Organisation for Economic Co-operation and Development

DELSA/ELSA/WD/SEM(2020)18

Unclassified English text only

11 January 2021

DIRECTORATE FOR EMPLOYMENT, LABOUR AND SOCIAL AFFAIRS
EMPLOYMENT, LABOUR AND SOCIAL AFFAIRS COMMITTEE

Cancels & replaces the same document of 17 December 2020

Can disability benefits promote (re)employment? Considerations for effective disability benefit design

OECD SOCIAL, EMPLOYMENT AND MIGRATION WORKING PAPERS No. 253

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JEL Classification: I38, J14, J18, J21, J22.

Keywords: disability benefits, in-work benefits, TaxBEN, replacement rate, work incentives.

This paper combines previous OECD work on disability policy with new tax-benefit models for twelve OECD countries that assess the adequacy of income support programmes for people with reduced work capacity and the work incentives they provide. The preparation of these models was supported by an EC grant. The aim of the paper is to draw lessons on desirable design features of an effective disability benefit programme that promotes employment.

Authorised for publication by Stefano Scarpetta, Director, Directorate for Employment, Labour and Social Affairs

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JT03470141

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Acknowledgement

This report was prepared by Duncan MacDonald, Christopher Prinz, and Herwig Immervoll of the OECD Directorate for Employment, Labour and Social Affairs. Niamh Kinane provided editorial assistance.

The authors are grateful to Mark Pearson, Stéphane Carcillo, Mark Keese, Philip Hemmings, Daniele Pacifico, Olga Rastrigna, Raphaela Hyee, Rodrigo Fernandez, Marc Knotts, François Perl, Eivind Breidlid, Orsetta Causa, and the delegates of the OECD Working Party on Social Protection (WPSP) for their helpful comments and suggestions.

This document was produced with the financial assistance of the European Union Programme for Employment and Social Innovation "EaSI" (2014-2020). The opinions expressed and arguments employed herein do not necessarily reflect the official views of the OECD member countries or the European Union. Any existing errors are the responsibility of the authors.

Abstract

Ten years ago, the OECD published a comprehensive report on sickness and disability policies and reforms, concluding the "Sickness, Disability and Work: Breaking the Barriers" series (OECD, 2010[1]). That report concluded that since 1990, disability policy has changed substantially in many OECD countries, including through more stringently managed benefit systems and a considerable expansion of employment and rehabilitation measures.

Nevertheless, ten years later, there are still large employment gaps between people with a disability and those without, and finding the right balance between income and employment support remains an unfinished exercise. While the OECD has repeatedly argued that greater efforts need to be made to transform disability benefits in to an employment-support instrument alongside their function of providing income support (OECD, 2003[2]), this has not fully materialised.

This paper builds on earlier OECD analysis and a series of recent extensions of OECD's tax-benefit model (http://oe.cd/TaxBEN) for selected OECD countries. The model calculations aim to assess the adequacy of income support programmes for people with reduced work capacity and the work incentives that they provide. It focuses exclusively on these programmes and tries to shed light on system characteristics that shape labour-market behaviour and employment. The paper finds evidence that the broader institutional setup of a disability programme does not necessarily have a major impact on key aspects of social-protection effectiveness. Rather, the evidence suggests that all types of scheme can achieve reasonable levels of benefit adequacy and broad benefit coverage for people with health problems or work limitations. On the contrary, the paper finds that disability benefits interact with other elements of the tax and benefit system, and argues that design specifics matter considerably for the likelihood of (re-)employment.

Résumé

Il y a dix ans, l'OCDE a publié un rapport complet sur les politiques et les réformes en matière de maladie et d'invalidité, concluant la série "Maladie, invalidité et travail : briser les barrières" (OECD, 2010[1]). Ce rapport concluait que depuis 1990, la politique en matière d'invalidité a considérablement changé dans de nombreux pays de l'OCDE, notamment grâce à une gestion plus rigoureuse des systèmes de prestations et à une expansion considérable des mesures en faveur de l'emploi et de la réadaptation.

Néanmoins, dix ans plus tard, il existe toujours des écarts importants en matière d'emploi entre les personnes handicapées et les autres, et trouver le bon équilibre entre le revenu et l'aide à l'emploi reste un exercice inachevé. L'OCDE a demandé à maintes reprises que l'on développe plus de moyens pour transformer les prestations d'invalidité en un instrument de soutien de l'emploi parallèlement à leur fonction de soutien du revenu (OECD, 2003[2]), mais cela ne s'est pas entièrement concrétisé.

Le présent document s'appuie sur une analyse antérieure de l'OCDE et sur une série d'extensions récentes du modèle d'imposition et de prestations de l'OCDE (http://oe.cd/TaxBEN) pour certains pays de l'OCDE. Les calculs du modèle visent à évaluer l'adéquation des programmes de soutien au revenu pour les personnes à capacité de travail réduite et les incitations au travail qu'ils offrent. Il se concentre exclusivement sur ces programmes et tente de mettre en lumière les caractéristiques du système qui façonnent le comportement sur le marché du travail et l'emploi. L'étude démontre que le cadre institutionnel plus large d'un programme de handicap n'a pas nécessairement un impact majeur sur les aspects clés de l'efficacité de la protection sociale. Il apparaît plutôt que tous les types de régimes peuvent atteindre des niveaux raisonnables d'adéquation des prestations et une large couverture des personnes ayant des problèmes de santé ou des limitations de travail. Au contraire, le document constate que les prestations d'invalidité interagissent avec d'autres éléments du système d'imposition et d'indemnisation, et que les détails spécifiques de chaque programme d'invalidité sont très importants pour les chances de réintégrer un emploi.

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1. Introduction

Many people with a reduced capacity to work can and want to work. Policies can and should therefore support their efforts to find and keep jobs. Support may include services to improve health; employment and re-integration measures to maintain or regain work capacity; and income support to promote autonomy and ensure decent living standards.

This paper focuses on this latter element of disability policy: income support and its impact on work incentives for persons with disability. More specifically, it looks at key issues and policy choices that arise when designing such income support programmes. It builds on new indicators of benefit generosity and work incentives in specific individual circumstances developed by the OECD and sheds light on system characteristics that shape labour-market behaviour and employment.

In line with earlier OECD work on the topic, the paper explores the feasibility and usefulness of encouraging reforms to move towards more unified income-support provisions for different groups of out-of-work individuals. Key elements of such a more unified income-support system could include:

i. **Compensation for a loss of earnings or earnings capacity** at an appropriate level;

ii. An **effective activation framework** with accessible employment-promotion measures, consistent with people's work capacity, as well as carefully designed in-work benefits to make work pay;

iii. **Tailored extra support to respond to individual circumstances**, such as payments to cover particular disability-related costs.

The rest of the paper proceeds as follows: Section 2 outlines the incidence of disability benefit receipt across a set of European OECD countries. Sections 3 and 4 examine disability benefit coverage and generosity, while Section 5 examines the work incentives provided by disability benefits for a further subset of twelve OECD countries. Section 6 examines some common benefit design characteristics in these countries. Finally, Section 7 considers whether there could be a role for in-work benefits for people with disabilities and outlines some design considerations. Section 8 concludes.

2. Disability benefits remain the main out-of-work support in many countries

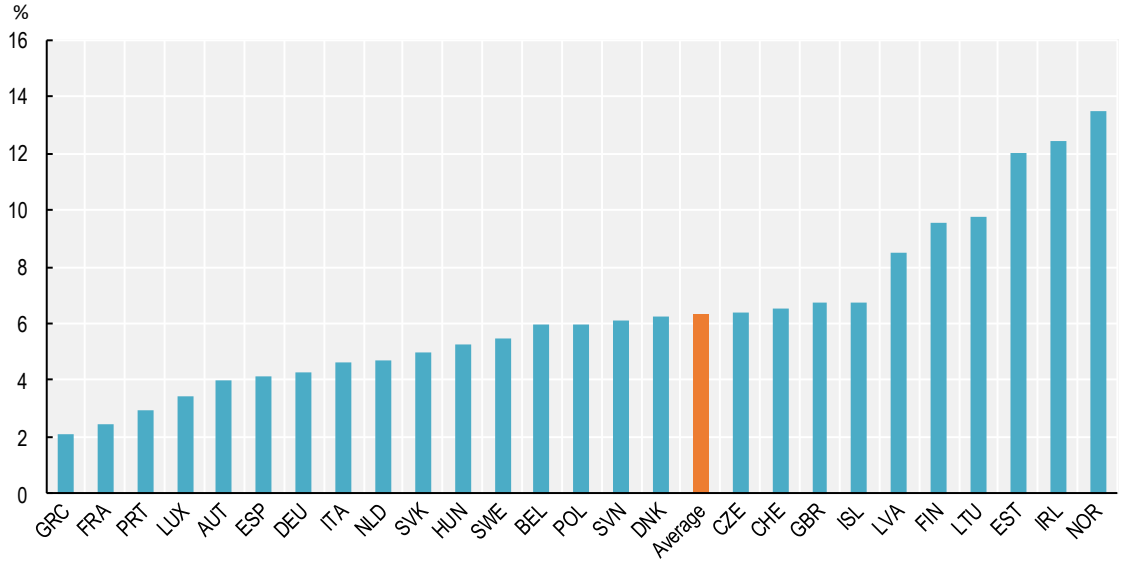
Prior to the COVID-19 health emergency, caseloads for disability benefit were much higher than for unemployment benefits in many countries and had been trending upwards in some. Administrative data

from the OECD Social Benefit Recipients database (SOCR) show that on average across the OECD in 2016, there were 3.9 disability benefit recipients for every recipient of unemployment benefits; the ratio ranged from 0.6 in Spain to 10.5 in Estonia. If recipients of sickness benefits were included, the ratios would be even larger (OECD, 2020[3]).

Data from household surveys are in line with administrative caseload data and point to the prominent role of disability benefits as a source of out-of-work support. Overall, the share of working-age people receiving a disability benefit in 2018 ranged from 2% in Greece to almost 14% in Norway, with an average of 6.3% across European OECD countries (Figure 1).

Figure 1. Receipt of disability benefits: Very substantial country differences

Share of the working-age population (aged 18 to 64) receiving a disability benefit, 2018



Note: 'Average' is the unweighted average of the depicted countries. Data for Ireland (IRL), Slovakia (SVK) and the United Kingdom (GBR) are for 2017. Data for Iceland (ISL) are for 2016.
Source: OECD Secretariat calculations based on EU-SILC.

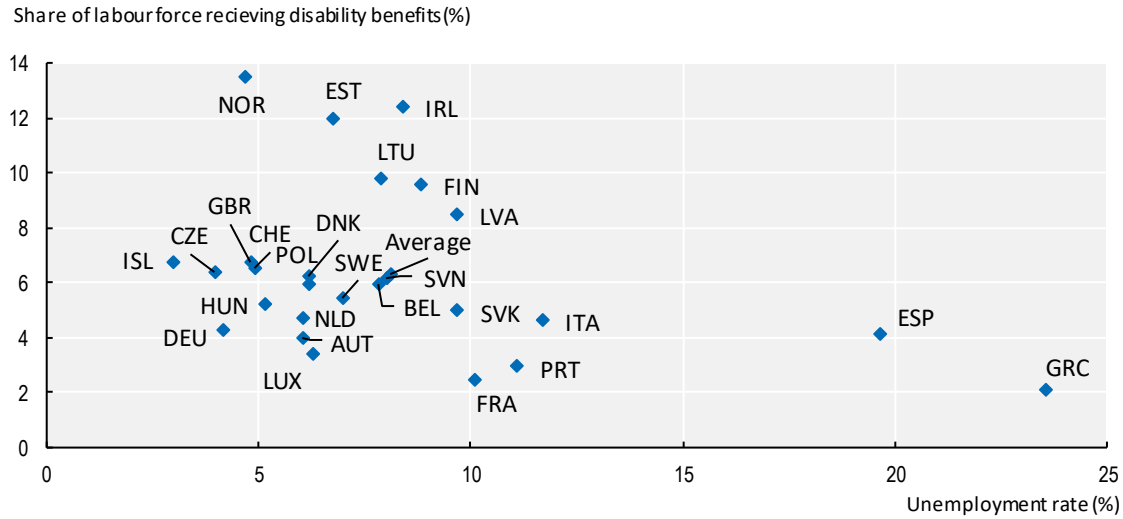
Disparities in the incidence of health problems cannot explain such large country differences in the reliance on disability-related income support (OECD, 2012[4]; OECD, 2015[5]). Rather, these differences are an indication that policy settings and benefit systems can be powerful drivers of both benefit claims and labour-market outcomes. For instance, Figure 2 shows that several countries with relatively high unemployment levels have relatively low disability benefit caseloads (such as Greece and Spain) and vice versa (such as Norway and Ireland). These patterns suggest that unemployment and disability benefit receipt can be substitutable to some degree, a finding that is in line with earlier OECD work (Blöndal and Pearson, 1995[6]). Indeed, a recent study using administrative data for Norway found that adverse local labour market conditions affect unemployment and disability insurance applications in a remarkably similar way, leading the authors to question whether it is meaningful to maintain a sharp distinction between these two types of programmes (Andersen, Markussen and Røed, 2019[7]).

One advantage of the use of data from income surveys is the possibility to examine the incidence of benefit receipt according to a range of socio-economic characteristics, such as self-reported health status, ability to work and actual employment outcomes. Inspecting benefit receipt data across these different categories suggests that a large share of beneficiaries may respond to employment opportunities or incentives

(Figure 3).[1] On average across 26 European countries, around 31% of non-working recipients of a disability benefit report being severely ill *and* permanently unable to work or in early retirement. Many other recipients are likely to have some work capacity, including those reporting to be either severely ill but able to work, or not ill but unable to work (52% in total). As many as 17% of recipients say they are able to work *and* not hampered by chronic ill health or disability. Country differences in these distributions are sizeable. For instance, comparatively large shares of recipients in Belgium, Germany, Greece, Slovakia, and the United Kingdom, identify as severely ill and unable to work (up to 62% in Greece, though disability benefit receipt is relatively uncommon). However, in some countries with high disability benefit caseloads – such as Lithuania, Finland, Ireland, and Norway – many individuals self-report to be able to work.[2]

Figure 2. Unemployment and disability benefits are substitutes in some countries

Unemployment rate (%) and share of labour force aged 18 to 64 that is receiving disability benefits (%), 2018.



Note: 'Average' is the unweighted average of the depicted countries. Data for Ireland (IRL), Slovakia (SVK) and the United Kingdom (GBR) are for 2017. Data for Iceland (ISL) are for 2016.
Source: OECD Secretariat calculations based on EU-SILC and OECD.stat.

There are notable differences in disability beneficiary rates by age, partly reflecting the strong age gradient in the prevalence of disability.[3] When looking at all working-age individuals together, there is no common time trend across countries in rates of disability-benefit receipt. Over the past decade, the share of working-

[1] The available data only reflect employment outcomes with no details about the reasons for non-employment, which can be due to lacking employment opportunities, incentives, or capacity. The latter can take many forms, including physical or mental impairments, but also other aspects such as inadequate skills and insufficient work experience.

[2] In some countries with a pension-type disability benefit, such as Austria, France and Slovenia, reporting "retirement" can be common among respondents who are unable to work. To improve comparability, the calculation therefore includes working-age people who report to be either permanently unable to work or retired.

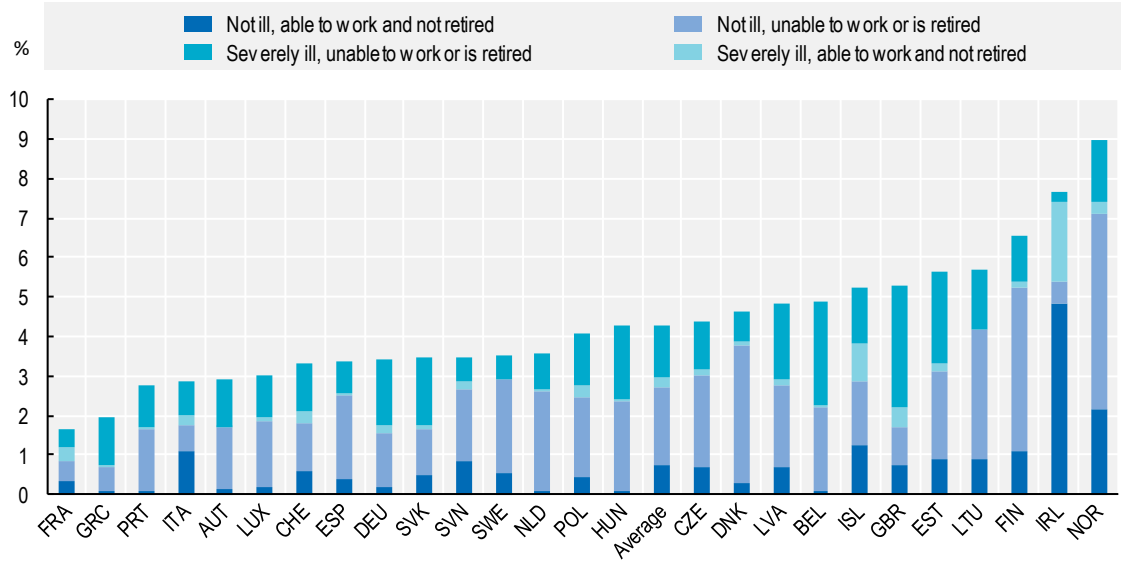
[3] Survey data suggest that there may have been a small increase in the prevalence of disability in the working-age population over the past decade, with 14% of working age individuals in Europe reporting activity limitations due to chronic health problems or disability in 2017, compared to around 13% a decade earlier. Demographic ageing plays an important role in this trend increase. However, ageing is not the whole story. For instance, obesity has been on the rise in OECD countries, particularly among children and young adults (OECD, 2017[26]), and has been linked with higher levels of disability (Chang, Alley and Dowd, 2017[27]).

age individuals receiving benefits increased in half of the countries and fell in the other half. The country average did not change much in the period from 2007 to 2018.

Trends are more clear-cut for different age groups, however. Despite divergences across countries, the average disability-benefit recipient rate fell by 0.7 percentage points for those in the 30-64 age group but increased by 0.6 percentage points (i.e., by over 15%) among young adults under the age of 30 (Figure 4). This suggests that, in some countries, reforms during the past decade(s) have been partly successful in curbing caseload growth for prime-age workers but have failed to do so for young workers.

Figure 3. Some disability benefit recipients will respond to employment opportunities or incentives

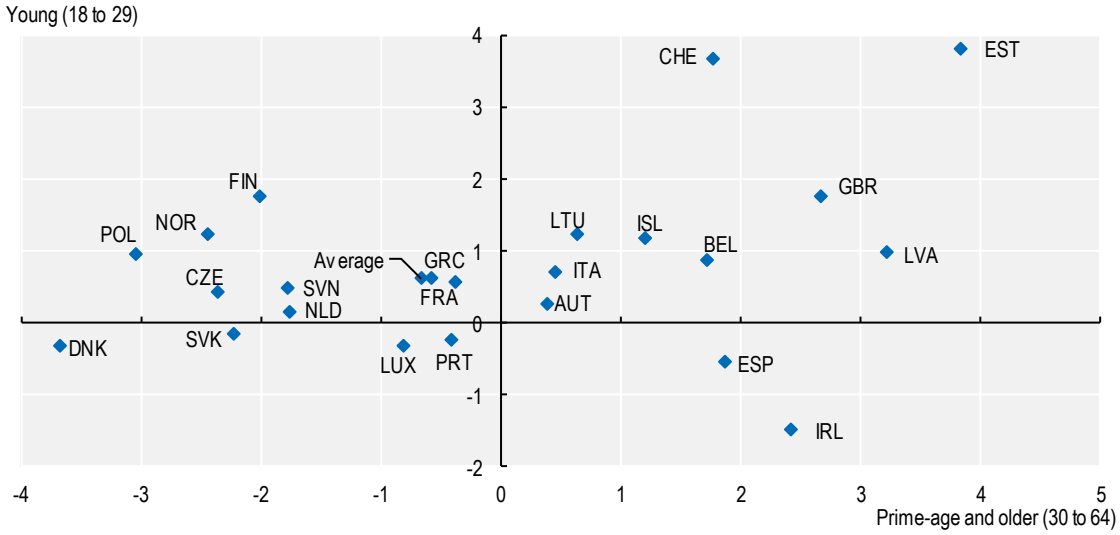
Share of the working-age population (aged 18 to 64) receiving a disability benefit and not working (%), by ability to work and presence of severe chronic illness, 2018



Note: 'Average' is the unweighted average of the depicted countries. Data for Ireland (IRL), Slovakia (SVK) and the United Kingdom (GBR) are for 2017. Data for Iceland (ISL) are for 2016.
Source: OECD Secretariat calculations based on EU-SILC.

Figure 4. Disability benefit receipt has generally become more common among young adults

Percentage point change in the share of the working-age population receiving disability benefits, young adults (age 18 to 29) and prime-age or older adults (age 30 to 64), 2007 to 2018



Note: 'Average' is the unweighted average of the depicted countries. Data for Ireland (IRL), Slovakia (SVK) and the United Kingdom (GBR) are for 2017. Data for Iceland (ISL) are for 2016.
Source: OECD Secretariat calculations based on EU-SILC.

Indeed, the caseload growth for young adults in the majority of countries reflects the difficulties many countries' disability benefit systems have faced in responding to the growing reported incidence of mental health issues. Work capacity assessments, for example, have generally been designed with physical health problems in mind. They therefore tend to be less suited for determining the work capacity of claimants with mental health problems. Similarly, rehabilitation and employment supports are often not fit for purpose for this group. These policy challenges are addressed in earlier work (OECD, 2012[4]; OECD, 2015[5]), and are therefore not further elaborated here, even though they remain highly relevant today.

3. Disability benefit coverage is generally fairly high

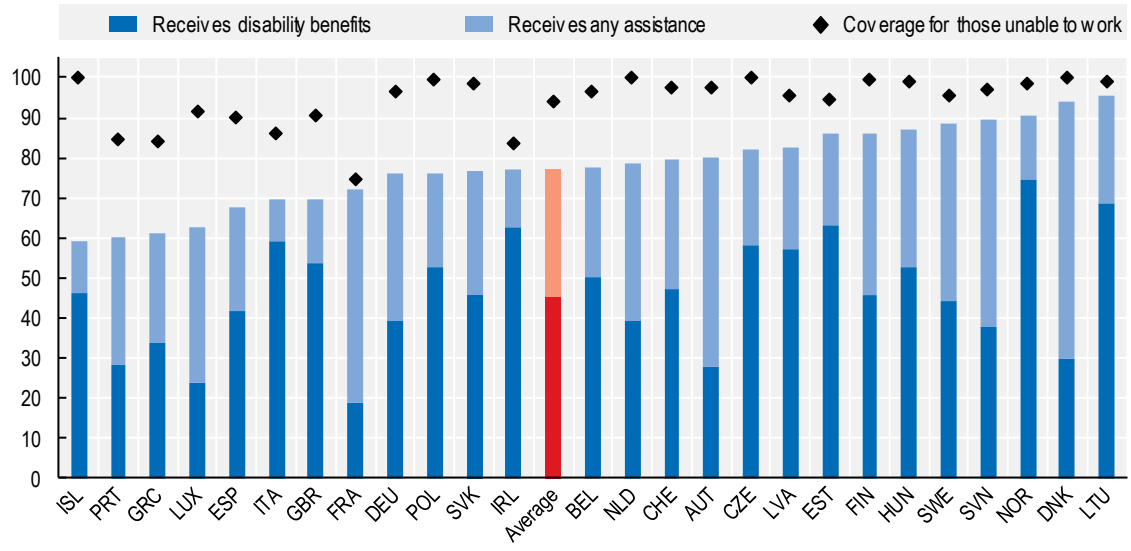
The effective reach of income support, often referred to as "benefit coverage", is a major issue for jobless groups in many countries. For instance, in 2016, the share of unemployed receiving unemployment benefits ranges from under 15% in Greece, Italy, Poland, Slovak Republic, Slovenia and the United States, to between 45% and 60% in Austria, Belgium and Finland. On average across OECD countries for which data are available, less than one third of jobseekers received unemployment payments (OECD, 2018[8]).[4]

For persons with disability or reduced work capacity, measuring coverage is more complex. It is less obvious who "should" receive a benefit, as it can be difficult to determine objective thresholds for disability. Nevertheless, estimates of coverage can be made for people who report to have a chronic health problem or disability that *severely hampers them in their daily activities* (Figure 5). For this group, disability benefit coverage reaches at least 45% in most countries (15 of 26) and over 65% in Lithuania and Norway.

[4] Some unemployed people, especially many of the long-term unemployed, may receive minimum-income benefits (social assistance) instead of unemployment benefits.

Figure 5. Most people with severe chronic illness receive some income support

Share of individuals (aged 18 to 64) with a severe chronic illness that receive disability or other benefits, 2018



Note: 'Average' is the unweighted average of the depicted European countries. Data for Iceland (ISL) are from 2016. Data for Ireland, Slovakia, and the United Kingdom are from 2017.
Source: OECD Secretariat calculations based on EU-SILC.

Lower coverage rates in several countries are in most cases the result of people receiving social benefits *other* than disability benefit. Accounting for the complexity of benefit systems by including other income-replacement benefits into the equation, notably social assistance and early retirement pensions, increases the coverage rate to over 75% in most countries. Only some countries have significantly lower coverage, around 60%, including Luxembourg, Iceland, Greece and Portugal.

For people reporting to be *unable to work* (or retired; see footnote 2), coverage rates are even higher. This is to be expected, as disability benefit programs are increasingly focused on ensuring that those who cannot work do receive benefits. Including all income-replacement benefits into the equation, not only disability benefits, coverage rates for people unable to work are around 90-100% in most countries, and only Ireland, France, Greece, Portugal, and Italy have coverage rates below 90%.

Overall, estimates of coverage rates for a number of alternative "target groups" suggest that most people with reduced work capacity have access to income support in most European countries.

4. Most disability benefit systems replace a significant share of in-work income

As with other benefit programmes, disability benefits can influence benefit-claiming behaviour and there is strong evidence of a sizeable causal link between benefit generosity and employment levels (Autor et al., 2019[9]; Gruber, 2000[10]; Maestas, Mullen and Strand, 2013[11]). The income provided by disability benefits can be a particularly decisive driver of employment outcomes when combining benefits with employment is difficult or impossible. By contrast, linking benefit receipt to re-integration programmes, or to individual efforts that seek to strengthen or re-establish self-sufficiency, can help to ease any trade-offs between benefit levels and employment outcomes (OECD, 2015[12]; Card, Kluve and Weber, 2018[13]).

Figure 6 shows net incomes of benefit recipients as a share of in-work incomes (net replacement rate, NRR) for two different wage levels. It focusses on 12 OECD countries, which all have significant numbers

of disability-benefit recipients, and which represent different policy models (see Box 1).[5] As support may depend on the degree of remaining work capacity, the figure shows results for different degrees of impairment and compares corresponding entitlements to those of somebody with full work capacity who receives unemployment benefits. Further results and full details are reported in (OECD, 2018[14]).

For those relying on disability benefits as the main source of income, the design features of income-support programmes have a very direct impact on income adequacy and poverty risks. People assessed to have a high degree of impairment, or very low or no remaining work capacity, are entitled to the full ('maximum') disability benefit rate, though some countries (e.g. Belgium and Ireland) do not distinguish between varying degrees of work capacity. For people with low earnings potential (here: 50% of each country's average wage, see Panel A) who qualify for the maximum disability benefit rate, net benefit entitlements sum to between 80% and 107% of net in-work incomes, with the lowest NRRs in Belgium and Estonia and the highest NRRs in the Czech Republic and Denmark.

In general, NRRs for low-paid workers are remarkably similar across countries even when benefit architectures differ (Panel A). For instance, Finland, Sweden, and Ireland all provide comparable levels of income replacement for this group, despite operating very different types of benefit system. Finland's main disability benefit programs are a flat-rate benefit coupled with a "pension-type" benefit program. Ireland's main disability benefits programs include two flat-rate benefits, which both include top-ups that vary based on the claimant's age and household structure. Sweden operates an "unemployment-type" disability benefit, where income replacement is determined by the degree of disability and past earnings and contributions. Yet, all three countries provide income replacement of between 90% and 95% of past earnings for those with low earnings potential who qualify for the full disability benefit rate.

Box 1. A topology of disability benefit programmes in OECD countries

OECD countries provide disability benefits in one of three ways, based on institutional arrangements, eligibility criteria and the calculation of benefit amounts (Browne, Neumann and Pacifico, 2018[15]):

- **Flat-rate** benefit programmes provide a uniform payment that is broadly similar across eligible individuals, possibly with some variation by years of residency in the country or severity of the disability. Usually, these programmes are tax-financed and some of them provide income assistance to those who fail to qualify for other, insurance-based disability benefits. Among the 12 countries included in the benefit calculations used in this paper, Denmark, Estonia, Ireland and the United Kingdom have flat-rate disability benefit programmes.
- **Unemployment-type** benefit programmes determine eligibility and benefit amounts based on *recent* work history, similar to unemployment insurance. Such programmes replace a portion of previous earnings over some period prior to the onset of disability. Among the 12 countries included in the benefit calculations used in this paper, Belgium, Hungary, the Netherlands and Sweden provide unemployment-type disability insurance benefits.
- **Pension-type** benefit programmes determine entitlements with reference to a claimant's *entire* work history, similar to pension benefits in many countries. In such systems, each year of past

[5] The NRR is household based and relates after-tax ("net") household income when out of work to net household income in work. Calculations account for income taxes, social contributions and any housing and social assistance supplements that are available to low-income families living in privately rented accommodation. Calculations assume entitlement to the primary disability benefit programme in each country and do not include other payments that can be available in some countries to cover specific disability-related costs, such as Personal Independence Payments (PIP) in the United Kingdom or the disability allowance (*handikappersättning*) in Sweden.

contributions creates additional benefit entitlements. Hypothetical years remaining until the legal retirement age may also count, to a varying degree in different countries, in determining benefit entitlements. Among the 12 countries included in the benefit calculations used in this paper, the Czech Republic, Finland, Lithuania and Poland all provide pension-type disability benefit programmes.

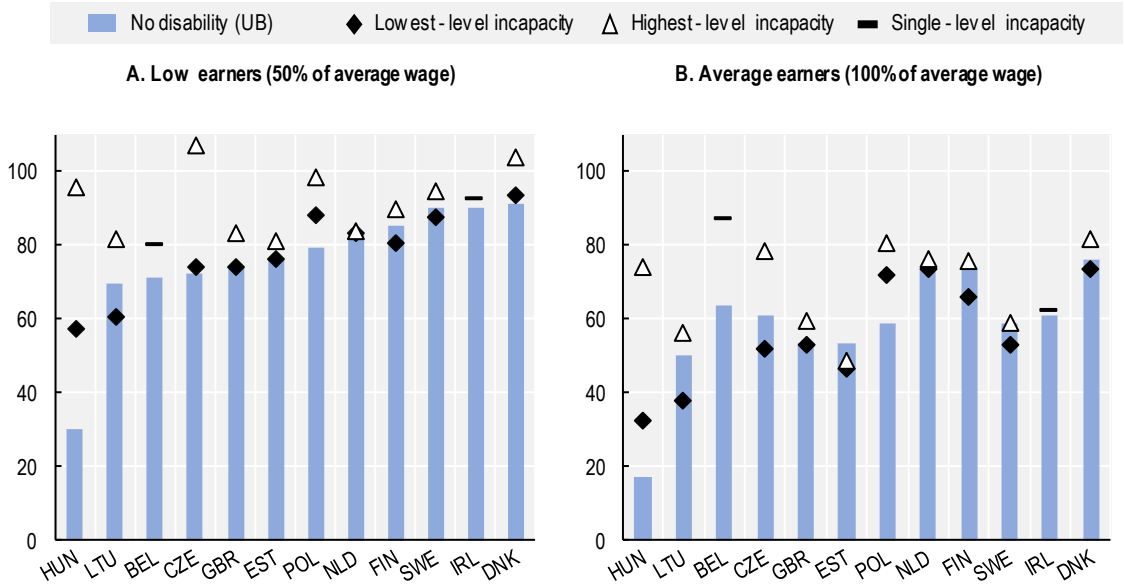
Country differences are larger at average wage levels, and NRRs are typically significantly lower for average earners than for low-paid workers (see Panel B). The gap is biggest in countries operating flat-rate disability benefits (e.g. Estonia, Ireland) and smallest, where entitlements for disability benefits are calculated as a percentage of recent employment earnings (in a similar way to unemployment insurance, e.g. Belgium, the Netherlands). Overall, and with the exception of Belgium[6], net replacement rates are higher for low earners than for those who previously earned the average wage. This is consistent with benefit receipt being relatively more attractive for those with low earnings potential, and aligns with the observation that disability benefit receipt is most frequent among those with low earnings potential or past earnings (OECD, 2010[1]; Maestas, Mullen and Strand, 2013[11]; French and Song, 2014[16]; Autor and Duggan, 2003[17]).

With the single exception of workers in Estonia with average earnings, NRRs for recipients of the highest rate of disability benefit are higher than for those receiving unemployment benefits. The difference between the two benefit programmes can be 20 percentage points or more in some countries (Belgium, Hungary and Poland), but it is small in others. A higher NRR for disability benefits plausibly reflect consideration of additional support needs for those with major work incapacity. It may also reflect a view of disability as a more permanent out-of-work status than unemployment. Such policy stance can be problematic, however, especially in countries that grant disability benefits more easily in periods of economic slack, possibly as a substitute for unemployment benefits in some cases. Indeed, recipients of disability benefit are much less likely to return to the labour market in periods of economic growth than the long-term unemployed (OECD, 2010[1]).

[6] Most countries have net replacement rates (NRR) that decline with income. Belgium is an exception, with the NRR increasing up to a certain wage, and declining only at wages above that level (see Figure A.1). The increasing NRR is the result of a tax credit for the replacement income for low-income individuals (the credit is available for some of those who receive unemployment, disability, and sickness benefits). As a result, as income increases for these individuals, the amount of their tax credit also increases, pushing up the overall NRR up to a certain (still relatively low) wage level.

Figure 6. Disability benefits can compensate substantial parts of lost earnings

Benefit income relative to net income in work (net replacement rate, NRR), 50-year old workers with a 'long and continuous' employment record, 2016.



Note: Share of previous income replaced for benefit recipients (NRR), averaged over four family types (one-earner couples, and lone adults, both with and without children) and two earnings levels (50% and 100% of the average wage). The figure excludes two-earner couples, as they are not a relevant family type for out-of-work scenarios. The NRR indicates net household income when out of work to net household income when in work. Calculations account for income taxes, social contributions and any housing and social assistance supplements that are available to low-income families living in privately rented accommodation. 'Lowest level incapacity' refers to the lowest level of severity needed to qualify for a disability benefit and 'Highest level incapacity' to the highest level (noting that not all countries distinguish benefit entitlements by severity). 'Single-level incapacity' refers to disability benefit systems that do not distinguish levels of incapacity. 'Long and continuous' employment record means the individual has been in employment continuously since age 19.
Source: OECD Secretariat calculations using the OECD tax-benefit model (http://oe.cd/taxben).

Several OECD countries provide *partial* disability benefits for persons with partial work capacity or disability. In these cases, medical or insurance professionals evaluate a person's health limitations or the resulting work capacity, and benefit entitlements are determined in line with this assessment. NRRs for "minimum disability" benefits (where they exist) are typically slightly lower than for unemployment benefits although still above 50% of previous in-work earnings in most countries. They can even exceed 70% for low-wage earners, which is often significantly above the NRR for long-term unemployed who rely on social assistance.[7] In Poland and Hungary, the lowest available level of disability benefit exceeds the unemployment benefit even for short-term unemployed.[8]

More detailed analysis published in Browne et al. (2018[15]) further shows that social contribution histories matter. On average across the 12 countries, people without any previous employment record – including most of those who claim disability benefits at a very young age – would receive around 75% of the net income of full-time low-wage earner (50% of the average wage). In many cases, the benefit entitlements

[7] Lower disability benefit entitlements for those with a partial incapacity and, hence, a partial benefit are in many countries compensated in part by higher housing or other supplementary benefits and lower tax rates.

[8] In the case of Hungary, this is the result of exceptionally low unemployment benefit payments, which replace no more than 25% of the past wage. In Poland, the unemployment benefit scheme provides a flat rate benefit while disability benefit recipients receive a percentage of a computed reference wage.

are similar to somebody receiving income support of last resort (minimum-income benefits, social assistance). This is often well below commonly used poverty thresholds but, for a young person with significant labour market barriers and no work experience, it can nonetheless represent a benefit entitlement that may be close to potential in-work earnings.

5. Are disability benefits work friendly?

As most persons with disability have significant remaining work capacity, work incentives and employment opportunities are important determinants of their job prospects. The OECD's *Faces of Joblessness* series establishes the incidence of "capacity", "incentive" and "opportunity" barriers for unemployed and inactive individuals. It also highlights that multiple simultaneous barriers are common among jobless individuals or those with weak labour-market attachment, including those with health problems.[9] This section focusses on work incentives and on policy-design features that determine the extent to which "work pays". It relies on two commonly used indicators:

a. The participation tax rate (PTR) for a benefit recipient taking up a job. The PTR is the share of in-work earnings that is lost due to reduced benefits and taxes that are payable on in-work earnings (income taxes and social contributions). Values of 100% indicate that workers are financially no better off by working than by not working and receiving benefits.

b. The marginal effective tax rate (METR) for a part-time employee increasing hours or earnings. The METR is the fraction of the earnings increase that is lost to reduced benefits and to higher taxes once working hours or earnings are increased. Values of 100% indicate that working longer hours or earning a higher wage does not generate any additional income for the worker.

All countries employ mechanisms to phase out or discontinue income-support payments in one way or another when benefit recipients return to work. Benefit reductions can take the form of means tests (which typically reduce entitlements in line with income at the household level) or conditions regarding individual earnings or working hours. The specifics of these clawbacks shape both the participation tax rates and the marginal effective tax rates (

Figure 7). In Belgium, Sweden and the United Kingdom, PTRs to enter part-time work are significantly higher for disability benefit recipients with a high degree of impairment than for jobseekers receiving unemployment benefits (Panel A). In all other countries included in the analysis, disability beneficiaries face much lower PTRs, e.g. about 30% in Estonia, Lithuania and the Czech Republic.

For some countries, the PTR is higher for those individuals with the lowest degree of impairment than it is for those with higher degree impairments. Examples include Hungary, Denmark, Estonia, and Lithuania. These countries all include disability benefits in the means test for social assistance or housing benefits. As a result, these means-tested benefits phase out quickly for individuals with lower degrees of disability as they enter work. By contrast, individuals with a higher degree of incapacity receive more generous disability benefits, reducing any available top-ups of social assistance or housing benefits. As a result, when they enter work, losses of means-tested benefits are limited and these individuals face less steep benefit withdrawals overall.

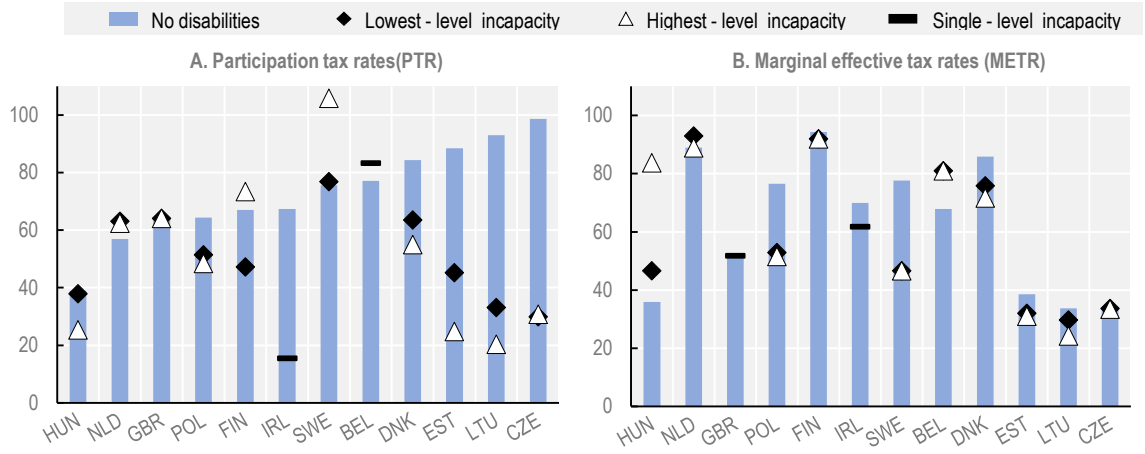
Panel B shows that METRs vary between around 25% in Lithuania and the Czech Republic (i.e., a recipient of disability benefits with a part-time job gets to keep 75% of additional earnings when she decides to work longer hours) and over 85% in Finland and the Netherlands. For those with the highest degree of impairments ("maximum disability), disincentives for increasing work effort (METRs) are sometimes greater

[9] http://www.oecd.org/social/faces-of-joblessness.htm

than the disincentives for starting work at all (PTRs).[10] This implies that countries' benefit systems can pose additional barriers to increase work effort further, once beneficiaries successfully returned to employment. Only for disability benefit recipients in Belgium, Sweden and the United Kingdom, are METRs lower than the corresponding PTRs (as is typically the case in all countries for people receiving unemployment benefits).

Figure 7. Does work pay for benefit recipients?

Participation tax rates for workers taking up part-time employment (Panel A) and marginal effective tax rates for workers transitioning from 'part-time' to 'full-time' work (Panel B), 2016.



Note: The indicator is an arithmetic average across six family types (including one- and two-earner families, as work incentives can be quite different for a second earner) and two earnings levels (50% and 100% of the average wage). 'Lowest-level incapacity' refers to the lowest level of severity needed to qualify for a disability benefit and 'Highest-level incapacity' to the highest level (noting that not all countries distinguish benefit entitlements by severity). 'Single-level incapacity' refers to disability benefit systems that do not distinguish levels of incapacity. 'No disabilities' refers to the case of a fully capable individual receiving social assistance benefits subject to relevant eligibility and income conditions. When calculating PRTs, workers in the 'No disabilities' group are for recipients of unemployment benefits. Benefit entitlements assume a 'long and continuous' employment record prior to benefit receipt (employment since age 19 until the age of 50). 'Part-time' work is 20 hours of work per week. Part-time workers in Sweden and the United Kingdom do not receive disability benefits. The model assumes for Finland and Sweden that beneficiaries suspend their disability benefits if they exceed the relevant earnings or working time allowances for disability benefit receipt.
Source: OECD Secretariat calculations using the OECD tax-benefit model (http://oe.cd/taxben).

A number of notable features of countries' disability benefit programmes shape these results:

- The Czech Republic places **no restrictions on work activities that disability-benefit recipients** can undertake while receiving benefits (disability insurance benefits consist of a flat-rate benefit and an additional amount paid proportional to the level of disability). Lithuania's disability insurance, the Lost Working Capacity Pension, also places no restriction on working. In both cases, the generous treatment of benefit recipients' employment incomes means that taking up employment and increasing working hours is financially attractive.
- A few countries either **terminate benefits** as soon as earnings or working hours reach a certain threshold, or do not permit combining work and benefits at all. Hungary terminates benefits at earnings above 150% of the minimum wage. Similarly, the United Kingdom terminates benefits if

[10] Disability benefit recipients often face higher marginal effective tax rates as they receive higher benefit payments, which constitute a larger share of their income relative to people receiving lower benefit amounts. This means that the effective tax rate is higher for those with a higher degree of disability as benefits are phased out when work intensity increases.

workers exceed rather low weekly thresholds of 16 hours worked or earnings beyond 120 GBP. In Sweden, workers can retain their full disability benefit if they work less than five hours per week, and do not earn more than one-eighth of a "normal" income. Otherwise, their benefit payment is suspended and they receive instead a payment equal to 25% of their previous benefit amount.

- Disability benefit programmes in a number of countries feature provisions that **feature provisions that reduce benefits more gradually** (Belgium, Denmark, Estonia, Ireland, the Netherlands and Poland). Estonia provides for a comparatively generous phase-out, with benefits reduced by half once monthly earnings exceed EUR 1012 (in 2016, essentially the average wage). By contrast, the Netherlands reduces benefit amounts by at least 70% of in-work earnings. However, this comparatively steep phase-out is partially offset by a supplementary earnings top-up for low-earning workers who have entered work from either unemployment or disability (Browne, Neumann and Pacifico, 2018[15]).[11]
- In Ireland, recipients of an Invalidity Pension cannot take up work while receiving the benefit. Rather **those who return to work receive a different payment**, the Partial Capacity Benefit, which is worth between 50% and 100% of the original benefit amount, depending on the severity of the disability.
- In Finland and Sweden, beneficiaries can **suspend entitlements temporarily while working**. In Finland, suspensions can be for 3-24 months if earnings exceed 60% of previous earnings (prior to benefit receipt). There is also a possibility to reduce the benefit to a partial payment (50% of the full amount) if earnings are lower (but exceeding 40% of previous earnings). In Sweden, working benefit recipients can also receive a lower benefit, worth 25% of the full amount, during a suspension period. Following suspension, claimants can decide to discontinue employment or studying at any point and go back to receiving (full) benefits.
- Finland and Sweden also offer dedicated **disability-related supplements** for claimants of housing benefits, which are subject to a means test. In the case of Finland, the clawback of these housing benefits contribute to the high METR (close to 100%) as workers move into full-time work.

6. Benefit design matters for employment outcomes

Across countries, employment rates of persons with disability correlate strongly with overall employment levels (Figure 8). Accordingly, an earlier OECD report (OECD, 2003[2]) argued that the biggest factors in improving employment outcomes for persons with disability are a strong economy and an effective general employment policy. However, a sizeable employment gap between persons with and without disability remains in all countries. In line with the empirical evidence cited earlier, benefit systems and the work incentives they provide are among the drivers of observed employment gaps. This is also borne out in participation patterns across countries, such as the share of benefit recipients who also work.

While a majority of those with health problems who receive disability benefits are not working, differences between countries are large. In 2018, across European OECD countries the share of disability-benefit recipients who both report health limitations that are in employment was just over one third (around 34%) of the corresponding rate of people with health limitations who did *not* receive such benefits (

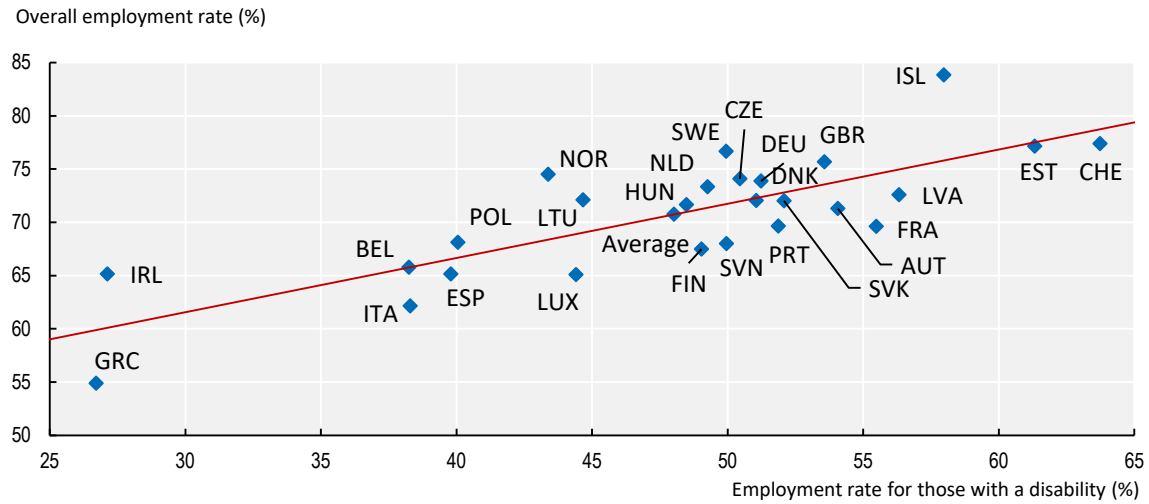
[11] This steep phase-out is partially offset by in-work benefits and a health care benefit to compensate workers for the purchase of private health insurance. Despite this, PTRs are above 70% because of the removal of social assistance and housing benefits form some households

Figure 9).[12] However, this "with benefits / without benefits" employment ratio varied enormously across countries, ranging from approximately 5% in Portugal and Greece to over 50% in Slovenia, Sweden and Estonia. The large divergence reflects a number of drivers. While some benefit recipients may not be able to work, for others incentives can be crucial.

For example, in Estonia, the gradual phase-out of disability benefits for those entering work, and activation requirements for those with partial work capacity, enables and encourages a culture of combining benefits and work. Similarly, Slovenia also reduces disability benefits gradually as earnings increase, while workers with a disability have hiring priority for vacancies for which they are suitably qualified. These incentives support an expectation by individuals and employers alike that those with chronic health problems can and should enter work.

Figure 8. Employment rates of persons with disability correlate strongly with overall employment

Employment rate (%) for the overall working-age population and for those individuals with a disability, 2018.



Note: 'Average' is the unweighted average of the depicted countries. Data for Ireland (IRL), Slovakia (SVK) and the United Kingdom (GBR) are for 2017. Data for Iceland (ISL) are for 2016.

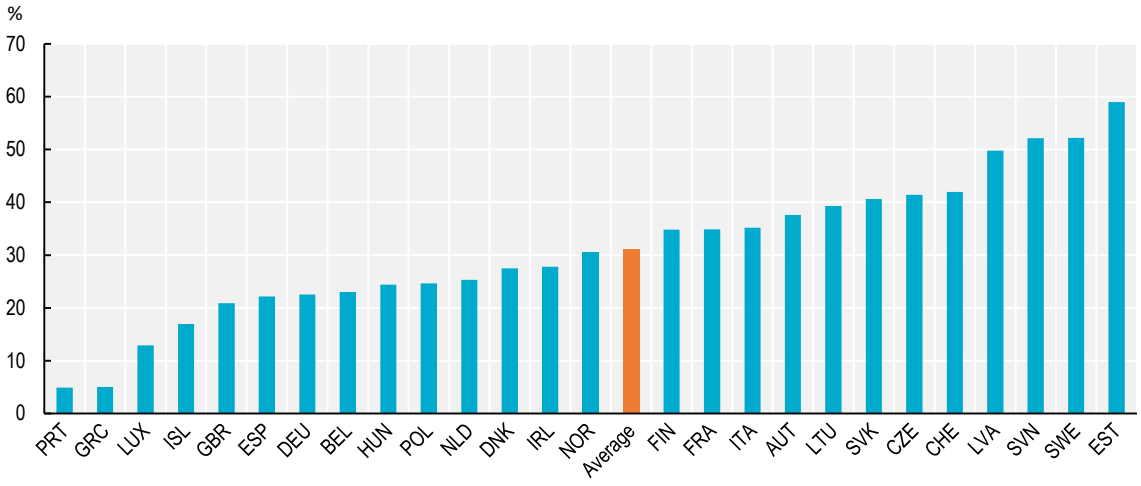
Source: OECD Secretariat calculations based on EU-SILC.

Conversely, no comparable provisions exist in Belgium, where disability-benefit entitlements in this country are often higher than for the unemployed. Indeed, though this paper does not present an empirical link, employment rates among recipients of disability benefits in Belgium are low (see Figure A.1). Similarly, employment rates are also low in Poland where, like in Estonia, benefits are reduced as earnings increase, but where initial benefit levels can be significantly higher.

[12] The employment shares for both disability benefit recipients and disability benefits recipients with health limitations are presented in Figure A.2.

Figure 9. Disability benefit recipients who are in work: Large differences across countries

Share of benefit recipients that is employed, as a ratio of the share of non-recipients that is employed, among persons with disability aged 18 to 64, percent, 2018.



Note: OECD-EUR average is the unweighted average of the depicted European countries. Respondents answered either 'Yes, limited' or 'Yes, strongly limited' when asked if they have limitations in activities they usually do because of health problems or disability in the past six months.
a) Data for Iceland (ISL) are from 2016. Data for Ireland, Slovakia, and the United Kingdom are from 2017.
Source: OECD Secretariat calculations based on EU-SILC.

7. Compensating for reduced work capacity: Is there a role for in-work benefits?

In practice, income support for persons with disability can come from a host of different benefit programmes including not only disability benefits but also unemployment benefits and social assistance that replace lost income and aim to ensure a minimum level of family resources (see Figure 5). However, disability benefits differ from most other benefit programmes as they specifically compensate for reduced work capacity and, to a different degree, for the additional costs faced by those with a disability.

To make the objectives of disability provisions transparent, and reduce risks of unintended differences in support for different out-of-work groups, disability benefits could focus more tightly on those two key functions: reduced work capacity and disability-related costs. This focus would leave questions of earnings replacement and income adequacy to other programmes, such as unemployment benefit or social assistance, thereby ensuring more equal treatment (in terms of replacement rates, work incentives, and activation approaches) in comparable labour-market situations.

To **cover the direct individual costs of a disability**, a first element of such an approach could provide for a flat-rate payment to persons with disability, with the benefit amount provided irrespective of work status but in line with extra costs incurred. It could for instance help to cover the costs for the purchase of a wheelchair or home improvements, or of securing dedicated care. Some countries, including Australia, Belgium, Denmark, Iceland and Norway, already provide benefits of this kind, to cover the costs of care, mobility or other recognised special needs.

A second prong of a focused disability programme could **top up in-work earnings**. The objective would be to compensate for reduced work capacity, and therefore encourage and facilitate employment for this group. The top-up (in a sense a form of partial disability benefit) could be proportional to an individual's assessed work capacity. It could grow with a worker's earnings, and reach a maximum at the workers assessed maximum capacity (it would require a carefully designed phase-out rate to balance the work

incentives of those recipients who find that they can work more than their assessed capacity).[13] Such a payment would target the aspects of disability that other social protection programmes do not cover. That is, it would reimburse individuals only for the work capacity that they have lost, measured in terms of income or hours worked. It would also boost the employability of people with reduced work capacity, by enabling employers to pay them in line with their actual output.

Of course, not all persons with disability will be in work, or be capable of searching for work, or taking up work if offered. For these persons, in-work benefits would not apply. Rather, they would receive the flat-rate benefit to help cover the additional costs associated with their disability, and would additionally be eligible to receive traditional income support for out-of-work individuals in the form of unemployment insurance, unemployment assistance, or social assistance, depending on their situation. For example, a person with disability who is entirely incapable of working would receive social assistance according to their situation, as well as a disability benefit that supports them according to their additional costs. Another person, who could work and who searches for a job, would receive unemployment benefits along with a disability benefit to support their additional disability-related costs. This would ensure that inactive or unemployed persons with disability receive comparable support relative to their peers without disability, while still providing targeted benefits related to their specific needs and costs.

In a number of respects, such a refocussed programme, or set of programmes, could offer more generous benefits than existing disability programmes and strengthen financial work incentives. Benefit recipients would be evaluated to have a specific level of potential work capacity and, while in employment, would receive in-work benefit accordingly. In practice, however, many factors beyond work incentives could hinder a recipients' entry into work and many recipients will either not be able to work, or not be able to work to their full assessed capacity. Thus, the average benefit amount would be significantly less than the statutory maximum entitlement for working recipients, limiting the budgetary cost. Additionally, while in work, disability benefit recipients would contribute to benefit financing by paying social security contributions and income taxes.

Many of the components for such a disability benefit system exist already in various forms. Most countries currently provide variable disability benefit amounts conditional on assessed work capacity, while flat-rate benefits to cover disability costs exist in many countries including Italy, Norway, Sweden, and the United Kingdom. In addition, a number of countries, including Canada, Finland, Israel, Korea, the United States, and others provide in-work benefits for workers irrespective of disability. The novelty of this reform lies in combining these elements together in a manner that targets persons with disability and that holistically incorporates existing income support measures such as unemployment benefits and social assistance.

As with any significant change of the tax-benefit system, thoughtful design would be required to assess potential losses for different groups, and prevent or bolster unintended ones. Implementing such a reform is also not without practical challenges. First, a disability-based in-work benefit is subject to similar constraints as more general in-work benefit programmes. For instance, in-work benefits can reduce the incentive for recipients to increase their income and take up unsubsidised work. Relatedly, steep phase-out rates on benefits can diminish the gains from moving into higher paying jobs (Immervoll and Pearson, 2009[18]). Further, the interaction of a disability-based in-work benefit with other in-work benefits, and with other elements of the tax-benefit system, such as tax concessions for low-earners, out-of-work benefit levels, and eligibility conditions for other forms of assistance, risks adding additional complexity to the social protection system. To ensure equitable outcomes for all workers, reforms must therefore pay careful attention to the interaction between new and existing in-work benefits with other existing programs.

[13] If a worker were to earn more than their assessed capacity, it would imply that they had increased their work capacity. In this case, the benefit would begin to be phased-out. Such a mechanism would need to be designed with care to avoid disincentives for career progression or participation in necessary work-capacity reassessments.

There are several other questions to consider in implementing such a new disability programme. To avoid resistance to the change arising from potential benefit losses, the new system could be applied to new applicants only, thereby grandfathering entitlements of some, or all, of those who receive disability benefit already at the moment of the introduction of the new system. A decision has also to be taken on the further situation and entitlements for those people losing benefits temporarily or permanently upon a regular reassessment, e.g. after they had successfully regained (some of their) work capacity. For those groups, special transitional rules might be necessary, especially for those reapplying for benefits again at a later stage or in countries where regulations allow disability benefit recipients to work on a trial basis, and to return to benefit if the trial is unsuccessful.

Beyond tax and benefit considerations, medical professionals conducting disability evaluations are generally not well equipped to adjudicate on a patient's potential productivity, or ability to work a set number of hours per day. Perhaps more worryingly, in-work benefits could induce more individuals to seek disability benefits, resulting in more recipients among some groups, not less (Ruh and Staubli, 2019[19]). Relatedly, in-work benefits may not provide sufficiently strong incentives for benefit recipients to transition into employment, and they can encourage workers to seek earnings supplements, rather than full employment (Koning and van Sonsbeek, 2017[20]; Jiménez-Martín, Juanmartí Mestres and Vall Castelló, 2019[21]).

While these potential pitfalls are notable, there are many other - non-monetary - positive effects of having more persons with disability in employment. For instance, beyond providing income for individuals, work increases social networks, offers a sense of purpose, and can direct mental focus away from individual (health) problems (Ryff and Singer, 1998[22]). Increased social inclusion, notably at work, is associated with increased physical activity and lower stress levels, resulting in longer and healthier lives (Cacioppo and Hawkley, 2003[23]; Umberson and Karas Montez, 2010[24]; Thoits, 2011[25]). These outcomes, coupled with a work culture that is increasingly inclusive, are meaningful indirect benefits that arise when more persons with disability engage in the labour market.

8. Conclusion: Lessons for disability benefit design

Results in this paper suggest several lessons for the effective design of disability benefits:

- The broader institutional setup of a disability programme – whether it offers a flat-rate benefit, a pension-like payment or an unemployment insurance-like entitlement – does not necessarily have a major impact on key aspects of social-protection effectiveness. For instance, the evidence suggests that all three types of scheme can achieve reasonable levels of benefit adequacy and broad benefit coverage for people with health problems or work limitations. However, flat-rate schemes tend to be less dependent on previous earnings, and may therefore achieve a greater degree of redistribution, with better access for individuals with a short or patchy contribution history.
- Generous disability benefits can have a considerable impact on efforts to obtain access to them, and on attempts to seek (re-)employment. This is especially true for young persons with disability, who may see long-term benefit payments as a viable and less risky alternative to employment. Relatedly, and despite recent disability reforms in several cases, the widespread fast increase in the number of young disability beneficiaries in many OECD countries – predominantly people experiencing mental health problems – appears to continue.
- Design specifics matter for people's likelihood of (re-)employment. For instance, the way in which benefits are phased-out and, eventually, lost when taking up work affects the employment participation and work efforts of beneficiaries. In particular, a gradual phase-out enables people to combine benefits and work, encourages part-time employment and, thus, promotes labour market and social integration for the majority of disability benefit recipients who can and want to work.

- Disability benefits interact with other elements of the tax and benefit system. Very often, disability benefits are higher than unemployment-related payments, but associated with a substantially weaker activation framework. A more unified approach to employment and income support can be an effective way to overcome benefit dependence, and ensure more equitable support and similar work incentives for people in comparable situations. Central elements of such a unified benefit system would be income top-ups for the additional needs arising from a disability (irrespective of the person's work status) and earnings supplements or in-work benefits in line with the person's remaining or lost work capacity. These two disability benefit components could be combined and co-ordinated with an out-of-work benefit that would provide a suitable degree of income security, and would be available irrespective of the reason for joblessness (e.g. disability or unemployment) and subject to the same activation provisions, such as active job-search.
- The new disability benefit proposed in this paper, i.e. a benefit with two components (the extra-cost benefit and the in-work benefit) that complement traditional out-of-work income support, is not new insofar as the components proposed exist in several countries in various forms. The novelty lies in the way in which these elements would be bundled together, with the aim to facilitate rather than replace employment among persons with disability. The key feature of such an integrated bundle of support would be that it would render a dedicated out-of-work disability benefit unnecessary. This would be a departure from the disability support strategies in most OECD countries, which currently include out-of-work disability benefits as a central component.

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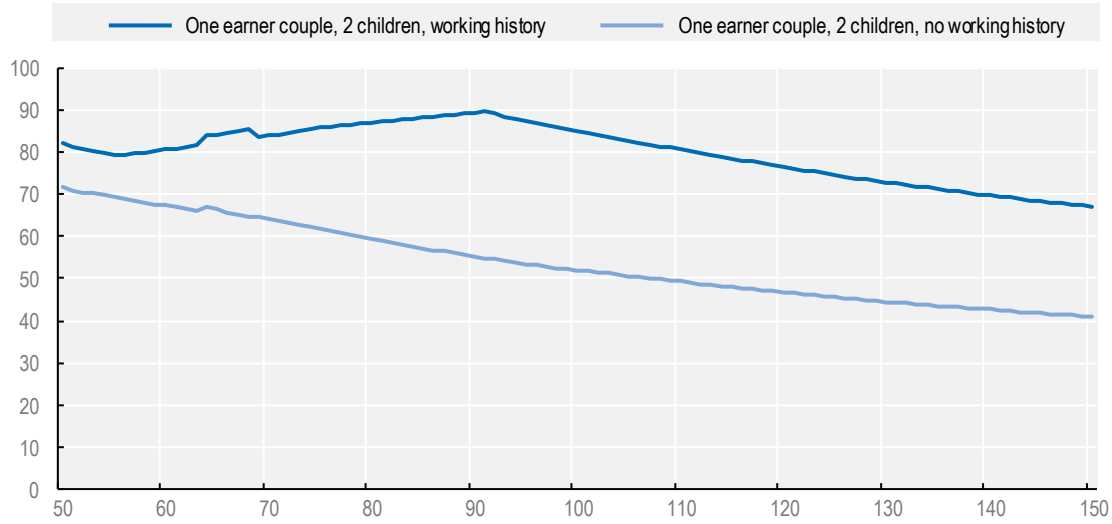
Annex A. Additional Figures

Figure A.1. Belgium net replacement rates

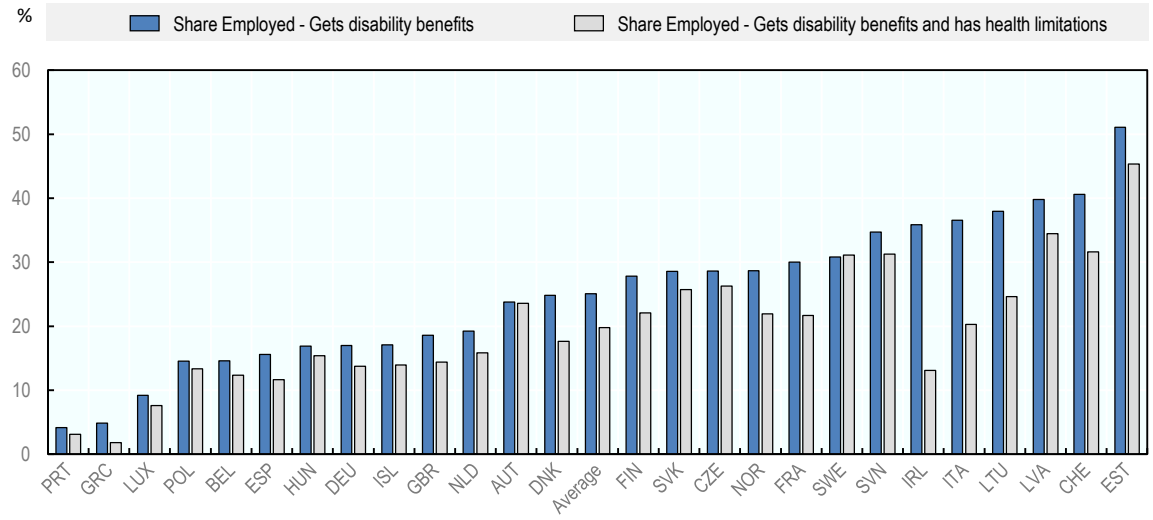
Benefit income relative to net income in work (net replacement rate, NRR) in Belgium
50-year old workers with 'Maximum disability', 2016.



Note: The NRR indicates net household income when out of work to net household income when in work. Calculations account for income taxes, social contributions and any housing and social assistance supplements that are available to low-income families living in privately rented accommodation. ''Maximum disability' to the highest level (noting that not all countries distinguish benefit entitlements by severity). Earners with 'working history' have been in employment continuously since age 19.
Source: Secretariat calculations using the OECD tax-benefit model (http://oe.cd/taxben).

Figure A.2. Employment rates vary for different groups of disability benefit recipients both between and within countries

Share of benefit recipients that are employed, all benefit recipients and the subset with health limitations, aged 18 to 64, percent, 2018[a].



Note: "Average" is the unweighted average of the depicted countries. . Respondents answered either 'Yes, limited' or 'Yes, strongly limited' when asked if they have limitations in activities they usually do because of health problems or disability in the past six months.
a) Data for Iceland (ISL) are from 2016. Data for Ireland, Slovakia, and the United Kingdom are from 2017.
Source: OECD Secretariat calculations based on EU-SILC.