addition, PWD may be less effective at work if their office desk is accommodated, but their home desk is not. Imposed teleworking may even be a cost-cutting strategy to circumvent accommodation obligations. Teleworking may also bring career risks. Line managers and employers may accommodate disabilities less effectively for staff that is teleworking. More broadly, being "out of sight, out of mind" of the employer may be a larger career risk for groups already facing labour market disadvantage, including PWD (OECD, 2021[111]; Oakman et al., 2020[80]; Schur, Ameri and Kruse, 2020[77]).

Second, teleworking is currently not an option for all PWD. PWD often lack digital access or the necessary digital skills to successfully telework (Chapter 6). Moreover, only a third of jobs held by PWD can be readily performed from home – fewer than the share of jobs held by their peers without disability. The extent to which a job is amenable to teleworking depends on its occupational task structure. For instance, occupations requiring workers to be outdoors (e.g. food delivery) or to use specialised equipment (e.g. a vehicle) cannot feasibly be performed at home, in contrast to for instance occupations only requiring a laptop and internet (e.g. an accountant) (Dingel and Neiman, 2020[112]). On average across European OECD countries, 34% of jobs held by PWD can be readily performed from home, compared to 39% of jobs of PWOD (Figure 5.10). PWD are overrepresented in lower-skill and lower-paid occupations that are less readily performed remotely (OECD, 2020[113]; OECD, 2020[114]). Yet, PWD have less often a job amenable to teleworking when accounting for differences in age and education.[26]

Figure 5.10. About a third of jobs held by employees with disability can be performed remotely

The share of jobs in dependent employment (aged 15-69) amenable to teleworking, 2019



Note: Data refer to 2018 for (Iceland, Ireland, Italy) and to 2016 (United Kingdom). The purple bar represents the unweighted average of the 24 European countries shown. The share of jobs amenable to teleworking is based on the types of tasks performed in different occupations and the share of those occupations in national labour markets.

Source: OECD calculations based on EU Statistics on Income and Living Conditions (EU-SILC); Dingel and Neiman (2020[112]), "How many jobs can be done at home?", http://dx.doi.org/10.1016/j.jpubeco.2020.104235; OECD (2020[113]), *OECD Regions and Cities at a Glance 2020*, https://dx.doi.org/10.1787/959d5ba0-en and OECD (2020[114]), "Capacity for remote working can affect lockdown costs differently across places", https://doi.org/10.1787/0e85740e-en.

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5.5. Towards a healthy and inclusive Future of Work for all

It is largely in the hands of OECD countries to harness the promise of a healthy and inclusive Future of Work for all people, including PWD. Whether countries will make the most of the major opportunities offered by technological progress, AI, globalisation and new work practices will largely depend on the policy decisions that they make. These policy decisions are all the more important for PWD. If managed right, PWD can substantially gain from these opportunities. In contrast, if managed poorly, PWD may experience a further aggravation of their labour market disadvantage.

This section proposes a set of guiding principles to promote a healthy and inclusive Future of Work for all, including for PWD:

1. Invest in skills and digital access
2. Build inclusive public employment services
3. Improve job quality of dependent employment by mainstreaming flexibility
4. Improve job quality of non-standard forms of work and self-employment
5. Pivot advancements in innovation and technology towards inclusion

The section illustrates these five guiding principles by providing examples of promising practices from the six country cases and other OECD countries. It goes beyond the purview of this section to comprehensively review how the six countries perform on all policy fields involved.

1. Invest in skills and digital access

A first guiding principle is to heavily invest in skills and digital access for all, so that everyone can make the most of the changing world of work.

As it will be discussed at length in Chapter 6, countries should improve their adult learning system to get skills right for all – including for PWD. Skill investments are the first-best policy to prepare workers for a changing world of work, by allowing them to transition to growing segments of the economy. Adult learning systems currently too often fail to reach PWD, even though they more often have lower skills and face an elevated risk of profound job change or job loss from the changes that lie ahead. Investing in digital skills deserves particular attention, given their rapidly growing importance in societies and economies.

Countries need to step up their game to ensure universal digital access. At present, many PWD do not have access to a computer or internet. Countries should make real investments to attain universal access to safe and affordable internet in the not-too-distant future. Countries may want to draw inspiration from Norway and Canada, which are both investing considerable money in achieving universal access to fast internet. Furthermore, costs of digital access should be taken into consideration when setting benefit levels (Chapter 4). Austria, for instance, has incorporated the costs of internet in their disability, old-age and social assistance benefit systems (Austrian Sozialministerium, 2012[115]). Finally, countries may want to experiment with targeted financial or in-kind support to provide internet connections and laptops to groups in which PWD are overrepresented. Such programmes exist for instance to promote access to remote learning. An example is the *Connectivity Funding* programme in the United Kingdom that funds internet access to children and young people up to 19 years old who are at a disadvantage and cannot access remote learning. The funding is also available for older students with disability.[27]

2. Build inclusive public employment services

A second guiding principle is to ensure that public employment services (PES) provide comprehensive and individualised support to promote labour market integration of all.

Currently, few PWD make use of the services offered by PES. Contrary to stated political intentions, early intervention to prevent long-term unemployment and labour market exit for PWD is too often missing. PES are a central government body to tackle unemployment and promote sustainable employment in a world in which job losses and job transitions are becoming more and more common throughout individual working lives. A broad evidence base shows the positive impacts of employment services on labour market (re)integration, including in the six country cases covered here (Desiere, Van Landeghem and Struyven, 2019[116]; Brown and Koettl, 2015[117]); Chapter 6). PES are all the more important during the COVID-19 pandemic and beyond, when risk of job loss and economic restructuring loom even larger, in particular for those who had poorer labour market outcomes already before the onset of the crisis (OECD, 2021[1]).

Any barriers that prevent persons on benefits received because of temporarily or permanently reduced work capacity to register with the PES should be removed. Certain countries demand that persons have proof of remaining work capacity to be able to register with the PES. This is the case for example in Austria (beneficiaries on disability benefits and paid sick leave), Switzerland (disability benefits, paid sick leave and workers' compensation) and the Netherlands (disability benefits).[28]

PES should reach out proactively to reach all PWD, including those on reduced work capacity benefits. Even if persons on reduced work capacity benefits can register with PES, they rarely do when registration is not encouraged. For instance, very few persons on disability benefits, workers' compensation or any other benefit (such as social assistance) register with PES in Flanders (Belgium). Countries can facilitate outreach through their administrative records on reduced work capacity benefits and other supports, such as records regarding legally determined disabilities and wage subsidies (OECD, 2021[118]).

Countries may want to consider making participation in active labour market policies obligatory for certain groups on reduced work capacity benefits, such as young persons, as well as individuals who enter disability benefits or who acquire a disability and have significant remaining work capacity. Countries can do so by adopting a mutual-obligations framework as currently exists for jobseekers, in which governments have the duty to provide benefit recipients with effective employment services, and in turn, beneficiaries have to participate to improve their employability (OECD, 2018[12]). Voluntary participation provides disappointing results. Only about 3% of the disability benefit population participated in an initiative for additional career guidance and adult learning in Flanders (Belgium) in 2020 (Chapter 6). In a concept strategy, the Flemish Parliament does not seem ready to make participation obligatory (Flemish Parlement, 2021[119]). The Dutch Government has plans to make registration with the PES obligatory for people on disability benefits with remaining work capacity. In the new regime, all new registrants will write together with the PES a re-integration plan, with follow-up support for five years. Countries can draw inspiration from rehabilitation and workers' compensation schemes, where obligations for training and reintegration are generally stronger. An interesting case in this regard is the 2014 reform in Austria. The reform abolished the temporary disability benefit and replaced it by either a rehabilitation benefit, for people in need of medical or occupational rehabilitation, or a retraining allowance for people who can no longer carry out the occupation they were trained for. The PES has responsibility to track and promote labour market integration (Fuchs et al., 2018[120]).

PES should provide individualised support to meet the complex needs of PWD. PWD, as many who face labour market disadvantage, often encounter very specific or even multiple obstacles. Adequate support requires an individualised combination of different active labour market programmes, such as adult learning to increase skills in order to improve employability, followed by job-search assistance and potentially employment subsidies. PES can provide better individualised support firstly by profiling of clients. Promising innovative practices using advanced statistical modelling come from the PES in Flanders (Belgium) and Austria (Box 5.3). Secondly, countries can enhance their individualised support by investing in better co-ordination between employment, health and education services (OECD, 2021[118]). The Norwegian Centres for Work Coping that integrate mental health and employment support are a promising practice of such co-ordination (Box 5.3).

Box 5.3. Promoting inclusion and effectiveness of public employment services in Austria, Flanders (Belgium) and Norway

In Flanders (Belgium), PES (VDAB) use machine-learning and multiple sources of information to predict a jobseeker's probability of being unemployed for more than six months. The underlying model is flexible, allowing it to be updated regularly in order to remain accurate under changing economic circumstances. The model uses detailed information on socio-economic characteristics and labour market history of jobseekers, information collected by caseworkers and "click data" of jobseekers' activity on the PES website. Whether or not a person has a disability is used as a socio-economic characteristic in the model. An evaluation in 2019 showed that the Flemish PES model is able to predict with a high level of accuracy the jobseeker's probability to remain unemployed. PWD face on average a much higher predicted probability of being unemployed for more than six months. The evaluation also indicated that more can be done to reach all jobseekers during the first year of unemployment. Between 14-24% of jobseekers do not participate in any activation measure or find employment within 12 months. Those with higher predicted probability of being unemployed, including PWD, particularly often do not participate in any activation measure or find employment (Desiere, Van Landeghem and Struyven, 2019[116]).

The statistical model of PES in Austria (AMAS) predicts the likelihood of re-employment among unemployed jobseekers in the short and long-term with a very high level of accuracy. The short-term model assesses the probability of moving into unsubsidised employment for at least three months in the first seven months after the start of unemployment. The long-term model estimates the probability of moving into unsubsidised employment for at least six months over 24 months. Clients are then assigned to three different client groups, with low, medium or high probability of labour market reintegration. The model makes use of a large set of variables of jobseekers, including whether or not a PWD, regional labour market opportunities and detailed labour market histories on prior work experience, unemployment and participation in active labour market programmes.

In Norway, the PES contain "Centres for Work Coping" (*Senter for Jobbmestring*). These Centres offer specialist employment services combined with cognitive behavioural therapy to people with mild to moderate mental disability who are still in work, on sick leave or inactive. Employment counsellors interact with therapists and their clients' employers. The services can include up to 15 sessions and are currently established in eight of Norway's 19 counties. A randomised controlled trial found that individuals receiving these services after 12 and 18 months more often keep or increase their labour force participation and report lower depression and anxiety and increased health-related quality of life, compared to a control group that received generic care (support from their general practitioner and vocational rehabilitation measures by the PES) (Reme et al., 2015[121]). The participants reported 10 to 46 months after the intervention higher income, higher work participation and more months without receiving benefits, but the effects were only significant for individuals on long-term benefits at inclusion (Øverland, Grasdal and Reme, 2018[122]). Other evaluations of Prompt Mental Health Care therapies used by the Centres also report positive labour market and health outcomes (Knapstad et al., 2020[123]; Myrtveit Sæther et al., 2020[124]).

Source: Øverland et al. (2018[122]), "Long-term effects on income and sickness benefits after work-focused cognitive-behavioural therapy and individual job support: a pragmatic, multicentre, randomised controlled trial", https://dx.doi.org/10.1136/oemed-2018-105137; Reme et al. (2015[121]), "Work-focused cognitive-behavioural therapy and individual job support to increase work participation in common mental disorders: A randomised controlled multicentre trial", https://dx.doi.org/10.1136/oemed-2014-102700; Desiere, Van Landeghem and Struyven (2019[116]), "Wat het beleid aanbiedt aan wie: een onderzoek bij Vlaamse werkzoekenden naar vraag en aanbod van activering", https://hiva.kuleuven.be/nl/nieuws/docs/2018-hivaprofiling-rapport-eind-nl-fin.pdf.

3. Improve job quality of dependent employment by mainstreaming flexibility

A third guiding principle to promote a healthy and inclusive Future of Work for all is to mainstream accommodation practices that improve flexibility and autonomy of dependent employment. Such mainstreaming will make dependent employment more attractive for workers, which will be particularly appealing to PWD. Many workers resorting to self-employment and non-standard forms of work do so because dependent employment does not offer sufficient flexibility and autonomy, even though it generally offers better earnings quality, labour market security including access to employment and social protection and quality of the work environment. For employers, dependent employment carries important benefits as well. It facilitates attracting, retaining and investing in talent by building linkages with their workforce and reducing turnover. High turnover and uncertainty whether their workforce will stay involve significant hiring, training and productivity costs (OECD, 2019[13]).

Accommodating to individual preferences and constraints by making adjustments in the workplace is important for all workers, with and without disability. A large evidence base indicates that accommodation – any change in the workplace, such as job task, working time or work environment, to enable a person to access, perform and advance in a job – helps to reduce employment and work barriers for all workers and contributes to firm performance. An extensive literature review of accommodation is published elsewhere (OECD, 2021[125]).

Low-cost working time and workplace flexibility are the most demanded and effective types of accommodation, with close to zero costs for employers. The most commonly requested adjustments to accommodate individual preferences and constraints by American employees with and without disability and British employees with disability are flexible and adjusted working hours, working from home and occasional time off to attend medical appointments. Such accommodation has close to zero costs, as reported by employers and managers (Schur et al., 2014[126]; Sundar et al., 2018[127]; Business Disability Forum, 2020[128]). Evidence even seems to suggest that low-cost flexibility accommodations are more effective than expensive forms of accommodation to improve employment outcomes for PWD (Anand and Sevak, 2017[129]; Kuznetsova and Bento, 2018[130]; Nevala et al., 2015[131]). The importance of flexibility for PWD is widely acknowledged in white papers, including in Austria and Flanders (Belgium) (Austrian Sozialministerium, 2019[88]; Flemish Commission for Diversity, 2021[132]).

PWD will benefit from mainstreamed workplace and working time flexibility. Mainstreaming flexibility prevents the need to disclose disabilities and is therefore particularly important for people with unobservable disability, such as mental health problems (OECD, 2015[133]). The need to disclose is currently an important barrier to obtain accommodation. Employee characteristics, particularly the presence of personality traits correlated with assertiveness and open communication, are more important predictors of receiving accommodation than employer characteristics among a sample of newly disabled workers over age 50 (Hill, Maestas and Mullen, 2016[134]). Moreover, widely available working time and workplace flexibility reduces the stigma that may come with requesting or receiving accommodation, which may even be perceived as preferential treatment (Tompa et al., 2015[110]).

Countries should provide all employees a statutory entitlement to request workplace and working time flexibility. This entitlement should be irrespective of the employee's needs to cover the case of disability and sickness and should only be refused by their employer on strict grounds. Statutory entitlements for flexibility exist in all six countries apart from Switzerland (Table 5.1).[29] However, only in the Netherlands, workers can ask for flexibility irrespective of their motivation, which employers can only refuse on the basis of strictly defined business reasons (Box 5.4). The United Kingdom has a similar regime (Box 5.4). Canadian employees also have a statutory entitlement regardless their needs, though employers can refuse the request more easily. The statutory right to working time flexibility in Austria and Belgium only covers care responsibilities and education. Employers can reject any request on the grounds of disability. In Norway, health is only a valid reason for the statutory entitlement if workers can show a medical certificate or if the worker is 62 or older. The statutory right to workplace flexibility is left to collective

agreements in Austria, Norway and for the most part in Belgium, with no information on the content. Switzerland does not have any statutory entitlement. Workplace and working time flexibility is left entirely to the individual employer and employee to agree on, and employers can refuse requests for flexibility on any ground (OECD, 2021[135]).

Table 5.1. Employees with disability often do not have statutory entitlements to a flexible workplace and flexible working time

Statutory entitlements for private sector employees to ask for flexible workplace (teleworking) and working time (reducing contractual working hours), 2020

	Type of flexibility	Enforceable entitlement to request		Under which conditions in case of health problems	Ground for refusal in case of health problems
		For at least some workers?	For workers with disability?		
Austria	Workplace	In collective agreements (no further information)	N/A	N/A	N/A
	Working time	Care responsibilities, education	No		
Belgium	Workplace	Yes for occasional teleworking. Regular teleworking in collective agreements (no further information)	Occasional telework: personal or circumstantial reasons (Regular telework: N/A)	Occasional telework: all employees (Regular telework: N/A)	Occasional telework: Can be refused on any ground (Regular telework: N/A)
	Working time	Care responsibilities, education	No		
Canada	Workplace	Yes (no reasons defined)		All employees with six months tenure	Defined but not very strict (additional costs, deterioration in quality etc.)
	Working time				
Netherlands	Workplace	Yes (no reasons defined)		• All employees with six months tenure in firms with at least 10 employees • Request two months before proposed date	Strictly defined reasons
	Working time				
Norway	Workplace	In collective agreements (no further information)	N/A	N/A	N/A
	Working time	Yes (health, care responsibilities, education)		Medical certificate necessary unless 62 or older	Strictly defined reasons
Switzerland	Workplace	No			
	Working time	No			

Ease of entitlement: Light blue (good ease); darker blue (with limits); darkest blue (no entitlement).
Note: Enforceable right to request is based on statutory rules unless stated otherwise. Reasons related to age and early retirement (e.g. in Norway and Austria) are left out.
Source: OECD Policy Questionnaire on Working Time Regulation 2020; OECD (2021[135]), "Working time and its regulation in OECD countries: How much do we work and how?", https://doi.org/10.1787/c18a4378-en; https://www.parlament.gv.at/PAKT/VHG/XXVII/A/A_01301/index.shtml#tab-Uebersicht; https://emploi.belgique.be/fr/themes/contrats-de-travail/teletravail/teletravail-occasionnel; http://www.cnt-nar.be/CCT-COORD/cct-085.pdf.

Countries should regulate teleworking to maximise health benefits and reduce health risks. Teleworking needs to become part of the legal and practical understanding of the workplace. Particularly important for worker health and well-being is to ensure that teleworking remains a choice made jointly and in agreement by employers and employees, unless during a pandemic when teleworking is a necessity. It should not be adopted as a strategy to cut costs or as an excuse to avoid implementing workplace adjustments, leading to a reduction in long-term physical and environmental planning for PWD and PWOD. Furthermore, countries should invest in encompassing occupational health and safety regulations and guidelines that cover the workplace at home (EU-OSHA, 2021, p. 13[81]). Such regulations and guidelines should cover the topic of working time, given that persons working from home more often work longer and unsocial hours. Countries can draw inspiration from Spain's teleworking regulation (Box 5.4) as well as from the Framework Agreement on Digitalisation that specifies "modalities of connecting and disconnecting", adopted in June 2020 by the European social partners (OECD, 2021[135]; Criscuolo et al., 2021[136]).

Box 5.4. Mainstream accommodation practices to improve flexibility and autonomy of dependent employment in the Netherlands, the United Kingdom and Spain

In the Netherlands, employees have the right to ask for reduced working hours and workplace flexibility by law. The entitlement is unconditional: it does not require any motivation. Moreover, all employees who work in a firm with at least ten employees and have at least six months of tenure have this statutory right, regardless for instance their contract status. Employers can only refuse a request based on strictly defined business reasons.

The United Kingdom implemented in 2014 the Flexible Working Regulations Act which grants all employees with at least six months of tenure (excluding agency workers) the right to request flexible working arrangements, including teleworking. Employers' ground for refusal is limited to strictly defined business reasons.

Spain adopted a regulation on teleworking in September 2020 (Royal Decree-Law 28/2020). The regulation was the result of tripartite social dialogue. The regulation stipulates that teleworking requires the agreement of both workers and employers and grants teleworkers the same rights as those who perform their duties on the company's premises. The regulation contains specific clauses on working time. Workers are entitled to adopt flexible working hours in accordance with the terms established in a remote working agreement and clauses in collective bargaining agreements. Flexible hours can cover working hours, rest time as well as agreed hours of availability. The law also obliges the worker and the firm to keep a register of working time. Collective agreements can establish specific terms relating to the right to disconnect.

Source: OECD (2021[125]), *Disability, Work and Inclusion in Ireland: Engaging and Supporting Employers*, https://doi.org/10.1787/74b45baa-en; Eurofound (2021[137]), *Working time in 2019–2020*, https://doi.org/10.2806/275402.

4. Improve job quality of non-standard forms of work and self-employment

A fourth guiding principle is to improve job quality of non-standard forms of work and self-employment, most notably by expanding access to health, social protection and employment supports. This is important to promote a healthy Future of Work for all workers in such types of employment, including many of them with disability.

Reducing fiscal and regulatory differences between employment forms and combating false self-employment is important to improve job quality. Workers in non-standard forms of work who find themselves somewhere in the "grey zone" between dependent employment and self-employment often cannot access protections and supports designed with dependent full-time employment on a permanent contract with a unique employer

in mind. Keeping the "grey zone" as small as possible, ensuring the correct classification of workers and tackling misclassification are therefore essential steps to protect workers adequately and to ensure that firms that respect protective regulations are not disadvantaged (OECD, 2018[138]; 2019[13]).

Universal health coverage, not tied to employment status nor to benefits, is a cornerstone policy to reduce the health risks of employment loss. Without universal health coverage, unemployment not only means a decrease in income, but also the loss of health coverage. Universal health coverage is all the more important for PWD, given their higher need of health care and on average lower incomes (Chapter 4). Countries should pay particular attention to include self-employed workers and those in non-standard forms of work, who less frequently have health insurance in countries without universal health coverage (Berkowitz et al., 2021[45]). Linking access to health care to reduced work capacity benefit entitlement is also problematic from both an equity and work incentives perspective. Such a system implies that people risk losing access to health care when they take up employment and become unemployed. Such linked systems exist for instance in Ireland and the United States (OECD, 2021[125]). Country-specific recommendations to improve universal health coverage, including for the six country cases covered in this report, are beyond the scope of this report (OECD, 2021[139]).

Governments should invest in broad access to out-of-work benefits and employment support to reduce the health risks of labour market insecurity. Out-of-work benefits mitigate the physical and mental health effects of unemployment and increased labour market insecurity, by providing income replacement and reducing the risk of falling into poverty when becoming unemployed. These benefits are all the more important for persons who face labour market disadvantage, such as PWD. Only a handful of OECD countries provide comprehensive access to all self-employed to unemployment benefits, to the same extent as employees.[30] Canada, the Netherlands, Norway and Switzerland exclude most self-employed. In Austria, self-employed workers have six months to decide whether to opt into voluntary unemployment insurance upon starting their business, which is a binding decision for eight years. In 2015, only 0.3% of all eligible self-employed chose to opt in. In Belgium, self-employed workers who have been declared bankrupt, are in a collective debt settlement, or who have been forced to interrupt their business activities, as well as self-employed workers in economic difficulties who cease all their self-employed activities may be (under certain conditions) entitled to a monthly benefit and social contribution exemptions (OECD, 2018[138]; OECD, 2019[13]). A promising practice in this regard is Denmark, which has standardised and simplified access to unemployment benefits across different types of employment in 2018 (Box 5.5). Self-employed persons and those in non-standard forms of work can also benefit from better access to PES (OECD, 2019[44]).

Policy makers should pay particular attention to closing entitlement gaps to incapacity benefits, which are the principal policies to protect jobs, income and health of workers experiencing sickness, disability and injury (Table 5.2):

- Self-employed workers have limited or no access to paid sick leave in half the OECD countries. Access and contribution payment is voluntary in Austria, Canada and the Netherlands and partial in Belgium, and both partial and voluntary in Norway. In the Netherlands, voluntary access is further restricted to those self-employed with a previous compulsory insurance record of at least one year, i.e. only those who were in dependent employment prior to self-employment. A detailed discussion of the importance of and entitlements to paid sick leave is provided elsewhere.
- Self-employed workers in Belgium, the Netherlands and Switzerland do not have the same entitlements to disability benefits as employees. Disability benefits are the prime source of income replacement for workers who experience disability (Chapter 4). Self-employed workers have the same entitlements to disability benefits as employees in most OECD countries. However, this is not the case for instance in the Netherlands, where enrolment is voluntary, and in Belgium, where self-employed are only eligible if they are unable to pursue any career (not just their previous career like employees). In Switzerland, the first-pillar disability benefits are mandatory, while second-pillar payments are voluntary.

- Self-employed workers only have full access to workers' compensation in a minority of OECD countries. Workers' compensation, also called accident insurance in countries like Switzerland (SUVA), provides income replacement to workers with (total or partial) disability because of a work injury or occupational disease. Access and contribution payment is voluntary in Austria, Canada, Norway and Switzerland.[31]

Offering self-employed voluntary access to incapacity benefits leads to very low coverage.[32] For instance, only 2% of eligible self-employed in the Netherlands and 8% in Austria opted into the voluntary sickness insurance part that covers the first six weeks of sick leave (CBS, 2019[140]; OECD, forthcoming[141]). A long strand of literature shows that individuals are not sufficiently forward-looking to purchase the right amount of insurance. This may be even worse in the case of long-run risks with severe financial consequences, such as sickness, disability and injury (OECD, 2019[100]). Moreover, in a voluntary insurance scheme, those who have the highest risk have the greatest incentive to join. This adverse selection leads to a downward spiral of rising premiums and falling coverage, unless willingness to enrol is very high or governments provide public subsidies to reduce premiums. The self-employed who enrolled into voluntary short-term sickness insurance in Austria had nearly twice the average duration of sickness absence compared to compulsory insured employees (OECD, 2018[138]). Enrolment in the Canadian *Special Benefits for Self-employed Workers* that cover sickness and parental benefits and care benefits for ill family members is much higher among persons with much lower incomes and with children. Enrolees claim benefits much more frequently than obligatory covered employees. The state funds the employer-side contributions to encourage enrolment. This proofs to be an expensive undertaking, with premiums only covering one-third of benefit payments during the evaluated period (Employment and Social Development Canada, 2016[142]).

Workers in new non-standard forms of work have even less often access to reduced work capacity benefits. For instance, zero-hour contract workers in the Netherlands (about 7% of all employees) are only eligible to employer-provided sick pay for those hours they were called upon by their employer (OECD, 2018[138]; Spasova et al., 2017[143]). Dutch on-call workers are sometimes explicitly excluded from collective labour agreements that extend paid sick leave, such as in the gas stations and laundromat sector (OECD, 2019[13]). Workers in hybrid forms of self-employed work, such as freelancers, gig or casual workers, are particularly often excluded from paid sick leave (OECD, 2019[13]). They are also excluded from paid sick leave, disability benefits and workers' compensation in countries that arrange such benefits or benefit top-ups by collective agreements, for instance in Sweden and partly in the Netherlands (OECD, 2018[138]). About half of the platform workers in EU countries and the United States indicated not to have access to sickness benefits in a 2017 survey (Eurofound, 2020[46]). Some countries have taken initiatives to grant workers in non-standard forms of work access to workers' compensation. Dependent contractors in Korea and Spain are entitled to workers' compensation. In France, the 2016 *El Khomri* law obliges platforms to provide reimbursement to workers earning more than EUR 5 100 per year from platform work who voluntarily take up insurance (OECD, 2019[44]).

Table 5.2. Self-employed workers often have worse access to sickness benefits, disability benefits and workers' compensation

Situation as of 2021 (ignoring temporary improvements implemented throughout the COVID-19 pandemic)

	Sickness benefits	Disability benefits	Workers' compensation
Australia	Standard	Voluntary	Voluntary
Austria	Voluntary	Standard	Voluntary
Belgium	Partial	Partial	No scheme
Canada	Voluntary	Standard	Voluntary
Chile	Standard	Partial	Standard
Colombia	Standard	Standard	Voluntary
Costa Rica	Standard	Standard	Voluntary
Czech Republic	Voluntary	Standard	No access
Denmark	Partial	Standard	Voluntary
Estonia	Partial	Standard	No access
Finland	Standard	Standard	Voluntary
France	Standard	Standard	No access
Germany	Voluntary	Standard	Voluntary
Greece	Partial	Standard	No scheme
Hungary	Standard	Standard	Standard
Iceland	Standard	Standard	Standard
Ireland	No access	Standard	No access
Israel	No access	Standard	Standard
Italy	No access	Standard	Standard
Japan	Partial	Partial	Voluntary
Korea	No scheme	Standard	Voluntary
Latvia	Standard	Standard	No access
Lithuania	Standard	Standard	No access
Luxembourg	Standard	Standard	Standard
Mexico	No access	Standard	Voluntary
Netherlands	Voluntary	Voluntary	No scheme
New Zealand	Standard	Standard	Standard
Norway	Partial/Voluntary	Standard	Voluntary
Poland	Voluntary	Standard	Standard
Portugal	Standard	Standard	Standard
Slovak Republic	Standard	Standard	No access
Slovenia	Standard	Standard	No scheme
Spain	Standard	Partial	Voluntary
Sweden	Partial	Partial	Partial
Switzerland	Standard	Standard	Voluntary
Türkiye	Standard	Partial	Standard
United Kingdom	Partial	Standard	No access
United States	No scheme	Standard	No access

Ease of access to benefits: Light blue (most accessible); darker blue (partially accessible); darkest blue (least accessible).
Note: *No scheme*: no statutory scheme. *No access*: statutory scheme only exists for full-time employees but self-employed workers are excluded. *Partial*: eligibility conditions, waiting period, benefit level or benefit duration are less advantageous for self-employed compared to employees. *Voluntary*: self-employed can choose to opt into the statutory scheme for full-time employees. Data refer to 2021, except for Canada, Chile, Costa Rica, and Mexico (2019), and for Iceland, Israel, Japan, Türkiye and the United Kingdom (2018).
In Switzerland, the first pillar of disability insurance is standard for self-employed workers, while the second pillar is voluntary for self-employed and mandatory for regular workers.
Source: European Commission's Mutual Information System on Social Protection (MISSOC), United States' Social Security Administration's Social Security Programs Throughout the World (SSPTW), OECD (2020[144]), "Paid sick leave to protect income, health and jobs through the COVID-19 crisis", https://doi.org/10.1787/a9e1a154-en.

Arguments commonly put forward to restrict access to social protection for the self-employed are little convincing in the case of reduced work capacity benefits (OECD, 2019[13]).

- A first common argument is that *entrepreneurship is an activity where owners take on themselves the risks of business failure*. However, sickness, disability and injury are largely out of a person's control and should therefore not be a determinant of business success. It is inefficient if healthy firms go bankrupt because of sickness, disability and injury of the owner. It is also inequitable, since in that case persons who happen to be more prone to health problems, such as PWD or older workers, would be disproportionally affected and may refrain from becoming entrepreneur in the first place. Medical reasons can be a frequent cause of bankruptcy. For instance, an estimated two fifths of personal bankruptcies in Canada were medical (Himmelstein et al., 2014[145]).
- A second common argument is that *requiring the self-employed to pay the equivalent of both employer and employee contributions is an excessively large financial burden*. However, it is much healthier to extend reduced work capacity benefits and contributions and if considered necessary provide public financial support independent of reduced work capacity to promote entrepreneurship.
- A third common argument is that it *is too complicated to calculate social security contributions for the self-employed*, because of fluctuating earnings and possibilities to avoid contributions by optimising the contribution base. Many OECD countries use declared tax revenues to calculate the earnings base for contributions – a high quality and readily available data source deemed sufficiently good for tax purposes. Countries also sometimes use average income of multiple years to reduce fluctuations and potential for contribution base optimisation. Countries can again learn from the example of Denmark, where workers only need to provide earnings information, irrespective of income source (self-employment or dependent employment) (Box 5.5).
- A fourth common argument is that *undue benefit take-up (fraud) may be a more important concern, as there is no employer to confirm sickness, disability or injury*. Undue absenteeism is not very common and may be even less common among self-employed. For instance, the self-employed take less sick leave even in countries with voluntary systems such as Germany and the Netherlands (Baert, van der Klaauw and van Lomwel, 2018[146]; Lechmann and Schnabel, 2014[147]). Undue disability benefit and workers' compensation take-up seem even less likely because of more stringent medical certification requirements. More broadly, countries should reduce undue absenteeism by requiring medical certification and participation in return-to-work programmes in line with remaining work capacity (Chapter 4).

More broadly, the arguments in favour of universal access to reduced work capacity benefits are strong. First, all workers regardless of their income source deserve protection of their income, job and health when experiencing sickness, disability and injury. Second, reduced work capacity policies protect workplaces, economies and societies beyond the health of the individual worker. Paid sick leave facilitates workers with a contagious disease (such as a cold or with COVID-19) to stay at home, avoiding infections of others at or on their way to work as collateral damage. Empirical results shows that access to paid sick leave substantially reduces influenza-type and COVID-19 infection rates, reducing total sickness absence and sickness expenditure (OECD, forthcoming[141]). Reduced work capacity policies can only play this role when they are widely available. Third, separate regimes by employment status are an important driver for (fake) self-employment and non-standard forms of work. For instance, the exceptional growth and level of self-employment and certain non-standard forms of work in the Netherlands is to a large extent driven by differences in taxes and regulations across employment forms, including in sickness and disability payments (OECD, 2019[100]).

Box 5.5. Encompassing health and social protection in Denmark, Canada and Germany

Denmark implemented in 2018 a reform to improve accessibility of unemployment benefits for self-employed workers and workers in non-standard forms of work. Before the reform, self-employed persons had to provide a substantial amount of records on revenue and tax declarations, whereas employees only had to prove that they met the minimum earnings threshold. In addition, the insurance system only allowed for registration as either dependent employee or self-employed, which made it more challenging for individuals combining dependent and self-employment to meet the minimum earnings threshold. The reform harmonises benefit receipt rules: eligibly is only based on a minimum income threshold over a three-year window regardless of source of income. This should make access more predictable, as workers can readily verify whether they attain the threshold on their tax returns. The reform should also improve access for those who combine income from various sources, since all income from work is considered together. The reform further simplifies the administrative process to prove that a firm has closed down. In addition, it introduces a six-month "job search" period, during which benefit recipients have to look for dependent employment and are not allowed to start their own business to prevent that self-employed continue working while receiving benefits (OECD, 2018[138]).

Canada introduced a (now discontinued) special COVID-19 sickness benefit that covered all workers irrespective of employment status and that is more generous than the existing paid sick leave system for employees. The emergency benefit in Canada consists of a flat-rate payment of CAD 500 (EUR 380) per week for up to six weeks. The benefit covers all Canadian residents who cannot work at least 50% of their work week because they must self-isolate due to COVID-19 and have earned at least CAD 5 000 (EUR 3 800) in 2019, 2020, 2021 or in the 12 months preceding isolation. The benefit does not distinguish by source of income and therefore includes self-employed workers, who previously had only voluntary access to sickness benefits, and gig workers. However, the special benefit only provides income compensation in relation to COVID-19 symptoms and therefore does not protect workers with other health problems (OECD, 2020[144]).

The integrated entrepreneurship scheme *enterability* provides targeted support to people with severe disability in setting up a business in Germany. The scheme offers its target group entrepreneurship as a potential pathway to inclusion. Support includes seminars, training and exchange of ideas on business creation and management in pre and post start-up phase, alongside managing disability-related challenges such as health prevention, accommodation and financial constraints. The project supported about 1 400 people with severe disability between 2004 and 2019. The scheme was awarded a European Enterprise Promotion Award in 2015 in the "Responsible and Inclusive Entrepreneurship" category.

Source: OECD (2018[138]), "The Future of Social Protection: What Works for Non-standard Workers?", https://doi.org/10.1787/9789264306943-en.

Certain countries can extend coverage by making temporary paid sick leave expansions put in place throughout the COVID-19 pandemic permanent. Throughout the pandemic, 17 OECD countries improved access to sickness benefits for self-employed workers in case of COVID-19 symptoms or mandatory quarantine. Countries can choose to make these time-bound extensions permanent and applicable for all sicknesses. For instance, Canada implemented an emergency sickness benefit covering all workers irrespective of employment status (Box 5.5). Norway reduced the sickness benefits waiting period for self-employed workers from 16 to three days. Austria and the Netherlands, however, did not extend sickness benefits to self-employed workers without voluntary insurance – not even in the case of mandatory quarantine (OECD, 2020[144]).

Countries may further want to improve job quality of self-employment and non-standard forms of work by investing in inclusive entrepreneurship programmes. About half the self-employed with disability prefer self-employment, for instance because of entrepreneurial motives. Public policy can do more to address the barriers that (aspiring) entrepreneurs with disability face. Effective schemes can include targeted packages of training, coaching and finance. An interesting example of such a scheme that specifically targets the needs of people with severe disability comes from Germany (Box 5.5).

5. Pivot advancements in innovation and technology towards inclusion

As a fifth and final principle for a healthy and inclusive Future of Work for all, governments should pivot advancements in innovation and technology towards inclusion.

Governments should be stewards of inclusion in mainstream innovation and technology by advocating *Universal Design*. Technologies built on the basis of Universal Design are developed from the outset in such a way that (virtually) everyone can access, understand and benefit from it, irrespective of their needs or ability. Universal Design is a key principle to promote the integration of PWD not just in the field of innovation and technology, but also for instance in education and adult learning. Countries have obligations and responsibilities to promote Universal Design, as stipulated by for instance the United Nations Convention on the Rights of Persons with Disabilities (UN CRPD) and anti-discrimination and accessibility law.[33] All OECD countries also assume responsibility to actively promote Universal Design and inclusion in the development of AI by having signed the OECD Recommendation of the Council on Artificial Intelligence.[34] The obligation for Universal Design stretches out to joint activities performed by diverse ministries, public administrations and public agencies. A promising example of a whole-of-government approach towards the advancement of Universal Design comes from Norway (Box 5.6).

There are multiple ways through which governments can promote the Universal Design of mainstream technologies:

- The public sector should lead by example and embed Universal Design in all its digital and physical infrastructure, products and services. The Netherlands has adopted a law in 2018 that obliges all public sector institutions to make all of their digital and physical architecture accessible. The institutions need to report every year on Universal Design and accessibility since 2020 (Dutch Ministry of the Interior and Kingdom Relations, 2021[148]). Governments should also extend Universal Design and accessibility requirements in all public procurement tenders. The European Accessibility Act (EU-AA) contains obligations to incorporate Universal Design in public procurements.
- Universal Design should be a prerequisite when attributing public funds to develop any technology. Many innovation programmes, including in the field of AI, contain public funding, meaning that governments have a direct say and responsibility in steering innovation towards inclusion (Paunov, Planes-Satorra and Ravelli, 2019[149]).
- Firms should have access to clear guidance how to implement accessibility and Universal Design. A promising example for websites is the *Netherlands Design System (NLDS*). The *NLDS* provides clear principles, ready-made programme codes and website components built on Universal Design. The *NLDS* further promotes exchange of knowledge and experiences between developers and actively integrates the voices of PWD. Another example is the Norwegian *Samveis* roadmap for technology and innovation. The roadmap provides firms and public institutions with tools and guidance for the integration of Universal Design throughout the entire cycle of innovation, including implementation and evaluation (Norwegian Ministry of Children, 2016[150]). An evaluation indicated that overall the digital infrastructure of the Swiss Government is fairly accessible, though the evaluation did not underscore the importance of Universal Design to integrate accessibility from the outset (Dungga and Weissenfeld, 2018[151]). According to the evaluation of the Austrian National Action Plan on Disability 2012-20, the Austrian Government can do more to develop standards and guidelines on Universal Design (Austrian Sozialministerium, 2020[152]).

- Government strategies on mainstream innovation and R&D should contain specific inclusion objectives. For instance, the AI strategies of France, Germany and the United Kingdom incorporate specific inclusion objectives to ensure a diverse AI talent pool, particularly by encouraging the participation of women and minority groups, and promoting the use of AI applications to drive social inclusion. The German AI Strategy supports broad societal dialogue around AI issues and provides funding to develop innovative AI applications that support social inclusion and cultural participation. Similarly, the French Strategy for AI supports AI-based social innovations (Paunov, Planes-Satorra and Ravelli, 2019[149]). The Pan-Canadian AI Strategy funds expert teams to examine the economic, ethical and social implications of AI. The Canadian research body CIFAR, which is responsible for this strategy, has written an action plan to promote equity, diversity and inclusion with measurable objectives on diversity of applicants and staff, bias-free recruitment, staff engagement and mandatory awareness training for staff (CIFAR, 2020[153]). The Austrian, Belgian, Dutch and Norwegian AI strategies and the Swiss digital strategy list social inclusion as an important principle, without setting concrete objectives (Norwegian Ministry of Local Government and Modernisation, 2020[154]; Austrian Council on Robotics and Artificial Intelligence, 2018[155]; Dutch Ministry of Economic Affairs and Climate Policy, 2019[156]; Swiss Confederation, 2020[157]).
- Countries may have to adjust regulatory frameworks to prevent biases against disability in mainstream technologies, in particular in the field of AI. Additional accountability mechanisms and robust performance metrics may be necessary to ensure that new technologies do not discriminate. For instance, such mechanisms may be needed to ensure that AI training data accurately reflect the diversity of persons (OECD, 2020[158]). Policy makers may also consider additional regulation of mainstream job application websites and online application processes, which may place people with visual impairment or with cognitive disability at a disadvantage (Tompa, Samosh and Boucher, 2020[95]).
- Accessibility and Universal Design should be part of any engineering curricula. In this way, the engineers of tomorrow will have a more inclusive user experience in mind. In Austria, lectures on accessibility are part of the curriculum for architecture, civil engineering, electrical engineering and information technology students (Austrian Sozialministerium, 2020[152]).

Governments can also stimulate the development and adoption of assistive technologies that are specifically designed to promote the needs of PWD. Again, governments have accepted such responsibility by ratifying the UN CRPD.[35]

- Governments can steer funding to advance assistive technologies.[36] Instruments include public spending, tax incentives and grants for R&D (Planes-Satorra and Paunovi, 2017[159]). The German AI Strategy provides funding to develop innovative AI applications that support social inclusion and cultural participation (German Federal Government, 2020[160]). A promising practice is the Canadian Accessible Technology Program established in 2017 (Box 5.6). Norway has also established a funding programme for assistive technologies, with NOK 21 million (about EUR 2.05 million) funding for 2021.
- There is also potential to stimulate the adoption of assistive technologies in firms. Most OECD countries have reasonable accommodation obligations that cover adoption of assistive technologies for employees with disability. All partners involved, be it employers, individuals or medical professionals and interest groups, should have access to clear information and guidance on how to put reasonable accommodation into practice and what supports are available. A promising practice here is the Job Accommodation Network in the United States (Box 5.6). Another is the Norwegian website https://www.kunnskapsbanken.net, which compiles information on assistive technologies, including for at work. Many countries provide financial support to compensate employers for the adoption of assistive technologies. Countries should make sure that the list on what technologies will be refunded remains up to date (Canadian Disability Advisory Committee, 2019[161]). Disability awareness training can also promote the adoption of assistive and personalised technologies at the work floor (OECD, 2021[125]).

More generally, the disability community should be part of the conversation on the development and adoption of technology. As is the case in other policy fields, actively involving the voices of those with lived experience helps to ensure that technologies are designed and adopted with bodies and abilities of PWD in mind. It further acts as a mechanism to make sure that policies are keeping pace with the technologies used by the community (Canadian Disability Advisory Committee, 2019[161]). In Austria, the disability community plays an active role in the adoption and regulation of telecommunication technologies and services (Austrian Sozialministerium, 2020[152]). The Dutch Government funds a specific expert group called User at the Centre (*Gebruiker Centraal*) with experts on digital accessibility. The expert group has sounding boards that include persons with lived experience.

Box 5.6. Pivoting advancements in innovation and technology towards inclusion in Norway, Canada and the United States

Norway has been an early adapter of Universal Design embedded in a whole-of-government approach. It presented in 2009 its action plan "Norway universally designed by 2025" with specific objectives on a range of policy fields, including technology, innovation, physical infrastructure, formal education and adult learning (Norwegian Ministry of Children and Equality, 2009[162]). It has recently approved a new action plan with objectives for 2021-25 (Norwegian Department of Culture, 2021[163]). Evaluations indicate that most of the original plans were implemented, with progress in particular in promoting Universal Design in physical and digital infrastructure. The evaluations also point to substantial buy-in from a range of public sector institutions as well as groups representing PWD. Still, more detailed evaluations of the individual measures taken are lacking (Proba, 2019[164]; Lund and Bringa, 2016[165]).

Canada launched in December 2017 the Accessible Technology Program. This programme consists of CAD 22 million (about EUR 16.74 million) of earmarked funding for innovative projects to develop assistive and adaptive digital devices and technologies over a period of five years. The programme is part of Canada's Innovation and Skills Plan, a multi-year strategy to create well-paying jobs for the middle class. As of December 2021, the Accessible Technology Program has provided funding to 28 projects. Examples of projects include electronic tactile devices to display graphics with Braille text, inclusive audiobook players and voice assistant technologies and the design of a machine learning chat bot that can evaluate and respond to the digital information needs of users with disability.

The Job Accommodation Network in the United States is a comprehensive resource for information, free and confidential technical assistance, workshops and training on workplace accommodations. It receives funding from the US Department of Labor. The network provides information for all parties involved: employers, individuals, as well as other actors such as medical professionals and union representatives. It has detailed sections on assistive technologies and accommodation, including on how to implement Universal Design of workplace technologies.

Source: OECD (2021[125]), *Disability, Work and Inclusion in Ireland: Engaging and Supporting Employers*, https://doi.org/10.1787/74b45baa-en; Eurofound (2021[137]), *Working time in 2019–2020*, https://doi.org/10.2806/275402.

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Annex 5.A. Job quality of non-standard forms of work

There are important differences in job quality across employment types in European countries (Annex Table 5.A.1):

- Employees working unpredictable hours have lower job quality than those working predictable hours. Employees working unpredictable hours report lower earnings quality, autonomy, working time and workplace flexibility and more often work unsocial hours.
- Self-employed workers compared to employees report more autonomy and working time and workplace flexibility, although they less often work part-time. However, they work much more often unsocial hours.
- Among the group of self-employed workers, those who are dependent or own-account self-employed have much lower hourly earnings, less autonomy including on working time, though they more often work part-time or at home.

Annex Table 5.A.1. Job quality varies substantially across employment types in European countries

Differences in reported job quality among different groups of workers (aged 15-69), 2015

	Hourly earnings	Autonomy	Working time and workplace flexibility				Unsocial hours	
			Working time arrangements	Working from home	Easy taking 1-2 hours off	Working part-time	Very long working hours	Working at night
Employees working unpredictable hours (vs. other employees)	-5%***	-12 percentage points***	-18 percentage points***	-3 percentage points***	-18 percentage points***		+1 percentage point**	+18 percentage points***
Self-employed (vs. employees)		+18 percentage points***	+55 percentage points***	+26 percentage points***	+13 percentage points***	-3 percentage points***	+18 percentage points***	+10 percentage points***
Dependent or own-account self-employed (vs. other self-employed)	-18%***	-5 percentage points***	-4 percentage points***	+5 percentage points***	-3 percentage points*	+14 percentage points***	-3 percentage points*	

Difference in job quality relative to reference group (in parenthesis): Light blue (statistically significant better job quality); darkest blue (statistically significant worse job quality).
Note: Results show significant differences in reported job quality indicators, using fixed effects regressions controlling for gender, age, education, sector, occupation, firm size, contract type and whether or not working part-time. Hourly earnings: net monthly earnings per hour from main job, top and bottom-coded (1% and 99%). Autonomy: worker is able to choose or change order of tasks, methods of work as well as speed or rate of work. Working time arrangements: worker can choose between several fixed working schedules, adapt working hours within certain limits or entirely determine working hours. Working from home: person works at least several times a month from own home in main job. Easy taking 1-2 hours off: worker can fairly or very easily take 1-2 hours off during working hours to take care of personal or family matters. Working part-time: usually working fewer than 30 hours per week in main job. Very long working hours: working 55 or more usual working hours per week. Working at night: share working at night at least once per month. Data show the unweighted average for 26 European OECD countries: Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.
Source: OECD calculations based on the European Working Conditions Survey (EWCS).

StatLink https://stat.link/xyvgqn

Within each employment type, PWD generally more often work from home or part-time, but report worse job quality on most other dimensions (Annex Table 5.A.2).

Annex Table 5.A.2. Job quality for each employment type varies by disability status in European countries

Differences in reported job quality per employment type between workers with and without disability (aged 15-69), 2015

	Hourly earnings	Autonomy	Working time and workplace flexibility				Unsocial hours	
			Working time arrangements	Working from home	Easy taking 1-2 hours off	Working part-time	Very long working hours	Working at night
Employees with disability working unpredictable hours with disability (vs. those without disability)				+4 percentage points**	-7 percentage points***			
Self-employed with disability (vs. those without disability)	-17%***		+2 percentage points**	+13 percentage points***		+9 percentage points***	+6 percentage points**	+8 percentage points***
Dependent or own-account self-employed with disability (vs. those without disability)	-18%***			+15 percentage points***		+9 percentage points**	+9 percentage points**	+10 percentage points**

Difference in job quality relative to reference group (in parenthesis): Light blue (statistically significant better job quality); darkest blue (statistically significant worse job quality).
Note: Results show significant differences in reported job quality indicators, using fixed effects regressions controlling for gender, age, education, sector, occupation, firm size, contract type and whether or not working part-time. Hourly earnings: net monthly earnings per hour from main job, top and bottom-coded (1% and 99%). Autonomy: worker is able to choose or change order of tasks, methods of work as well as speed or rate of work. Working time arrangements: worker can choose between several fixed working schedules, adapt working hours within certain limits or entirely determine working hours. Working from home: person works at least several times a month from own home in main job. Easy taking 1-2 hours off: worker can fairly or very easily take 1-2 hours off during working hours to take care of personal or family matters. Working part-time: usually working fewer than 30 hours per week in main job. Very long working hours: working 55 or more usual working hours per week. Working at night: share working at night at least once per month. Data show the unweighted average for 26 European OECD countries: Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.
Source: OECD calculations based on the European Working Conditions Survey (EWCS).

StatLink https://stat.link/y2iax6

Notes

[1] Li and Liang (2020[173]) show that export expansion in the American manufacturing industry contributed to lower workplace injury rates, possibly through higher investment in advanced equipment and better compliance of safety and health regulations.

[2] The chapter does not look into domestic outsourcing, which is the practice that workers are legally employed by one firm but in practice work for another. Examples are for instance many cleaners, security guards and cafeteria staff. Domestic outsourcing may lead to greater occupational injury. Domestically outsourced workers may be operating in a less known environment, and employer responsibilities for injuries are less clear cut (OECD, 2021[170]).

[3] This may explain the inconclusive findings in the (small) academic literature on the effects of self-employment on health. Studies report different associations between self-employment status and subjective well-being, prevalence of physical and mental health problems or mortality (Bencsik and Chuluun, 2019[174]; Toivanen, Mellner and Vinberg, 2015[168]; Willeke et al., 2021[166]). Studies attempting to gauge the causal effect, generally using longitudinal data, also report inconclusive findings. A study for the United States finds that healthier individuals select themselves into self-employment, and that self-employment itself may rather be negative for health (Rietveld, Kippersluis and Thurik, 2015[169]). Another study for the United States instead finds that people with mental health problems more often become self-employed (Bogan, Fertig and Just, 2021[38]). A study for Germany finds that switching from unemployment or dependent employment into self-employment generally improves physical and mental health (Nikolova, 2019[171]).

[4] Similar results are obtained when looking at the labour force participation rate, rather than the employment rate. There is essentially no correlation between changes over time between 2009 and 2019 in shares of self-employment and employment rates.

[5] Calculations are based on EWCS 2015. Self-employed work significantly more often very long hours than employees, also when restricting to full-time workers, and when accounting for age and education as well for as a broader set of factors at the person (education, age and gender), job (occupation, working part-time) and firm level (sector and firm size). Dependent self-employed work less often very long hours or at night than other self-employed, but this gap is only significant without taking into account differences in part-time work.

[6] Statistics refer to the share of employees (aged 15-64) working usually or occasionally from home in 2019, and to the share of workers with access to telework who were usually employed before the onset of the COVID-19 crisis in March/April 2020 (OECD, 2021[1]).

[7] According to the study, teleworking is feasible for about half of employees, and the typical plan for that half involves two workdays per week at home. Prevalence of teleworking peaked at about 60% of full days in May 2020 among workers able to work from home (Barrero, Bloom and Davis, 2021[71]).

[8] Only few studies have been conducted on the impact of teleworking on physical and mental health before the COVID-19 pandemic (Oakman et al., 2020[80]; OECD, 2021[111]). Moreover, conclusions from these studies may not necessarily generalise, as teleworking practices were fairly rare and likely predominantly performed by a group with strong teleworking preferences. On the other hand, it is not trivial to isolate the health effects of teleworking during the COVID-19 pandemic. The pandemic has heightened many risk factors associated with poor mental health (financial insecurity, unemployment, fear), while protective factors (social connection, employment and educational engagement, access to physical exercise, daily routine, access to

health services) fell dramatically (OECD, 2021[111]). Still, the existing evidence strongly suggests that positive health effects are larger and negative effects are smaller if telework is a worker's own choice.

[9] Blurred boundaries may apply to the work location for individuals without a dedicated space to work from at home, as well as to working time if work is shifted to evenings and weekends. Responsibilities for care of children or other family members exacerbate blurred lines between private and work life and can lead to work-family conflicts (Messenger, 2019[172]).

[10] Employed PWD perform monotonous and repetitive tasks significantly more often than their counterparts without disability across the pooled sample of European OECD countries. This also holds when accounting for age, education as well as a broader set of factors at the person (education, age and gender), job (self-employed or not, occupation, working part-time and type of contract) and firm level (sector and firm size). There are no indications that trends are significantly different in the five European country cases.

[11] These calculations are based on an index that quantifies the extent to which tasks in occupations per countries can be automated (Nedelkoska and Quintini, 2018[86]). No data on risk of automation are available for Switzerland, as the country did not participate in PIAAC. Instead, the average risk of automation per occupation across the OECD is used for this country. A variance decomposition shows that 92% of the variation in total risk of automation scores (the sum of high and substantial risk) from Nedelkoska and Quintini (2018[86]) comes from variation between occupations within countries, whereas the remaining 8% of the variation comes from variation between countries within occupations. Thus, the average risk of automation at the OECD level likely is a good predictor of risk of automation in Switzerland.

[12] The disability gap conditional on age and education is not significant in the Netherlands and Norway.

[13] PWD are significantly overrepresented in middle-skill occupations only for the pooled sample of European countries. The gap is no longer significant when controlling for age and education. PWD significantly less often are in high-skill occupations in the pooled sample of European countries as well as for the five European country cases. When controlling for age and education, the gap decreases by about 50% and is no longer significant in Norway and Switzerland.

[14] Assistive technology is any equipment, device or software that helps a PWD to perform a function in her or his social and physical environment that otherwise would be difficult.

[15] See https://www.microsoft.com/en-us/ai/seeing-ai.

[16] See https://www.ibm.com/blogs/age-and-ability/2016/09/21/simplifying-content-for-people-with-cognitive-disabilities/.

[17] See https://ai.googleblog.com/2009/12/automatic-captioning-in-youtube.html.

[18] Accounting for age and education reduces the gap by about a third to around 7 percentage points on average across European OECD countries. The disability digital access gap is significant for the pooled sample of European OECD countries and the five European country cases, with and without controlling for age and education, except in the case of Norway for access to internet when controlling for age and education. Further analysis broken down by country and age group shows that pooled across European OECD countries, the digital gap is notably higher for persons aged 55-69 (10-11 percentage points) compared to persons aged 30-54 (6 percentage points) and persons aged 15-29 (3-4 percentage points). This analysis cannot be conducted at the country level due to small sample size.

[19] Calculations are based on EU-SILC 2019. The self-employment rate among PWD decreased during the last decade across European countries on average. The decrease was relatively large in Norway, from 14 to 9%. Instead, in the Netherlands, workers with disability became more often self-employed, from 16 to 18%. The gap in self-employment rates between PWD and PWOD decreased, since the self-employment rate of workers without disability stayed about constant. Calculations using EWCS 2015 show slightly larger differences. Across the pooled sample of European OECD countries, PWD are 4 percentage points more likely to be self-employed. The gap shrinks to about 2-3 percentage points when taking into account age and education, as well as when accounting for a broader set of factors at the person (education, age and gender), job (occupation) and firm level (sector and firm size).

[20] Calculations are based on EWCS 2015. Due to low sample size, it is only possible to examine trends pooled across European OECD countries. Employees with disability significantly more often work unpredictable hours and self-employed PWD are significantly more often dependent self-employed, also when accounting for age and education as well for as a broader set of factors at the person (education, age and gender), job (occupation, working part-time) and firm level (sector and firm size). Self-employed persons are significantly more often own-account workers, unless when accounting for whether or not the person works part-time.

[21] There is a wide array of platforms, there is little to no administrative data available, platform workers may subscribe to a platform but not offer services and platform work typically has high turnover. Moreover, platforms typically do not ask workers whether they have a disability (Austrian Sozialministerium, 2019[88]).

[22] Data come from the 2017 COLLEEM I survey, covering more than 30 000 platform workers from different on-demand and gig-work platforms in 14 EU member countries including the Netherlands. However, many surveyed platform workers answered that most of the motivations stated in the survey were important in their particular case. For instance, an even larger share of platform workers stated that motivations related to flexibility, independence, but also attractive pay and interesting work were important in their case (Pesole et al., 2018[102]).

[23] It is difficult to conclude whether pull factors of flexibility and autonomy or the push factor of discrimination are the prime motivation for PWD to become self-employed or a platform worker for multiple reasons. First, few studies examine self-employment motivations of PWD, and often not in comparison to PWOD and with small sample size. Studies related to platform and other new forms of work are even rarer. Second, these studies only examine those who are in work, and not those outside the labour market who may not have entered because of discrimination. Third, discrimination can manifest itself in many ways, for instance in difference in salary, career perspective, or employers' unwillingness to make necessary workplace adjustments. PWD may also be discriminated against because of age or lower education.

[24] Similar results are obtained when looking at the labour force participation rate, rather than the employment rate. There is essentially no correlation between changes over time between 2009 and 2019 in shares of self-employment and employment rates for PWD.

[25] Calculations are based on EWCS 2015. All gaps discussed in the paragraph are significant with and without accounting for age and education, or when accounting for a broader set of factors at the person (education, age and gender), job (occupation) and firm level (sector and firm size), except for the gap in actually having employees (only significant without controls). The small sample size does not allow for a breakdown by countries.

[26] PWD have significantly less often a job amenable to telework for the pooled sample of European countries as well as for the five European country cases. When controlling for age and education, the gap decreases by about 50% and is no longer significant in Switzerland.

[27] See https://www.gov.uk/government/publications/get-help-with-technology-conditions-of-internet-access-and-device-grants/get-help-with-technology-programme-conditions-of-internet-access-grants.

[28] In the Netherlands, only those who have capacity to work can register with the PES. While benefit recipients of WGA (WGA 35-80 as well as WGA 80-100), *Wajong* and illness benefits (Ziektewet) can register, IVA recipients who have (almost) permanent disability cannot directly register, but generally first need to move to another benefit (UWV, 2020[167]).

[29] The case of part-time paid sick leave or graded work, where workers on paid sick leave with remaining work capacity perform regular duties for fewer hours than in their contract, topped up by partial receipt of paid sick leave, is not covered here (see Chapter 4). Graded work does not give an entitlement to persons experiencing health problems but not (yet) on paid sick leave.

[30] One reason for this is that there is no employer to verify genuine unemployment to be distinguished from gaps in payments from clients (OECD, 2018[138]).

[31] Belgium and the Netherlands do not have a separate workers' compensation scheme.

[32] Another option sometimes put forward to cover self-employed are individual activity accounts that allow beneficiaries to withdraw funds contributed by themselves. Such accounts exist for instance for vocational training, taking time for caring responsibilities or early retirement. They are, however, not a good substitute for an obligatory insurance system in the case of reduced work capacity benefits. They collect individual contributions for individual use, and therefore do not incorporate risk-sharing. As such, they would not even protect very high-earning individuals against catastrophic risks such as disability, severe injury or long-term sickness.

[33] Art. 1 of the United Nations Convention on the Rights of Persons with Disabilities (UN CRPD) obliges ratifying countries to "[…] undertake or promote research and development of universally designed goods, services, equipment and facilities […], which should require the minimum possible adaptation and the least cost to meet the specific needs of a PWD, to promote their availability and use, and to promote universal design in the development of standards and guidelines […]."

[34] Art. 1 of the OECD Recommendation of the Council on Artificial Intelligence states that "[…] stakeholders should proactively engage in responsible stewardship of trustworthy AI in pursuit of beneficial outcomes for people and the planet, […] [and] advancing inclusion of underrepresented populations, reducing economic, social, gender and other inequalities, […] thus invigorating inclusive growth, sustainable development and well-being".

[35] Art. 4 of the UN CRPD requires countries "[t]o undertake or promote research and development of, and to promote the availability and use of new technologies, including information and communications technologies, mobility aids, devices and assistive technologies, suitable for PWD, giving priority to technologies at an affordable cost".

[36] Countries may also want to consider investing in technologies that improve occupational safety and health to prevent disability and health problems.

6 Getting skills right for all

Continuous skill investments are key to participate in today's rapidly changing world of work. Yet, people with disability too often lack the necessary literacy, numeracy and digital skills. Too few participate in adult learning, further aggravating existing education inequalities. This chapter proposes actionable recommendations to OECD governments to make their adult learning systems deliver better for all – including for people with disability.

In Brief

Too many people with disability have low skills and too few participate in adult learning. OECD countries should make their adult learning systems more inclusive and effective to get skills right for all.

- **Continuous skill investments are crucial for individuals and employers alike**. Individuals with the right skill set fare much better in our constantly changing labour markets. Employers need a skilled workforce to produce and innovate. **Governments play an important role to promote skill formation for all** by designing a formal education and adult learning system (Section 6.1).
- **Too many people with disability have low literacy, numeracy and digital skills**. This is worrying, since such basic skills are becoming a precondition to participate in our more and more digital society and economy (Section 6.2).
- **While skill investments are all the more important for people with disability, in reality few find their way into the adult learning system**. Adult learning participation rates of PWD are well below those of their peers without disability in virtually all OECD countries. Rates are particularly low for the large group of non-employed with disability, placing them at even greater distance to the labour market. Public employment services (PES) already play a major role in providing inclusive publicly funded mainstream adult learning, although still very few persons on reduced work capacity benefits register and enrol (Section 6.3).
- **Those who participate do not always receive the adult learning they need**. Promisingly, adult learning participants at the PES with disability find their way into employment almost as often as their peers without disability. Yet, employees with disability are less positive about the usefulness of their formal training and express lower support from their boss in their personal development. Moreover, employees with disability more often find themselves in jobs in which they cannot put their skills to good use. This likely further hampers their career development and motivation to learn (Section 6.4).
- **OECD countries, including Austria, Belgium, Canada, the Netherlands, Norway and Switzerland, should improve their adult learning system to get skills right for all – including for people with disability**. This chapter proposes a set of six guiding principles to do so: (i) active mainstreaming combined with widely available flexibility; (ii) clear career guidance; (iii) proactive outreach to potential leaners; iv) making adult learning more relevant; (v) capacity-building and encouragement of employers to train their entire workforce for a changing world of work; and (vi) tackling of time and financial barriers (Section 6.5).

6.1. Continuous skill investments are crucial for production and inclusion

Job-related skills are essential for the performance of both individuals and firms in the labour market. An adequate skill set means having both the level and the types of skills needed to perform the tasks that are demanded in the labour market. In a rapidly transforming world of work, having adequate skills requires continuous skill investments (OECD, 2019[1]; OECD, 2019[2]; OECD, 2017[3]).

Individuals with the right skill set have better labour market prospects in a changing world of work. Skilled individuals are more often employed, earn higher wages, enjoy better working conditions and report on average greater job satisfaction. Skilled individuals also have better chances to progress in their careers and make the most of changes in the world of work. While the changes in the world of work affect everyone, those with low skills are most at risk of seeing their labour market prospects deteriorate (Chapter 5). More broadly, having the right skill set facilitates social and economic inclusion (OECD/ILO, 2017[4]; OECD, 2019[1]; OECD, 2016[5]).

For employers, having a workforce equipped with the skills required for the jobs of today and those of tomorrow is vital. Employers benefit from a skilled workforce through increased productivity, higher employee retention rates, more engaged workers and enhanced relations between management and workers. Furthermore, having employees with the right skills is important for firm survival, development and innovation. A skilled workforce facilitates the implementation of new technologies and work practices, and skilled workers are more prepared to adapt to changes in the nature of work (OECD/ILO, 2017[4]; OECD, 2016[5]).

Job-related skill formation, i.e. acquiring skills that likely impact work performance and productivity, principally takes place in formal education and adult learning systems. This report only considers adult learning, broadly understood as all learning to upskill and reskill at all levels by adults who have left formal education. Adult learning is sometimes referred to as lifelong learning. Adult learning comprises of i) formal adult training and education, which results in a formal qualification; ii) non-formal adult training and education, including structured on-the-job training, open and distance education, courses and private lessons, seminars and workshops; and iii) informal learning, including unstructured on-the-job learning, learning by doing or learning from colleagues. Adult learning not only improves skills, it also comes with positive health effects (Box 6.1). The analysis and recommendations in the report cover learning at all levels; not only basic skills training. This chapter does not cover formal education in great detail, as the need for education mainstreaming is briefly discussed in Chapter 3. While solid formal education is beyond the remit of this report, it is imperative for social inclusion and labour market performance. In particular, formal education lays the groundwork for skill formation, and affects the effectiveness of later skill investments (Heckman, Humphries and Veramendi, 2018[6]; Heckman, 2006[7]).[1]

Governments have an important role to play to promote job-related skills formation, firstly because of efficiency arguments. Both employers and individuals may underinvest in adult training and education due to a lack of information, capacity and incentives. Employers and individuals may not be well informed about the benefits, availability and quality of training, as well as which skills to invest in. Employers, in particular small and medium-sized enterprises, can have limited capacity to plan, fund and deliver training. More generally, employers may underinvest in skills out of concern for poaching, i.e. losing trained workers to other employers. Individuals may underinvest in education because of training participation barriers. Such barriers can include disability and health problems, a lack of time for instance because of caring responsibilities, financial resources, the possibility to learn on-the-job and employer support (SCP, 2021[8]).

Box 6.1. Learning for healthy lives

Participation in adult learning can have positive effects on mental health. Participation increases social interactions and connectedness. It helps to create a structured time routine, which can improve mental well-being (Bailey et al., 2018[9]; Zechmann and Paul, 2019[10]). The acquisition of new skills through adult learning helps to boost self-esteem and creates a sense of purpose (Manninen et al., 2014[11]). Continued learning throughout life contributes to a "cognitive footprint" which helps to delay the onset of dementia (Rossor and Knapp, 2015[12]). As an activation measure, adult learning is found to have better health outcomes than sanctions. An evaluation of adult learning courses for unemployed persons in Sweden showed improvements in mental and cardiovascular health, and a decrease in sickness absence. Instead, punitive benefit sanctions consisting of temporary income cuts increased stress (Caliendo et al., 2020[13]).

Participation in adult learning can also improve physical health, by empowering adults to take informed health choices (Li and Powdthavee, 2015[14]; Brunello et al., 2016[15]). For instance, longitudinal studies show that adult learning is linked with higher rates of smoking cessation, exercising, taking up cervical screening, better nutrition, less drug abuse and lower risk of coronary heart disease, especially for those with the lowest qualifications when leaving school (Schuller, 2017[16]; Westergren and Hedin, 2010[17]; Chandola et al., 2011[18]).

Skill investments through adult learning can have further positive mental and physical health effects by improving employability. A large literature finds that unemployment and job insecurity have negative effects on mental and physical health. Conversely, taking up employment comes with health improvements (Voßemer et al., 2018[19]; Cygan-Rehm, Kuehnle and Oberfichtner, 2017[20]; Farré, Fasani and Mueller, 2018[21]).

Secondly, governments can support individuals in their skill formation out of equity considerations. In a rapidly evolving world of work, increasing everyone's engagement in adult learning is key to sustained labour market participation. Having insufficient skills can aggravate labour market inequalities of groups that already experience labour market disadvantage, such as people with disability (PWD), individuals without a high-school diploma and long-term unemployed (OECD, 2019[2]). As shown in Chapter 5, PWD are more exposed to risk of job loss due to automation and polarisation, reinforcing their need for skill investment.

Governments have multiple instruments at their disposal to improve skill formation for all by making adult learning more inclusive. These include amongst others:

- Publicly funded adult learning provisions. Governments can directly provide or fund adult learning programmes, to make them widely accessible to their population. Many countries provide publicly funded adult learning programmes through their public employment services (PES).
- Publicly funded career guidance services. Similarly, governments can directly provide or fund career guidance services. Such services can be in-person, as well as online by means of a career guidance portal.
- Financial incentives to individuals and firms. Financial incentives can be more generous for targeted groups with lower participation, such as low-skilled workers or smaller firms.
- Statutory training leave entitlements for workers.
- Standards for adult learning content and provision. Governments may put particular emphasis on programmes to improve basic skills and skills in high demand, such as digital skills. Governments can also implement quality controls for adult learning programmes, including through teacher

curriculums. Furthermore, countries can set standards for adult learning provision, for instance to promote flexibility.

- Accessibility and support. Countries can improve accessibility of adult learning programmes, for example by means of anti-discrimination legislation, reasonable accommodation requirements and tailored support systems.
- Mutual obligations. Governments can make participation or provision of adult learning obligatory for certain groups of individuals and/or employers.
- Information and awareness. Governments can provide information and organise awareness campaigns targeted to individuals and firms to promote an inclusive learning culture.

6.2. People with disability have lower skills

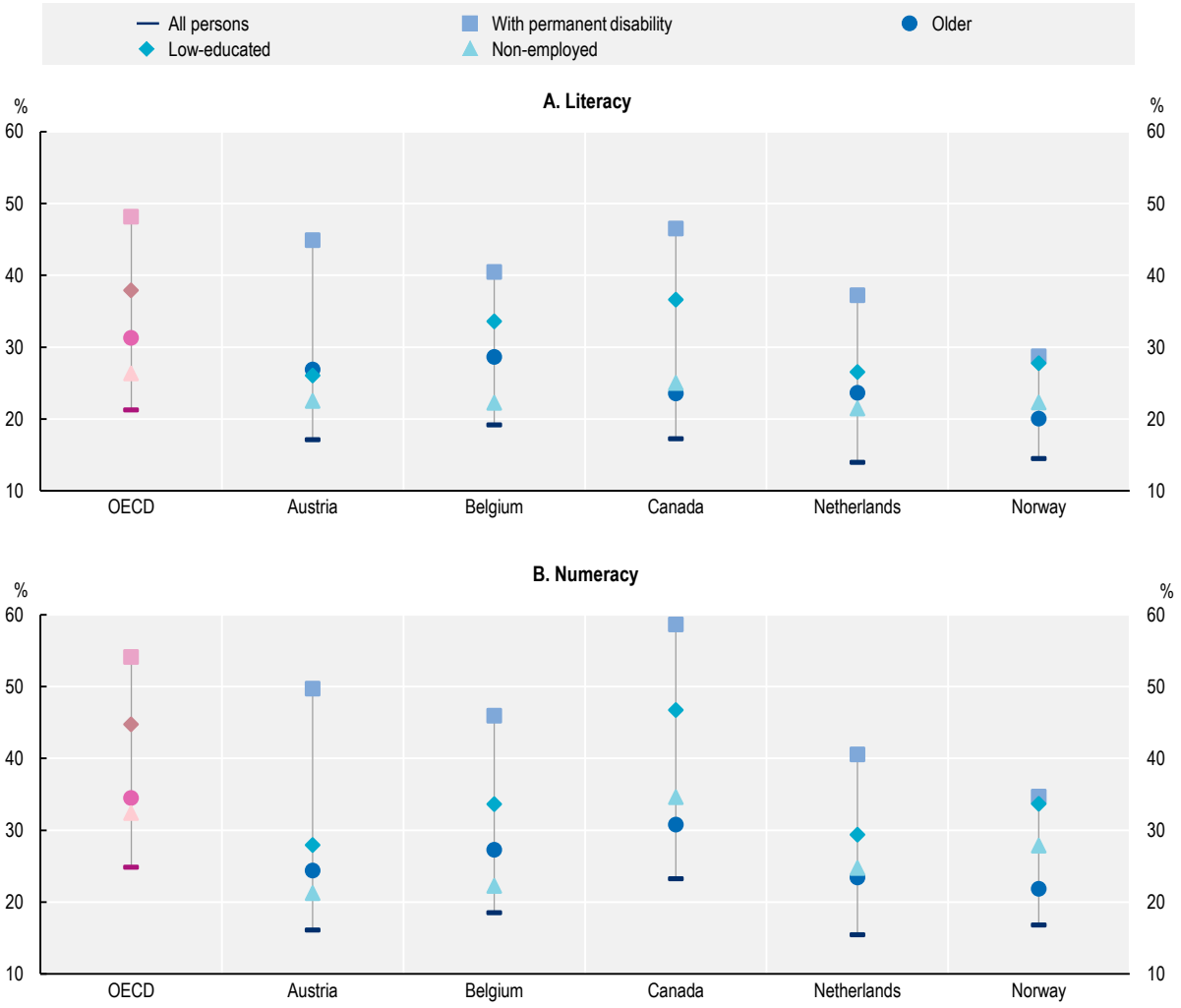
Many PWD have low literacy and numeracy skills. OECD PIAAC data show that among all adults across OECD countries, about one-fifth is able to complete only very basic literacy tasks and a quarter can only perform very basic numerical tasks (Figure 6.1). The five country cases covered in OECD PIAAC data (Switzerland is missing; Belgian data cover Flanders only) perform only slightly better. However, about one in two people with permanent disability has low literacy or numeracy skills on average across OECD countries. Norway performs better, with about one in three people with permanent disability with low skills. The PIAAC data only include information on people with permanent disability, e.g. those who say that "permanently disabled" best describes their current labour market situation. This group likely contains especially people with more severe disability who are furthest away from the labour market. It can therefore be seen as an upper bound estimate of the share of those with disability with low skills. Groups in which PWD are overrepresented – older, lower educated or non-employed individuals – also more often have low literacy and numeracy skill levels in all five country cases. These levels may be seen as lower bound estimates of the share of those with disability (permanent or not) with low literacy or numeracy skills.[2]

Digital skills deserve particular attention, as digital connectedness is becoming more and more a precondition to participate in our digital society and economy:

- Basic digital skills are important in everyday life, including for communication, to access information, government and financial services, to find housing and to shop online.
- Basic digital skills, such as using email and word processing, are virtually indispensable in the labour market. Evidence for the United States shows that older workers with limited skills with workplace computing retire earlier, face pay cuts and transfer to less intensive jobs with worse career prospects (Hudomiet and Willis, 2021[22]).
- Recruitment now predominantly takes place online. In 2013 already, an estimated two-thirds of vacancies in the United States were posted online (Carnevale, Jayasundera and Repnikov, 2014[23]). A 2015 survey showed that four in five American jobseekers utilised online resources in their most recent job search and for a third these online resources were the most important tool available to them (Smith, 2015[24]).
- Individuals with digital, abstract and non-routine skills enjoy better employment perspectives and job quality (OECD, 2017[3]; Thewissen and Rueda, 2019[25]; Thewissen, van Vliet and Wang, 2017[26]).
- The digital transformation is creating well-paid employment opportunities that require strong digital expertise, such as data scientists, web designers and artificial intelligence specialists.
- Much of adult learning and career guidance takes place online – a trend that has expedited during the COVID-19 pandemic (OECD, 2021[27]) (see Section 6.5).
- Digital skills are a prerequisite for teleworking (see Chapter 5).

Figure 6.1. People with disability more often have low skills

Share with low skills aged 16-65 among selected groups of the population, 2012



Note: See https://www.oecd.org/skills/piaac/Key%20facts%20about%20the%20Survey%20of%20Adult%20Skills.pdf for definition of low skills. *With permanent disability*: "permanently disabled" best describes their current labour market situation. *Older*: aged 55-65. *Low-educated*: below upper secondary education. Data for Belgium refer to Flanders. OECD is an unweighted average and excludes countries not participating in PIAAC (Colombia, Costa Rica, Iceland, Latvia, Luxembourg, Portugal, Switzerland) and countries with low number of observations (Australia, Japan, Sweden, Tûrkiye).
Source: OECD calculations based on the Survey of Adult Skills (PIAAC), https://www.oecd.org/skills/piaac/.

StatLink https://stat.link/ktdljh

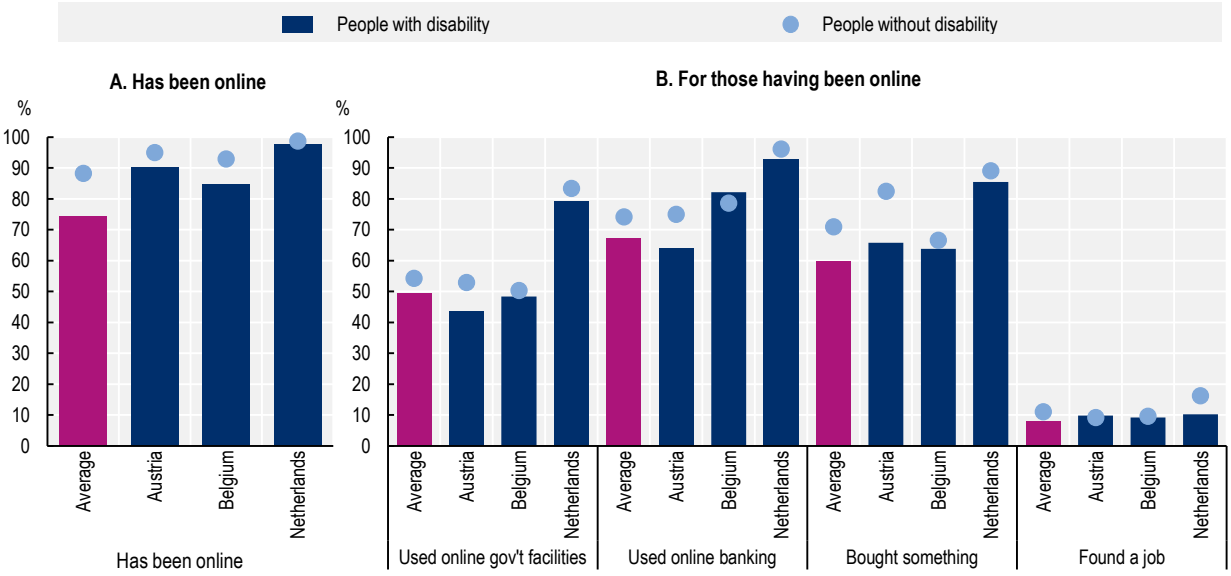
The importance of digital skills has accelerated significantly throughout the COVID-19 pandemic. Shopping online has become imperative with the closure of non-essential shops and curfews. Government services, such as those offered by public employment services, have shifted online almost entirely (OECD, 2020[28]; OECD, 2021[29]). Teleworking has become common practice in order to continue working. It is very likely that these new digital practices are here to stay.

Yet, PWD have lower digital skills. Fewer PWD have been online (Figure 6.2, Panel A). Among those with disability who have been online, fewer have used online facilities of public administration, banking, shopping or found a job online (Panel B). Moreover, as discussed in Chapter 5, PWD more often do not have access to basic digital technology, such as a computer and internet. Disabilities are at the origin of

the digital skills gap, even when taking into account age and educational differences. Accounting for age and education differences reduces the gap by about half for the five indicators across European OECD countries.[3] The reason for the disability skills gap can be manifold and could certainly be because digital technologies are not disability inclusive, or because PWD are less exposed to acquiring these skills through work or adult learning. It could also be a matter of income.

Figure 6.2. Even people with disability who have access to the internet show lower digital skills

Share of persons aged 18-69 by disability status, 2016



Note: All indicators refer to behaviour in the last 12 months. Used online government facilities refers to having used any online facility of public administration (tax returns, applications for benefit claims, driving license, passport, etc.). The purple bars represent the unweighted average of 23 European countries: Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Tûrkiye and the United Kingdom. Norway and Switzerland are not covered in this dataset. Greece is excluded due to a low number of observations.
Source: OECD calculations based on the European Quality of Life Survey (EQLS).

StatLink https://stat.link/ejkui8

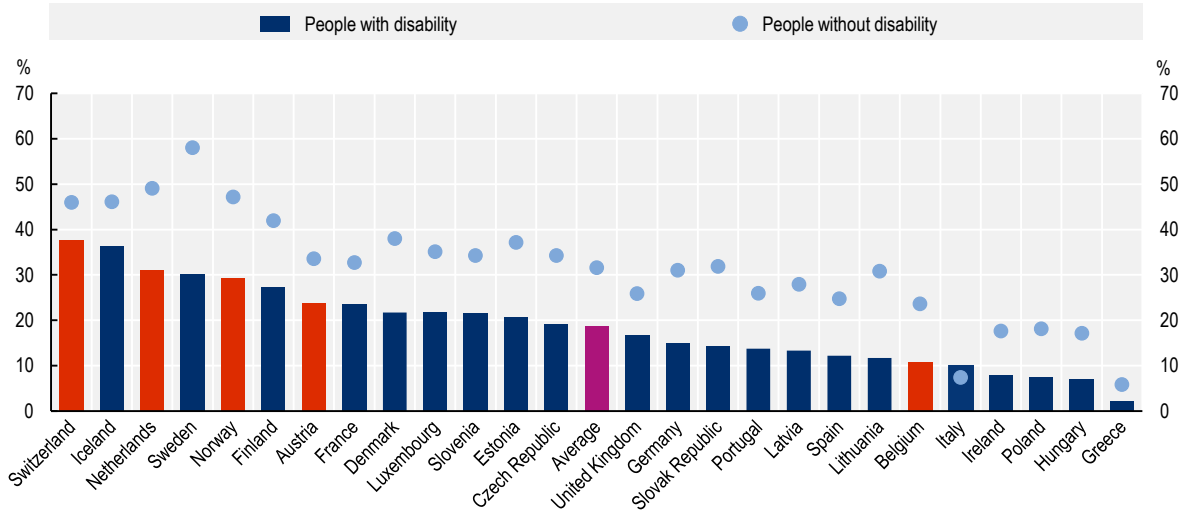
6.3. People with disability participate less often in adult learning

While adult learning is all the more important to make up for lower levels of education and skills, PWD rarely participate in adult learning. Less than one in five PWD engaged in adult learning on average across European OECD countries. Participation rates for PWD vary widely between countries, from about one in three in for instance Switzerland and the Netherlands to one in nine in Belgium and substantially lower still in other OECD countries such as Greece (Figure 6.3).

PWD participate much less often in adult learning than people without disability (PWOD). While less than one in five PWD participated in adult learning, the corresponding figure was one in three for PWOD. PWD face an adult learning participation gap of 10-15 percentage points in most European OECD countries. The gap is larger in Norway and the Netherlands (around 18 percentage points), and lower in Switzerland (8 percentage points).[4] Also in this case, age and education can only explain about half the adult learning participation disability gap.[5] The adult learning participation disability gap is apparent in data from multiple sources.[6]

Figure 6.3. People with disability participate much less often in adult learning

Adult learning participation rate among persons aged 15-69 by disability status, 2016



Note: The purple bar represents the unweighted average of the 26 European countries shown.
Source: OECD calculations based on the EU Statistics on Income and Living Conditions (EU-SILC) ad-hoc module.

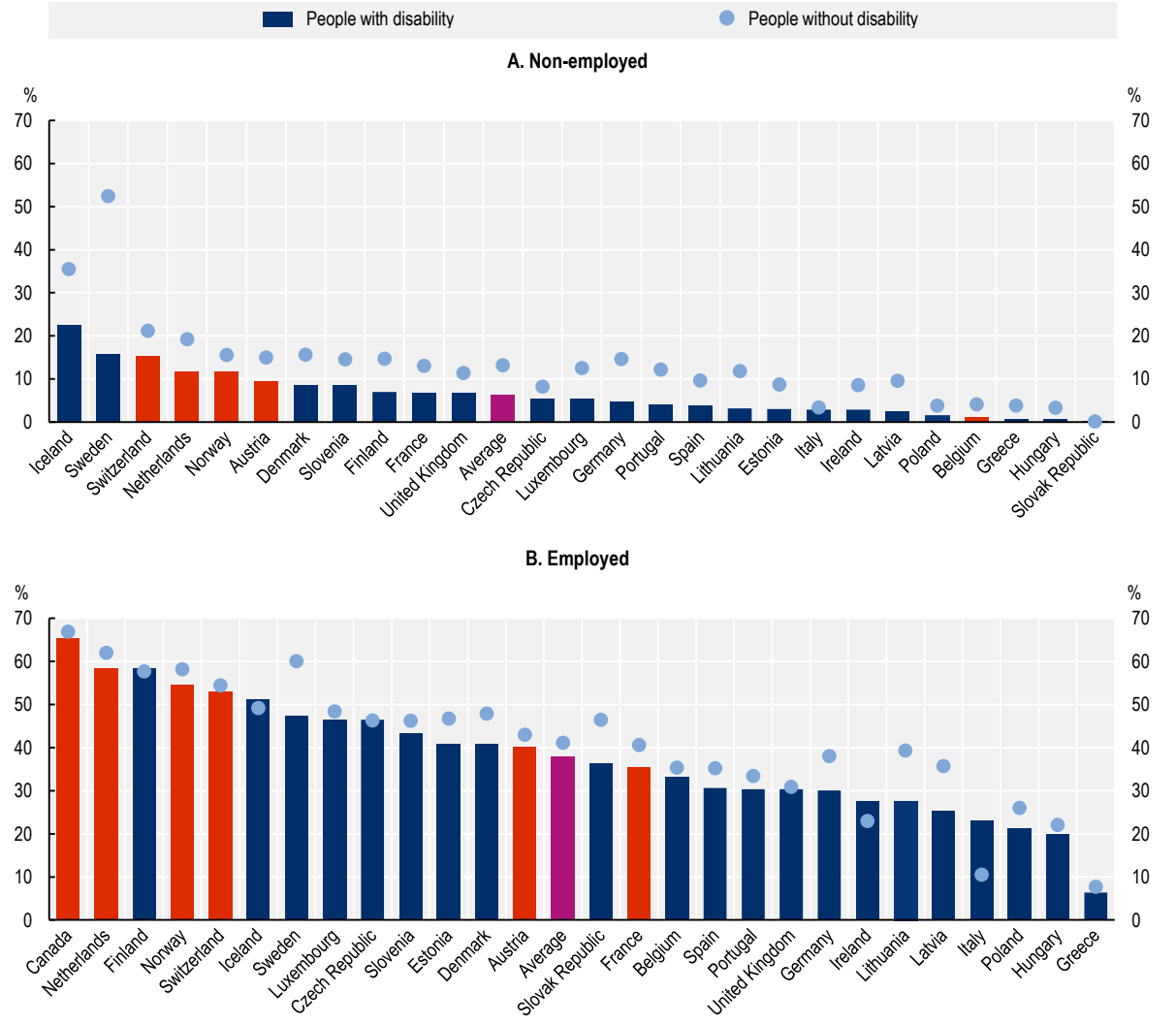
StatLink https://stat.link/zh13fv

Adult learning participation rates are particularly low among non-employed PWD (Figure 6.4, Panel A). About one in 16 non-employed with disability enrolled in adult learning, compared to one in eight non-employed without disability. Rates are too low in all countries, but particularly so in Belgium: only 1% of non-employed with disability indicated to have participated in adult learning. The gap can only partly be explained by differences in age and education.[7]

The lower levels of education, skills and adult learning participation rates act as a major impediment to the labour force participation of PWD. Findings from surveys among employers and PWD in the United States corroborate the importance of education and skills for employment. The three most often barriers to employment for PWD listed by HR staff in the United States all relate to skills or work experience: a lack of qualified applicants (51%), lack of relevant experience (36%) and a lack of requisite skills and training (30%) (Erickson et al., 2014[30]). American jobseekers with disability in a large representative sample most often mentioned not having enough education or training as an employment barrier (41%). Only 39% were able to overcome this barrier (Sundar et al., 2018[31]).

Figure 6.4. The adult learning participation gap is particularly high among non-employed people with disability

Adult learning participation rate among persons aged 15-69 by employment and disability status, 2016



Note: Data for Canada cover ages 15-64. The purple bar represents the unweighted average of the 26 European countries shown in Panel A with the addition of Canada in Panel B.
Source: Data provided by Employment and Social Development Canada from the General Social Survey, (GSS, 2016) and OECD calculations based on the EU Statistics on Income and Living Conditions (EU-SILC) ad-hoc module.

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Employed PWD participate much more often in adult learning and face a smaller adult learning participation gap than non-employed PWD (Figure 6.4, Panel B). In fact, for those who are employed the disability adult learning participation gap is no longer significant when taking into account education and age differences on average across European OECD countries as well as for the five European country cases separately.[8] The higher adult learning participation rates of employed PWD reinforces the importance of bringing PWD into the labour market to facilitate further skill investments in a rapidly evolving world of work.

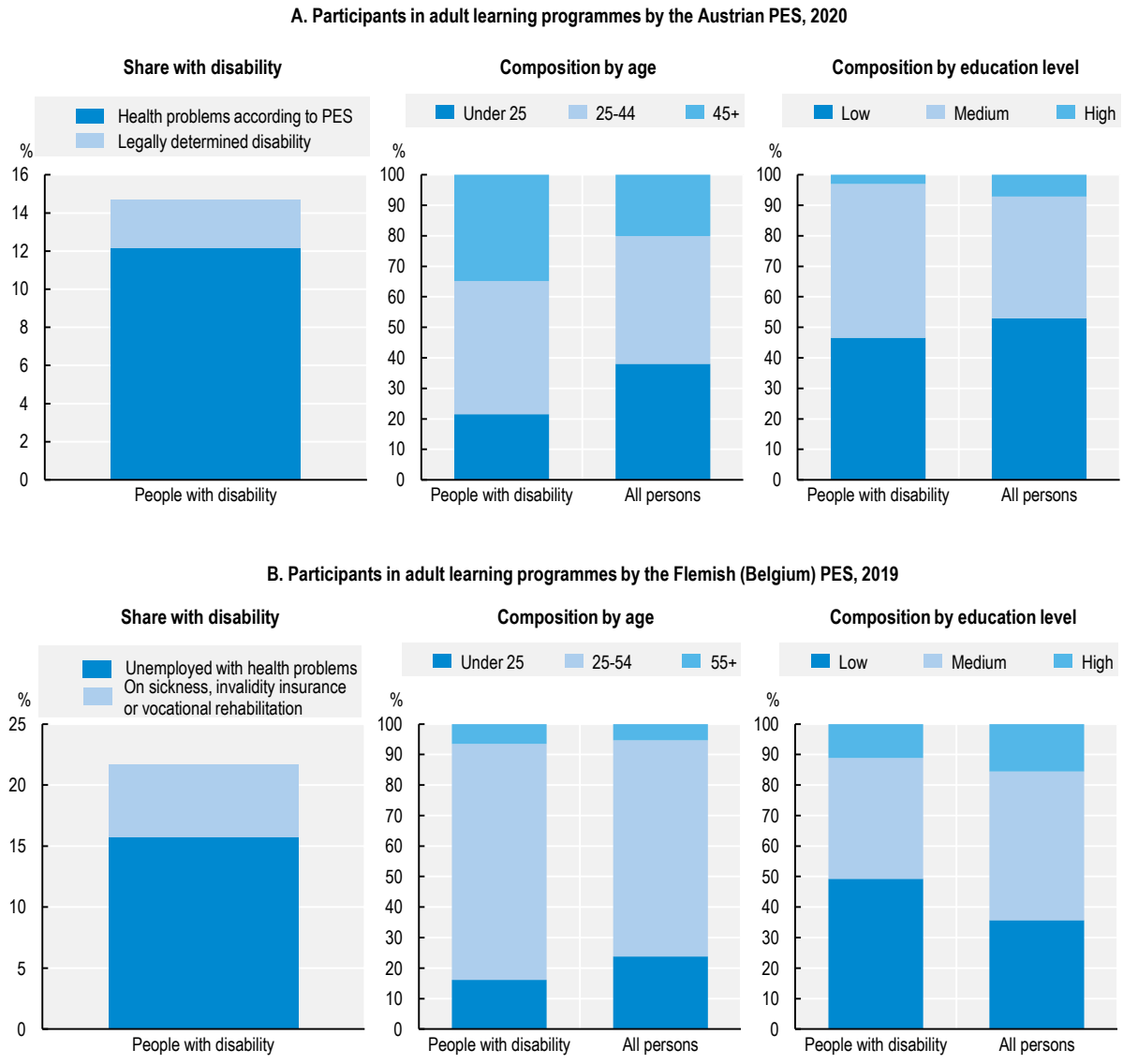
Publicly funded adult learning provided by public employment services (PES) is of major importance for PWD, and for inclusion in general. About 15% of persons availing of adult learning programmes funded by the Austrian PES are either unemployed and have health problems according to the PES or have a legally

determined disability (Figure 6.5, Panel A). In Flanders (Belgium), about 22% of those participating in adult learning organised by the PES are either unemployed and have health problems according to the PES or are on sickness, invalidity insurance or vocational rehabilitation (Figure 6.5, Panel B). PES adult learning programmes are important for inclusion more broadly. Also older and lower educated individuals, who tend to participate less often in adult learning, make heavy use of publicly funded adult learning in Austria and Flanders (Belgium). The national administrative data used for these calculations provide useful illustrations between different groups within countries but may not be fully comparable across countries (Box 6.2).

Very few persons on incapacity (i.e. sickness or disability) benefits – generally less than 1% – make use of adult learning offers from the PES. A principal reason for this is that few register with the PES. Increasing the number of persons on incapacity benefits who register with PES is an essential first step for the promotion of adult learning rates among PWD.

- In **Austria**, the large majority of all PES learners are unemployed (more than 85% in the provided data). About 12% are employed and 2% are out of the labour force. Virtually no people on disability-related benefits make use of PES adult learning, mainly because registration with the PES is not possible for disability pension claimants, only for those receiving transitional benefits. Adult learning participation rates among different registered groups are comparable (Figure 6.6, Panel A).
- In **Flanders (Belgium)**, almost all PES learners were unemployed in 2019 (94% in the provided data). The remaining 6% were on sickness and invalidity insurance or on vocational rehabilitation. This means that less than 1% of recipients of sickness and invalidity insurance or vocational rehabilitation made use of adult learning provided by the PES. Very few persons on disability benefits or workers' compensation make use of PES adult learning.[9] Those few on sickness and invalidity insurance or on vocational rehabilitation who register with the PES actually enrol in adult learning more often than unemployment benefit recipients (with or without health problems) (Figure 6.6, Panel B) – maybe choosing to register in order to participate in adult learning.
- In **Norway**, while many of those on PES programmes that could be defined as adult learning (see definition in note to Figure 6.6) are on incapacity benefit, this is still a low share as percentage of the total population of benefit recipients. One in two adult learners at the PES are on some incapacity benefit (Work Assessment Allowance or Permanent Disability Benefit). The remaining 50% is either unemployed or receiving other or no benefits.[10] The PES administers all benefits, hence, registration is also automatic for recipients of incapacity benefits. Yet, few actually participate in adult learning: only 13% of all Work Assessment Allowance recipients and about 1% of Permanent Disability Benefit recipients with reduced work capacity (Figure 6.6, Panel C). The share of registered persons on Work Assessment Allowance that participates in adult learning is comparable to the share of unemployed.[11]
- In **the Netherlands**, 11% of the PES adult learning courses were taken by disability and sickness benefit recipients between 2012 and 2018 (UWV, 2020[32]).[12] This implies that about 1% of all disability and sickness benefit recipients are enrolled in PES adult learning courses.
- **Also in Ireland, very few inactive and employed PWD make use of mainstream publicly funded adult learning**. Less than 5% of employed and inactive people with and without disability enrol in publicly funded adult learning. On the contrary, as many as about one in four unemployed with disability and one in three of all unemployed enrol (OECD, 2021[33]).

Figure 6.5. People with disability often use publicly funded adult learning in Austria and Belgium



Note: "Unemployed with health problems": Persons on unemployment benefits with health problems assessed by the public employment service. Low educated: primary or lower secondary education ("Pflichtschulausbildung" or "Kortgeschoold", ISCED 0-2). Medium educated: medium to upper secondary education ("Lehrausbildung, Mittlere und Hoehere Ausbildung" or "Middengeschoold", ISCED 3-4). Higher educated: tertiary education and above ("Akademische Ausbildung" or "Hooggeschoold", ISCED 5-8). The educational levels might not be fully comparable across countries. Panel A: Data cover Qualifizierung programmes (partly) funded by the Austrian PES: the Apprenticeship Guarantee (AG25), the Employment Foundation and Training Measures (BM, AST) and Individual Subsidised Qualification Schemes (FKS, GSK, KK, QBN, QFB, SFK). The data exclude persons on disability benefits or workers' compensation. Panel B: Data cover all in-person adult learning programmes and exclude online adult learning. Persons "on sickness, invalidity insurance or vocational rehabilitation": persons on "arbeidsongeschiktheidsuitkering", "invaliditeitsuitkering" and "socio-professionele re-integratie", all provided by RIZIV. The data do not cover persons on disability benefits ("IVT"), on workers' compensation ("Arbeidsongevallen/beroepsziekten"), employees (unless on sickness- or invalidity insurance) or persons on any other benefits.

Source: OECD calculations based on administrative records provided by Austrian and Flemish (Belgium) authorities.

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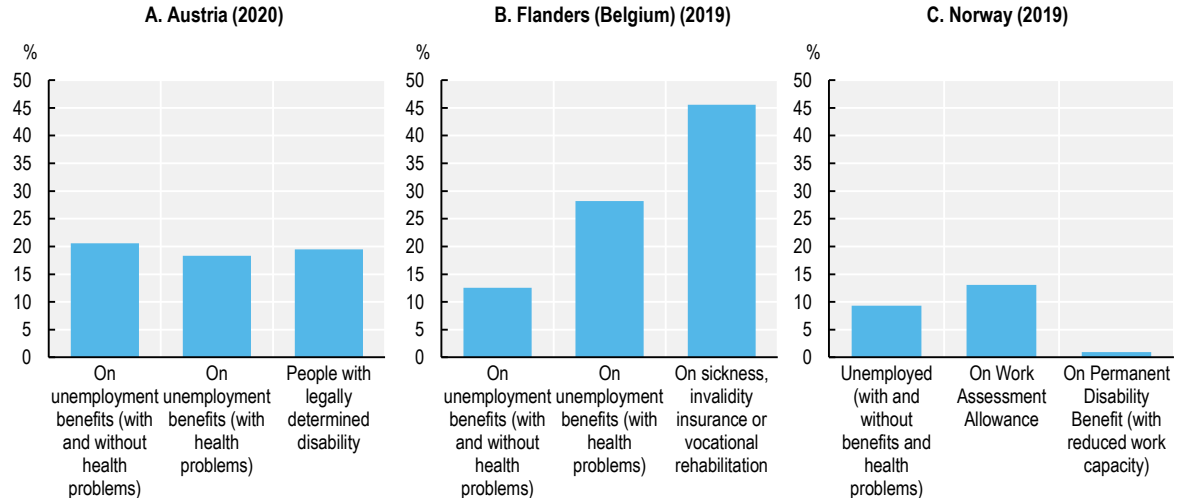
Figure 6.6. Once registered with PES, health problems do not hinder participation in adult learning

Share of different groups registered with the PES who participate in adult learning



Note: See Figure 6.5 for information on data for Austria and Flanders (Belgium). Panels A and C: Data do not distinguish between those on unemployment benefits and those employed but registered as job seeking. Panel C: Adult learning is defined as active labour market policies related to education, training, work practice and work training ("Opplæring" and "Arbeidspraksis").
Source: OECD calculations based on administrative records provided by Austrian, Flemish (Belgium) and Norwegian authorities.

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Box 6.2. Comparability of PES data on adult learning and career guidance

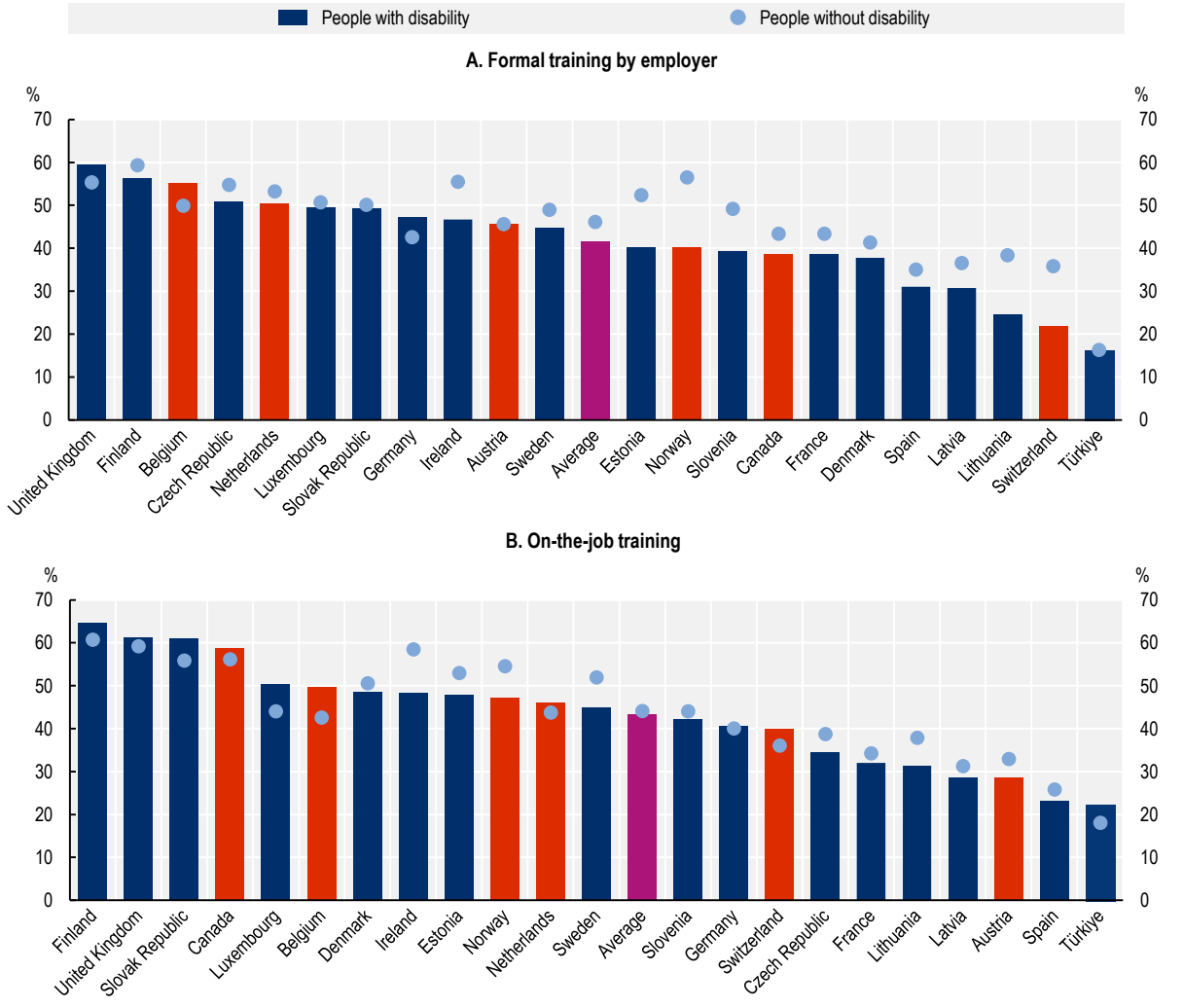
This chapter makes use of administrative PES data provided by Austria, Flanders (Belgium) and Norway. These data provide useful illustrations between different groups within countries but may not be fully comparable across countries for multiple reasons:

- The Austrian data refer to 2020 and are likely significantly affected by the COVID-19 **pandemic**, whereas the Norwegian and Flemish (Belgium) data refer to 2019. For instance, the low entry rates into employment after participation in adult learning likely at least partially reflect the difficulty of entering employment throughout the COVID-19 pandemic (Figure 6.9). The entry into employment for Norway may also be affected by the COVID-19 pandemic, since the data measure entry into employment six months after having completed an adult learning course.
- The **population with disabilities registered at PES** may vary from country to country, depending on the obligations to register and the role of PES in managing health-related benefits and occupational rehabilitation and the **definition of health problems identified by PES**.
- The **definition of adult learning by PES** may differ across countries. For instance, students in ordinary education are included in the definition of adult learning in Austria and Belgium but not in Norway.
- The **role of PES in the adult learning landscape** may differ across countries. Other organisations may also provide publicly funded mainstream adult learning courses (OECD, 2019[2]). The role of PES in providing vocational rehabilitation may differ as well.

PWD who are employed participate less often in formal training provided by the employer, though they participate about as often in on-the-job training as PWOD. About two in five employed PWD participate in formal training provided for or paid by the employer on average across European OECD countries and in Canada (Figure 6.7, Panel A). A similar rate participates in on-the-job training on average across European OECD countries, compared to about three in five employed PWD in Canada (Figure 6.7, Panel B). Employed PWD participate 5 percentage points less often in formal training by the employer. This gap is larger in Norway and Switzerland. The gap seems largely due to the weaker labour market position of PWD. The gap shrinks to about 2 percentage points when employee (education, age and gender), job (occupation, working part-time and type of contract) and firm characteristics (sector and firm size) are taken into account. This suggests that some PWD find themselves caught in a low-skills trap, where their weaker labour market position and lower initial skills level prevents them from developing further through education and training (OECD, 2019[34]).

Figure 6.7. Employees with disability engage less often in formal training provided by the employer

Adult learning participation rate among employees aged 15-69, 2015



Note: The purple bars represent the unweighted average of the 22 countries shown. Data for Canada cover employees aged 15-64 in 2016.
Source: Data provided by Employment and Social Development Canada based on the General Social Survey (GSS, 2016) and OECD calculations based on the European Working Conditions Survey (EWCS).

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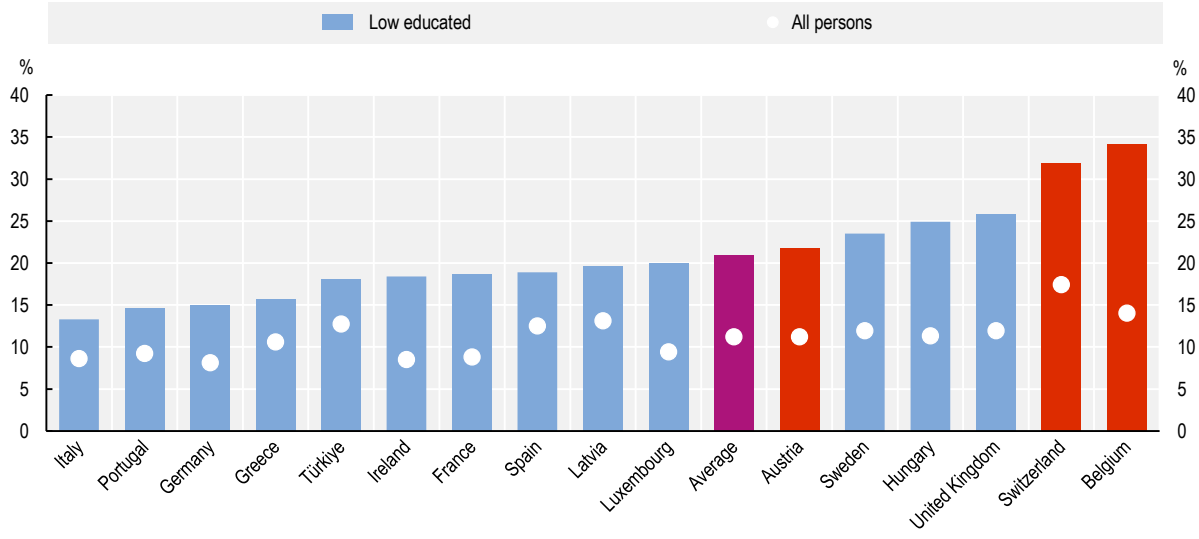
Lower participation rates suggest that PWD face higher participation barriers. Indeed, many low-educated persons wanting to participate in adult learning mention health or age as a barrier to not participating (Figure 6.8). Health or age present particularly often a barrier for low-educated persons in Switzerland and Belgium.[13]

Figure 6.8. Health and age are adult learning participation barriers for many low-educated persons

Share of persons aged 25-64 wanting to participate in education or training but did not participate mentioning health and age as barrier, 2016



Note: The purple bar represents the unweighted average of the 16 European countries shown.
Source: Adult Education Survey, Eurostat dataset: Population wanting to participate in education and training, by reason for not participating and educational attainment level [TRNG_AES_178].

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Employed PWD more frequently face a lack of employer support as an adult learning participation barrier. Different pieces of evidence suggest that a lack of employer support contributes to the lower participation rates in employer-provided formal training of PWD. First, analysis from 2016 *EU-SILC data* shows that 23% of employed PWD across European OECD countries state that their main reason for not participating in adult learning was that the employer did not provide this, compared to 20% of PWOD.[14] Second, PWD state about 25% more often that they asked their employer for training but did not receive it.[15] Third, participants with disability in the British *Unionlearn* programme, discussed in greater detail below (Box 6.4), report more often a lack of managerial support (22% vs. 16%), including for time off for learning (25% vs. 17%) as major adult learning barriers (Stuart et al., 2016[35]).[16]

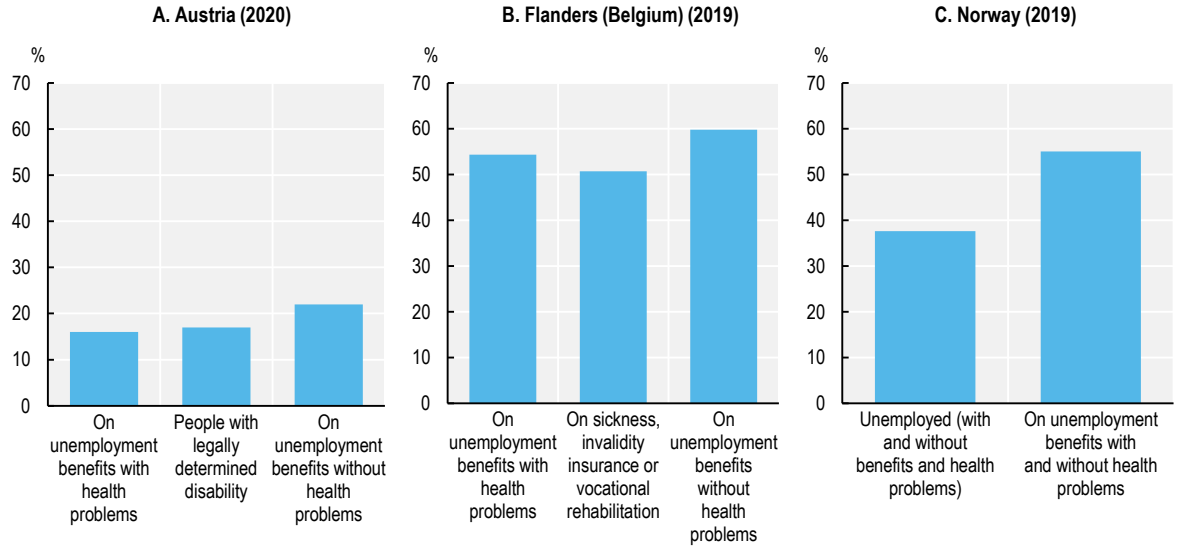
6.4. People with disability may less often receive the training they need

Even when participating, PWD may not always receive the adult learning they need to enter employment or advance in their careers. PWD who participate in adult learning from the PES slightly less often find their way into employment than their peers without disability, though the difference is encouragingly small (Figure 6.9). This finding underlines the importance of adult learning for all, but also to better understand which publicly funded adult learning programmes are most effective for PWD as a priority for further research. Part of the difference in employment outcomes likely comes from compositional differences,

including in age and education. More detailed data for Flanders (Belgium) shows that entry rates into work are similar for young and low-educated PWD and PWOD. Instead, prime-aged, middle and higher educated PWD are in employment after adult learning less often than their counterparts without disability. There may also be differences in type of adult learning that persons receive, with different entry rates into work (see Section 6.4). More generally, whereas comparisons of entry rates between PWD and PWOD within countries are useful, the comparability of entry rates between countries may be low (Box 6.2). For instance, the low rates of entry into employment in Austria and to a lesser extent for Norway likely at least partially reflect the difficulty of entering employment in 2020 throughout the COVID-19 pandemic.[17]

Figure 6.9. People with disability slightly less often enter work after participation in adult learning

Percentage entering employment after having completed PES adult learning



Note: Percentage in employment three months (Austria and Flanders (Belgium)) or six months (Norway) after having completed PES adult learning. See Figure 6.5 and Figure 6.6 for information on data for the three countries. Panel A: Data only cover Employment Foundation and Training Measures (BM, AST). Panel C: Data cover labour market training and education ("Opplæring") and work practice and training ("Arbeidspraksis"). Persons entering employment may still be registered with the PES, may still participate in adult learning and can be employed with or without a benefit (such as a wage subsidy).
Source: OECD calculations based on administrative records provided by Austrian, Flemish (Belgium) and Norwegian authorities.

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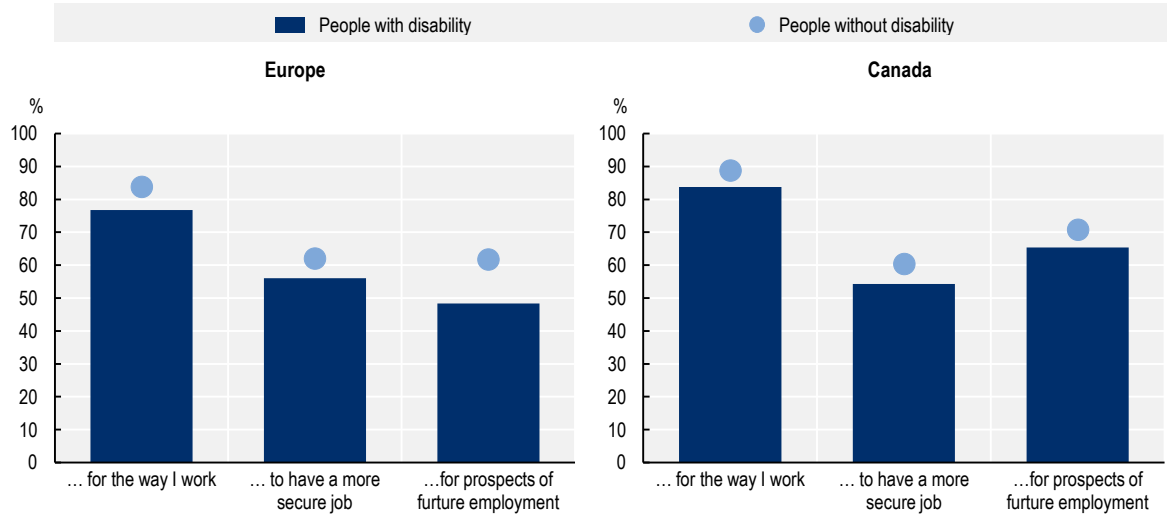
Employed PWD report receiving lower-quality formal and on-the-job adult learning. They are less optimistic about the usefulness of formal training they receive. PWD across European countries as well as in Canada less often state that their training helped them improve the way they work, to have a more secure job or for prospects of future employment (Figure 6.10). The gap is significant, even when taking into account their labour market position.[18]

Figure 6.10. Employees with disability are less optimistic about their adult learning outcomes

For employees aged 15-69 in 2015, the training helped…



Note: Europe is the unweighted average of 21 European countries: Austria, Belgium, the Czech Republic, Denmark, Estonia, Germany, Finland, France, Ireland, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Tûrkiye and the United Kingdom. Data for Canada cover employees aged 15-64 in 2016.
Source: Data provided by Employment and Social Development Canada based on the General Social Survey (GSS, 2016) and OECD calculations based on the European Working Conditions Survey (EWCS, 2015).

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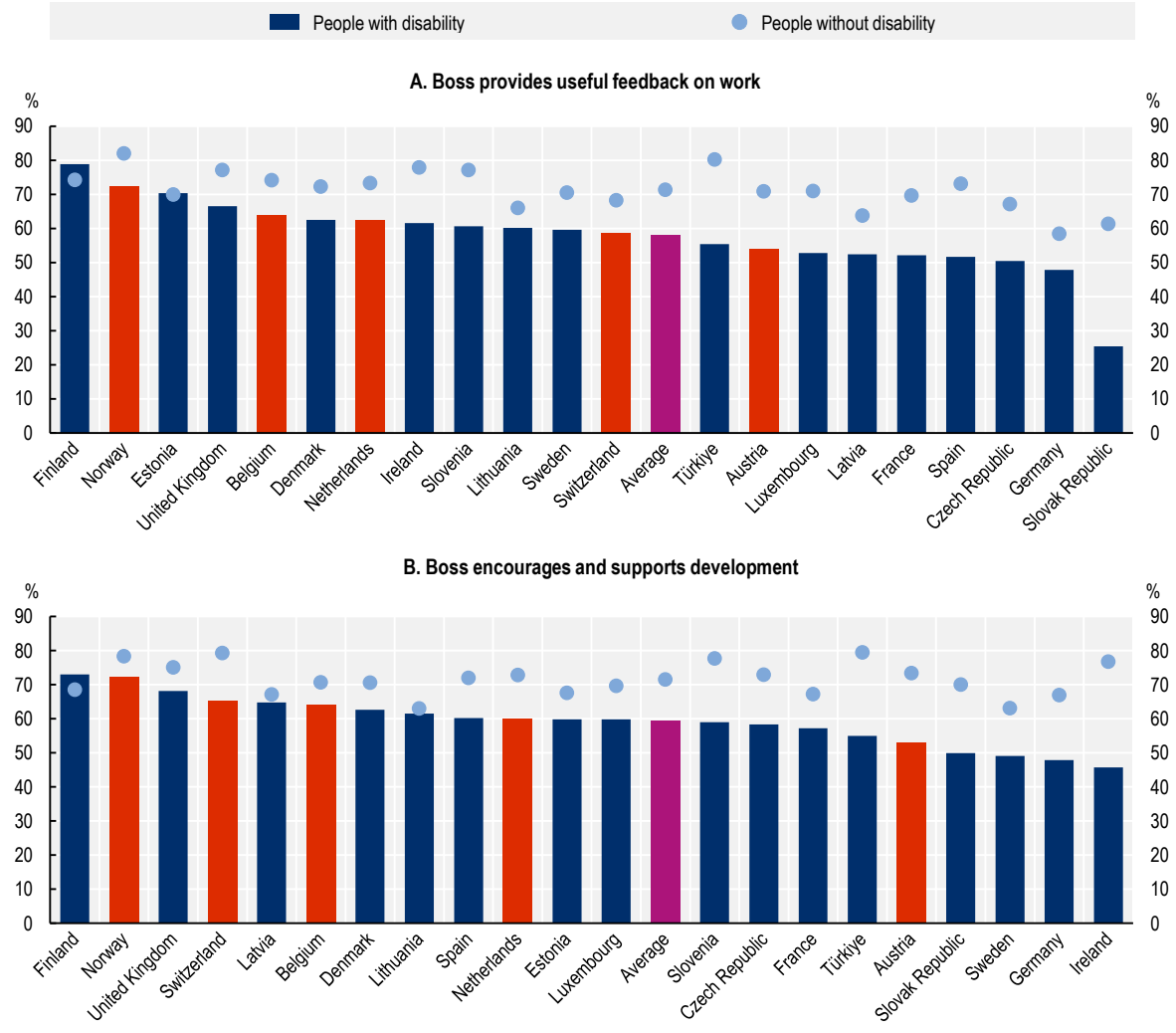
PWD also express worries about the quality of on-the-job training, indicating that they are less supported by their boss in their personal development. PWD state less often that their boss provides useful feedback on their work (Figure 6.11, Panel A), or encourages or supports their development (Panel B). The gap is large and generally significant, even when taking into account their labour market position.

Moreover, PWD more often state that their skills are not well matched with the skills needed to perform their job.[19] The main reason for this is that PWD more often express to be overqualified for their job (Figure 6.12). Particularly many Austrian and Swiss PWD declare a skills mismatch. Skills mismatches have negative consequences for both firms and workers. First, skills mismatches imply that workers are less productive as they do not use their skills to their fullest in their job. Second, high skills mismatches lower the incentives for persons to invest in their skills, and therefore negatively affect human capital accumulation and career developments. Third, skills mismatches reduce allocative efficiency, as more productive firms can less easily hire skilled labour and gain market shares at the expense of less productive firms (McGowan and Andrews, 2015[36]).

Figure 6.11. Employees with disability less often say their boss supports learning development

Share of employees aged 15-69 by disability status, 2015



Note: The purple bars represent the unweighted average of the 21 European countries shown.
Source: OECD calculations based on the European Working Conditions Survey (EWCS, 2015).

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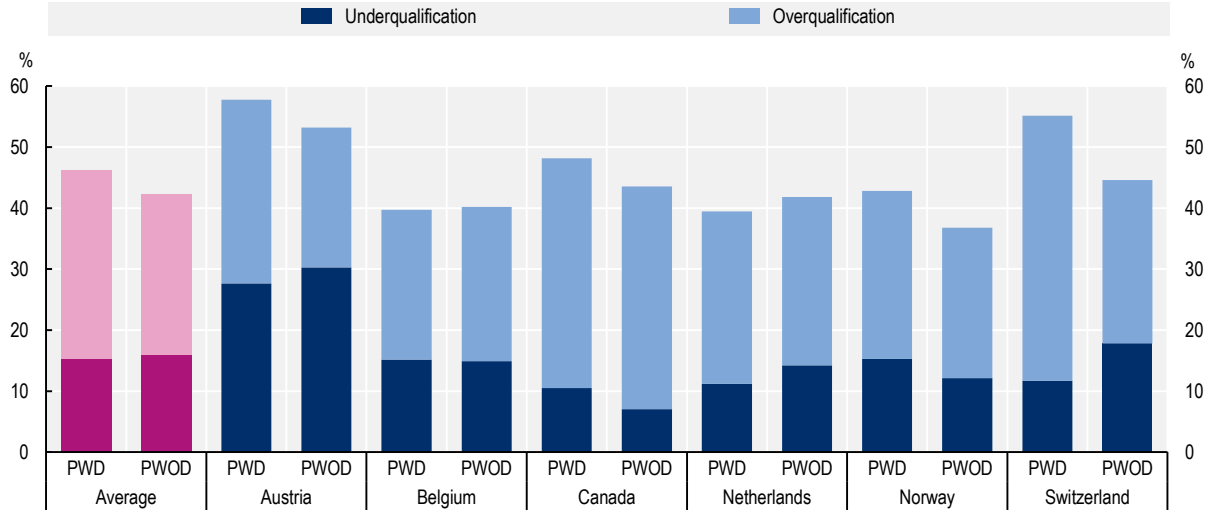
The fact that self-assessed skills mismatches are more prevalent for PWD is worrying for their labour market position and prospects. It suggests that PWD do not apply to or manage to get into more challenging jobs that fit better with their skills. It further means that PWD flourish less in their current jobs, which likely hampers their career development. More generally, it suggests that increasing education and skills alone is not sufficient to improve the labour market position of PWD (Chapter 2).

Figure 6.12. Self-assessed skills mismatch is higher for employees with disability

Share of employees aged 15-69 reporting being underqualified or overqualified in their job, 2015



PWD: People with disability; PWOD: People without disability.
Note: The purple bars represent the unweighted average of Canada and 21 European countries: Austria, Belgium, the Czech Republic, Denmark, Estonia, Germany, Finland, France, Ireland, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Tûrkiye and the United Kingdom. Underqualification: in need of further training to cope well with duties. Overqualification: having the skills to cope with more demanding duties. Data for Canada cover employees aged 15-64 in 2016.
Source: Data provided by Employment and Social Development Canada based on the General Social Survey (GSS, 2016) and OECD calculations based on the European Working Conditions Survey (EWCS, 2015).

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6.5. Towards adult learning that delivers for people with disability

OECD countries, including Austria, Belgium, Canada, the Netherlands, Norway and Switzerland, should improve their adult learning system to get skills right for all – including for PWD. Getting skills right for all is important to have an adequately skilled and future-ready workforce and to promote universal inclusion. Countries that have ratified the United Nations Convention on the Rights of Persons with Disabilities (CRPD) – which include all OECD countries except the United States – are legally required to promote, protect and ensure the full inclusion of PWD in adult learning on an equal basis with others.[20]

This section proposes a set of guiding principles for the design of an adult learning system that delivers for all, including for PWD, irrespective of the main provider of adult learning (i.e. PES and others):

1. Apply an active mainstreaming approach with widely available flexibility
2. Provide clear career guidance
3. Reach out proactively to potential learners
4. Make adult learning relevant for employment
5. Build capacity of and encourage employers to train in an inclusive fashion
6. Tackle time and financial barriers

The section illustrates these six guiding principles by providing examples of promising practices and identifying room for improvement for the six country cases. It goes beyond the purview of this section to comprehensively review the performance of the entire adult learning system for PWD, given the breadth and complexity of these systems in the six country cases (OECD, 2019[2]).[21]

1. Apply an active mainstreaming approach with widely available flexibility

Formal education and publicly funded adult learning should be based on a mainstreaming philosophy. Persons with any additional needs should participate as much as possible in the same class or school as persons without additional needs. Mainstreaming is an effective strategy to get the basic system right for everyone, including for PWD in the open labour market. It further helps to prevent segregation and stigmatisation. It also minimises the necessity for persons to disclose their additional needs. Finally, emerging evidence for the United States shows that PWD participating in mainstream education programmes have better employment outcomes. Students with disability enrolling in mainstream programmes obtain more often paid employment and enjoy higher salaries (Qian et al., 2018[37]; Grigal et al., 2019[38]).[22]

First, mainstreaming requires a formal education and adult learning system built on *Universal Design* from the outset. This means that the system should be designed in such a way that (virtually) everyone can access, understand and benefit from it, irrespective of their needs or ability (Story, Mueller and Mace, 1998[39]). Countries can draw from the rich guidelines and evidence on developing learning systems, material and software based on Universal Design collected by the non-profit research and development organisation CAST (www.cast.org). More detailed guidelines based on the CAST framework have been created for instance for online adult learning (Rogers-Shaw, Carr-Chellman and Choi, 2018[40]). Canada has set up the 2019 Accessible Canada Act to make Canada without barriers by 2040, although the act only extends to the federal jurisdiction and education is the responsibility of individual provinces and territories, some of whom have accessible education standards in place (DESD Canada, 2021[41]). There are a number of federal skills programmes with targeted adult learning support for PWD, such as the Opportunities Fund for Persons with Disabilities and earmarked federal funding for PWD for provinces and territories (Employment and Social Development Canada, 2018[42]).[23] Norway was an early adapter, presenting in 2009 its action plan "Norway universally designed by 2025" that covers formal education and adult learning (Norwegian Ministry of Children and Equality, 2009[43]).[24] A promising practice is the case of Ireland, which has made significant steps to create a formal education and adult learning system built with a Universal Design in mind (Box 6.3).

Second, all adults, including all benefit recipients, should have access to all mainstream publicly funded adult learning, as everyone is a potential learner. This includes that enrolment in adult learning should not affect benefit entitlement. Currently, too many people on disability benefits do not receive adult learning (see Section 6.3). The PES is a key provider of publicly funded mainstream adult learning in the six country cases. While persons on unemployment benefits have access to these services, this is not always the case for persons on different sickness or disability benefits, or for employed PWD (Table 6.1). Certain countries demand that people have proof of remaining work capacity to be able to register with the PES. This is the case in Austria (beneficiaries on disability benefits and paid sick leave), Switzerland (disability benefits, paid sick leave and workers' compensation) and the Netherlands (disability benefits).[25] Restrictions are stronger still in Austria for people on permanent disability pensions who need a referral from the Department of Social Affairs to register. Once they register, they lose their disability benefit entitlement. They can register with the Department of Social Affairs, but this organisation only offers segmented adult learning and career guidance such as sheltered employment. Switzerland and British Columbia (Canada) focus their more intensive training measures and counselling primarily to unemployment benefit recipients.[26] That said, British Columbia has a well-established adult basic education system that is tuition free for all citizens outside the PES, delivered primarily by post-secondary institutions and school districts (OECD, 2020[44]).

Table 6.1. Disability benefit recipients cannot access mainstream publicly funded adult learning

Access to mainstream publicly funded adult learning provided by public employment services

	Austria	Flanders (Belgium)	British Columbia (Canada)	Netherlands	Norway	Switzerland
Disability benefit recipients						
Paid sick leave recipients						
Workers' compensation recipients				(Benefit does not exist)		
Unemployment benefit recipients (with identified disability)						
Employed person with disability not receiving any benefits						

Note: Light blue: benefit recipients have access. Darker blue: benefit recipients can have access under certain conditions or to a limited training offer. Darkest blue: benefit recipients (essentially) do not have access.
Source: 2021 Disability Inclusion questionnaire.

Third, mainstreaming necessitates an active engagement and awareness of adult learning providers and teachers. Providers and teachers should view it as their responsibility and be able to instruct as many learners in the classroom as possible and help identify learners in need of further accommodation. For this, providers and teachers require access to authoritative and accessible guidelines how to identify and support learners with disability. These guidelines should go beyond compliance requirements and promote best practices. Furthermore, inclusive education and disability awareness should be part of the teacher curriculum. Again, countries can draw from the rich material on curriculum design and courses on effective inclusive learning from CAST (www.cast.org). Austria's training for all teachers contains a compulsory module on inclusive education and disability awareness, since its adoption of the *New Teacher Training* guidelines in 2013. Its PES also demands that its contracted out services have taken inclusive learning modules. Such modules exist but are not compulsory for adult learning teachers in Flanders (Belgium), the Netherlands and Norway (ANED, 2021[45]).

Fourth, the adult learning system should be held accountable for mainstreaming. This firstly includes clear budget lines to resource supports to learners with disability in the mainstream system. Dedicated budget is particularly important in a mainstreaming system, to make sure that a sufficient part of investment goes to PWD. Governments should use such budget lines as an instrument to promote mainstreaming, by requiring mainstream establishments to transfer budgets in case of referrals. Governments should further set out clear institutional targets for the inclusion of adult learners with disability. There is little information available whether the six country cases use financial incentives and institutional targets to promote inclusion, although this is of vital importance for effective mainstreaming. The Austrian National Action Plan on Disability 2012-20 stresses that universal accessibility should be an important principle when awarding government funding for adult learning to (private) providers. The evaluation of the action plan states that the government has only partially accomplished this, without more detail (Austrian Sozialministerium, 2020[46]). More generally, countries should track adult learning participation and consecutive labour market outcomes of PWD to hold the system responsible for inclusion. The Austrian, Flemish (Belgium) and Norwegian PES are promising practices to follow in this regard, as is evident from the figures displaying their data in this report.

Fifth, the adult learning system should accommodate individualised learning pathways by means of widely available flexibility in content and provision. Mainstreamed accommodation reduces the need for learners to disclose their preferences and constraints, including health problems. Many learners, such as PWD, migrants and older persons can benefit from access to simplified language course material. Equally, many

learners including those with disability and with family commitments would gain from possibilities for part-time enrolment and distance, blended and modular courses to shape their own learning path in their own time and place (Kis and Windisch, 2018[47]). Distance learning can be particularly helpful for learners for whom it is physically or mentally more demanding to come to a learning facility at a set hour. Blended courses that combine face-to-face and distance learning are particularly promising, as they still allow learners to benefit from direct contact with teachers and classmates to improve both technical knowledge and social skills (McGinty, 2018[48]). Modular learning provides flexibility by allowing individuals to work towards a full qualification over time by successively adding self-contained modules to their learning portfolio, in contrast to traditional learning programmes that require full completion to gain a qualification (OECD, 2019[34]).

The extent to which publicly funded adult learning is flexible differs across countries and type of adult learning. For instance, the Centres of Adult Education in Flanders (Belgium) are a promising practice, by providing adult learning in an almost fully modular format (Box 6.3). The courses provided by the Flemish PES courses are less flexible by themselves, though flexible learning is still generally possible by means of a generous offer of courses. Higher education institutions however, in particular universities, offer little flexibility, which may explain why few adults enrol in their programmes (OECD, 2019[49]).

Box 6.3. Promising practices of Universal Design in Ireland, modular learning in Belgium and Denmark and profiling learners in Dublin

Ireland has underscored its ambition for a formal education and adult learning system based on Universal Design in its National Planning Framework for Project Ireland 2040 (Government of Ireland, 2018[50]). The country has taken a frontrunner position in advancing towards an adult learning system built on Universal Design, although it is not yet there. The independent non-profit organisation AHEAD that aims to create inclusive education and learning environments has published a conceptual framework of Universal Design for formal education and adult learning, commissioned by the Irish state agency SOLAS responsible for funding, planning and co-ordinating of publicly funded adult learning. AHEAD has recently published concrete guidelines for adult learning providers to implement Universal Design, which were written in consultation with stakeholders. The Centre for Excellence in Universal Design of the Irish National Disability Authority (NDA) was heavily involved in the design of these guidelines (OECD, 2021[33]).

Adult learning provided by the Centres for Adult Education in Flanders (Belgium) is almost entirely modular. The Centres account for more than half of all formal adult learning in Flanders. The Centres provide a wide range of literacy, numeracy, ICT and social skills courses. Learners obtain a partial certificate after each module they attend, which can lead to a full qualification (OECD, 2019, p. 72[49]). The system provides particular support to low-skilled adults and PWD. These groups benefit from lower fees (between EUR 0-EUR 0.30 rather than EUR 1.50 per hour) and are entitled to extra learning support and adjusted learning materials (OECD, 2019[49]).

The Danish adult learning system provides high flexibility to its learners, allowing them to tailor their education and training programme based on their individual needs (Desjardins, 2017[51]). Learners can combine modules from different training providers and across multiple subjects. For example, learners aiming to attain a vocational qualification can select from a wide range of vocational training courses from Labour Market Training Centres (Arbejdsmarkedsuddannelse) but also enrol in courses provided by the general education system. Adults can also follow modules at universities. For instance, Danish bachelor programmes have a modular structure (OECD, 2019, p. 73[49]).

The Technological University Dublin (Ireland) has adopted an online tool, called *Do-It profiler*, which screens and profiles all students at the point of their induction on a volunteer basis. Students making use of the service receive immediate feedback on their learning styles with some suggestions about how best to study. About 10% of the screened students are profiled with a possible learning difficulty that may require additional support. These students are invited for a meeting with the institute's educational support service. Uptake of this invitation is high. The profiler helps to identify those in need of more support immediately at the beginning of their studies. Moreover, teachers can access learning style profile reports to tailor teaching approaches to the needs of the class group (ETBI, 2018[52]; OECD, 2021[33]).

In Austria, PES programme guidelines generally do not allow for provision in the evenings, weekends or modular blocks. The minimum intensity is 16 hours per week. There are specific programmes that offer more flexibility, such as the modular training programme *Kompetenz mit System* at apprenticeship level for persons with recurring periods of unemployment. The system also offers more online courses since the COVID-19 pandemic. Dutch private providers generally offer wide flexibility, though this is not the case for higher education institutions such as universities (OECD, 2017[53]). Swiss law explicitly acknowledges that equal opportunities in access to adult learning involves adaptation of the duration and organisation of adult learning offers for PWD.[27] A promising practice of prevalent flexibility throughout the adult learning system comes from Denmark (Box 6.3).

Sixth, learners need to have access to continuous and proactive support where needed. Dedicated and knowledgeable access officers should be responsible for continuous and one-stop shop support at course entry, throughout the course and afterwards towards further learning and sustainable employment. Ideally, support should be proactive. As many learners may not disclose constraints, countries may consider implementing a standardised process that screens all learners at point of entry to identify any additional needs. In Canada, each adult learners at Novia Scotia's Community College, a network of 14 campuses, is assigned a faculty advisor who provides support throughout the programme to achieve their individual career and academic goals. The faculty advisor can help the student to access learning supports, academic accommodations and tutoring programs. The Netherlands provides possibilities for extended learnings paths and individual guidance throughout secondary and higher professional education. A promising example of screening comes from the Irish Technological University Dublin (Box 6.3).

Seventh, PWD should play an active role in the design of adult learning systems. A truly inclusive system requires that all voices are heard. Active involvement helps to ensure that the adult learning system is designed with bodies and abilities of PWD in mind. It further empowers PWD, as expressed by the motto "Nothing About Us Without Us". A first example comes from Flanders (Belgium), where the PES uses focus groups of employees who are part of the target groups for inclusion, including employees with disability. The VDAB also reports on the share of employees with disability – 4% in 2019 (VDAB, 2021[54]). Disability interest groups can play a role as well, and can provide a perspective of non-employed and employed PWD. For instance, Norway has established permanent contact forums and focus groups for PWD within relevant directorates, including in the departments of labour, education and training and health. Each municipal and county authority are required by law to set up an advisory council for PWD (Norwegian Ministry of Children and Equality, 2018[55]). Such focus groups of PWD are also actively involved in the creation of the strategy to increase secondary education completion rates in Norway (Norwegian Ministry of Education, 2021[56]).

2. Provide clear career guidance

Career guidance helps adults to appreciate the importance of learning and to make well-informed educational, adult learning and occupational choices in a constantly evolving world of work. Many organisations provide career guidance services, including private providers and publicly funded career services such as the PES (OECD, 2021[57]).

Persons facing labour market disadvantage, including PWD, have much to gain from career guidance services. PWD more often are unemployed, inactive or in lower quality jobs and have higher training needs. Moreover, they may be less aware of promising training avenues and may opt for no or less demanding training as they are more risk-adverse or lack confidence (Klein, Iannelli and Smyth, 2016[58]).

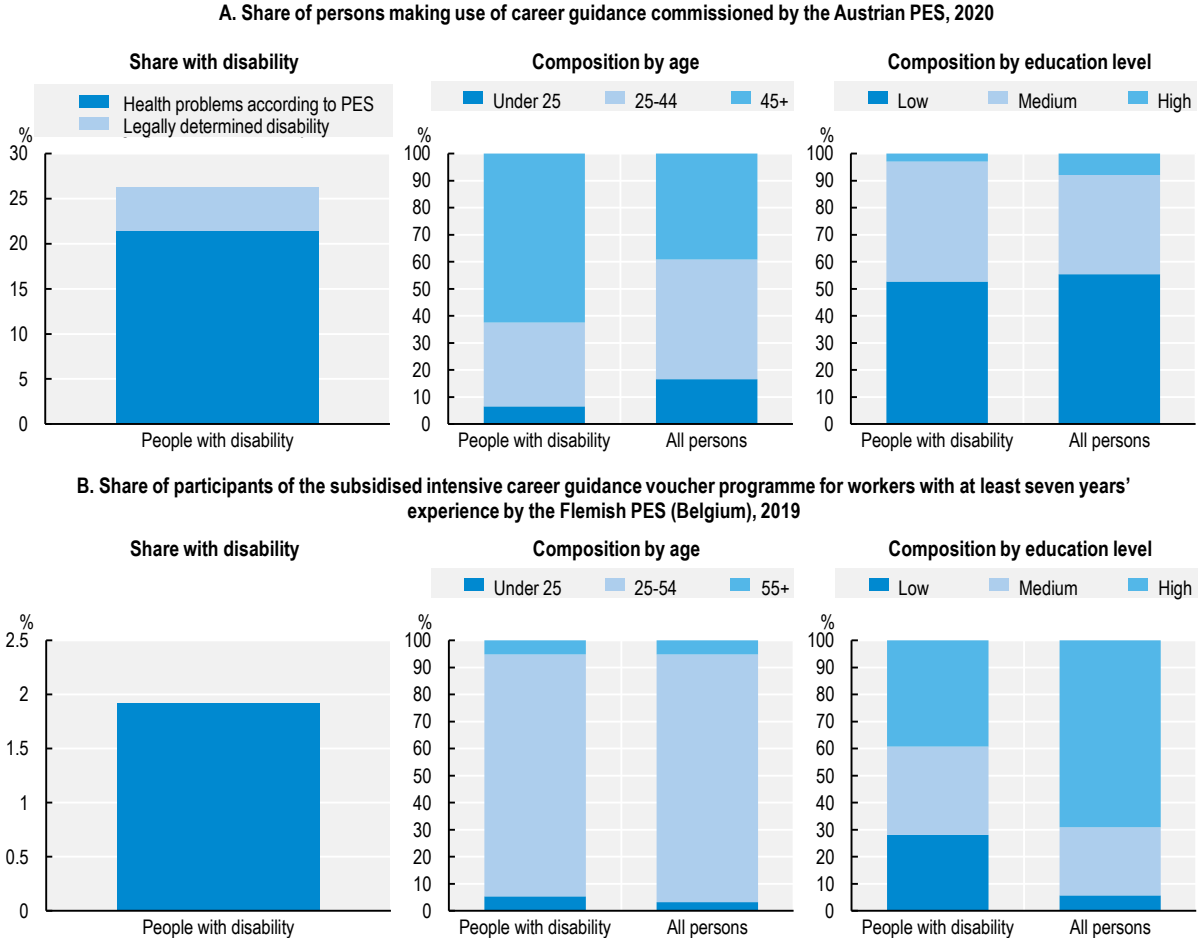
Whilst career guidance services can be particularly helpful to persons facing labour market disadvantage, they tend to use them less often. Evidence for Chile, France, Germany, Italy, New Zealand and the United States from the *OECD 2020 Survey of Career Guidance for Adults* shows that older and lower educated adults avail of career guidance services in general much less often.

For persons facing labour market disadvantage, career guidance provided by publicly funded institutions is particularly important.[28] Administrative records for Austria show that a relatively high share of people availing of career guidance commissioned by PES have a disability, is older or has a lower education (Figure 6.13). Conversely, PWD may less avail of career guidance targeted to persons already in the labour market, when this measure is offered by the PES. Participants of the Flemish (Belgium) career guidance voucher programme offering highly subsidised intensive career guidance of up to seven hours for workers with at least seven years work experience tend not to have a disability, are generally prime-age and higher educated.[29] Participants with disability making use of this programme tend to ask more questions on rehabilitative work and work accommodation, whereas participants without disability pose more questions on career advancement and leadership (VDAB, 2019[59]).

Countries can improve their career guidance offer to PWD in multiple ways. Countries should have a high-quality online career guidance portal built on Universal Design principles. Online portals are important for PWD who may appreciate flexibility of time and place more. Online portals have become even more vital throughout the COVID-19 pandemic (OECD, 2021[27]). High-quality online portals integrate information on availability, costs and quality of education and training programmes, up-to-date labour market information and available financial support. They further help persons understand what skills they have and provide ways to communicate directly with a career guidance advisor to ask questions and interpret the information. This should be all centralised in a single portal to prevent fragmentation. The portal should be built on Universal Design principles so that PWD can use them effectively. All OECD countries have space to improve their online portal, and can learn from experiences of identified promising practices (OECD, 2021[57]). Norway launched in 2020 a national digital career guidance service, including an e-guidance service for end-users as well as for practitioners (*www.karriereveiledning.no*). The service has been built with accessibility in mind. It presents easily accessible self-help online information as well as guidance to local in-person services (Norwegian Ministry of Education and Research, 2016[60]).

Countries should offer high-quality in-person career services that are free for all. In-person services are important for PWD to identify fitting pathways into work, promote self-confidence and motivation and improve career and training-search efficacy (Solberg et al., 2012[61]). Moreover, in-person services are of particular importance for PWD ability as they more often lack digital access and skills. In Norway and the Flemish and German-speaking parts of Belgium, all individuals have the statutory right to career guidance, forcing governments to offer universal career guidance services. Austria and Wallonia (Belgium) do not have such universal legal right, but offer their services freely to all adults (OECD, 2017[62]). Instead, access to career guidance in Switzerland varies by canton. It is generally free for low-skilled and low-income individuals. Austria is a promising example of high-quality career guidance services.

Figure 6.13. Publicly funded and widely available career guidance is important for persons facing labour market disadvantage



Note: Panel A: Data cover career guidance provided by educational institutions that have been commissioned by the Austrian PES (*Beratungs- und Betreuungseinrichtung*). Data cover persons registered with the PES and exclude people on disability benefits or workers' compensation. Low educated: primary or lower secondary education ("Pflichtschulausbildung", ISCED 0-2). Medium educated: medium to upper secondary education ("Lehrausbildung, Mittlere und Hoehere Ausbildung", ISCED 3-4). High educated: tertiary education and above ("Akademische Ausbildung", ISCED 5-8). Panel B: Persons availing of the career guidance voucher ("loopbaancheque"). Eligible persons are principally employees and self-employed with at least seven years work experience. People with disability have been identified as having a disability by the PES. Low educated: below secondary education. Medium educated: secondary education. Higher educated: above secondary education. The educational levels might not be fully comparable between countries.
Source: OECD calculations based on administrative records provided by Austrian and Flemish authorities.

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Career guidance should be personalised, by addressing the adult learning and employment barriers that people face. PES career guidance services generally provide personalised services that are more intensive for groups at a greater distance of the labour market (Desiere, Langenbucher and Struyven, 2019[63]). Countries may propose more extensive personalised services to particular groups facing larger barriers. Several OECD countries, including Canada and Norway, have career guidance services for early school leavers and students with additional education needs (Brussino, 2020[64]). Austria's online portal (www.erwachsenenbildung.at) includes specific support for low-educated learners to overcome fear to go back to learning and how to learn effectively (OECD, 2021[57]). Moreover, its main vocational rehabilitation provider (*Berufliches Bildungs- und Rehabilitationszentrum*) offers integrated and personalised career

guidance particularly relevant for PWD, provided by certified providers. In 2019, about 65 000 individuals availed of these services. Canada Pension Plan (CPP) provides career guidance and occupational vocational rehabilitation to its disability benefit recipients with regained work capacity who wish to return to work. The Netherlands offers more intense career guidance to workers aged 45 and above; an age group among which disability is more prevalent. The advice provides insights on the workers' current job, competences, and future career prospects as well as on staying employed until retirement and favouring a smooth transition into retirement (OECD, 2021[57]). Switzerland launched a free career assessment for people aged 40 plus in 2021 in 11 cantons called *viamia*. In 2022 the policy was implemented as the evaluations were positive. An interesting example are the French one-stop career guidance shops (*Conseil en Evaluation Professionne, or CEPI*) that offer free and personalised advice to anyone wishing to receive guidance. Users can find their professional development advisor on an accessible website, which guides the user to a specialised CEP organisation tailored to their personal situation (e.g. employment status, age, or disability). In a first step, the client is invited for a one-to-one interview for a personalised assessment of skills and experience. Next, the CEP adviser and client develop together a professional plan, including any recommended training. The CEP adviser continues to provide support to the client when executing the professional plan (OECD, 2021[57]). First evaluations indicate the importance of better equipping CEP advisers with knowledge on health issues, in order to help identify clients in need of further accommodation (Rougier and LeGrand-Jung, 2016[65]).

3. Reach out proactively to potential learners

Reaching out proactively to groups that participate less often in career guidance and adult learning using existing relationships helps them connect with adult learning. An important reason why many groups facing a labour market disadvantage participate less often in training is that they find it more difficult to recognise their learning needs and enquire less often into training opportunities. On average across European OECD countries, only 12% of adults with low skills looked for learning opportunities compared to 36% of adults with high skills, according to the 20*16 Adult Education Survey* (OECD, 2019[34]).

Public authorities should reach out proactively to potential learners on sickness and disability benefits using their benefit provision network. As shown previously, benefit recipients cannot always register with PES nor access publicly funded adult learning and career guidance (Table 6.1). Even if they register, they rarely enrol. This truly is a missed opportunity, firstly, since reaching out can be easily organised through the disability benefit and support system, and secondly, data presented in this chapter show very promising entry rates into employment after having finished adult learning (Figure 6.9). Indeed, further evidence supports the view that adult learning is one of the most efficient ways for labour market re-integration, in particular among low-educated jobseekers and long-term unemployed (Card, Kluve and Weber, 2018[66]; Kruppe and Lang, 2018[67]). The Dutch PES, for example, has conducted an experiment in which disability benefit recipients were approached to promote training as part of their re-integration, with promising results (Box 6.4). There are some examples of proactive outreach, but it remains scattered and voluntary. For instance, the Flemish Government has initiated a policy with additional funding for additional career guidance and adult learning for people on disability benefits, in collaboration with the PES and disability insurance organisations. Participation is voluntary and requires the agreement of a doctor that the person has remaining work capacity (Flemish Parlement, 2021[68]).

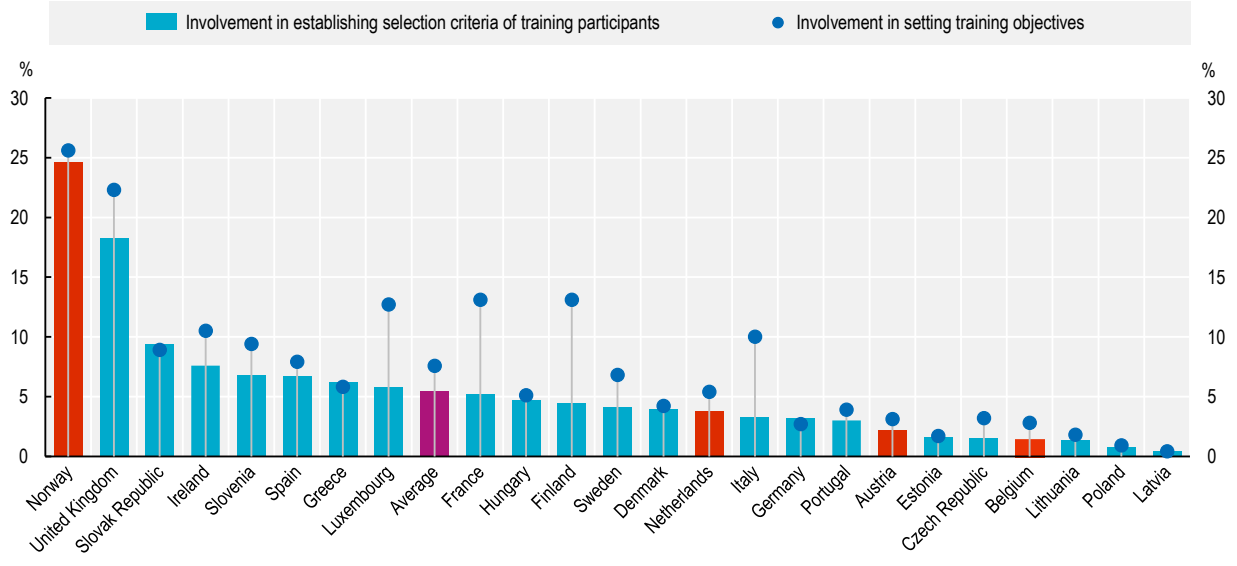
Countries may consider going even further by making career guidance and possibly adult learning obligatory for certain groups on reduced work capacity benefits, such as young persons, as well as individuals who enter disability benefits or who acquire a disability and have significant remaining work capacity. Countries may want to adopt a mutual-obligations framework, in which governments have the duty to provide benefit recipients with effective career guidance and adult learning services, and in turn, beneficiaries have to participate in the offered services to improve their employability (OECD, 2018[69]). Voluntary participation provides disappointing results. For instance, in 2020, 3 602 disability benefit recipients participated in the Flemish initiative for additional career guidance and adult learning; about 3%

of the disability benefit population.[30] In a concept strategy, the Flemish Parliament does not seem ready to make participation obligatory (Flemish Parlement, 2021[68]). The Dutch Government is planning to make registration with the PES obligatory for people on disability benefits with remaining work capacity. In the new regime, all new registrants will write together with the PES a re-integration plan, with follow-up support for five years. Countries may draw inspiration from rehabilitation and workers' compensation schemes, where obligations for training and reintegration are generally stronger. An interesting case in this regard is the 2014 reform in Austria. The reform abolished the temporary disability benefit and replaced it by either a rehabilitation benefit, for people in need of medical or occupational rehabilitation, or a retraining allowance for persons who can no longer carry out the occupation they were trained for. The PES is since then responsible for paying the retraining allowance and offering training to those people with the goal to reintegrate them into the labour market (Fuchs et al., 2018[70]).

Employees with low skills can be encouraged to participate in adult learning by means of outreach through the workplace. The workplace is one of the key places where individuals identify their training needs and take part in training opportunities. Trade unions and staff representatives can provide a bridging function to help employees voice their training needs to their employers. The extent to which staff representatives are involved in establishing selection criteria for training participants and setting training objectives varies substantially across OECD countries. Whilst in Norway staff representatives have a say in about one in four firms with at least 10 employees, this is the case in less than 5% of firms in the Netherlands, Austria and Belgium (Figure 6.14).

Figure 6.14. Staff representatives are not often involved in the organisation of adult learning

Share of firms with 10 employees or more with staff representative involvement in training elements, 2015



Note: The purple bar represents the unweighted average of the 24 European countries shown.
Source: Continuing Vocational Training Survey (CVTS).

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The British *TUC Unionlearn* programme trains Union Learning Representatives (ULRs), who help workers identify training needs and arrange learning opportunities within their companies. Independent evaluations show promising results, including for PWD (Box 6.4). The Canadian Union Training and Innovation Program (UTIP) supports union-based apprenticeship training, with an emphasis on supporting access to trade careers for key groups facing barriers, including PWD.

Interest groups from the disability sector can facilitate a pathway to engage persons with adult learning and career guidance. Interest groups are aware of the diverse needs and circumstances of their cohorts and have a network. For instance, the Dutch Academy for Self-Reliance (*Academie voor Zelfstandigheid*), a collaboration between disability interest groups, the disability and health sector and adult learning providers, provides support to persons with additional needs to participate in adult learning and to live independently. The Academy also provides guidelines to adult learning providers how to support learners with additional needs (Artéduc, 2020[71]). The Flemish interest group *Rentree* provides career guidance to former cancer patients back to work, in collaboration with the Flemish PES (Flemish Parlement, 2021[68]).

Many countries also use awareness campaigns to reach potential learners, although there is little evidence that such campaigns are successful. The German campaign *Nur Mut – Der nächste Schritt lohnt sich. Besser lesen und schreiben lernen*, aimed to engage adults with low-literacy skills by means of TV and radio advertisements and posters. The evaluation noted that it raised overall awareness of the importance of literacy, but was not effective in reaching the target group itself. The Portuguese *New Opportunities Initiative* campaign suffered from similar problems (OECD, 2019[34]). Switzerland launched two campaigns in 2017 on prior learning recognition and improving basic skills, but these have not been evaluated. Flanders (Belgium) has campaigns promoting lifelong learning (*Work Up Call*) and the use of services of its PES for all adults (*En iedereen beweegt*). Both campaigns are organised in collaboration with the social partners. Evaluations generally indicate that campaigns are not very successful in increasing adult learning participation rates (OECD, 2019[34]). It seems unlikely that broad campaigns will work better to engage PWD, as they may face additional learning barriers and require more personalised support.

Box 6.4. Reaching out to potential learners in the Netherlands and the United Kingdom

In the Netherlands, the *No Limits at Work* research agenda aims to expand the knowledge base on effective training for bringing disability benefit recipients back to work. The PES offers 11% of its trainings to disability benefit recipients, although this still only covers 1% of the total benefit population. The initiative to enrol in adult learning can come from the benefit recipient, the PES, the employer or an organisation involved in re-integration. Clients who followed the training were relative to the overall benefit population more often male and younger. About half were low-educated. The labour market effects of training targeted to disability benefit recipients are promising. Around 80% finished their training. About 60% who received training found a job – almost twice as high as those who did not receive training and 50% higher than those who only followed a re-integration process. About half still have a job five years later (UWV, 2020[32]; UWV, 2020[72]).

Unionlearn, established by a trade union federation in the United Kingdom, supports workers in acquiring qualifications to improve their employability. The programme actively considers overcoming disability-related barriers to learning. One of its key activities is the training of Union Learning Representatives (ULRs), who help workers identify training needs and arrange learning opportunities within their companies. Since its inception in 2006, *Unionlearn* has trained 40 000 ULRs. It provides learning opportunities to about 250 000 workers per year, including relatively high numbers of workers with no or low qualification levels according to independent evaluations. In 2016, 14% of union learners disclosed to have a disability, in line with the share of the working age population with a disability. Employers report positive effects on productivity and employee commitment (Stuart et al., 2016[35]).

4. Make adult learning relevant for employment

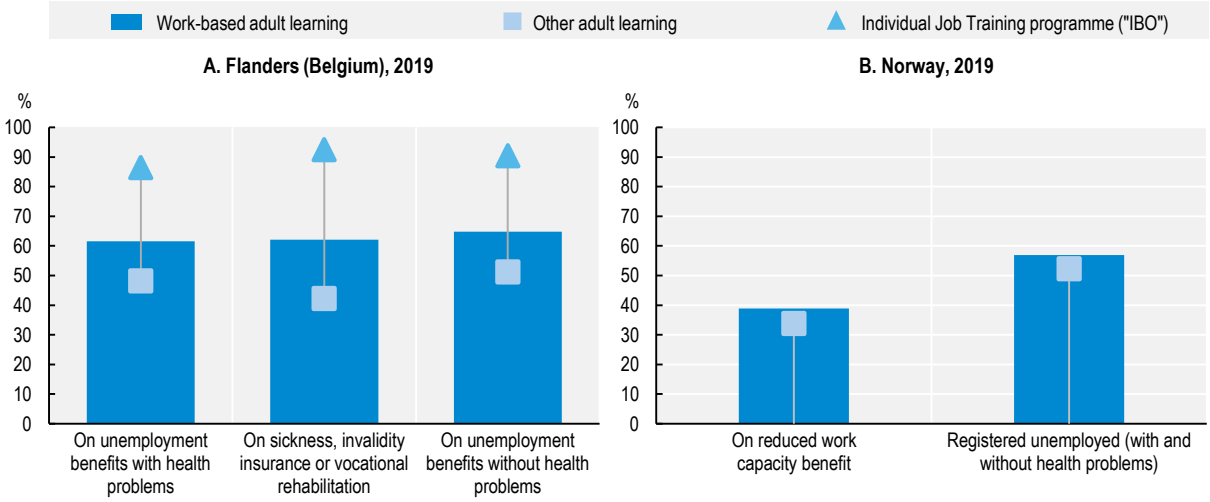
A lack of motivation is the principal reason for persons with and without disability not to engage in adult learning across European OECD countries.[31] PWD may face additional motivational barriers, such as a lack of self-esteem and confidence about one's ability to acquire skills (McGinty, 2018[48]). This is compounded by the fact that many are further away from the labour market.

Crucial for motivation to participate in adult learning is that the investment leads to better income prospects. This is not always the case for PWD. First, for those on disability benefits, the (partial) transition to work does not always lead to higher incomes because of high benefit replacement rates. The transition to work may also come with loss of additional benefits, such as free travel passes or housing support attached to disability benefits (Chapter 4). Second, the transition to work may lead to higher income on average, but this may not be the case. It may be difficult to find a position for a sufficient amount of working hours or a sufficiently high hourly wage. There is also a possibility that work proves too challenging, but that the possibility to move back to disability benefits is restricted or administratively cumbersome (Chapter 4). Third, those with disability that are already in the labour market may not be inclined to invest in their skills if this does not translate into better career possibilities or a higher wage. It may be harder for an employed person with disability to get a better job with the same employer or a new employer. In the Netherlands and Flanders (Belgium), low work incentives come out as important adult learning participation barriers for disability benefit recipients (UWV, 2020[72]; Flemish Parlement, 2021[68]).

A generous offer of high-quality learning possibilities to improve basic skills helps to reduce motivational barriers. Improving basic skills is all the more important for PWD who often enter the labour market with an educational disadvantage. For instance, administrative data on publicly funded adult learning in Ireland shows that learners with health problems more often enrol in lower level and generic programmes, such as employability skills and language courses (OECD, 2021[33]). The six country cases generally pay additional attention to getting basic skills right. All basic adult learning and language courses in Flanders (Belgium) and British Columbia (Canada) are free.[32] The Norwegian adult learning agency (*Kompetanse Norge*) has a specific mandate to improve basic skills of the population. In this regard, it has developed training modules to teach basic skills to adults, the *SkillsPlus* basic skills training in the workplace programme (Box 6.5), and it is currently piloting projects in eight adult education centres across the country to test the effectiveness of basic skills courses. While adult learning in Switzerland is mostly a responsibility of individual cantons, the federal state has specific responsibilities and funding mechanisms to promote basic skills with the implementation of the 2017 Federal Adult Learning Act (*Loi fédérale sur la formation continue*). Evaluations in the Netherlands indicated that PES case workers should propose more often basic skill courses to its clients (Artéduc, 2020[71]; Artéduc, 2020[71])

Furthermore, adult learning provision should be practical and problem-oriented. Currently, large parts of adult learning still take place in a classroom setting with school-type learning styles. This approach can be problematic for PWD, since they may have experienced difficulty during their formal education and may not want to return to such a setting (OECD, 2019[34]). Moreover, classroom-type learning is less effective for acquiring soft skills (Musset, 2018[73]). One possibility is to promote embedding of adult learning in the workplace for persons already employed, such as the *SkillsPlus* programme in Norway (Box 6.5). Another is to promote work-based adult learning organised by the PES.[33] Information from the Flemish (Belgium) and Norwegian PES (Belgium) shows that persons with and without health problems who participate in work-based learning more often find their way into employment (Figure 6.15).

Figure 6.15. Participants of work-based adult learning programmes more often find employment



Note: Percentage in employment three months (Flanders (Belgium)) or six months (Norway) after having completed PES adult learning. See Figure 6.5 and Figure 6.6 for information on data for the two countries. Panel A: Work-based adult learning covers "IBO", "IBO+", "ISS", "BIS", "Werkervaringsstage", "Beroepsverkennende stage", and "Activeringsstage". "Individual Job Training programme" covers both "IBO" and "IBO+". Other adult learning covers "Beroepsgerichte opleiding", "Oriënterende opleiding", and "Niet-sectorgerichte competentieversterking". Panel B: Work-based adult learning covers: "Arbeidspraksis". Other adult learning: "Opplæring".
Source: OECD calculations based on administrative records provided by Flemish (Belgium) and Norwegian authorities.

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A particularly promising example of the Flemish PES is the Individual Job Training programme ("*Individuele Beroepsopleiding*", IBO). This programme provides jobseekers with work-based learning opportunities by means of a training plan jointly established by the PES and the employer. Employers receive a subsidy to cover wage and social security costs, and financial support to pay for training. Employers have to pay a "productivity premium" and are expected to offer a permanent work-contract to the trainee following the training (OECD, 2019[2]). The PES offers an alternative version of the programme (IBO+) to employers who hire PWD or long-term unemployed. This version offers a longer maximum duration (52 instead of 26 weeks), employers do not have to pay a productivity premium, and the training is completely free.

Countries should further ensure that learning opportunities equip PWD with the skills needed for the labour market. Promoting digital skills deserves particular attention. Digital skills are more and more important in a constantly changing world of work and are a prerequisite for participating in online and distance learning as well as working from home as accelerated through COVID-19 (OECD, 2021[27]). Moreover, as discussed previously, PWD have on average lower digital skills (Section 6.2) and less access to basic digital tools (Chapter 5). Administrative data on publicly funded adult learning in Ireland indicates that only 4% of learners with health problems, and 5% of all learners, enrolled in ICT courses (OECD, 2021[33]). In many countries, digital skills are now considered to be a foundation skill, much like literacy and numeracy. For instance, the Swiss confederation has made the promotion of basic digital skills a key objective with the implementation of the 2017 Federal Adult Learning Act (*Loi fédérale sur la formation continue*). Luxembourg has established a basic digital skills programme (*Internet-Führerschäin*) for adults with very low literacy skills to develop their knowledge and skills on using ICT. The United Kingdom's *Digital Skills Partnership* programme provides access to low-skilled adults to free digital skills programmes, that have been developed together with employers and charities (OECD, 2019[2]). There are also examples of courses targeting PWD. The Spanish foundation *ONCE* has developed multiple inclusive training programmes focusing on digital skills (Box 6.5) (ILO & ONCE, 2021[74]). The *European Network for Technology Enhanced Learning in an Inclusive Society* (*Entelis*+), consisting of a consortium of ten

partners from EU countries and the United States, aims at developing and implementing innovative methods and practices to foster digital skills and competences of digitally excluded groups. Their Fact Sheets and Success Factors on improving accessibility of ICT education and adult learning and uptake of technology provide additional information for OECD countries to invest in digital skills of their citizens with disability. It includes for instance references to digital accessibility training for web developers in Austria, Greece, Poland, Slovenia and Spain (Entelis+, 2021[75]).

Employers have a key role to play in creating relevant learning opportunities that align with skill needs. Better engaging with employers is an effective way to reduce the high skills mismatches reported by persons with and without disability (see Figure 6.12 in Section 6.4).

Firstly, employers can be involved actively in training using work placement programmes. This for instance can be done using work-based adult learning organised by the PES as discussed previously (Figure 6.15).

Secondly, employers, together with trade unions, can help to establish joint priorities in adult learning and anticipate training needs. Social partners and governments come together in skills or sectoral councils to play such a role in many countries. In the six country cases, their engagement varies from managing parts of the adult learning system in Austria and the Netherlands to having a more passive consulting role in Québec (Canada) (Table 6.2). As of 2020, Flanders (Belgium) has a Platform Life Long Learning (*Platform levenslang leren*) that recommends the Flemish Government. The Platform consists of representatives of social partners, key stakeholders (public and private adult learning providers, municipalities, the PES) and different experts (on adult learning, education, technological innovation) (Government Flanders, 2020[76]). Canada launched in 2019 the federal government initiative Future Skills. The initiative established an advisory body to the Minister of Employment, Workforce Development and Disability Inclusion (Future Skills Council), with members from public, private, labour, education and training providers, non-profit organisations and Indigenous interest groups, as well as an independent research institute (Future Skills Centre). The Future Skills Council and Centre have a special mandate to address the needs of disadvantaged groups, including PWD (OECD, 2020[44]). A promising practice comes from Korea, where social partners help to define national training standards and integrate them in their own training (Box 6.5).

Table 6.2. Involvement of social partners in adult learning varies across countries

Social partners…	Country
… define and manage the training system	Austria, the Netherlands
… contribute to the curriculum development	Belgium, Alberta (Canada), British Columbia (Canada), Norway, Switzerland
… have a consulting role	Québec (Canada)

Source: OECD (2019[77]), "Getting Skills Right: Making Adult Learning Work in Social Partnership", https://www.oecd.org/employment/emp/adult-learning-work-in-social-partnership-2019.pdf.

Box 6.5. Making adult learning relevant in Norway, Spain and Korea

The Norwegian programme SkillsPlus provides training grants to firms to embed basic skill training in the workplace. Any organisation can apply. Training must consist of a combination of on-the-job learning through work and basic skills training in an attempt to strengthen motivation to learn, ideally complemented with other job-related training. The training has to be aligned with the Norwegian national standards for basic skills for adults (reading, writing, mathematics, digital competence and oral communication). The government assures quality of provision and supports firms by providing competence goals, profession-specific profiles for basic jobs skills, tests and learning materials (OECD, 2019[34]). Moreover, it has established a publicly accessible database that includes information on participants by age, gender and educational background (not by disability status) to track progress. More than 100 000 adults enrolled into the programme between 2006-19. About half the participants had low education levels. Unfortunately, data by disability status are unavailable.

The Spanish Foundation ONCE has developed multiple training programmes to improve digital skills of PWD. *Por Talento Digital* is targeted at PWD. The programme *Radia* aims to promote the inclusion of women with disability, and has been developed in collaboration with the Conference of Social Councils of Spanish Universities and the Spanish Confederation of Employers' Organisations Foundation. Both programmes aim to make participants familiar with new digital technologies by means of a digital training course supported by mentors and by providing the possibility to intern at a company (ILO & ONCE, 2021[74]).

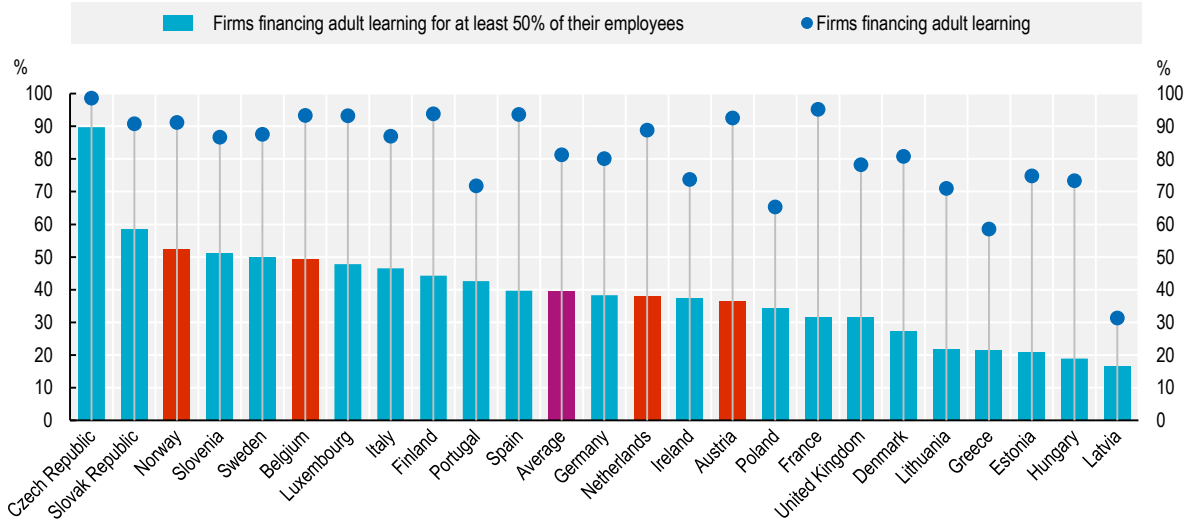
In Korea, social partners provide information on changing skill needs and help set training standards. Tripartite Industry Skills Councils use labour market information to develop national occupational standards, to ensure that these standards reflect the needs of the workplace. These standards then form the base of vocational education and adult learning qualifications. Employers can apply the same standards in their human resource management, for instance for on-the-job learning (OECD, 2019[2]).

5. Build capacity of and encourage employers to train in an inclusive fashion

Employers should be actively supported and encouraged to provide inclusive training. While employers play a key role in providing adult learning, few firms do so to a large part of their staff. As discussed previously, PWD participate less often in employer-provided training and receive less employer support for their personal development. Less than two in five European firms with at least ten employees fully or partly finance adult learning to 50% of their employees (Figure 6.16). Firms in Belgium and Norway are somewhat more inclusive in their training behaviour. Inclusiveness is particularly a concern in small and medium enterprises (SMEs). Further, firms may not necessarily know what skills to invest in or how to develop an appropriate training offer.

Figure 6.16. Fewer than half of firms provide adult learning to a significant part of their employees

Share of firms with at least ten employees financing (at least partly) adult learning, 2015



Note: Adult learning here is defined as continuing vocational training (CVT): training measures or activities which have as their primary objectives the acquisition of new competences or the development and improvement of existing ones and which must be financed at least partly by the firms for their persons employed who either have a working contract or who benefit directly from their work for the firm such as unpaid family workers and casual workers. The pink bar represents the unweighted average of the 22 European countries shown.
Source: Continuing Vocational Training Survey (CVTS).

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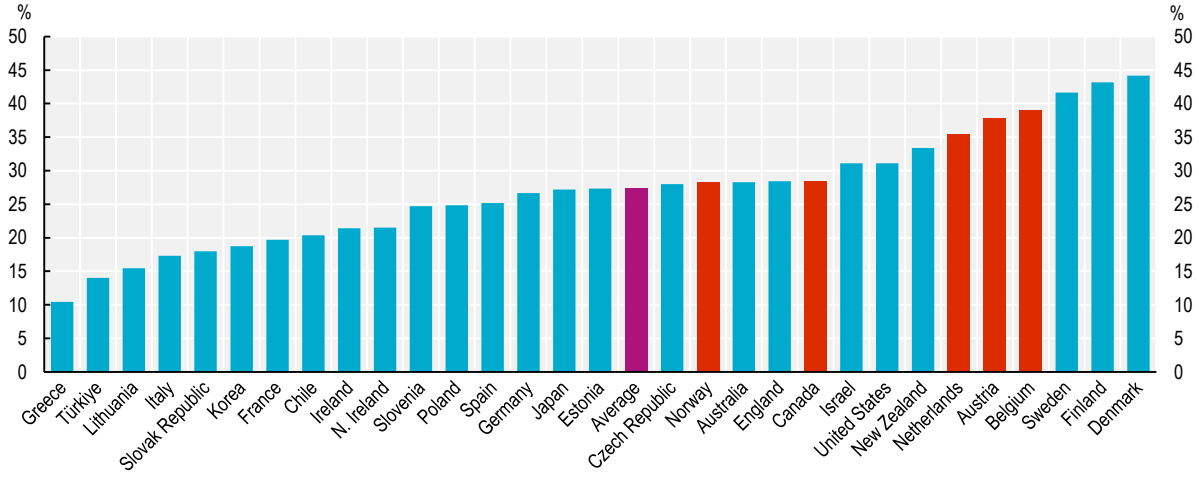
Governments may provide targeted coaching and financial incentives to firms to help them provide inclusive adult learning. In Flanders (Belgium), the government-funded Centres for Adult Basic Education send so-called “ambassadors” to firms to evaluate work-based learning opportunities and discuss the benefits of providing these opportunities with the company. The ambassadors particularly aim to improve adult learning opportunities for low-skilled workers. Countries can also address capacity constraints by encouraging firms to team up and use economies of scale to provide better and more inclusive training. The Austrian PES helps firms establish networks of firms (*Implus-Qualifizierungs-Verbund*) to provide cost-efficient and work-relevant training. The PES funds operational costs of these networks, the development of training plans and assists with applying for further financial support for in-company training (OECD, 2019[2]). Another promising practice comes from the Finnish PES, which provides co-financing to set up employer networks that provide training targeted to specific groups of workers (Box 6.6).

More broadly, the dissemination of high-performance work practices (HPWPs) within firms can promote the better use of skills to improve job quality and productivity. Better using skills in the workplace concerns the extent to which skills are effectively applied in the workplace to maximise workplace and individual performance. It is also an effective remedy against the high skills mismatches that PWD currently experience (Section 6.4). There is considerable diversity to the degree to which employers value and utilise the skills of their employees. HPWPs include, for example, employee reward programmes, more flexible working hours, mentoring and leadership development courses, as well as a company culture that promotes training and development. About one in three jobs in Belgium, Austria and the Netherlands apply HPWPs more than once a week (Figure 6.17.). Levels are lower in Norway and Canada. New Zealand has adopted an innovative employer support to promote HPWPs (Box 6.6).

Figure 6.17. Many firms do not apply high performance work practices across OECD countries

Share of jobs which adopt high-performance work practices at least once a week, 2012-15



Note: The high-performance working practices index combines indicators on work flexibility, work organisation and management practices. Data for Belgium refer to Flanders. The purple bar represents the weighted average of the countries/regions shown.
Source: OECD (2016[78]), *Skills Matter: Further Results from the Survey of Adult Skills*, https://doi.org/10.1787/9789264258051-en.

StatLink https://stat.link/e4109t

Promoting and raising awareness among employers of the importance and benefits of an inclusive learning culture deserves particular attention. Austria, Belgium and the Netherlands have set up multiple campaigns to disseminate rights and responsibilities in relationship to the United Nations Convention on the Rights of Persons with Disabilities (UN-CRPD). Many of the campaigns target both employers and PWD. The Dutch Coalition for Inclusion, a network of NGO's and individual PWD financed by the Ministry of Health, Welfare and Sports, provides assistance and guidance to respect the UN-CRPD (ANED, 2021[45]).

Countries should also enforce anti-discrimination legislation, including with respect to all forms of adult learning. Article 27 of the UN-CRPD explicitly extends anti-discrimination legislation for PWD into the realm of career advancement and adult learning. Governments have to enforce these obligations to make sure that firms abide. Many countries, including for instance Austria, Belgium, the Netherlands, Norway, as well as provincial governments of Canada, have an anti-discrimination Ombudsman who has as a part of its task to promote equality for the groups protected by the equality and anti-discrimination legislation. Austria has a dedicated Disability Ombudsman as of 2006, which provides support and information, handles inquiries and cases, and actively works together with NGOs.

Box 6.6. Building capacity of employers in Finland and New Zealand

Finland's Joint Purchase Training (*Yhteishankintakoulutus*) provides guidance to employers to build a positive learning culture. The programme is offered by the PES, which provides informational support and covers between 20% and 80% of the training expenses (OECD, 2019[77]). The programme consists of three different services, all tailored to the needs of the firm: (i) training for non-employed persons to be recruited afterwards; (ii) retraining for existing staff in light of technological and operational changes; and (iii) training of staff that has to be dismissed due to financial and production-related reasons. In 2016, almost 24 000 persons participated in the programme. An evaluation from 2012 indicated positive impacts on competence development, job retention and productivity, as reported by employers.

New Zealand has set up a two-year programme to improve utilisation of skills in the workplace in an attempt to boost productivity and profitability. The High-Performance Working Initiative (HPWI) provides business coaching for SMEs to help streamline work practices and increase employee engagement and satisfaction. Specialised business improvement consultants are responsible for the coaching. The government funds half of the programme. Any private firm can apply. The HPWI is part of a broader set of services designed to improve innovation and skills provided by the government (OECD, 2016[5]).

6. Tackle time and financial barriers

About one in seven employees with and without disability mention that time constraints were the main reason for not participating in adult learning across European OECD countries, according to EU-SILC data from 2016. According to OECD PIAAC data, time constraints either due to work related (22%) or family related reasons (19%) are even the most prevalent barrier for low-skilled adults. Low-skilled workers have limited bargaining power to ask their employer for (paid) training leave during working hours (OECD, 2019[34]). Moreover, getting to training facilities and learning may take more time for PWD. Learners with disability part of the *Unionlearn* programme in the United Kingdom more often mentioned work-related shortage of time as a major barrier to learning (29% vs. 19%) (Box 6.4) (Stuart et al., 2016[35]).

More generally, adult learning systems should have a flexible provision to reduce the barriers of entry (OECD, 2019[2]). Many countries offer several forms of flexible adult learning provision, such as part-time, evening and weekend programmes, distance learning, or programmes in a modular format, all of which contribute to making it easier to work or attend to family obligations while participating in adult learning.

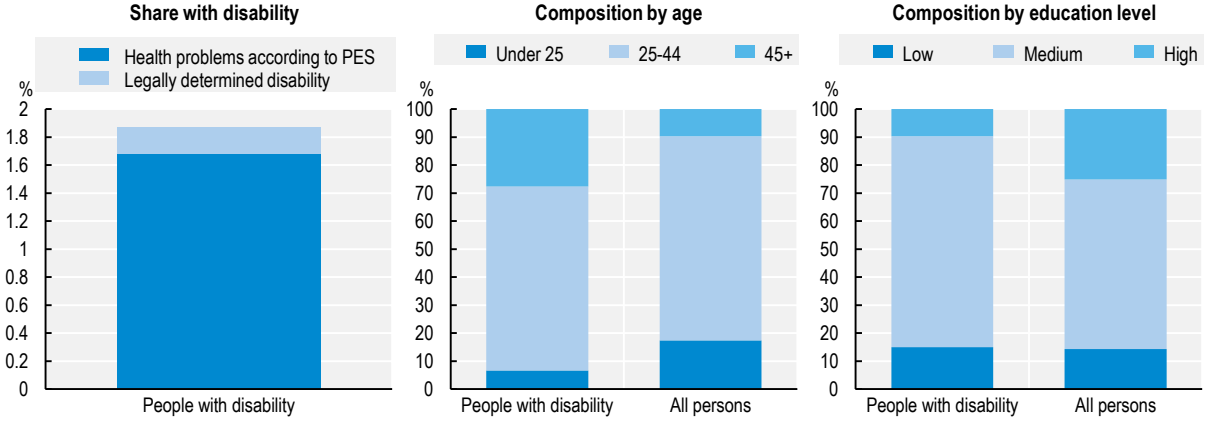
Giving all workers, including those with disability, the statutory right to take leave for education and training purposes can increase training participation. Austria, Belgium and Norway have a legislative entitlement to education or training leave. In Canada, the Netherlands and Switzerland, such leave is organised through collective agreements that do not cover all workers. Collective bargaining agreements only cover about one in four workers in Canada and one in two in Switzerland.[34] While collective bargaining coverage is higher in the Netherlands (78% in 2017), significant differences in the regulation of training leave exist between sectors as well as by firm size (OECD, 2021[57]).

Compensation for employees and employers to take up leave can further stimulate participation. Training leave in Austria is open to all employees, including part-time workers since 2013. It provides employees the possibility to take up to one year of leave, with compensation equal to the level of unemployment benefits. This comes at a high cost of around EUR 12 000 per participant in 2016 (OECD, 2020[79]). In Belgium, employees can take between 32 and 120 hours off per year. The maximum training leave is longer for training in occupations with labour market shortage (180 hours). During their training leave, workers receive full pay up to a capped amount, while employers can be compensated for the wages paid during training leave (OECD, 2019[2]).

Still further efforts may be needed to promote training leave among PWD. Administrative data from the generous training leave entitlement in Austria show that still very few PWD make use of the scheme (Figure 6.18). This is in contrast to adult learning and career guidance programmes administered by the Austrian PES, where relatively high shares of participants have a disability (Figure 6.5 and Figure 6.13). The low share of persons availing of training leave with disability is part of a wider inclusion problem: relatively few users are older or lower educated. It echoes results of a previous evaluation finding that older and lower educated workers, as well as migrants make less of the scheme (Bock-Schappelwein, Famira-Mühlberger and Huemer, 2017[80]). Part of the low take-up may be explained by the fact that fewer PWD are employed. Other reasons may be low awareness, and perhaps the requirement that employers need to agree with the leave – though a certain form of agreement makes sense for business continuation reasons. Further research could help to make the system a success for everyone.

Figure 6.18. People with disability make little use of training leave in Austria

Share of persons making use of (part-time) training and educational leave in Austria, 2019



Note: Data cover part-time and full-time training and education leave in Austria (*LeistungsbezieherInnen Bildungsteilzeitgeld und Weiterbildungsgeld*). Low educated: primary or lower secondary education ("Pflichtschulausbildung", ISCED 0-2). Medium educated: medium to upper secondary education ("Lehrausbildung, Mittlere und Hoehere Ausbildung", ISCED 3-4). High educated: tertiary education and above ("Akademische Ausbildung", ISCED 5-8).
Source: OECD calculations based on administrative records provided by Austrian authorities.

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Financial barriers form another obstacle for PWD. About one in 14 PWD, compared to one in 20 PWOD, state that financial constraints are the main reason for not participating in adult learning across European OECD countries, according to EU-SILC data from 2016. Disability comes on average with more frequent career breaks and a wage penalty, and may come with higher expenses. Moreover, training investments may have lower returns for those in low-paid positions with limited opportunities to progress.

Financial incentives that support individuals can make adult learning systems more inclusive. Financial incentives targeted to individuals, such as loan and individual subsidy schemes, are generally more effective to increase adult learning among underrepresented groups than financial schemes directed to firms. Employers have a tendency to train educated workers who are involved in more complex tasks (Brunello and Wruuck, 2020[81]). Financial incentives may be more generous for targeted groups. France, Canada and the United Kingdom have schemes that provide PWD with additional funding (Box 6.7). The Austrian PES provides an *Allowance for Course and Course-related Costs* that PWD, among other groups, can avail of. Norway provides more generous conditions for study loans for persons aged over 45 through its *Educational Loan Fund*. Flanders (Belgium) has a relatively large number of financial incentives targeted

to different groups. Take-up among low-skilled and older individuals is relatively how, however, due to complexities in the system and entitlement rules that often exclude for instance jobseekers and workers with a weak attachment to the labour market (OECD, 2019[49]). Canada offers employees since 2019 the *Canada Training Benefit*, which consists of a refundable tax credit up to CAD 5 000 (about 3 804 EUR) to offset tuition costs and related fees, an additional benefit to compensate income lost while training and leave provisions for federally regulated workers to take time away from work for training while maintaining their job security (OECD, 2020[82]). It also has financial supports for PWD. The *Canada Student Loans Program* offers loan forgiveness for qualifying borrowers who have a severe permanent disability. The *Disability Supports Deduction* provides tax relief for the cost of disability supports incurred for the purposes of education, including accommodation, tuition, tutors and sign interpreters. The Dutch Government is planning to implement in March 2022 a personal training account of EUR 1 000 annually available to all adults, called the STAP-budget. In first instance, this personal training account will not be more generous for groups underrepresented in adult learning.

Box 6.7. Tackling time and financial barriers in France, Canada and the United Kingdom

The French *Compte Personnel de Formation* is a personal account that provides individuals with training credits based on the time spent in employment during the year. Entitlements are portable between employers. Enhanced support is available for low-skilled individuals and PWD, including extra training credits (48 hours as opposed to 24 hours) and extra funding (EUR 800 per year) to purchase training. Evaluations show that while enrolment has increased rapidly, low-skilled individuals still rarely avail of the personal account, underlining the need for accompanying career and training guidance (Perez and Vourc'h, 2020[83]).

Adult Upgrading Grants in British Columbia (Canada) cover the indirect costs of participating in adult learning. The grant is available to low-income adults attending public post-secondary education or adult learning. The grant covers tuition as well as indirect costs such as additional fees, books, supplies, transportation, unsubsidised childcare (OECD, 2019[34]). The effectiveness of this measure has not been evaluated.

The United Kingdom has a *Disabled Students Allowance*. This scheme covers costs up to GBP 23 258 a year for undergraduate or postgraduate students with a disability in part-time or full-time studies, including distance learning. There is no age limit or means test. Financial support is available for day-to-day costs of studying related to the disability, including specialist equipment, day-to-day costs related to the disability, a travel allowance and a non-medical helper such as a sign language interpreter. About 6-7% of full-time first-degree students received the allowance in 2017/2018 in the United Kingdom (IES, 2019[84]). More half of the recipients agreed that the supports they received through the allowance meets all of their needs, and two-thirds stated that the support allows them to participate more fully in their course than they would be able to otherwise. Nevertheless, the allowance had a limited impact on the decisions of students with disability to go into higher education, in part because of low awareness of the support scheme (Johnson et al., 2019[85]).

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Notes

[1] Other OECD work examines formal education for PWD or additional education needs (Brussino, 2020[64]).

[2] We thank Elish Kelly (ESRI) and Annelore Verhagen (OECD ELS/SAE) for providing data and coding. Further calculations not shown here indicate that individuals who are older, lower educated as well as non-employed have about equally as often low literacy and numeracy skills as persons with permanent disability.

[3] The disability digital skills gap is significant for the five indicators for the pooled sample of European OECD countries, with and without controlling for age and education. In the case of founding a job online this is the case when restricting to the sample of non-employed. Small sample size does not allow for separate tests across countries. As an alternative, country differences are tested using the pooled sample of European OECD countries by adding interactions with country dummies. This analysis shows that trends are statistically different for using banking facilities and shopping online in Belgium and the Netherlands, for which the disability digital skills gap is no longer significant. Canada, Norway and Switzerland are not included in the *EQLS* dataset.

[4] The relatively small adult learning participation gap in Switzerland is also evident from national data for 2016. The adult learning participation gap is the largest among older persons (OFS Switzerland, 2018[87]).

[5] Older persons may have lower incentives to participate in training given the short pay-back time on investment. The disability adult learning gap is significant for the OECD countries and the five European country cases, with and without adjusting for age and education.

[6] The disability adult learning gap is apparent in the EQLS, EWCS and the EU-SILC database. Comparisons are available upon request.

[7] The disability adult learning gap for non-employed persons is significant for the pooled sample of European OECD countries and the five European country cases without controlling for age and education. When controlling for age and education, the gap remains significant for the pooled sample, as well as for Belgium and the Netherlands.

[8] The disability adult learning gap for employed persons is only significant for the pooled sample of European OECD countries without controlling for age and education. It is not significant for the five European country cases with and without controlling for age and education. Restricting further to employees, the disability adult learning participation gap is also no longer significant across OECD countries on average and for the five country cases when taking into account a larger set of employee (education, age and gender), job (occupation, working part-time, type of contract) and firm characteristics (sector and firm size).

[9] Persons on disability benefits, on workers' compensation, employees (unless on sickness or invalidity insurance or vocational rehabilitation) or persons on any other benefits (such as social assistance) are not included in the data from the Flemish (Belgium) PES. The Flemish PES has confirmed in personal communication that this is because very few of these groups register with the PES, rather than that many register but do not receive adult learning.

[10] In the Norwegian PES system, no distinction is made between unemployed with and without reduced work capacity as is in the case in the Austrian and Flemish (Belgium) data. About one in four adult learners

has identified reduced work capacity on benefits other than unemployment insurance, the Work Assessment Allowance or Permanent Disability Benefits or on no benefits.

[11] Only about 1% of Permanent Disability Benefit recipients with registered reduced work capacity make use of PES adult learning. The figure would be even lower expressed as a share of all Permanent Disability Benefit recipients, with or without registered reduced work capacity (0.1%).

[12] In 2018, about 45% of the disability and illness benefit participating in training by the PES received the *Wajong*, about 30% in the *WGA* and about 25% in the *Ziektewet*. This amounts to about 1% of the benefit population for each benefit (UWV, 2020[32]).

[13] The data does not allow for a distinction between health and age barriers.

[14] Further analysis is available upon request.

[15] Calculations are based on EWCS 2015. Twelve percent of employees indicate that they asked their employer for training but did not receive it. For PWD, this number is about a quarter higher, even when accounting for their labour market position. The small sample size does not allow for a breakdown by countries. There is no indication that the pattern is different in Austria, Belgium, Switzerland and Norway. The pattern is significantly different for the Netherlands, where employees with disability do not indicate more often to have asked their employer for training without receiving it, conditional on their labour market position.

[16] On the other hand, British *Unionlearn* participants more often state that they asked their employer (50% vs. 35%) and actually have taken further training (61% vs. 50%) after having completed a course (Stuart et al., 2016[35]).

[17] The Norwegian data may also be affected by the COVID-19 pandemic, since the data measure entry into employment six months after having completed the adult learning course. Entry into employment in mid-2020, well into the COVID-19 pandemic, may have been particularly difficult for persons who participated in adult learning at the end of 2019.

[18] Employees in Belgium and the Netherlands are less positive about the extent to which training helped them to have a more secure job (52% and 41% respectively) and for prospects of future employment (around 43%). The low number of observations does not allow for a breakdown by country for training outcomes for PWD. The training outcome gap pooled across European OECD countries is significant at the 1% level for each indicator (1) without controls, (2) when controlling for age and education and (3) when controlling for a larger set of controls (see footnote in Figure 6.10.). The gap decreases marginally when adding control variables (maximum 20% in the case of prospects of future employment). The training outcome gap to have a more secure job for Switzerland is significantly larger than the OECD average. The training outcome gap for all three outcomes for Norway is significantly smaller than the OECD average.

[19] The indicator used here is self-assessed skills mismatch: whether individuals think themselves that they are underqualified (in need of further training to cope well with their job duties) or overqualified (they have the skills to cope with more demanding duties). This self-assessed indicator allows for a breakdown between persons with and without disability. The concept differs from the “objective” skills mismatch indicator generally reported in OECD reports, for which no breakdown between persons with and without disability can be made. The “objective” skills mismatch indicator defines mismatches on the basis of education levels of workers relative to the modal education level needed in their job (OECD, 2017[3]). Statistical analysis shows that PWD significantly more often report skills mismatches. The skills mismatch gap pooled across European OECD countries is significant at the 1% level (1) without controls, (2) when

controlling for age and education and (3) when controlling for a larger set of controls, with little difference in the coefficient (about +5 percentage points). This is because PWD more often report being overskilled for their job (significant at the 1% level (1) without controls, (2) when controlling for age and education and (3) when controlling for a larger set of controls, with little difference in the coefficient: about +4 percentage points). The low number of observations does not allow for a breakdown by country for training outcomes for PWD. The skills mismatch gap is significantly less large for Belgium. A further breakdown by education shows that the skills mismatch gap is significant both among low-educated employees (around +9 percentage points) and high-educated employees (around +6 percentage points). In both groups this is because PWD report more often to be overskilled.

[20] For instance, art. 24-5 of the UN CRPD reads: "States Parties shall ensure that persons with disabilities are able to access general tertiary education, vocational training, adult education and lifelong learning without discrimination and on an equal basis with others. To this end, States Parties shall ensure that reasonable accommodation is provided to persons with disabilities."

[21] Moreover, adult learning is often a responsibility for regional governments. This report does not aim to comprehensively review all regions, but shows information depending on availability and usefulness for other countries.

[22] A further study shows that programme factors (access to mainstream programmes, possibilities of financial aid) rather than student factors (age, education, type of disability) explain enrolment into mainstream programmes by students with intellectual and development disability. This study also finds that students with disability taking specialised courses often stay in the specialised track, and do not find their way into the mainstream system (Papay et al., 2018[86]).

[23] Canada has a number of federal skills programmes targeted to PWD. The Opportunities Fund for Persons with Disabilities (USD 40 million per year) supports a wide range of programs and services, including job search supports, pre-employability services, wage subsidies, work placements and employer awareness initiatives to encourage employers to hire PWD. An evaluation showed promising results participants' average annual earnings increased by 38% compared to non-participants with similar characteristics. Overall, USD 1 invested in the programme yielded USD 1.7 in return over a 10-year period (Employment and Social Development Canada, 2021[89]). The Government of Canada announced a USD 65 million increase to the Opportunities Fund in the Fall Economic Statement 2020. Part of this funding will support PWD who are already employed to advance their careers. The Canada Student Grant for Students with Permanent Disabilities provides up to USD 4 000 means-tested financial support. The Repayment Assistance Plan for Borrowers with a Permanent Disability cancels student debt. Furthermore, the federal government provides funding to provinces and regions (around USD 3 billion per year) through Labour Market Development Agreements and Workforce Development Agreements to invest in skills and employment supports to help Canadians, including PWD. The Workforce Development Agreements include dedicated funding for PWD.

[24] Norway has recently approved a new action plan for 2021-25, which includes Universal Design measures for the education system and the workplace (e.g. accessibility of the digital and physical learning environment and workplace, interpreting services) (Norwegian Department of Culture, 2021[88]).

[25] In the Netherlands, only those who have capacity to work can register with the PES. While benefit recipients of WGA (WGA 35-80 as well as WGA 80-100), Wajong and illness benefits (Ziektewet) can register, IVA recipients who have (almost) permanent disability cannot directly register, but generally first need to move to another benefit (UWV, 2020[32]).

[26] The Swiss disability and accident assurances (IV and UV) also provide training and career guidance for their benefit recipients, mostly through contracted out services. Employed persons can register to the PES. However, they can only access counselling and placement services, as the focus on more intensive training measures lies on job search and placement. In British Columbia (Canada), adult learning by PES ("WorkBC Employment Services") is principally targeted to unemployed or precariously employed persons who have made some attempt to have entered the workforce. While persons on different disability-related benefits can access the programmes, they may not have access to the more intensive training measures.

[27] This is laid down in parliamentary discussions on the 2017 Federal Adult Learning Act (*Loi fédérale sur la formation continue*); see *Message relatif à la loi fédérale sur la formation continue*.

[28] According to the *OECD 2020 Survey of Career Guidance for Adults* (SCGA), whilst the PES is the most used career guidance provider (24% of users), many make use of other career guidance service providers (OECD, 2021[57]).

[29] Some groups of workers are also eligible to the career guidance voucher programme, including for instance persons on paid sick leave who still have a contract with their employer. Data by this breakdown are not available.

[30] Slightly more people participated in 2018 (4 007) and 2019 (4 601) (Flemish Parlement, 2021[68]). According FOD Social security, 206.259 persons are entitled to disability payments, of which 51% is living in Flanders.

[31] On average across European OECD countries, about three-quarters of adults not participating in training were not interested to participate, with even slightly higher rates for low-educated adults according to the 2016 *Adult Education Survey*.

[32] More advanced adult learning courses in Flanders cost EUR 1.50 per course hour.

[33] More broadly, learning in schools and training facilities can be made more practical. This is all the more important throughout the COVID-19 pandemic when fewer firms provide work-based learning opportunities. Governments can provide guidance and teaching resources to support the adaptation of curricula, train teachers to equip them with practical learning skills and promote the engagement of social partners in the redesign and implementation of adjusted school-based programmes. Countries such as Denmark and Norway already provide alternative school-based vocational training and education (OECD, 2021[90]).

[34] Data come from the *OECD/AIAS ICTWSS database*.

Disability, Work and Inclusion

MAINSTREAMING IN ALL POLICIES AND PRACTICES

One in seven working-age adults identifies as having a disability in OECD countries, a share that is also substantial and growing among young people (8% in 2019). Many of them are excluded from meaningful work and have low levels of income and social engagement. This report documents the current labour market situation of people with disability, who continue to face large employment, unemployment and poverty gaps compared with people without disability. The report concludes that the goal set up some twenty years ago of making disability policies pro-active and employment-oriented has not been achieved. In particular, key areas of disability policy have received too little attention so far, such as policies to support young people with disability, improve the skills of people with disability, and intervene early in the course of a health problem or disability. The report calls for rigorous disability mainstreaming in all relevant policies and practices as the missing link to better labour market inclusion.

PRINT ISBN 978-92-64-59659-7
PDF ISBN 978-92-64-94147-2