A People-centred Perspective on Employment Barriers and Policies

## FACES OF JOBLESSNESS IN FINLAND



This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.© OECD 2020

Note by Turkey

The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".

Note by all the European Union Member States of the OECD and the European Union

The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

## Acknowledgements

This review is the eleventh in the Faces of Joblessness series (<u>http://oe.cd/FoJ</u>). It was written by Emily Farchy and Herwig Immervoll with extensive support from the OECD Tax and Benefit Team, in particular Daniele Pacifico. The OECD Secretariat would like to thank the Finnish Ministry of Health and Social Affairs for supporting this review, and is particularly grateful to Jere Paivinen, Minna Ylikanno, and Essi Rentola whose co-ordination were invaluable in the production of the review. Ilari Keso, Minna Liuttu, Paivi Haavisto-Vuoriorg and Signe Jauhiainen also provided valuable comments which helped to improve an earlier draft.

# Table of contents

Acknowledgements	3
Abstract	5
Introduction	6
Key messages	8
1 Joblessness in Finland: Labour market and social security context	11
2 Joblessness in Finland: Extent and incidence of labour market difficulties	32
3 Faces of joblessness: key groups for policy intervention	44
4 Conclusion	73
5 Appendices	75
References	84

## Abstract

Following five years of economic growth, prior to the COVID-19 pandemic, employment in Finland had increased to 72.6% of the working-age population in 2019. The effects of this strong recovery, however, have not been felt by all. The protracted downturn that began in 2008 has had long-lasting impacts on certain groups of the population, and long-term unemployment remains stubbornly high. In 2017, over 18% of working-age individuals were without employment while a further 9% were in unstable employment; working only a fraction of the year or facing restricted hours. If the government is to reach its ambitious 75% employment target by 2023 these individuals will need to be recognised and supported in overcoming the barriers that prevent them from fully engaging in the Finnish labour market.

This report utilises the Faces of Joblessness methodology to identify those needing support, on the basis of the specific employment barriers that they face. The report develops indicators to quantify these employment barriers, before using the indicators – within a statistical clustering model – to map out the main groups of individuals in Finland with similar support needs. This approach identifies 8 "faces" of joblessness including groups characterised as: (1) rural inactive (2) unstable work (3) skilled retirees (4) urban active (5) female carers (6) low-skilled youth (7) prime-aged low skilled and finally a smaller group of (8) those with limited financial incentives.

The results can shed light on the effectiveness of existing employment support strategies, and lay the foundation for the development of holistic policy packages: that are tailored to the barriers people face; that recognise most people with weak labour-market attachment face multiple barriers, and that coordinate policy interventions across policy domains and institutions accordingly.

Prior to the COVID-19 crisis, the most common employment obstacles in Finland were health difficulties, lack of work opportunities, and limited financial work incentives for those with access to other income sources (e.g., earnings of a spouse or capital income). Other barriers are less prevalent overall but nonetheless relevant for some groups. For example, the barrier created by limited work incentives due to out-of-work benefits that are "high" relative to individual earnings potential affects a relatively limited proportion of the jobless. Nevertheless, for a small subgroup this barrier plays a very strong role in determining distance from work. Of the working-age population who lack stable employment, fully 70% face multiple employment barriers, over 39% face three barriers or more.

## Introduction

Prior to the Covid-19 pandemic, Finland had enjoyed five consecutive years of economic growth, following nearly a decade of economic difficulties between 2008 and 2015. As GDP growth returned to positive ground, employment has seen a strong upturn, with over 72.6% of the population now in employment. A reduction in the inactivity rate, by over 4 percentage points since 2009, has been achieved alongside falling unemployment rates, which stood at 7.4% prior to the COVID-19 crisis.

Nevertheless, both unemployment and inactivity rates have remained above those in other Nordic countries, and weathering two recessions in the past 10 years has taken its toll – on both the labour market and the economy more widely. Substantial job losses in specific industries put a heavy burden on certain regions and, despite a high vacancy rate at the national level, high unemployment persists in some parts of the country. In addition to unemployment and inactivity, a significant share of the employed work in unstable jobs, with intermittent activity or fewer hours than they would like. Results in this report show that, across Finland, 27% of the working-age population face labour market difficulties; 18% did not work at all throughout the year, while a further 9% were only weakly attached to the labour market; occupying unstable jobs, working limited hours, or earning very little.

Finland's population is also ageing. The number of Finns aged 15-64 is falling by almost 0.5% a year, while the proportion of the population made up of individuals above 64 - which currently stands at 22.6 percent - is set to rise by four percentage points over the next 15 years. The concomitant age-related spending on pensions, health, and social care - is putting increasing pressure on public finances and is a key driver of the government's objective to strengthen employment. Finland shares this challenge with many other OECD countries. However, with the third highest dependency ratio in the OECD (after Japan and Italy), relatively low labour force participation among older workers, and a social security system that is among the most expensive in the OECD, the challenge is particularly pressing in Finland.<sup>1</sup> Indeed, a recent report (Alasalmi, 2019[1]) estimated that the broad cost of unemployment to the national economy as a whole, was EUR 10.8 billion in 2016.<sup>2</sup> To meet this challenge, and cope with the financial pressures of an ageing population, a number of labour market reforms, including cuts to unemployment benefits and a reduction in labour costs, have been implemented in recent years in an attempt to increase employment. Alongside these changes, a number of elderly long-term unemployed benefit receivers were, in 2017, transferred to the pension system<sup>3</sup> (Law on Pension Assistance 2016/1531). While these important changes no doubt went some way to contributing to the falling unemployment rates between 2015 and 2019, the resulting progress may have largely represented 'low-hanging fruit', i.e. employment integration of groups whose distance from the labour market was relatively small to start with. Further progress towards reducing inactivity, unemployment and underemployment, will require reaching those who are furthest from the labour market, by addressing the multiple barriers that keep them from participating more fully in the world of work. Such obstacles may stem from deficient skills, limited work experience, health problems or care responsibilities, or they may relate to a lack of opportunities or poor incentives to work.

Good-quality information on the incidence and extent of barriers to work is fundamental for targeting and tailoring support programmes to the complex needs of jobseekers. Yet, employment analysis that relies on

common labour-force statistics tends to highlight broad characteristics, such as gender, age, or country of birth, which are poor indicators of the particular barriers that people face in practice.

While in some cases obstacles may present themselves in isolation, in others, individuals may face multiple barriers that keep them from taking up stable employment. Where individuals face two or more concurrent barrers, addressing one of them in isolation may not have the desired, or anticipated, effect on employment outcomes. The results of this note highlight the extent to which this is the case in Finland. Indeed, over 68% of Finns without work, or with very low work intensity (henceforth referred to as jobless), face at least two barriers at the same time, and 39% face three or more. Continued progress in helping more people into employment will require efforts to address employment barriers in a holistic and co-ordinated manner across policy domains and institutions.

In an acknowledgement of the complex set of employment barriers faced by the majority of the jobless, many countries across the OECD increasingly attempt to account for individual circumstances, and capacities by means of sophisticated statistical profiling tools that often distil a large number of jobseeker needs and characteristics into an overall employability "score" (Langenbucher, Desiere and Struyven, 2019<sub>[25]</sub>). Complementing caseworker expertise, such individual scores can be used to inform decisions about specific ALMP offers, or the preparation of broader individual action plans. Such tools are used to categorise jobseekers on the basis of administrative data, and they facilitate tailoring employment programmes to individual needs.

The Faces of Joblessness methodology (<u>http://oe.cd/FoJ</u>) is related to statistical profiling, but it casts the net wider and provides a birds-eye view on patterns of employment barriers across the entire jobless population, including those that may not be immediately "on the radar" of specific service providers. The results seek to provide a map of the characteristics and employment obstacles of jobless individuals in Finland, the degree to which these barriers impede their return to work, and people-centred evidence to support policy efforts to design, target and co-ordinate employment support interventions.<sup>4</sup>

The remainder of this report is organised as follows. Section 1 provides the context of employment and income-support policies in Finland: the economic and labour market context as well as the social policy context. Section 2 provides an overview of the size and composition of people with potential labour market difficulties in Finland and quantifies the prevalence of labour market barriers among them. Section 3.1 derives clusters of people in inactivity, unemployment or with low work intensity into groups of individuals sharing similar sets of employment barriers. Section 3.2 goes on to discuss the significance of the barriers for employment outcomes and for strategies to target and tailor policy aimed at labour-market integration for different groups. The methodology employed in this report is outlined in Box 2.1, Box 2.2 and Box 3.5 with additional details in the appendices. A final section concludes and outlines options extending the analysis and for using it as a basis for continuous labour-market monitoring in Finland.

# Key messages

#### 1.1. Labour Market objectives and context

- Finland's comprehensive and comparatively costly social security provisions, combined with a
  rapidly ageing population have led to growing fiscal sustainability concerns. Prior to the COVID19 pandemic, five years of economic growth, an employment rate close to 73%, and a raft of
  structural reforms, had gone some way towards tackling these concerns. However, even prior to
  the pandemic, the government's stated goal of an employment rate of 75% by 2023 was ambitious.
- The strong economic recovery from 2014-2019 did not benefit everybody. Despite progress since 2016, long-term joblessness has remained a challenge, and labour-market inactivity among sizeable population groups particularly older and younger individuals continued to create social and economic risks at the individual level, and held back headline employment figures.

#### 1.2. Extent and incidence of labour market difficulties

- As in other OECD countries, a primary focus of employment policy in Finland is assisting the unemployed into work. However, the unemployed do not constitute the only, or the biggest, source of potential employment growth.
- A large number of jobless individuals are not (or no longer) actively seeking work. In addition, some people work significantly less than they could, or may like to, and face labour market difficulties that result in frequent moves between joblessness and different categories of marginal or precarious employment.
- To capture the various manifestations of labour-market difficulties, this report examines employment patterns of working-age individuals (17-64) in Finland over the course of a full year (2017, with data collected in 2018):
  - Some 18% were without any employment. 42% of them were mainly unemployed during the year, while the majority of the jobless reported being inactive due to early retirement, domestic responsibilities, or health concerns.
  - A further 9% of working-age individuals were in unstable or marginal employment; working only a fraction of the year or restricted hours.
- In addition to the unemployed, those with no or only weak labour-market attachment may benefit
  from employment-support measures and related policy interventions. With the right employment
  support and financial incentives, older workers (or older unemployed) may delay retirement and
  opt for continued employment; with the right support and work place adaptions, many of those with
  health problems or a disability are able to engage in productive work, and with appropriate training,
  discouraged workers may discover new employment opportunities.

- To guide policy initiatives, this report maps a number of key barriers that are likely to keep people from fully engaging in the labour market. Employment barriers are measured at an individual level, are based on self-reported labour-market status and a broad range of socio-economic circumstances, and take into account people's family situation (such as the presence of children). The report distinguishes three types of employment obstacles: barriers related to work capacity (skills, work experience, health, care responsibilities), incentive barriers resulting from tax and benefit provisions or because of the availability of significant incomes that do not depend on own work effort), and opportunity barriers (i.e., limited availability of job offers)
- Results indicate that reported health limitations, unsuccessful job search, and the availability of significant non-labour incomes are particularly prevalent in Finland, affecting 45%, 30% and 28% of the jobless population, respectively.
- Many jobless Finns are confronted with complex and inter-related employment obstacles. Close to 70% face two or more employment barriers at the same time, and this share rises to 87% for those who are persistently out of work for 12 months or longer. For those with multiple barriers, policies focussing on addressing a single employment barrier in isolation may not have the intended effect on labour-market outcomes, as other remaining barriers continue to impede participation.

#### **1.3. Targeting and tailoring labour market integration policies**

- Grouping the jobless in terms of their main employment barriers can help to design interventions that are suitably targeted and tailored to people's needs and circumstances. On this basis, eight salient "Faces of Joblessness" can be distinguished in Finland:
  - A large group of individuals who are no longer looking for work and largely live in rural areas (this group accounts for 26% of the jobless);
  - A group in unstable or intermittent employment and with limited employment barriers (20%);
  - A group of skilled retirees with comparatively high skills but limited financial work incentives (12%);
  - A group of mostly men, living in urban areas and actively seeking work despite health limitations (11%);
  - Women with significant care responsibilities (10%);
  - A group of young low-skilled individuals (9%);
  - Prime-aged low-skill individuals (8%); and
  - A group with significant non-labour income (4%).
- Policymakers may need to make difficult decisions regarding the allocation of finite resources across these groups, notably in periods of elevated labour-market problems, e.g. in the aftermath of the COVID-19 crisis. When it is not feasible to tackle *all* employment barriers facing *every* jobless individual, policy may require setting specific priorities between groups ("targeting"). And, for any given target group, policy design involves choosing the intervention or set of interventions that is likely to have a strong impact on employment outcomes ("tailoring").
- The Faces of Joblessness anatomy of target groups, barriers and characteristics helps to uncover the trade-offs involved in targeting, and offers evidence to support policies that are tailored to the circumstances of jobless people. For instance,

- Trade-offs in targeting "low hanging fruit" or those with the greatest support needs. Members of Group 2 ("unstable work") are largely job-ready, with no or limited numbers of obvious employment barriers. Many report active job search and may currently receive relatively little support within the Finnish Public Employment Service, where a heavy counsellor caseload and early streaming to sort jobseekers according to their support needs can limit attention to more job-ready clients. However, if growing labour-market slack makes successful job search more difficult, this group may require additional support to reduce the risks that they slip into longer-term joblessness.
- Retaining skills or maximising skills return. A desire to retain and mobilise existing skills may shift attention to increasing incentives for lengthening effective working lives for some groups, such as Group 3 ("Skilled retirees"). Close to half of this group are likely to hold significant professional or management skills. A focus on the long-term payoff of policy investments, on the other hand, may suggest focusing policy efforts on the younger jobless, including Group 6 ("Low skilled youth").
- Tailoring to the most important barriers. For any given target group, effective policy intervention requires an understanding of which of these barriers are most relevant for people's employment outcome. The results of this report highlight, for example, that for the members of Group 1 ("Rural inactive"), targeting reported health barriers alone is likely to have a larger impact on reducing the distance to the labour market than targeting education barriers alone. However, there are potential synergies arising from policies that successfully address both education and health-related barriers concurrently. Given the magnitude of this group, the presence of such synergies may even have implications for policy evaluation. Where multifaceted support needs exist, interventions that effectively target just *one* barrier may have a limited impact on aggregate employment figures. They may thus be deemed ineffective when evaluated.

# **1** Joblessness in Finland: Labour market and social security context

#### 1.1. Labour market: Government objectives and recent trends

## 1.1.1. Finland has made progress towards its ambitious goal of 75% employment, but key labour-market groups still lag behind...

A strong economy and the impact of structural reforms, including changes to unemployment benefits and a reduction in labour costs, have supported strong employment growth in Finland over the past three years (Kyyrä and Pesola,  $2020_{[2]}$ ).<sup>5</sup> In 2019, at 72.6%, the employment rate in Finland stood significantly above its earlier peak prior to the global financial crisis (71.6%, 2008). Alongside this, the unemployment rate fell by over two percentage points between 2015 and 2018 – in line with the average trend across OECD countries, which also fell by approximately the same margin (OECD,  $2020_{[3]}$ ).

Despite employment growth, however, the employment rate remains significantly below 75%, the government's stated target for 2023. Reaching this target would imply moving an additional 60 000 individuals into employment.<sup>6</sup> Prior to the ongoing global pandemic, Finland's economy was already expected to slow over the next few years and the Covid-19 shock has worsened the global economic and labour-market outlook sharply. In spite of these major additional challenges, the government's goal continues to have important strategic dimensions related to longer-term economic and demographic challenges. Progress towards achieving it will require identifying untapped sources of employment growth, including among groups, and in regions, that have traditionally seen low employment rates. For instance, Figure 1.1 shows employment rates of just 51.7 and 59.5 percent among older workers and youth, respectively.

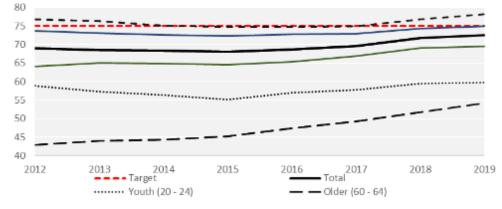


Figure 1.1. Employment rates remain low among both the young and old Total and selected population groups, percent

Note: Total refers to population aged 15-64 Source: Statistics Finland

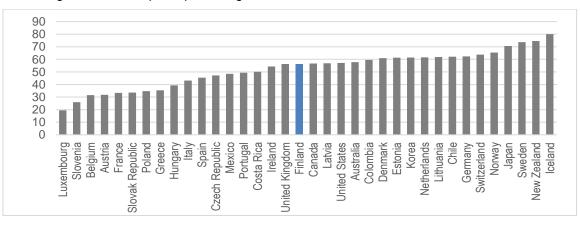
#### 1.1.2. An ageing population means that Finland must run just to stand still...

In 2005, the earnings-related component of the Finnish pension system underwent the most extensive reform in its 40-year history, with changes including the introduction of a flexible retirement age (between the ages of 63 and 68), a cut in early retirement pensions, and an increase in their lower age limits. By 2018, the inactivity rate among the population aged 55-64 had fallen 12.5 percentage points from its 2009 peak. The 2005 reform may be of the drivers of this fall.

Further reforms in 2017 set the minimum retirement age on a path to reach 65 by 2027 (with an increase of 3 months per year), and a link to life expectancy thereafter. Alongside this, the *part-time pension* was replaced with a *partial old-age pension* that incorporates a penalty that encourages later retirement.<sup>7</sup> While this partial old-age pension offers slightly reduced payments, it removes all claimant requirements other than age such that there are now no limits on working while claiming the partial old-age pension.<sup>8</sup>

The result has been an increase in the employment rate of over 28 percentage points, since the turn of the century, among those aged 60-64. Nevertheless, labour force participation among older workers remains substantially lower than in Finland's Nordic peers and other high-performing OECD countries (Figure 1.2). The Finnish working-age population (ages 15-64) has been falling by a compound annual rate of almost 0.4% a year over the past five years. According to UN medium-variant forecasts for 2060, there will be more than 0.6 individuals aged 65+ for every member of the working age population (UN World Population Prospects).

## Figure 1.2. Labour force participation among older workers lags high-performing OECD countries, 2018



Percentage labour force participation, age 60-64.

Source: OECD Labour Force Statistics

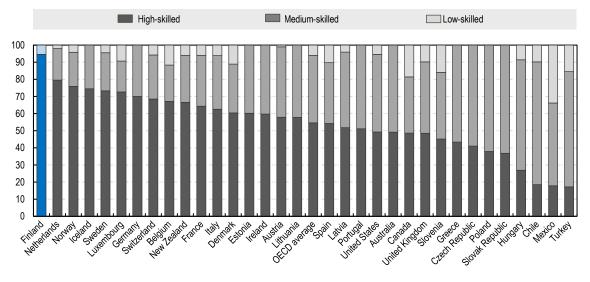
#### 1.1.3. Finland's labour force is highly skilled, but opportunities are limited for lowerproductivity workers

Finland has one of the strongest education and skill development systems in the OECD (OECD 2019). Fully 44% of the population aged 25-64 hold a tertiary degree or higher (OECD average in 2017 was 37%) and the country consistently scores amongst the top performers in international skill assessments both among students (PISA) and among the adult population (PIAAC). However, those born before the reforms to the schooling system that took place in the 1970s tend to have lower skills. Furthermore, Finland's compressed wage distribution makes hiring lower-productivity workers costly for employers, and demand for low-skilled workers and/or those with limited education and experience is comparatively low. Indeed,

#### 12 |

among the countries surveyed in PIAAC, high-skill occupations in Finland account for the largest share of employment in occupations with unmet demand for workers (Figure 1.3).

#### Figure 1.3. Limited labour demand in low-skilled occupations



Percentage of employment in occupations with labour shortages, by skill level, 2015

Note: High, medium and low skilled occupations are International Standard Classification of Occupations (ISCO) occupational groups 1 to 3, 4 to 8 and 9 respectively.<sup>9</sup> Shares of employment in each skill tier are computed as the corresponding employment in each group over the total number of workers in shortage in each country. Data refer to the latest year for which information is available: AUS (2016), DEU (2012), ILS (2013), MEX (2016), NZL (2017), NOR (2014), SVN (2012), USA (2017)

Source: OECD (2020) Getting Skills Right in Finland: Continuous Learning in Working Life. Based on the OECD Skills for Jobs database (2018).

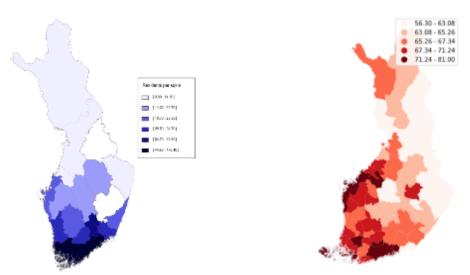
The prevalence of high-skill jobs, combined with a highly-selective higher education system, leaves lowskilled youth with few choices. Indeed, young people who failed to get an upper-secondary degree account for nearly half of all the NEET in Finland (OECD 2019). For many, early employment difficulties mark the start of a lifetime on the margins of the labour market, as early skills deficiencies compound over time: although participation in adult learning is among the highest in the OECD, Finland also ranks highest for the participation gap between low and high skilled (OECD 2020).<sup>10</sup> As a result, the current continuous learning system further widens, rather than narrows, the skill gap that exists at the end of initial education.

#### 1.1.4. Employment rates are very low in many rural areas

Finland's population is increasingly concentrated in the larger settlements predominantly located in the south of the country – most notably in the Greater Helsinki metropolitan area. The countryside is exceedingly sparsely populated, rural areas have struggled to retain young people in particular, and internal migration away from rural areas has reinforced the demographic drag on the working-age population from low birth rates. Moreover, functional labour markets are relatively local and commuting does not appear to be a feasible or desirable proposition for many; just 34.6% of workers, aged 15-64, commute outside their municipality of residence (Official Statistics of Finland (OSF), 2020[4]), while just 4.9% commute across regional boundaries in Finland – compared to an European average of 8.6% (Eurostat, 2000[5]).<sup>11</sup> As a result, regional disparities in activity and opportunity can leave displaced workers struggling to find re-employment (OECD, 2016[6]).

#### Figure 1.4. Activity in Finland is concentrated in the capital region,

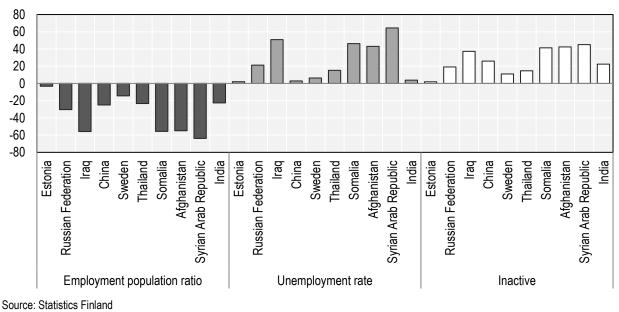
Panel A: Residents per Square meter 2017 Panel B: Employment rate, 2019. Percent.



Source: Statistics Finland (Panel A) and OECD Regional database (Panel B)

#### 1.1.5. Finding stable employment tends to be difficult for migrants

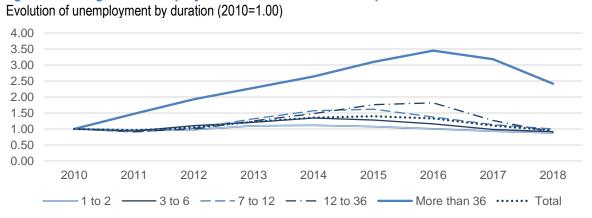
Starting from a low base, Finland's migrant population has seen faster growth rates over the last 25 years than most other OECD countries. As in a number of OECD peers, migration is increasingly viewed as a potential policy option to tackle mounting old-age dependency ratios. However, for the time being, migrants tend to have greater difficulties in finding stable employment than native-born Finns (Figure 1.5). In part, this is because the early employment outcomes of migrants are strongly influenced by the linguistic distance between the Finnish language and that of their country of origin.<sup>12</sup> In addition, high skill requirements in the Finnish labour market, uncertainty among employers regarding the value of qualifications acquired abroad, and certain family-oriented cash benefits have also been highlighted (OECD, 2018). Beyond the uncertainty involved in hiring individuals with qualifications obtained outside Finland, recent research has shown that, even human capital obtained within Finland has a higher return for individuals with Finnish or, to a lesser extent, European sounding names (Ahmad, 2020<sub>[7]</sub>).





#### 1.1.6. Long-term unemployment accounts for a large share of joblessness

Prior to the COVID-19 pandemic, the unemployment rate has progressively fallen back from its 2015 peak of 9.4%. However, this fall has been largely driven by reductions in short-term unemployment. Long-term unemployment did not begin to decline until 2016. The downward trend was substantial and prolonged, but it has left levels of very-long-term unemployment (> 36 months) at more than double the 2010 values (Figure 1.6).<sup>13</sup> In 2019, fully one-half of the unemployed aged 60 to 64 were long-term unemployed – across all levels of education (Official Statistics of Finland,  $2019_{[8]}$ ). In 2018, the share of all unemployed who have been unemployed for over a year stood at 26 per cent with slightly under one in three of these individuals in unemployment for over 36 months.<sup>14</sup>



#### Figure 1.6. Long-term unemployment has not fallen back to pre-crisis levels

Note: The fall in unemployment between 2016 and 2017 is partially a result of the periodic interviews with unemployed job seekers that began in 2017 and removed an estimated 20,000 to 30,000 persons from the job seeker register. Prior to their removal, these individuals were, in most cases, classified as long-term unemployed.

Source: Statistics Finland

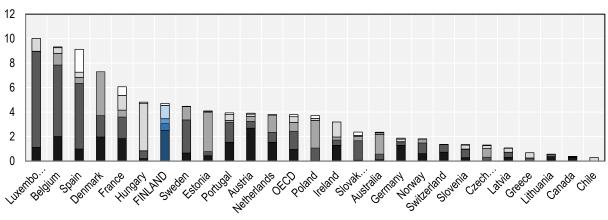
#### 16 |

Long-term unemployment is highest among older workers and, in 2018, the long-term unemployed accounted for 30% of all unemployed aged 45-54, and close to 42% among unemployed those aged 55-64. And while the proportion of the labour force participating in some form of labour market programme is high in Finland, relatively few of the long-term unemployed undertake active measures. Indeed, In Finland, close to 70% of participants in active labour market programmes (ALMP) receive out-of-work income maintenance and support.

While the participation in ALMPs in Finland is marginally above the OECD average (Figure 1.7) and these measures have been shown to be effective (Aho, 2018[10]), the likelihood of participation is much lower for the long-term unemployed than it is for those with shorter unemployment durations (

Figure 1.8). And while the downward trend in participation rates among the long-term unemployed has been reversed in recent years, it remains much lower than prior to the global financial crisis. Participation is just a first step, however, and will only lead to an improvement in proximity to the labour market if it addresses the key barriers that are keeping the jobless from working.

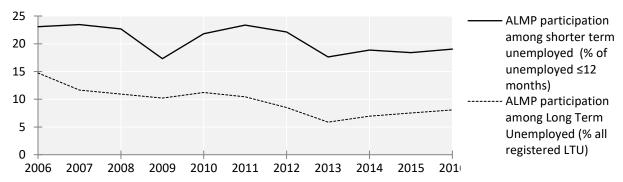
#### Figure 1.7. Participation in active labour market programmes is in line with the OECD average Participants stocks by main category (% labour force)



Training Employment incentives Sheltered and supported employment and rehabilitation Direct job creation Start-up incentives

Source: OECD LMP Database

#### Figure 1.8. ALMP participation rates are lower for the long-term unemployed Percentage participating in ALMP measures



*Notes:* Stock of participants in ALMP measures that were previously registered unemployed divided by the stock of registered unemployed plus the stock of participants in regular activation measures that were previously registered unemployed and whose unemployment spell is broken by participation in a regular activation measure. Note that, in Finland, participation in LMP measures always causes a break in the unemployment spell and participants are no longer counted as registered unemployed. *Source*: (OECD-EU, 2018<sub>[71</sub>)

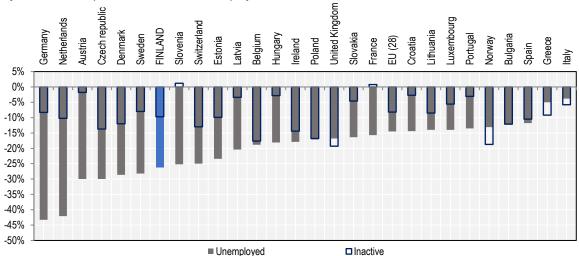
#### 1.1.7. Perceived health among the unemployed is low, particularly among the young

According to the Ministry of Social Affairs and Health, as many as 1.9 million Finns of working age have some type of disability or chronic disease – this is over half of the working age population (Ministry of Social Affairs and Health,  $2019_{[8]}$ ).<sup>15</sup> Furthermore, close to a third of these individuals, approximately 600,000, find that their disease or disability affects their work or work opportunities. In light of these figures, tackling health concerns and increasing employment among those with health issues will need to be a cornerstone of employment support in the coming years.

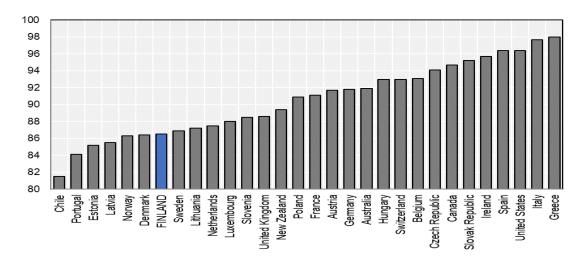
Poor physical or mental health can lead to poor work performance, and hence, to job loss. At the same time job loss and extended periods in unemployment can lead to, or exacerbate, health concerns. As a result, positive association between unemployment and health is common in many countries. Indeed, when it comes to health perceptions, the disparity between the health of the employed and the unemployed are particularly large (Figure 1.9).

#### Figure 1.9. Many Finns perceive themselves to be in poor health

Panel A: Percentage-point difference in the proportion viewing their health as "good" or "very good", age 16-64, by activity status as compared to individuals in employment







# Note: The SILC Data for Finland reports health limitations for the primary survey respondent only (the 'reference household person'), while information is missing for other adults in the same household. However, given that the primary survey respondent is randomly assigned, this should not bias the results. A similar restriction applies to the data for Norway. Source: Panel A: Eurostat Panel B: OECD Health Status database.

Also of note is the age at which health concerns begin in Finland. Indeed, among youth aged 15-24, already close to 15% perceive their health to be only fair or bad, a much higher share than in many comparator countries, though not dissimilar from Denmark, Norway and Sweden. (Figure 1.9 Panel B).

#### **1.2. The role of income support programmes**

Effective activation and employment support are seen as key ingredients in reducing Finland's social security bill, but a decisive policy strategy is yet to emerge (Kyyrä and Paukkeri, 2018[9]). While financed through taxes and insurance contributions, Finland social security system has a complicated implementation infrastructure populated by multiple actors, including: the Social Insurance Institution (Kela), the municipalities, the unemployment funds, pension insurance companies and other insurance providers.

This system has, in some cases, led to a disconnect between benefit payments (largely administered centrally by Kela, or by unemployment funds for earnings-related unemployment), employment services (largely undertaken within Employment and Economy offices), and social services (largely undertaken within municipalities). The recent transfer of responsibilities for basic social assistance payments from municipalities to Kela, may have widened some aspects of this already existing disconnect.

While some municipalities currently organise various employment services on a voluntary basis (e.g. employment using salary subsidies). Plans to strengthen the role municipalities play in employment service provision will begin in 2021 with the employment trial programme. As part of the employment trials, municipalities will provide employment services for (i) jobseekers receiving labour market support, (ii) youth under 30, and (iii) migrants. Compensation for staff and financial resources will depend upon the number of clients under their responsibility.

#### 1.2.1. Public social expenditure in Finland is amongst the highest in the OECD

Finland has a complex and comprehensive social security system incorporating elements of social insurance, universal and means-tested support, as well as a comprehensive healthcare system. In comparison with other OECD countries, large parts of the benefit system are residence based, such that it covers the entire population irrespective of past employment or paid contributions. This is notably the case for health, support for families and children, and old-age pensions, and some components of unemployment benefits (OECD, 2019[10]). In addition earnings-related components of unemployment benefits and pensions are contingent on past employment and largely financed by contributions from workers and their employers (see Box 1).

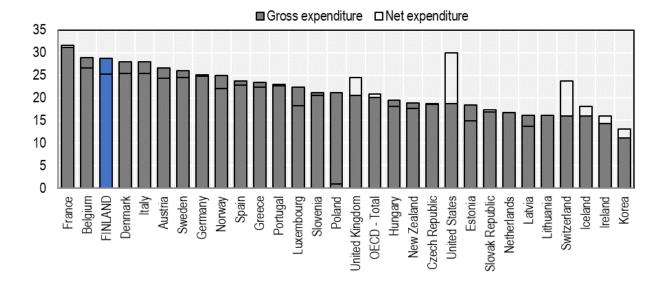
The Finnish social security system is among the most costly in the OECD, with expenditures totalling over 70 billion euros in 2018 (Finnish Institute for Health and Welfare, 2020[11]) and accounting for close to 30% of GDP (

Figure 1.10). Because most benefits in Finland are taxable and there are few tax breaks for social purposes, net social expenditures are lower, but Finland still ranks among the highest-spending countries.

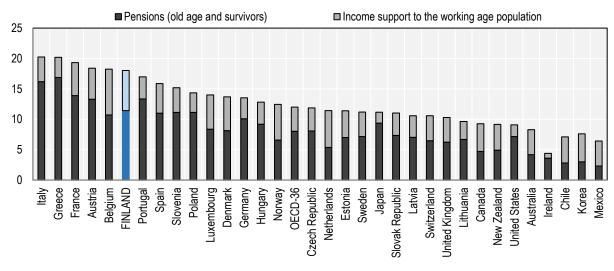
#### 18 |



Panel A: Public expenditure as a percentage of GDP, 2018



Panel B: Public social expenditure by broad social policy area. Percentage of GDP, in 2015/2017 or latest year available



Source: OECD Social Expenditure database

#### Box 1.1. Finnish Policy at a Glance: Elements of the Social Security landscape

#### Pensions:

The *earnings-related* pension is accrued on the basis of annual earnings. The costs are covered by contributions collected from employers (average 16.95% of salaried workers wages) and employees (average of 7.15% of the salary or 8.65% for those aged 53-62).

For those with small earnings-related pensions, a minimum pension of 834.52 Eur per month is guaranteed through a combination of the *national pension* and the *guarantee pension* supplement. In some cases a person might get three different pensions (earnings-related, national and guarantee) to get the minimum amount of 834,52 euros. Pensions are tax funded and can be drawn from the age of 65 (rising with life expectancy). Migrants are entitled to this minimum after three years of residence (OECD, 2019[16]).

#### Sickness Insurance

The scheme covers all residents and incorporates: the daily sickness allowance; maternity, paternity and parental allowances, reimbursements on medicines, travel costs and private care.

The Sickness Allowance is provided to those between the ages of 17 and 67 if they are unable to work due to illness. Disbursed through the Social Security Institution (Kela), the Sickness Allowance is available for a maximum of 300 working days per illness. The amount of the benefit is calculated on the basis of annual income (reimbursing approximately 70%), while employers pay the full salary during the first nine days of illness at a minimum or – depending on the collective agreement –between one to three months of illness.<sup>16</sup>

A sickness allowance on account of infectious diseases can be paid to persons who have been ordered to stay off work or who have been quarantined or placed in isolation. It is available for as long as the order remains in effect. Recipients of a sickness allowance on account of an infectious disease are compensated for the full loss of income.

#### **Disability benefit**

Following the end of the sickness allowance, workers in need of further support can apply for earningsrelated rehabilitation or disability benefits – with a partial benefit available to those deemed to have lost between 40% and 60% of their working capacity. Rehabilitation benefits, drawn for a period specified in the accompanying rehabilitation plan, are intended for recipients whose work capacity is likely to be restored through rehabilitative support. Those unlikely to return to work (or whose capacity to work is not restored after the rehabilitation period) receive disability benefits. These disability benefits can be drawn until the minimum retirement age for an earnings-related pension. These earnings-related disability benefits are part of the earnings-related pension system. Individuals not eligible to an earnings-related benefit can claim a disability benefit in the national pension system until the retirement age for the national pension.

Under the Finnish pension system, working is allowed within the personal earnings limit determined by pre-retirement earnings. Full disability pensioners' earnings may be a maximum of 40 per cent of the average earnings of the last five pre-retirement years, (60 per cent for partial disability pensioners). Indeed, disability pensioners have a lower average pension than other pensioners, which may increase the need for them to work while on a disability pension (Polvinen et al., 2018<sub>[12]</sub>).

#### **Unemployment Insurance**

The unemployment allowance is available to those who meet the employment condition (having worked 26 weeks of the previous 28 months). The allowance consists of two components (i) an earnings-related component, administered by an unemployment fund, and paid to its members for a maximum of 400 days (300 days for those who have worked less than three years), and (ii) a basic allowance payable to those who are not members of an unemployment fund for the same maximum duration.

Workers aged 58 years or more, who have worked at least five of the past 20 years, are entitled to a maximum of 500 days. In addition, those who are above the age of 61 years when they reach this 500-days limit, qualify for an extension until the retirement age of 65. This is known as the 'unemployment tunnel'. In spite of this nickname, claimants remain job seekers and must obey the same obligations as other unemployment jobseekers.

Unemployment benefits can be combined with work such that the unemployed who take-up work for less than two weeks can qualify for partial benefits. The days on which partial benefits are received are counted only partially toward the maximum benefit duration. In addition, when an unemployed person finds part-time or incidental work with some earnings, he/she can still receive an adjusted unemployment benefit.

#### **Unemployment Assistance**

Alongside the two unemployment insurance schemes, the labour market subsidy, administered by KELA, is paid to those unemployed who have not completed the employment condition, or whose earnings-related allowance has come to an end. The labour market subsidy is paid at an amount equivalent to that provided under the basic unemployment allowance.

#### **Family Benefits**

Child benefit is paid on a flat rate to all families with children under 17, with a lone-parent supplement. The amount of child benefit received is increasing in the number of children.<sup>17</sup>

#### **Child Care Benefits**

Families that have a child under 3 years of age who is not in municipal day care, are eligible to Child Home Care allowance. If granted, the allowance is also paid for any other children under school age (7) who are outside municipal day care. Municipalities may pay an additional municipal supplement to the basic amount. And, while the number of municipalities providing this supplement has decreased in recent years, around one fifth of all municipalities still pay the supplement including half of the big cities and all three metropolitan area cities. An amendment to the Act on Early Childhood Education and Care, effective as of 1 August 2020, means that equal access to early childhood education and care will be reinstated for all children. For example, the child of a parent who is unemployed or on childcare leave will then be entitled to full-time early childhood education and care.

Private Day Care Allowance is paid directly to a private child care providers and is available from the end of the parental allowance period until the child starts school.

#### **Housing Allowance**

General housing allowance is linked to gross household income and covers a maximum of 80% of housing costs. Housing allowance for pensioners is available to those receiving a small pension (excluding early retirement pensions). Students are also eligible to a housing allowance.

Sources: Ministry of Health and Social Affairs mimeo 2019, Finnish Centre for Pensions, (OECD, 2019[10]), and (OECD, 2019[13])

#### 1.2.2. Job search activity among unemployment-benefit recipients is relatively low...

The number of unemployment benefit recipient's remains substantially above the number of people unemployed according to the labour force survey. This is the case in a number of OECD countries, but this 'pseudo-coverage rate' (the ratio of benefit recipients to unemployed) is particularly high in Finland (Figure 1.11 Panel A). This is particularly the case among some age groups. Indeed, in 2018, the number of men aged between 45 and 49 claiming some form of unemployment benefit was 43 per cent higher than the number of unemployed in the same age bracket. Among women aged 40-44 the number receiving some form of unemployment benefit was as much as 67% higher than the number classified as unemployed in the Labour Force Survey (Figure 1.11 Panel B).

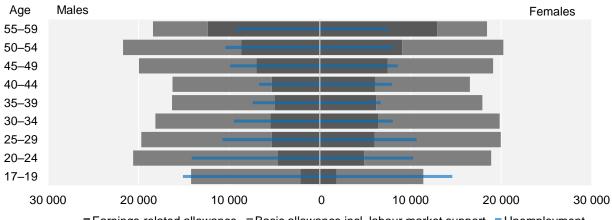
#### Figure 1.11. Receipt of unemployment benefits is high relative to numbers of active jobseekers

#### Panel A: Pseudo-coverage rates across OECD countries

 Total, 2007 Insurance, 2014 Assistance, 2014 % 140 120 100 80 60 40 20 0 FINIAND Germany Netherlands Ireland Austria OFCD INION United Mingdor NOWA Denmail Australi Switenar Sweder France Jun New Zeals Slovat Rept Luxenbo, Sta Calle Requi FUIOPERT United Clean

Recipient totals from administrative sources, in % of unemployed

Panel B: Unemployment benefit recipients by age and sex, Dec 2018



Earnings-related allowance Basic allowance incl. labour market support Unemployment

Note: 1. The pseudo-coverage rate is a simple ratio of benefit recipients and unemployed 2. Unemployment based upon Labour Force Survey data (Statistics Finland) and calculated according to the ILO definition i.e. individuals out of work who want a job, have actively sought work in the previous four weeks and are available to start working within the next fortnight. 3. Includes unemployment insurance and assistance benefits. Benefit recipients data for Greece are missing and there is currently no unemployment benefit in Mexico. 2007 data for Italy and Sweden are omitted for comparability reasons. In some countries, additional forms of income support may be available to some unemployed (e.g. for participants in certain labour-market programmes).

Sources: (OECD, 2018[14]) (Panel A) and KELA the Social Insurance Institution of Finland, and the Financial Supervisory Authority (Panel B)

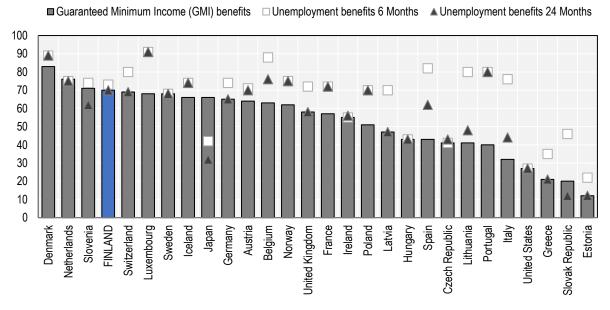
The large disparity between unemployment headcounts from labour force surveys, and the number of benefit payments is due in part to relatively low activity levels among the unemployed. Indeed, individuals who report low levels of job-search intensity or unavailability for work tend to be classified as inactive in labour force statistics. In addition, pseudo-coverage rates may also be inflated as a result of working individuals receiving some unemployment support. Indeed, people who receive *adjusted* unemployment benefit do not appear as unemployed if they work more than 4 hours per week. And, given that the benefit is fairly generous, financial incentives to work part-time or occasionally can be higher for benefits recipients than in other countries, where partial unemployment benefits do not exist or are less generous (see Box 1.1).

## 1.2.3. Efforts have been made to strengthen incentives to look for and accept employment opportunities

In recent years, policy reforms in Finland have moderately increased the net incomes of working families, relative to the average wage. Between 2016 and 2018, tax rates in the lowest and the highest income brackets decreased by 0.5ppts, and in the middle brackets by 0.25ppts (OECD, 2019[13]). Tax thresholds, the tax allowance for work-related expenses, and the maximum amount of the basic tax allowance have also increased, reducing tax liabilities further.

#### Figure 1.12. Participation tax rates are high for those on low incomes

Participation tax rates for single person without children entering employment at 67% of average wage, 2019



Source: OECD tax-benefit models and policy database, http://oe.cd/TaxBEN

#### 24 |

Notes: Participation tax rates (PTRs) are calculated for somebody making a transition from unemployment into paid employment at 67% of the average wage. They correspond to the share of in-work earnings that are lost due to reduced benefits and higher taxes upon taking up a job. PTRs account for housing benefit top-ups and, where they exist, for any temporary into-work benefits. At month 6 of the unemployment spell, a benefit claimant in Finland is eligible to receive earnings-related unemployment benefit. At month 24, they would instead qualify for labour market subsidy, which is less generous. However, at month 24 labour market subsidy is topped up with social assistance, and at both month 6 and 24 unemployment benefits are topped up with housing benefits. The case of GMI includes housing benefit top-up. As a result, out-of-work net incomes in all three cases are almost the same in Finland. Those making a transition into employment may qualify for temporary into-work benefits to promote re-employment in some countries (e.g. a part of previous social assistance or unemployment benefit may continue to bel paid after starting a new job). Such benefits do not affect results for Finland. Unemployment benefits in the out-of-work situation are also calculated based on previous earnings at 67% of average wage. In the case of Finland, participation in the unemployment fund is assumed (implying eligibility to earnings-related unemployment benefit for the first 18 months).

Policymakers have also explored mechanisms to address any disincentives resulting from the benefit system (see Box 2). Alongside changes to benefit duration and generosity, this included a reform to articulate the link between benefit receipt and job-search activity, both for basic unemployment benefits and for income-related unemployment schemes. Data from Finland's benefits agency (KELA) indicate that this *Activation Model* resulted in sanctions in the form of benefit cuts for a substantial number of the unemployed. Indeed, approximately one in three of the unemployed receiving income-related benefits (from unemployment funds) had their benefits reduced, alongside 40% of those receiving basic benefits from Kela (Kyyrä et al., 2019[15]).<sup>18</sup>

The tightening of benefit conditionality proved to be controversial, however. In particular, there were widespread concerns that benefit cuts penalised jobseekers who face specific additional barriers to employment or active job search (Kyyrä et al., 2019[15]). The *Activation Model* was subsequently withdrawn in January 2020.

#### Box 1.2. Recent changes to unemployment benefits in Finland

#### Finland implemented several changes in unemployment benefits in both 2017 and 2018.

#### In 2017:

The maximum duration of earnings-related unemployment benefit (UI) decreased by 100 payment days (that is, from approximately 23 to 18 months for those with a contribution record of 3 years or more, and from 18 to 14 months for those with an employment record of less than 3 years). After UI expires, a means-tested unemployment assistance benefit, labour market subsidy (UA), is paid for an unlimited duration. The change does not apply to those aged 58 or over.

The basic unemployment benefit amount, supplements for children and the threshold for calculating the earnings-related component fell slightly (by less than 1%).

#### In 2018:

As part of the broader "Activation Model", an activity requirement test was introduced. An unemployed jobseeker must fulfil the test during each review period comprising 65 payment days (i.e. 13 weeks) in order to be entitled to the full benefit amount for the next 65 payment days. The criteria for the activity test were met if a benefit recipient:

- Was employed for at least 18 hours during the 13 week review period, or
- Earned at least EUR 241 during this period, or
- Participated in employment promotion measures or other similar activities for at least five days during this period.

If an unemployed jobseeker did not fulfil the activity requirement, the unemployment benefit was reduced by 4.65% for the next 65 payment days. The 4.65% reduction was applied to the total amount including possible child increases and increased amounts. The reduction was only applied once, i.e. reductions did not accumulate over time if the conditions are not met in successive periods, and the first 65 days of each benefit (both UI and UA) were always paid in full. In certain situations (e.g., a person with disability or a family carer) the activity was not monitored and the allowance is not reduced.

#### In 2020:

The activity requirement was rescinded.

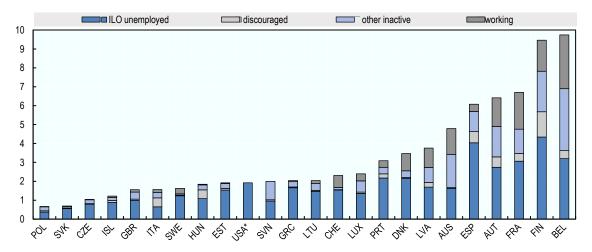
Source: Finnish Ministry of Social Affairs and Health (see https://stm.fi/en/income-security/unemployment

#### 1.2.4. Many jobless believe no suitable work is available

In addition to possible incentive or motivation-related barriers, the perceived availability of suitable work can also affect individuals' job-search strategies or intensity. They may suspend or abandon active job-search if they take the view that appropriate job opportunities are generally limited, because their mobility is limited, or because of other structural, social or cultural barriers that make available jobs inaccessible (e.g. discrimination). These so-called discouraged workers account for a comparatively high share of benefit recipients in Finland (see Figure 1.13).

#### Figure 1.13. Recipients of unemployment benefits

Percent of the working age population, 2016.



Note: 2015 figures for Australia. For comparability reasons, the labour status breakdown United States is not shown. ILO unemployed are individuals out of work who want a job, have actively sought work in the previous four weeks and are available to start working within the next fortnight. Discouraged workers are individuals out of work who want a job and are available to start working, but are not actively looking for a job, Other inactive category refers to out of job individuals not looking for a job, for different reasons (retired, unable to work, care givers, students, etc.). Source: (OECD, 2018<sub>[14]</sub>)

#### 1.2.5. Claimants of Disability pension are on the rise – particularly among the young

In 2019, the effective retirement age within the earnings-related pension system was 61.5 years. An increase of 0.2 years since 2018 (Finnish Centre for Pensions). The increase in the effective retirement

#### **26** |

age in recent years has largely been driven by the recent pension reforms, including the 2017 reforms that increase the qualifying age for the old-age pension by three months every year (see Box 1). However, while the number of new retirees on an old-age pension has declined significantly, the number of new retirees on a disability pension has increased in tandem.<sup>19 20</sup>

In fact, the rejection rate of disability pension applications has grown by 9 percentage points in one decade, with roughly 31 per cent of all applications (24,500) rejected in 2019, the expenditure on the disability pension still accounts for 8% of total pension expenditure (EUR 2 449 million) (Statistical Database of the Finnish Centre for Pensions). Notably, with a 13 percentage point increase, the increase in rejections has been highest among 45-54 year olds. Nevertheless, the proportion of earnings-related pensions accounted for by disability pensions has increased among this age group.

To some extent an increase in new retirees on disability support is to be expected among older workers following an increase in the retirement age. But, worryingly, this fall has been accompanied by an increase in the number of new claims by younger individuals under the age of 40.

Over half (52%) of those permanently out of the labour force due to disability suffer from mental and behavioural disorders. This represents an increase of 7 percentage points over the past ten years (Finnish Centre for Pensions). Those who have retired on a disability pension due to mental disorders are, on average, younger than those retiring due to musculoskeletal diseases. Across the OECD, in addition to lower levels of employment, individuals suffering from poor mental health tend to have poorer quality jobs, and lower productivity within that job (OECD, 2015<sub>[16]</sub>). While the data available for this report is not able to distinguish between mental and physical health concerns, the implications of mental health concerns for employment have been widely documented. Incorporating mental health concerns explicitly as an independent barrier to employment as part of the Faces of Joblessness approach will be an important avenue for future work.

Unemployment benefits remain a route into early retirement. Across the OECD, re-employment is difficult for workers who lose their job at an older age (OECD, 2019<sub>[17]</sub>). However, on average across OECD countries, unemployment rates tend to be lower for older workers close to retirement age than for those aged 55-59. This is not the case in Finland, where unemployment in the 60-64 age group is some 40% higher than in age group 55-59 (Figure 1.14). These individuals, are largely in, what is known in Finland as the 'unemployment tunnel' (see Box 1), with long-term receipt of unemployment benefits often serving as a type of early retirement benefit, with very limited transitions back into employment.

This unemployment tunnel bridges the gap to retirement by extending the period of earnings-related unemployment insurance (with simultaneous pension accrual) that older workers are entitled to.<sup>21</sup> In practice, if a person has been unemployed for 500 week days (5 days per week) when they turn 61, they may receive additional unemployment benefits until they reach 65 or until an old-age pension is taken out.<sup>22</sup> In 2017, according to the Ministry of Finance, about 12% of new pensioners aged 63 were previously receiving unemployment benefits (with a further 14% moving into retirement from disability benefits) (Ministry of Finance, 2019<sub>[18]</sub>).

There have been a number of reforms to tackle long-term benefit dependency prior to retirement. Since August 2015, when older jobseeker take employment in a lower-paid job and subsequently become unemployed again, the unemployment allowance is based on the previous (higher) paid job. The aim of this legislative reform was to encourage older jobseekers to take jobs with lower wages without fear of lowering their unemployment-benefit entitlements in future jobless spells. In January 2020, following a tripartite agreement, the minimum age for the additional unemployment insurance entitlement increased by one year. The Finnish Centre for Pensions has estimated that the higher age threshold for the direct route from unemployment benefit to old-age pensions could decrease the number of unemployed by 7,400 and put 6,000 people into jobs by the year 2025 (Reipas, 2019[19]).

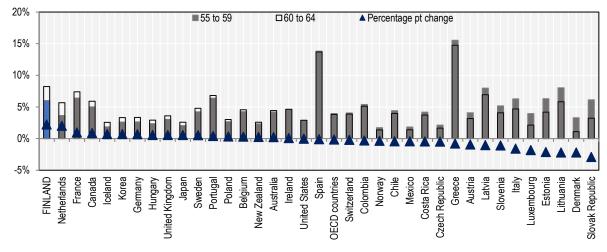


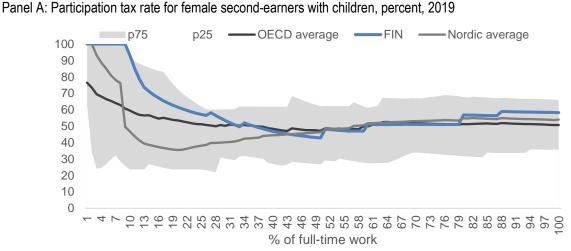
Figure 1.14. Unemployment in Finland increases markedly towards the end of working life Unemployment rate by age, and percentage change in unemployment rate between 55-59 and 60-64

Source: OECD Employment database

## 1.2.6. The structure of family benefits may contribute to a child-penalty in the labour market

In addition to child benefits, parents in Finland, whose youngest child is under 3 years of age, have had the option to look after their children (including older siblings under the age of 7) at home and, in exchange, receive the Child Home Care Allowance (see Box 1 above). The linking of this transfer to domestic responsibilities can incentivise inactivity among potentially eligible parents. Indeed, the financial incentives to undertake work among parents with small children are low in Finland.<sup>23</sup> The extent of these financial incentives can be measured using the participation tax rate (PTR). The PTR is an indicator capturing the proportion of earnings taken away by increased taxes and social insurance contributions or by reduced benefits when individuals move from unemployment or inactivity into work.

In Finland, a mother of young children, who moves from inactivity into full-time work as a second-earner, will keep only 43% of her gross income, with the remainder lost through higher taxes, reduced benefits, and the costs of non-parental childcare (Figure 1.15, Panel A). This is 8 percentage points less than the OECD average. Conversely, when a woman without children moves from inactivity into full-time work as a second-earner, they will keep 76% of their gross income (Figure 1.15, Panel B), which is above the OECD average.



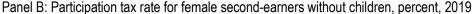
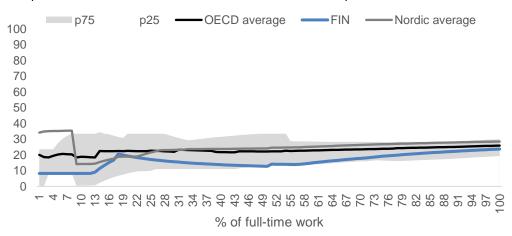


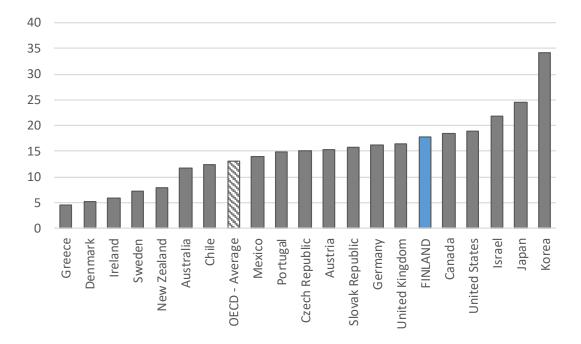
Figure 1.15. Financial work incentives for mothers are low in Finland



Note: Participation tax rates measure the fraction of additional earnings that is lost to higher taxes, lower benefits and childcare costs when a person takes up a new job. The person starts a new job with hourly earnings at the 20th percentile of the full-time women's earning distribution. Before taking up a job, this person is not entitled to unemployment benefits, but may be eligible to social assistance and housing benefits. The partner works full-time with hourly wage at the 20th percentile of the full-time men's earning distribution. Children are two and three years old. Extreme positive and negative are capped at 100% or 0%. The shaded area denotes the range between the 25th and the 75th percentile of 21 OECD countries (AUT, CZE, DEU, DNK, ESP, EST, FIN, GBR, GRC, HUN, IRL, ISL, ISR, ITA, JPN, LTU, LUX, LVA, POL, PRT, and SWE). Source: OECD Tax and Benefit Models, 2019. http://oe.cd/TaxBEN.

In addition to the tax-benefit system, low wages can be another factor shaping incentives for mothers. The gender wage gap in Finland is comparatively large, with the difference between male and female median earnings close to 18% of male median earnings. This is 4.5 percentage points higher than the OECD average, and close to two and a half times the gap in Sweden. Indeed, recent research finds evidence of both short- and long-term "penalties" reducing the gross labour earnings of mothers in Finland (Sieppi and Pehkonen, 2019<sub>[21]</sub>). Alongside this, sectoral segregation along gender lines (with women concentrated in low-paying social, care and service sectors) also contributes to the gender wage gap.

#### 28 |



#### Figure 1.16. Women earn substantially less than men Finland

Gender wage gap. Percentage. 2018 or latest available year.

Notes: The gender wage gap is defined as the difference between male and female median wages divided by the male median wages Source: OECD Family Database

The impact the Child Home Care allowance has, encouraging second-earners (frequently women) to stay at home, is particularly powerful among those who are outside the labour market – who are eligible to parental leave only at the basic level – and for those only able to gain low-paying jobs. For these individuals, the incentive to remain at home engendered by the CHC allowance is likely to play particularly forcefully upon their choices. Indeed, child care fees are income dependent in Finland (ranging from EUR 2 to EUR 289 per month for the first child), despite just 4.2% of low-income households reporting that they would like more childcare but cannot afford it, use of childcare among children from low income households is markedly low in Finland (Figure 1.17).<sup>24</sup>

#### Figure 1.17. Children from low-income households are less likely to use childcare

Low income Middle income △ High income % 100 Â 90 80 70 60 50 40 30 20 10 0 Cled Republic Slovak Republic United Kingdom FINIAND Switterland Germany Austria Poland Dennait 21412 S)

Participation rates of 3-5 year olds in early childhood education and care, by income level, 2017

Note: Data for Switzerland refer to 2014, and for Iceland to 2016. Data refer to children in centre-based care (e.g. nurseries or day care centres and pre-schools, both public and private), organised family day care, care services provided by (paid) professional childminders, and, in some countries, children in primary education. Income level is based on the child's position in the national income distribution. "Low income" refers to children in the first three deciles, "middle income" to those in the middle four deciles, and "high income" to those in the top three deciles of disposable income. Countries are sorted by the participation rate among 0- to 2-year-olds from low-income households. Source: (OECD, 2020<sub>[21]</sub>)

### 1.2.7. Increased reliance on social assistance to supplement earnings-replacement benefits has prompted a review of the system

Finland operates extensive, and comparatively generous, earnings-replacement benefits for the unemployed, for people with health problems, for those with care responsibilities and for early retirees. As a complement to these primary earnings-replacement benefits, means-tested support is mainly intended as a short-term benefit of last resort (Ministry of Social Affairs and Health, 1997<sub>[20]</sub>). However, in recent years social assistance, alongside housing benefits, are increasingly being used to supplement the primary basic level social security benefits. Indeed, the moderate reductions in unemployment benefits that followed the introduction of the Activation Model were partly offset by an increase in means-tested social assistance and housing benefits (OECD, 2019<sub>[13]</sub>).

#### 1.3. New measures to boost employment are currently under consideration

As part of the drive to increase the employment rate to 75% by 2023, the Finnish government is currently working on an employment package, the details of which are to be announced towards the end of 2020. Measures under discussion include: an increase in resources for the public employment service (PES); increased job counselling, greater use of wage subsidies, and various mechanisms through which to increase the activity rate of those with partial work abilities.<sup>25</sup>

Alongside this, in January 2020 the basic level of unemployment and sickness benefits were increased (increasing earnings related benefits as a result via the calculation formula). Further changes in the pipeline also include a general extension of the upper age limit for unemployment benefits for workers close to retirement to bridge the gap with the increasing retirement age.<sup>26</sup> Reconciling these changes with the government's employment target may not be straightforward, particularly in the current climate.

A major social security reform is currently planned to clarify the benefits system, and enhance employment. To this end, a parliamentary committee is currently examining ways of improving coordination across the social security system, as well as enhancing the coordination of benefits and employment services, and increasing clarity over the coordination between benefits and paid work.

# **2** Joblessness in Finland: Extent and incidence of labour market difficulties

#### 2.1. Characterising the jobless population in Finland

#### 2.1.1. Labour market difficulties extend beyond the unemployed

Across the OECD, a primary focus of employment policy is assisting the unemployed into work. However, the unemployed do not constitute the only, or even the main, source of potential employment growth. First, a large share of jobless individuals are not, or no longer, actively seeking work. These labour-market inactive individual are not classified as unemployed. Second, some people work significantly less than they could or would like to. Both groups may not be on the immediate radar of policymakers, or of the institutions that are implementing activation and employment-support policies. But, with the right financial incentives and employment opportunities, older workers may prefer continued work to (early) retirement; with the right support and work place adaptions, individuals with a health problems or a disability will be able to engage in productive work; with appropriate training, discouraged workers may discover new employment opportunities. Help with caring responsibilities may enable some people, who work restricted hours or who are in occasional or intermittent employment, to earn more.

In all OECD countries jobless persons are more likely to be inactive in the labour market than they are to be unemployed, and Finland is no exception (Figure 2.1, panel B). In Finland, the unemployed account for just 42% of the jobless with the remainder being inactive due to early retirement, domestic responsibilities, or health concerns. Starkly in Finland, nearly one in three jobless people state that their health is such that they are unfit to work (Figure 2.1, panel B).

#### 2.1.2. What are potential target groups for activation and employment support?

Limiting attention to "snapshots" of non-employed individuals in a specific point in time may not, therefore, capture the true extent of labour-market difficulties individuals are facing. As a result, the needs of these individuals may go unaddressed and policy attention may overlook potential sources of future employment growth. Alongside joblessness, labour market difficulties may also manifest in frequent moves between non-employment and different states of "precarious" employment. Individuals with some work, but weak labour market attachment, may have difficulties accessing a stable or full-time position, may work restricted hours, or may report very little remuneration for their work. While they may not show up in labour-force statistics that relate to a specific point in time, they may face some of the same employment barriers as the jobless and may benefit from some of the same policy interventions to strengthen their labour-market difficulties extending over a 12-month period. It includes individuals who report persistent joblessness (unemployment and/or inactivity over an entire year), as well as those with some but limited work during the year ("weak labour-market attachment). All information is taken from EU-SILC data. Box 3 defines the relevant categories in more detail and explains how each is identified in the data.

#### Box 2.1. Individuals with potential labour market difficulties in the EU-SILC data for Finland

For the purpose of this paper, information on activity status is derived using the information provided in EU-SILC data. This dataset offers a rich and multi-dimensional set of variables, providing detailed information on income sources, and employment status, during a 12-month period. EU-SILC data also covers a broad range of individual and family circumstances that may impact upon employment outcomes.

Using information drawn from a 12-month period of EU-SILC data as the basis for the calculation of activity status, will, however, in some instances, lead to figures that differ from other common tabulations. As a result, the figures on employment rates found in this paper will not be directly comparable to those based on labour force survey "snapshots" that relate to a specific point in time.

The version of EU-SILC upon which this report is based is the Eurostat 2017 data. This data has been supplemented with regional information taken from the National SILC data. This leads to an effective sample size of 14 495 for the working-age population (15-64) excluding students, and 3 427 for the population of interest, defined below.

The population of interest in this paper includes those who are persistently out-of-work, as well as those with some but limited work during the reference period.

**The persistently out of work** (long-term unemployment or inactivity) are those individuals reporting no employment activity throughout the reference period. The reference period corresponds to 12 consecutive monthly observations in the income reference year (January-December of year T-1) plus one additional observation at the moment of the interview (in year T).

Individuals with **weak labour market attachment** are those reporting some employment during the reference period. It includes those working:

- 1. In *Unstable jobs*: individuals working only a limited number of months throughout the reference period. The threshold is equivalent to Eurostat's low-work-intensity measure: Above zero but no more than 45% of potential working time in the income reference year.<sup>1</sup>
- Restricted hours: workers who spent most or all of the reference period working 20 hours or less a week.<sup>2</sup> However, individuals working 20 hours or less who are not likely to have additional work capacity, e.g. due to ongoing education or training, are excluded.
- For Near-zero earnings: individuals reporting some work activity during the income reference period but negative, zero or near-zero monthly earnings.<sup>3</sup> In addition to possible classification or reporting errors, working individuals with no or very low earnings could signal underpayment, temporary losses from self-employment, low-productivity independent work and/or informal activities.

1. The data used in this report are drawn from the EU-SILC database which, in Finland is drawn from the Finnish Survey on Income and Living Conditions. This survey collects data from about 10 000 Finnish households annually about their income and living conditions. In addition, data are derived from administrative registers available to Statistics Finland. Data incorporate, for example, the composition of households, the activities of the household members during the year, housing and housing costs, loans, economic livelihood and health. Importantly, cross-sectional EU-SILC data contain information on activity status for multiple points in time during a reference period of at least 12 months. This is useful for the purpose of the analysis presented in this report, as it enables us to capture employment difficulties over an extended period. Typically this includes 12 consecutive monthly observations corresponding to the calendar year (January-December of year T-1) plus one additional observation at the moment of the interview (in year T). EU-SILC, however, is not without limitations. Indeed, as many household surveys the limited sample size and presence of non-response can create bias in conclusions drawn from small subsamples. This can be exacerbated if non-response is particularly frequent among certain groups (eg migrants, long term unemployed, disabled). Future work will build upon administrative data to ensure that these drawbacks of survey data are addressed.
2. To reconcile information reported for the income reference period and at the moment of the interview the following individuals are also considered in this group: a) Workers who report no work activity during the income reference period but who are working at the moment of

the interview and, b) workers with between 45% and 50% of work activity during the income reference period who do not report any work activity in either the last month of the income reference period or at the moment of the interview.

3. The 20-hours threshold is approximately in-line with the 45% "part-year" threshold that identifies the group with unstable jobs. For a 40-hours working week in a full-time job, 45% of full-time would correspond to 18 hours a week. However, in SILC, the distribution of working hours in the main job shows a high degree of bunching at 10, 15, 20 and 25 hours a week. As the closest multiple of 5, a value of 20 hours was therefore chosen.

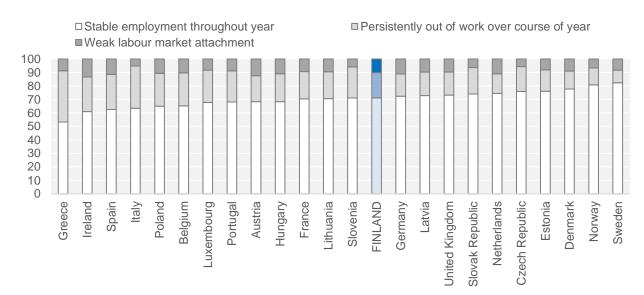
4. The near-zero earnings threshold is set to the 1<sup>st</sup> percentile of the earnings distributions. Using SILC data for Finland, this corresponds to 145 €/month.

In 2017, just over 70% of the working-age population in Finland had worked most of the year, while 29% were persistently out of work, or had some but limited work attachment over the year as a whole (Figure 2.1, panel A). These results are informative in the context of Finland's policy objectives to strengthen employment and reduce joblessness. It is important to note, however, that the 70% result is not directly comparable with the Government's 75% employment target. In addition to very different data sources, the concept of joblessness here includes both persistent non-employment and weak work attachment over a 12-month period. It is therefore substantially broader than in commonly used labour-force statistics.

The 29% of working-age individuals that had no or only weak work attachment therefore represent a potential target group for activation and employment-support policies. Close to two out of three individuals in this target group were persistently out of work (Figure 2.1 panel B). Of these individuals, 42% were unemployed, 15% were retired (below the age of 65) and 10% were not working due to domestic tasks. Alongside these individuals, however, a large proportion – close to one third – were not working because of health concerns. The remaining third consisted largely of people in unstable employment, while the number of individuals with near zero earnings or restricted hours is much smaller (Figure 2.1, panel C).

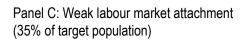
The population with no or weak labour market attachment has remained relatively stable since the beginning of the decade, with a relatively minor decrease in the number persistently out of work (over the course of 1 year) being more than compensated by an increasing proportion of the working age population with weak labour market attachment (Figure 2.2 Panel A). The increase in the proportion with weak labour market attachment is primarily driven by an increase in the number in unstable employment; those who move in and out of employment throughout the course of the year (Figure 2.2 Panel B).

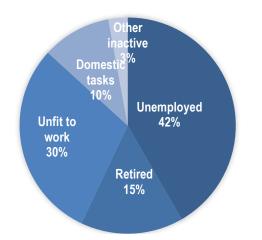
#### 34 |

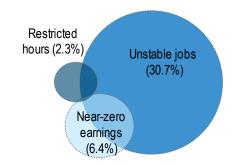


#### **Figure 2.1. Potential target population for activation and employment support** Panel A: Working-age individuals with potential labour market difficulties, 2017

Panel B: Persistently out of work (65% of target population)

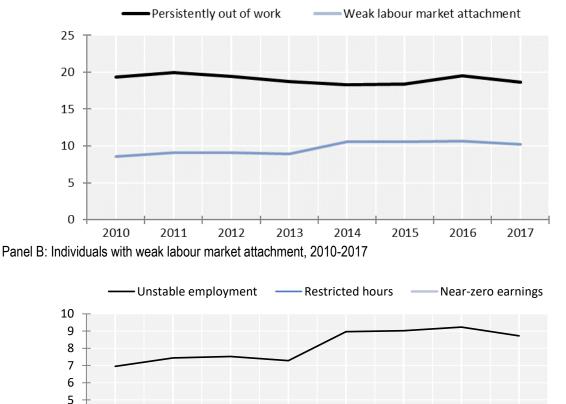






Note: Working age population excludes full time students and those in compulsory military service. Source: OECD Calculations based on EU-SILC 2017

## Figure 2.2. The number of workers in unstable employment has increased since the start of the decade.



Panel A: Working-age individuals with potential labour market difficulties, 2010-2017

 3

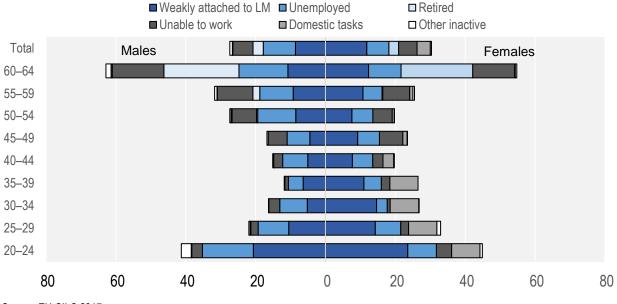
Note: Working age population excludes full time students and those in compulsory military service. Source: OECD Calculations based on EU-SILC 2010 - 2017

#### 2.1.3. Labour market difficulties by age: not a 'pyramid' but an 'hourglass'

Breaking the target population down further by age and gender reveals an age "hourglass" rather than an age "pyramid". The age groups with the highest shares of joblessness and weak work attachment are the youngest – aged 20-24 – and the oldest – aged 60-64. Women are more frequently out of the labour market due to domestic tasks, particularly below age 45. They are also more likely to work only a small part of the year or few hours ("weakly attached"), but less likely to be unemployed. Among youth aged 20-24, 41% (45%) of males (females) face potential labour market difficulties, but as many as half of them do in fact have some employment. Among older workers, aged 60-64, as many as 63% of men and 55% of women face potential labour market difficulties, with many having taken early retirement or not working due to health issues.

2017

Indeed, health concerns feature prominently as an aspect of joblessness in Finland, with close to 15% of older males (aged 60-64) saying that they are unable to work. Perhaps more alarming, however, is the already large proportion of young people who report being "unable to work".





Source: EU-SILC 2017

# 2.2. Employment Barriers

# 2.2.1. Anatomy of employment barriers: work capacity, incentives or opportunities?

Labour market statistics, and policy debate, often focusses on certain population groups such as 'youth', 'older-workers', 'lone-parents' or 'migrants'. Similarities in the employment barriers facing the members of such broad groups, may be implicitly assumed, but are not well documented – being young, for instance, is not, in itself, an employment barrier. A migrant is more likely than a native-born individual to face language barriers and qualification mismatch, a family migrant from Estonia is likely to face starkly different labour market barriers in Finland than is a Somali refugee. Other groupings based on demographic or family characteristics are equally approximate and may provide a poor basis for designing or targeting activation and employment-support measures.

This paper seeks to measure key employment barriers as directly as possible, on an individual basis and taking account of household level characteristics and constraints. The objective is to facilitate a bottom-up approach to policy design and implementation. The underlying principle is that accounting for the diversity of individual circumstances helps to make policy interventions more adapted and responsive to labour-market challenges and to people's needs for support.

As a starting point for mapping the complex landscape of joblessness, this report follows Immervoll and Scarpetta (2012) in considering employment barriers in three broad domains:

- 1. Work capacity or capability. This domain includes barriers that are likely to compromise individuals' capacity to work productively, such as skills, work experience, health limitations or the need to fulfil care responsibilities;
- 2. Incentives to work or to look for a job. Work incentives and the motivation to work are multi-faceted, and the financial gains from work are only one aspect. But financial incentives have received considerable attention in the Finnish debate, and they are readily measured with available household data. Financial incentives may be weak for a number of reasons. They may be weakened due to low earnings potential, because out-of-work benefits are relatively generous and/or easy to access, or they may be weakened because of the existence of significant income from sources that are independent of the individual's own work effort (for example capital income or earnings of other family members);
- 3. Job search success. Individuals may be fully capable and motivated to work but may be unable to find work due to limited labour demand in the relevant labour market segment, limited willingness to accept work below a certain reservation, or poor job search. Unsuccessful job search may be a consequence of macro-economic conditions (e.g., during a major downturn), or it may be due to "structural" factors, e.g., a skills mismatch, discrimination, market concentration, limited geographic mobility, or other frictions in the labour market.

Most of these employment barriers are typically not observed directly. However, it is possible to construct proxy indicators for them based on information that is available from individual-level micro-data, such as household surveys. This report adapts the methodology developed in Fernandez et al (2016), see Box 2.2 below.

# Box 2.2. Employment barriers: Typology and measurement in the Finnish context

To facilitate the clustering of jobless individuals into groups that share similar sets of employment difficulties, the analysis of this report defines indicators for a range of different employment barriers. To ease presentation, the indicators are binary and express whether or not an individual circumstance constitutes a "barrier" to employment or not.

Several of the barriers outlined above depend upon underlying categorical variables. This paper defines these barriers in line with the cut-offs established in (Fernandez et al., 2016<sub>[23]</sub>), such that an individual is classed as facing:

- An **educational barrier**, if the highest qualification they hold is a lower-secondary degree (*Keskikoulu*) or lower (ISCED-11).<sup>1</sup>
- A skills barrier, if their most recent occupation was in the bottom (of ten) categories of the ISCO-08 classification system.
- A **reported health barrier**, if they report that they face longer-lasting physical or mental limitations in daily activities.<sup>2</sup>

To capture experience two separate measures are used.

- A "no experience barrier" indicating whether an individual has ever undertaken paid work and
- A "recent work experience" barrier indicating whether an individual has worked (or earned income) during the reference year;

Finally, individuals with a 'high' risk of not finding a job are classified as facing

• An **job search barrier** if the standardised probability that they will not find a job despite active job-search during at least 12 months, and willingness to take up employment (as stated at the moment of the SILC interview)<sup>3,4</sup> is above the average of the reference population.

A number of others barriers are defined over continuous values. In these cases, deriving a binary indicator requires setting a meaningful cut-off point (threshold). To choose these thresholds transparently and on an empirical basis, this report determines thresholds endogenously by searching for the cut-off that maximises the information content of the resulting indicator, as in (Immervoll, Pacifico and Vandeweyer, 2019<sub>[22]</sub>). Starting from the conjecture that the employment barriers are indeed a relevant determinant of people's employment outcomes, the approach consists in choosing threshold values that *maximise* the explanatory power of a statistical model that relates employment outcomes (dependent variable) to the resulting indicators (explanatory variables). In this manner we search for "optimal" threshold values that provide the best separation between a "bad" state (jobless individuals) and a "good" state (those with stable full-time work).

This method is used to determine the cut-off point for the following three barriers:

- A care barrier if an individual has a family member who requires care during more than 23 hours per week, and if he or she is either the only potential care giver in the household, or the only person in the household who is labour-market inactive or working part time because of care responsibilities.<sup>5</sup>
- "Weak" financial work incentives, due to access to "**substantial**" income that does not depend in their own work effort. The cut-off that is used for "substantial" income is *1.3 times the median* value in the working-age population (adjusted for household size and excluding all work-related income of the individual).
- "Weak" financial work incentives due to out-of-work benefits that are "high" relative to individual earnings potential.<sup>6</sup> The cut-off used for "high" benefits is a participation tax rate of 72% of potential in-work earnings. The commonly-used participation tax rate, is defined as the share of earnings that is lost to reduced benefits and higher taxes when taking up employment:

$$PTR = 1 - \left(\frac{y_{Net}^{InWork} - y_{Net}^{Out of Work}}{y_{Gross}^{InWork} - y_{Gross}^{Out of Work}}\right)$$

Where *PTR* is the participation tax rate, and  $y_{Net}$  and  $y_{Gross}$  are, respectively, household income after taxes and benefits, and household income before taxes and benefits.

For jobless individuals, the *PTR* is based on a comparison between observed net income while out of work (i.e. the social benefits that they receive), and the individual's shadow labour income (i.e., the net income that an individual with similar observed characteristics would be expected to earn in work). For working individuals, the measure is based on a comparison between observed net income while in work (earned income and any benefits), and the shadow benefits that the individual in question could expect to claim if they were to stop working. In all cases, taxes are estimated using EUROMOD.<sup>7</sup>

### Possible additional barriers for future work:

Statistics Finland has a vast panoply of data sources that could further enrich the map of labour-market difficulties in Finland. Accessing this data would enable work do delve into a number of barriers for which information that is missing from EU-SILC data.

- <u>Work experience barriers</u>. Future work could enrich this dimension further by including information on the intensity of past work experience, e.g., using information from tax records, or *Folk* administrative data.
- <u>Linguistic barriers</u>. Finland has a short history of hosting migrants, yet growth in per capita terms – has been amongst the fastest in the OECD. Migrants face a number of additional barriers to work however, these can vary substantially across different groups of migrants. Aggregate employment figures relating to migrants in Finland, mask a large degree of

heterogeneity. Future work could build upon data recording the mother tongue of the individual, and the year of their arrival, to build a measure of linguistic distance and the extent of the barrier that language poses.

- <u>Mental-health barriers</u>. In the context of the high prevalence of mental health problems in Finland – the highest in the OECD – and the high rate of incapacity benefit receipt, follow-up work could build on the measurement of health-related capacity limitations using medical reimbursements and measures of access to health services to disentangle mental from physical disabilities.
- <u>Geographic isolation</u>. This can be an informative indicator in the Finnish context as living in sparsely populated areas, with little economic activity, can make it a challenge to find work within a commutable area.
- <u>Labour-market slack</u> (employment opportunities). While a number of indicators of labour demand exist at a national or regional level, depicting demand-related constraints at the micro-level is a challenge and requires capturing the availability of vacancies in the particular labour-market segment that is relevant to the individual given their skills, experience, location etc. Follow-up work could build on granular local vacancy rate data and job search by sector, using this alongside information of each individual's sector specific education and experience to gage the tightness or slack of the relevant labour market segment.

#### Notes:

1. Details on the ISCED classifications and their application in the Finnish context can be found at: <u>http://uis.unesco.org/en/isced-mappings</u>. Information on education levels for foreign-born individuals is often missing from the Finnish SILC data. In these cases, this paper imputes the probable education level on the basis of the educational distribution within the native population of individuals with comparable characteristics (sex, age, work activity status, sector, occupation, labour market income, and region).

2. The Finnish SILC data records health limitations only for primary survey respondents (the reference person of the household). However, as the primary respondent is randomly assigned, it is possible to model reported health limitations of other household members on the bases of the distribution of reported health limitations of all primary respondents with comparable characteristics (notably benefit receipt, sex, age, region level of education, current economic status).

3. This risk is estimated in a regression incorporating information on region, degree of urbanisation, age, gender, level of professional skills and education, migrant and health status. Individuals with an estimated risk that is higher than the mean value are considered to face scarce job opportunities

4. This barrier to some extent also captures discrimination, to the extent that such discrimination is based upon observable characteristics.3.
5. Family members assumed to require care are children under the age of 12 receiving less than 23 hours of non-parental childcare a week and adults reporting severe limitations in daily activities due to their health and being economically inactive throughout the reference period (and in the case of those of working age, that permanent disability is the reason for their inactivity).

6. Shadow labour incomes are modelled via a Heckman corrected wage equation on the basis of education, age, sex, region, degree urbanisation, health skill, migration status, as well as higher order polynomial of age and interactions between age, sex, education, degree of urbanisation and migration status.

7. Taxes are estimated using a regression model using tax liabilities as calculated by EUROMOD as the dependent variable, and dependent variables including the following: estimated gross shadow labour and benefit income, education, non-labour income, age sex, region, degree urbanisation, household type, number adults working, number of children, health status, household earned income and migration status, as well as higher order polynomials of benefit and non-benefit income, non-labour income, and age.

### 2.2.2. How common are the different barriers among Finland's jobless population?

#### Nearly half report major health-related limitations

Reported health limitations are the most common employment barrier among the jobless in Finland. As many as 1.9 million Finns of working age have some type of disability or chronic disease. One third of them, or about 600,000 persons, find that the disease or disability affects their work or their work opportunities (Mattila-Wiro and Tiainen, 2019). Nearly one in three Finns (31%) with no or weak labour market attachment have health issues that severely limit their activities, and this proportion rises to 52%

among those who are persistently out of work (Figure 2.4). Clearly, the direction of causality between poor health and joblessness can go either way; just as health can impede work capacities, so distance from the labour force can exacerbate mental or physical health problems. Since 2011 unemployed residents in Finland have had the right to physical health check-ups within the municipal health care system and Finland's employment centres are tasked with directing jobless people to seek medical check-ups. However, where rapid and free access to primary healthcare is guaranteed through occupational healthcare, the unemployed mainly depend on the municipal healthcare, where they may face long waiting times (European Commission, 2018<sub>[26]</sub>).

The already high numbers of individuals facing health related employment barriers is likely to rise as the Finnish population ages. Understanding the patterns of barriers these individuals face and addressing them in a co-ordinated and appropriately sequenced manner will become an increasingly urgent priority. Further work should therefore focus on disaggregating reported health barriers by type of health problem. In particular, separating mental from physical disabilities using administrative data, would be an important step towards guiding tailored and cost-effective policy strategies in this area (see Box 4 above).

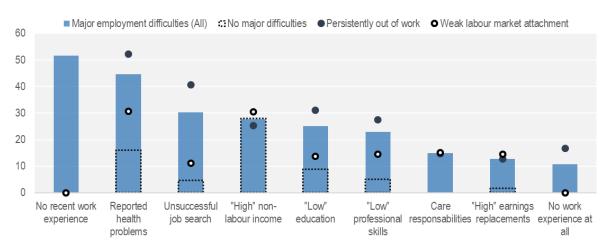


Figure 2.4. Health limitations represent the most common barrier among Finland's jobless Prevalence of employment barriers by sub-group, percent

Note: See Box 2.2 for definition of barriers Source: Calculations based upon EU-SILC 2017

# Table 2.1. Incidence of employment barriers

Prevalence of employment barriers among working-age individuals with different work intensities, in percent

		"Target" population			
	Working age population	All	Persistently out of work	Weak labour market attachment	No major difficulties
Insufficient work-related capabilities					
"Low" education	13	25	31	14	9
"Low" professional skills	10	23	28	15	5
No work experience at all	3	11	17	0	0
No recent work experience	15	52	79	0	0
Health limitations	24	45	52	31	16
Care responsabilities		15	15	15	•
Lack of financial work incentives					
"High" non-labour income	28	28	25	31	28
"High" earnings replacements	9	13	13	15	2
Scarce job opportunities					
Scarce job opportunities	12	30	41	11	5

Note: See Box 2.1 and Box 2.2 for definitions of barrier indicators. Source: Calculations based upon EU-SILC 2017.

Among those who are persistently out of work, unsuccessful job search, low education and low skills also represent substantial barriers effecting 41%, 31% and 28% respectively. Demand-side constraints and unsuccessful job search appear to impair job outcomes in these labour-market segments. They are, however, less common among those with some but weak employment attachment. Indeed, some of those with limited work attachment may have chosen not to engage fully in the labour market, e.g., because of limited financial disincentives (31% with "high" non-labour income, 13% with "high" earnings replacement). However, generous out-of-work benefits, frequently a key concern in policy debates in Finland for some groups, appear to be less common overall than other employment barriers.

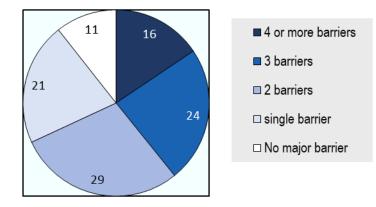
### A large majority of jobless individuals face at least two barriers concurrently

In practice, the economic and social circumstances of jobless people are rarely straightforward. Results show that many of them are confronted with complex and inter-related employment obstacles that hold them back from full participation in the labour-market. Indeed, close to 70% face two or more employment barriers at the same time, and this share rises to 87% for those who are persistently out of work (Figure 2.5). The share with three or more simultaneous barriers is significantly higher than in OECD countries will well-perming labour markets, such as Australia or Estonia (Figure 2.6).

These patterns suggest that policies focussing on addressing just one employment barrier in isolation may not have the intended effect on labour-market outcomes, as other remaining barriers continue to impede participation. In addition to the adverse consequences for the individuals concerned, the pervasiveness of multiple barriers also has implications for evaluating policy interventions, and for interpreting results. For instance, a programme that is actually effective at addressing a specific barrier, may be deemed ineffective when evaluated, if programme participants fail to show improved employment outcomes due to the existence of other simultaneous barriers.

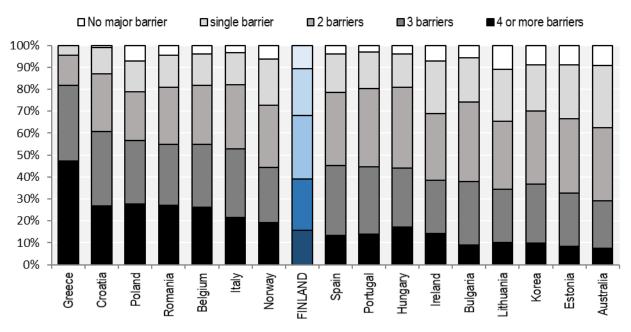
### Figure 2.5. Many face multiple barriers concurrently

Proportion of jobless and those with weak labour market attachment facing multiple barriers in Finland



Notes and Source: See Table 2.1.

### Figure 2.6. Multiple employment barriers: Finland in comparative perspective Percent of jobless individuals



Note: Results refer to different years: 2017 for Finland, further details in source for other countries. Countries are ranked by the proportion of the jobless who face 3 or more employment barriers.

Source: Calculations based upon EU-SILC 2017 (Finland, Belgium, Norway) 2014 (Bulgaria, Croatia, Estonia, Greece, Hungary, Ireland, Italy, Lithuania, Poland, Portugal, Romania, Spain) and HILDA 2014 (Australia) KLIPS 2017 (Korea), OECD Faces of Joblessness country reports (http://oe.cd/FoJ) and World Bank "Portraits of Labour Market Exclusion" project (for non OECD-countries and Greece).

# **3** Faces of joblessness: key groups for policy intervention

Across the OECD, there is widespread consensus that employment support is most effective when closely tailored to the individual needs and characteristics of the jobseeker. As a result, providers of public employment services are increasingly turning to sophisticated statistical profiling tools that often distil a large number of jobseeker needs and characteristics into an overall employability "score" ( (Langenbucher, Desiere and Struyven, 2019<sub>[25]</sub>)). Complementing caseworker expertise, such individual scores can be used to inform decisions about specific ALMP offers, or the preparation of broader individual action plans.

The Faces of Joblessness methodology is related. But instead of a focus on selected individuals, it provides a birds-eye view on patterns of employment barriers across the entire jobless population. The results complement profiling tools that may already be available for individual client groups, such as the registered unemployed. While commonly used profiling approaches seek to help with employment-integration strategies at the individual level, the aim of a broader perspective on employment barriers and needs is to inform decisions about policy priorities, policy design, and co-ordination of efforts across institutions, service providers and programmes. In particular, the Faces of Joblessness approach includes groups that may not yet be "on the radar" of specific employment-support providers, such as jobless individuals or people in marginal employment, who are not registered with the employment services or with other relevant institutions.

# 3.1. Salient clusters of jobless individuals in Finland

The employment-barrier indicators described above can be used in conjunction with a statistical segmentation method to reveal groups of jobless and underemployed individuals that are meaningful for designing, tailoring and targeting activation and employment support policies.<sup>1</sup> The objective is to obtain groups of individuals with combinations of employment barriers that are as similar *as possible within groups*, and *as different as possible between groups*.

It is useful to note that an analysis of employment obstacles using statistical segmentation is conceptually different from a traditional regression analysis. Regression models isolate the impact of one factor, while controlling for others. They would, e.g., show how each barrier *in isolation* affects the risk of facing potential labour market difficulties while holding all other barriers constant. By contrast, the segmentation approach employed here uncovers interrelations between employment barriers and how they *jointly* relate to observed labour-market outcomes. A focus on joint patterns of employment barriers is needed because of the high prevalence of multiple concurrent barriers as documented above. In this context, the success of

<sup>&</sup>lt;sup>1</sup> This study employs Latent Class Analysis (LCA) to identify "latent" (i.e., initially unobserved) groups of jobless people. LCA uses interrelations of an array of indicators to organise a sample of individuals into homogenous and separated groups using a fully-specified (i.e. parametric) statistical model, see e.g. (Goodman, 1974) and (Henry, 2006). The approach in the present study adapts the LCA model described in Fernandez et al. (2016) to the structure and content of the Finnish EU-SILC data.

activation and employment-support policies then typically depends on their ability to address real-world combinations of different labour-market obstacles, rather than one specific barrier at a time.

# 3.1.1. Grouping the Finnish out-of-work population in terms of the barriers that they face

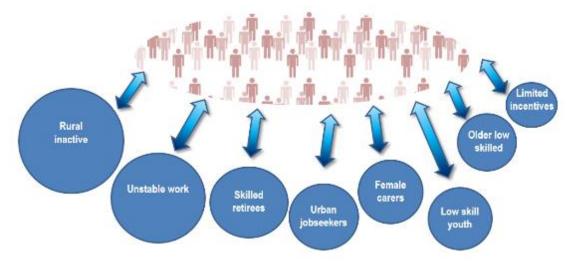
When Finland's jobless are clustered according to the labour market barriers that they face, eight distinct groups emerge (Figure 3.1). Each cluster shares common labour market barriers and would likely benefit from policy interventions that target these barriers in a holistic and co-ordinated manner.

- 1. Rural inactive
- 2. Unstable work
- 3. Skilled retirees
- 4. Urban jobseekers
- 5. Female carers
- 6. Low skilled youth
- 7. Prime age low-skilled individuals
- 8. Individuals with limited financial incentives

Each of these clusters is discussed in more detail below in terms of the labour market barriers they face, their socio-economic characteristics, and the difficulties that arise from the co-existence of multiple concurrent barriers.

# Figure 3.1. Eight "faces" of joblessness in Finland

Results from latent class analysis. Bubbles represent relative size of clusters.



Note: Bubble size representative of group size. Group sizes (in brackets) are in % of all jobless (persistent jobless plus those in marginal or intermittent employment).

Source: Latent class analysis of EU-SILC 2017 data, based on individual employment barriers (see Box 2.2).

### Group 1. Individuals largely in rural locations, no longer looking for work ("Rural inactive")

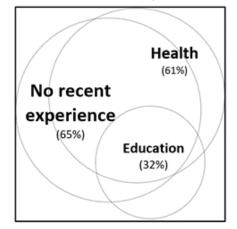
The largest group accounts for one in every four jobless or weakly attached individuals. Members of this cluster are predominantly located in less densely populated areas of Finland. Fully half of this group live in thinly populated areas of Finland with a further 34% living in intermediately populated areas (Figure 3.2, panel B).<sup>27</sup>

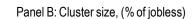
### Key characteristics:

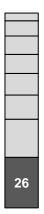
- Average age of 55. With 3% aged 29 or below, 33% aged 30-49, and 64% aged 50-64
- Mostly located in rural areas (50%) or towns and suburbs areas (34%).
- All have some prior work experience, but most (65%) have no recent experience.
- Average equivalised income: 19,400 EUR per year net of taxes and benefits
- Benefit receipt is common (51% receive sickness and disability benefit, 38% receive unemployment benefit and 32% receive housing benefit)
- The majority are relatively poor (71% in lowest two income quintiles)
- Most are single (42%) or in a couple without children (38%).

# Figure 3.2. Group 1: Rural inactive

Panel A: Incidence and overlap of most common barriers







Notes and source: See Figure 3.1

Lack of recent work experience (65%), health limitations (61%), and low education (32%) are the most common barriers in this group and individuals in this group are substantially more likely to face these barriers than the wider target population (see Table B.1 in Appendix 2). This group is characterised by a comparatively high share of benefit recipients, with over half claiming sickness or disability benefits, while unemployment support and housing support is each received by just under 40% during the course of the year.

In many OECD countries identifying ill-health – and in particular mental ill-health – among jobseekers has been neglected in public employment services (OECD,  $2015_{[16]}$ ). This can be problematic, given that many people with common mental disorders are claiming unemployment benefits (as opposed to sickness/disability benefits). Indeed, a large proportion of Group 1 members with health difficulties have been out of work for some time (with an average out of work spell of 11 months during the reference year), and almost half of all new disability-pension recipients in Finland were previously unemployed and (OECD,  $2020_{[25]}$ ). In Finland, in contrast to sickness benefit recipients, unemployed people with health concerns do not systematically receive a rehabilitation assessment. As a result, emerging health issues may go undetected, limiting the scope of pro-active prevention strategies. Longer-standing health issues may also remain unaddressed. And, while some municipalities provide free medical screening for anyone over 45 as well as rehabilitation plans for long-term unemployed such services are not universal. With easy access to key primary health services linked to employment (through Occupational Health Care), those without stable work can be less likely to access relevant services, and health-related barriers risk compromising employability still further (von Werder and Thum, 2013<sub>[27]</sub>).

This group is also likely to incorporate many displaced workers (see OECD 2016) who, given their age and limited education levels (fewer than one in five hold a tertiary degree), have struggled to find their way back

```
46 |
```

to employment and have since become discouraged with many developing health concerns. With an average age of just 55, the majority in this group should have many years of productive work ahead of them, yet fewer than one in ten (9%) are actively seeking employment. For some of them work is not sufficiently lucrative to draw them into the labour market. However, only 10% of this group receive out-of-work benefits that are generous relative to their potential in-work earnings (>72%, see Box 2.2 for calculation details). On the whole, incomes in Group 1 are modest, with over two thirds in the bottom two income quintiles.

When structural change – and the concomitant change in labour demand – displaces workers from the labour market, time spent outside of the labour market can have a scarring effect that is increasingly hard to overcome. In particular, when low education, lack of experience and health troubles go hand in hand they can perpetuate each other over time, cementing individuals into long-term unemployment or inactivity.

Breaking a vicious cycle of compounding barriers requires timely and well-coordinated interventions, addressing skills deficiencies as they emerge, and preventing barriers associated with poor health and a lack of work experience from compounding each other. For instance, holistic policy packages may need to include retraining with job-search support that is appropriately tailored to the people's mental and physical health (see Box 3.1).

# Box 3.1. Combining employment support and health services in OECD countries

The benefits of work to mental and physical health, and the harmful effects of unemployment, are widely recognised. Yet ill-health/mental health can impede job search and limit the pool of appropriate jobs. Given these feedback links between health and employment outcomes, effective employment support depends upon early identification of (mental) ill-health – ideally, on a jobseeker's first contact with the public employment service (PES) – and swift referral to integrated health and employment support. Where support is not co-ordinated, claimants risk becoming "institutionalised" within (mental) health services or being sent back and forth between different agencies, with employability and motivation suffering in the process and a resulting risk of slipping towards long-term unemployment or a reliance on disability benefit and complete withdrawal from the labour market.

In Finland, work ability co-ordinators attempt to mitigate the impact of silo's within the system, by providing a network to a wide and diverse range of services. A Work ability programme is currently planned to raise the employment rate among people with partial work ability Focussing on (i) streamlining the process for accessing the relevent services, (ii) working to enhance inclusion in the workplace and (iii) re-examining the benefits available to people with partial work ability.

### Developing integrated health and work services in the employment sector and co-ordinating support

Better job retention and reintegration at an early stage can prevent people with poor mental health from slipping into welfare and disability. Developing (mental) health competencies within the employment support system is therefore a priority. Countries have taken a number of approaches in this direction. In Sweden, the PES directly employs psychologists, occupational therapists and psychotherapists to provide specialist support to jobseekers. However, for this approach to be effective, caseload must be maintained at a level that enables these healthcare professionals to provide adequate support. An alternative approach, undertaken at the University of Leipzig in Germany is to train PES workers to provide limited psychosocial coaching, including an initial diagnostic interview, advice on treatment, mental health first aid and short-term therapy (OECD, 2015<sub>[16]</sub>). In Denmark, PES work with specialised employment service providers with mental health expertise. The return-to-work programme of the Danish Mental Health Foundation (a private non-profit provider) relies upon psychologically trained caseworkers, each responsible for no more than 10-20 jobseekers. In Australia, 'job carving' involves Disability Employment Services working with employers to shape roles and then providing ongoing

support to both employer and employee (Purvis et al., 2013). In Estonia, incapacity pensions have been replaced by a new Work Ability Allowance. The allowance places a stronger emphasis on work capacity assessments, requiring those with some work capacity to register as unemployed. Recipients are eligible for the same employment-support measures available to other unemployed, but in addition, those with limited ability to work can access specially designed services, and are entitled to employment incentives after a shorter waiting period, and for longer, than other groups. These measures have been available to those with work related disabilities on a voluntary basis since 2016 (Browne et al., 2018<sub>[28]</sub>).

### Individual Placement and Support; employment is part of recovery

Alongside integrating (mental) health support into the employment support infrastructure, finding employment has increasingly become an important step within the treatment of (mental) illness. The Individual Placement and Support model works with the aspirations of those with illness – particularly mental illness - aiming to place them into competitive employment with local employers at the start of their (mental) health treatment rather than as an end goal. Mainstream education and technical training are included alongside as ways to advance career paths. The Individual Placement and Support model, initially developed in the United States, is now increasingly used in other OECD countries, including the United Kingdom, Ireland, Australia, New Zealand and Norway (see, for example, (Reme et al., 2019<sub>[26]</sub>))

Source: Moving from Benefits to Work (https://www.gov.uk/moving-from-benefits-to-work) (Reme et al., 2019[26]), (OECD, 2015[16])

### Group 2. Individuals with unstable or intermittent employment ("Unstable work")

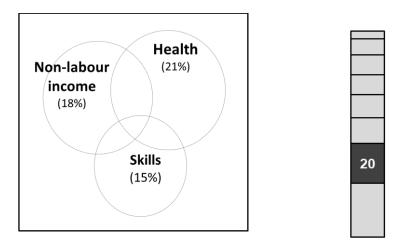
The second largest jobless group in Finland contains a large number of individuals who are relatively close to the labour market but do not engage in it fully. This group accounts for a full 20% - or one in every five – of the target population of individuals who are either out of work, or in unstable employment. Two thirds of this group work only intermittently – working some but no more than 45% of potential working time in the income reference year – while a further 5% work restricted hours (see section 2.1). This group is largely composed of the young and prime aged individuals with a mean age of 38.

### Key characteristics:

- Average age of 38, with 36% aged 29 or below, 55% aged 30-49, and 9% aged 50-64
- The majority are persistently out of work and in unstable jobs (67%)
- Half are already re-employed by the time of the interview
- Many are highly educated: most (61%) hold an upper or post-secondary education while 34% hold a tertiary qualification.
- Average equivalised income: 20,400 EUR per year net of taxes and benefits
- Benefit receipt is common (62% receiving unemployment benefit, and 42% housing benefit)
- 24% of migrants fall into this group

# Figure 3.3. Group 2: Unstable work

Panel A: Incidence and overlap of most common barriers Panel B: Cluster size, (% of jobless)



Notes and source: See Figure 3.1

This group, while large, remain relatively close to the labour market. The number of barriers they face, on average, is relatively low and the extent to which these barriers keep them for work is low relative to other groups (see Section 3.2 below). Nearly half (44%) face none of the barriers that are analysed in this report. The most prevalent barrier is health limitations. However, while 21% of Group 2 report such limitations, this remains is still (three percentage points) lower than for the entire working age population, and just five percentage points higher than for those in full-time, full-year work. Similarly, while close to one in five (18%) live in a household with a high income that is independent of their own work effort, this is substantially lower than for the entire working age population. Group members are, on the whole, highly educated, with 61% holding an upper- or post-secondary education, and a further 34% having completed higher education. Nonetheless, close to one in six (15%) group members hold only a low level of skills.

Those without major barriers may not require specific interventions, except to ensure that those with shortterm out-of-work spells remain engaged in the labour market. Indeed, the size of this group with – initially - relatively limited employment barriers may well grow further in the wake of the Covid-19 pandemic. Some jobseekers may be able to seize on job opportunities that arise, even in times of crisis, including in essential occupations. Others may require assistance and encouragement to find new work.

Finland relies heavily on automated employment services for individuals who are close to the labour market.<sup>28</sup> This will remain important and additional investments in this area may reap attractive returns if a growing number of people without previous labour-market problems experience out-of-work spells during the aftermath of the Covid-19 crisis. However, concurrently, it will be important to carefully monitor this group to ensure additional support is readily available for those who need it. Public and private employment services can play an important role in supporting workers to move from declining to growing sectors, especially when skill requirements are broadly similar, and short-term courses succeed at supporting displaced workers into occupations that are in demand. This group may also benefit from broader measures to promote job creation, e.g. through scaling up time-limited hiring subsidies, or raising incentives to take up work by offering re employment bonuses for jobseekers as several OECD countries did during the global financial crisis (OECD, 2020<sub>[31]</sub>).

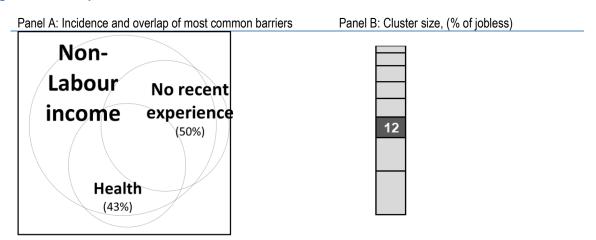
# Group 3. Early retirees with high education and skills but with low work incentives ("Skilled retirees")

The oldest cluster to emerge from the Finnish data, with a mean age of 60 can be characterised as early retirees with high education and skills but low work incentives. Many of the jobless within this cluster are

already retired (56%) though 17% are still unemployed and a further 14% are not working due to illness or disability.

### Key characteristics:

- Average age of 60 with 0% aged 29 or below, 15% aged 30-49, and 85% aged 50-64Many are already retired (52%), or in unemployed (18%) or ill/disabled (14%).
- This cluster contains the largest share of individuals with profession/managerial experience (31%)
- Mostly affluent (72% in top two income quintiles)
- Average equivalised income: 37,800 EUR per year net of taxes and benefits
- Medium benefit receipt (including 53% receiving old-age benefits, 25% receiving unemployment and 24% receiving sickness and disability benefits at some point during the year)



# Figure 3.4. Group 3: Skilled retirees

Notes and source: See Figure 3.1

This group tends to have a high non-labour income (96%), and many have withdrawn from the labour market for some time (half have no recent work experience). Alongside this, over two in every five have health concerns.

The jobless in this group tend to be fairly affluent, with two of every three living in households with an equivalised income that falls within the top two quintiles. This cluster tends to be highly skilled (45%) and exhibits the highest share of individuals with experience in professional and management occupations (31%). This group accounts for 12% of Finland's jobless or weakly attached to the labour market.

# Group 4. Men in urban areas actively seeking work despite health difficulties ("Urban jobseekers")

In contrast to Group 1, this group, is comprised of individuals who are actively seeking work and mostly live in urban areas. Individuals in Group 4 report the strongest job-search activity of all the clusters, with close to two in three actively seeking employment at the time of the survey. The group accounts for 11% and three quarters are men. Group members tend to be in the latter half of their working lives and, with an average age of 51.

# Key characteristics:

- Mostly men (74%) with an average age 51. 4% aged 29 or below, 60% aged 30-49, and 36% aged 50-64.

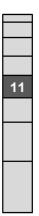
- Unemployed (71%) or unfit to work (18%)
- Longest average unemployment spell (13 months)
- 67% live in cities and high population density areas.
- Most report actively seeking work (62%)
- Many are poor (58% in bottom income quintile)
- Average equivalised income: 18,000 EUR per year net of taxes and benefits
- High benefit receipt (73% claimed unemployment, 55% received housing benefit, 31% received social assistance and 32% received sickness and disability benefits at some point during the year)
- Many are migrants (this group accounts for 21% of migrants)
- Many are single (44%) or in a couple with no children (29%)

### Figure 3.5. Group 4: Urban jobseekers

Panel A: Incidence and overlap of most common barriers



Panel B: Cluster size, (% of jobless)



Notes and source: See Figure 3.1

It is striking that all members of this group are likely to experience unsuccessful job search (see, panel A). Moreover, despite reporting active job-search, this group has the longest average out-of-work spell. As time has passed and they remain locked out of the labour market, their lack of experience is likely to have become a barrier that is increasingly difficult to overcome and, at the time of the survey, 86% of this group report that they had no recent work experience (paid work within the reference year, see Box 2.2). Group members tend to be relatively poor; 58% are located in the bottom income quintile and close to two in every five are at risk of poverty (according to the Eurostat AROPE methodology). Benefit receipt is common, especially for unemployment benefits (received by 73%), but also housing support (55%), social assistance (31%) or sickness and disability (32%). As with many of Finland's jobless, a large proportion of this group report health concerns.

The prevalence of unsuccessful job search among this group can result from mismatches between local labour market demand and the education and skills these individuals hold. Indeed, 23% of this cluster hold only a low level of education (lower secondary degree or less, see Box 2.2). Alongside other frictions in the labour market, discrimination may play a role in weakening demand for individuals in this group.<sup>29</sup> For instance, Finnish employers with a payroll in excess of  $\in$ 2 million, must pay higher social insurance contributions when former employees claim disability benefits. Risk-sharing through such so-called "experience-rating" provisions are intended to discourage an over-reliance on disability benefits as a way of reducing staff levels. But it can lead firms to alter the composition of new hires, shifting away from higher-risk groups – such as older workers, or individuals with health concerns – and limiting opportunities for these groups on the open labour market (Hawkins and Simola, Forthcoming<sub>[27]</sub>). The government has

# **52** |

recently decided to introduce anonymity in job applications, in order to prevent age discrimination at the early stages of hiring – though age will necessarily be revealed at the time of a subsequent interview (Neumark, 2020[29]).

This cluster also contains a relatively large proportion of migrants, with 21% of Finland's migrants located in this group, and migrants accounting for one in ten cluster members (see (OECD, 2018[38]) for a discussion of migrants' labour-market prospects in Finland). Of these migrants, 70% arrived in Finland from outside the European Union. Discrimination based on ethnicity is banned in Finland under the Non-Discrimination Act. However, when lack of information about a candidate's experience or qualifications causes risk-averse employers to avoid hiring him or her, employer uncertainty can translate into so-called "statistical discrimination". According to the Eurobarometer 2015, 66% of Finnish respondents thought that non-white skin colour or ethnic origin other than Finnish puts a job candidate at a disadvantage substantially above the European average of 46%. Going beyond perceptions, a 2012 study of fictional applicants for 1200 job vacancies indicated that job-seekers with Russian names had to send twice as many applications in order to receive an invitation to a job interview as those with Finnish-sounding names and an equivalent CV (Ministry of Economic Affairs and Employment, 2012[22]) alongside this recent research has found that human capital obtained within Finland has a higher return for individuals with Finnish sounding names (Ahmad, 2020<sub>[7]</sub>). The Finnish employment service operates a number of programmes to support labour demand for those jobseekers with limited opportunities (Box 3.2). However, the support level and amount of wage subsidies are, in part, conditional on the duration of the unemployment spell. As such, many newly arrived migrants are not able to benefit from the higher subsidy levels (see (OECD, 2018[38])).

Where discrimination results from risk aversion in the face of uncertainty regarding qualifications and abilities, experience on the job can play an important role in overcoming this uncertainty. In Finland, a recent report, using microsimulation at the individual level to assess the costs and benefits of various labour market measures, found that labour market programmes supporting demand in the private sector had a positive effect on both income and employment even after the employment measure (Alasalmi, 2019<sub>[1]</sub>) (see Box 3.2 below).

# Box 3.2. Finnish policy at a glance: Supporting labour demand

PES offices in Finland run a number of programmes aimed at increasing access to employment through supporting labour demand and providing jobseekers with recent work experience.

**Wage subsidies** (Pay Subsidy): Unemployed jobseekers registered with the PES office, and aged 30 years or over, may be eligible for a Pay Subsidy granting the right to subsidised wages. Employers of an eligible individual will receive a subsidy covering 30, 40 or 50 percent of payroll costs while the employee receives the salary stated in the relevant collective agreement.<sup>3</sup>. The percentage of payroll costs and duration of the available subsidy is determined on the basis of time in unemployment, the impact of disability or illness on work performance, and on the employer. The subsidy covers up to 50% of payroll costs for the initial 12-month-period and a maximum of 30% thereafter. The subsidy period may not exceed 24 months at a time.

**Work Try Outs**: These short, unpaid, work spells provide jobseekers with labour market experience while at the same time helping to clarify their vocational skills, training needs and career choice options. In 2017, 2 575 foreign-born jobseekers undertook work try-outs, accounting for 24 percent of all participants. Try outs are largely used for jobseekers who do not hold a vocational education or those that have been outside the job market for a long period of time. During a work trial, the participant undertakes tasks of a similar nature to those of an employee while continuing to receive the same benefits as prior to the commencement of the trial.<sup>1</sup> The duration of a work trial may not exceed 12

months – or six months with the same employer.<sup>2</sup> During the try out, the employer must designate a trial organiser who is responsible for the guidance and supervision throughout the trial period and, together with a representative from the PES, concludes a written agreement with the jobseeker regarding the terms of the trial.

**Rehabilitative work experience** aims to provide long term unemployed recipients of the means-tested Labour Market Support with a route back to the labour market. The programme is targeted at jobseekers facing multiple barriers to employment whose work ability is not sufficient to take part in other PES measures as well as those whose main source of income for the last 4 months (for those under 25) or 12 months (for those aged over 25) has been basic social assistance.<sup>4</sup> At the start of the programme an activation plan is agreed collectively between the jobseeker, the employment office and the local government – who are responsible for arranging the work experience. Participants continue to receive labour market support for the duration of the work experience, which can last between 3 and 24 months (part time or full time) for 1-4 days a week and at least 4 hours per day. The central government compensates the costs of the local government linked to the rehabilitative work experience based on the number of days person participate the measure. (Eurostat, 2016).

**Start-up grant:** Registered unemployed jobseekers with a feasible business idea can gain access to counselling and financial assistance to set up a new business through a start-up grant.<sup>5</sup> The start-up grant is payable for a maximum of 18 months and is paid for up to 5 days/week at the same level as unemployment benefits and can be increased by up to 60%. The payments are made in periods, with the first typically being six months. Further payments depend on a review of the viability of the business.

Assessing the benefits and costs of various labour market policy measures in Finland using microsimulation models at the individual level, (Alasalmi, 2019<sub>[1]</sub>) find that, while the costs of wage subsidies in the public and private sectors are comparable, employment with wage subsidies in the public sector appears to lead only to short-term employment with no impact on income. In the private sector, however, employment with wage support seems to have a positive effect on both income and employment even after the employment measure (though not for the long-term unemployed). Furthermore, while, internships and working life coaching, as well as preparatory training, do not seem to have much effect on employment or income, apprenticeships have a clear positive impact on both employment and income. Though, unemployed people receiving start-up benefits are more likely to find employment, their income is lower than in the comparison group.

*Notes*: 1. The participant may also receive compensation for his expenses over the days which he takes part in the trial. 2. If the work trial is organised within a municipality, it may last for 12 months but the jobseeker cannot stay on in the same tasks for more than six months. 3. The magnitude and duration of the subsidy depends principally on the distance of the jobseeker from the labour market. 4. For young people under 25 years it is considered after 8 12 months of unemployment, for older unemployed after 24 months of unemployment. 5. Those who are not unemployed but are settling up as an entrepreneur after a period in paid employment, education or domestic work and those moving from part to full-time are also eligible for thestart-up grant.

Source: http://www.te-palvelut.fi/. A number of supported employment creation programmes exist in order to strengthen labour demand for such jobseekers and provide some work experience to bring them closer to the labour market.

### Group 5. Women with care responsibilities ("Female carers")

One in ten of the target population are clustered in a group characterised by their childcare responsibilities. Fully 91% of this group are female with an average age of 37. This group tend to be relatively educated with only 5% holding less than an upper secondary degree.

### Key characteristics:

- Women (91%)
- Average age of 37 with 23% aged 29 or below, 69% aged 30-49, and 8% aged 50-64.
- 98% have care responsibilities.

- Medium or highly educated (only 5% hold less than an upper secondary education)
- Concentrated in the second (37%) and third (23%) income quintiles
- Relatively high partner or non-labour income (43%)
- Average equivalised income: 23,000 EUR per year net of taxes and benefits
- Benefit receipt including 38% claiming unemployment benefits and 17% claiming housing support
- Over 15% of migrants fall into this group

# Figure 3.6. Group 5: Female carers

Panel A: Incidence and overlap of most common barriers Care (98%) Non-labour income (43%) No recent experience (28%)

Notes and source: See Figure 3.1

Finland's Child Home Care Allowance (CHCA), which is granted when a child under 3 years of age is looked after at home, can render staying at home more financially advantageous than engaging in training or paid employment (see Section 1.2). 12% of this cluster face disincentives from "high" earnings replacements barriers and the CHCA plays a key role in that. However, parent's choices about how to balance work and family responsibilities, and about the length of any child-related career breaks, is shaped by a range of financial and non-financial factors. For women in Group 5, the availability of substantial income that does not depend on their own employment can reduce the immediate need for going back to work. Indeed, with a share of 43%, this potential employment barrier is more prevalent in this group than any disincentives created by the home-care allowance.

This cluster also comprises a relatively large proportion of Finland's migrants (8% of the group), accounting for 15% of Finland's migrant population (see (OECD, 2018<sub>[38]</sub>) and Box 3.3 on integrating Finland's Migrants). Migrant women in Finland frequently have limited earnings prospects. The CHCA is likely to strongly shape financial work incentives in these cases, though, as for all parents, family size and cultural factors will also play an important role in their for labour-market choices. However, the effects of low female labour market participation (and concomitantly low participation in day care among their children) are particularly problematic among migrant families because the benefits of day care, such as language and social learning, tend to be especially pronounced for children from disadvantaged or immigrant families (Hiilamo, Merikukka and Haataja, 2018<sub>[40]</sub>). The result is, that where the children of migrants are cared for at home, disadvantage passes from generation to generation. Indeed, many of the children of migrants in Finland tend to experience language difficulties that impede their schooling and future employment (OECD, 2018<sub>[38]</sub>). Worryingly, this is particularly marked among those children whose parents come from refugee-sending countries.

# Box 3.3. Integrating Finland's migrants into stable employment

### Finland's migrant population come from a diverse range of countries...

In recent years, the integration of migrants – and in particular of refugees – has been high on the policy agenda in many countries, and Finland is certainly no exception. The issue has been particularly high on the agenda in recent months as policymakers consider how to tackle the demands of an ageing population.

Finland does not have a long history of hosting international migrants. However, with a compound annual growth rate of 7 percent over the past 25 years, the growth of this population has been amongst the fastest in the OECD. Finland's migrant population come from a diverse range of countries and have a concomitantly diverse experience of Finlands labour market. Since the mid-1990's, migrants from Russia and Estonia have made up the largest foreign-born group in Finland and continue to do so; together accounting for approximately one third of the foreign-born population. Since 1994, migrants from Somalia have represented a fairly stable 3 per cent of the foreign-born population of Finland, while the number of migrants arriving from Iraq and Afghanistan has been increasing.

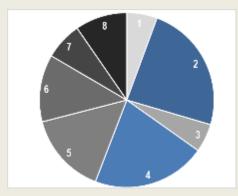
### ... each have quite different labour market outcomes

Finland's foreign born population have, on average, a lower employment rate than native-born Finns. Indeed when the migrant population is restricted to include only those arriving from outside the European Union, employment rates among Finland's migrants are the lowest in the OECD. This stark finding is somewhat hidden in the aggregate figure, which masks a large degree of heterogeneity among different migrant populations. Indeed employment rates among Finland's Estonian population do not lag far behind those of native born Finns, employment rates among other migrant populations (including the Russian, Iraqi, Somali and Afghan population) have employment rates that are substantially lower (OECD, 2018<sub>[24]</sub>).

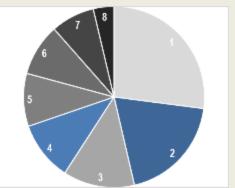
# Figure 3.7. Among the jobless, migrants are more likely to have some labour-market attachment

Foreign- and native-born jobless by Faces of Joblessness cluster

### Panel A: Foreign-born



Panel B: Native-born



*Notes:* Group 1 "Rural inactive", Group 2 "Unstable work" Group 3 "Skilled retirees", Group 4 "Urban jobseekers", Group 5 "Female carers", Group 6 "Low-skilled youth", Group 7 "Prime-age low skilled", Group "Limited incentives" Groups highlighted in blue are those showing the highest degree of labour market attachment with approximately half or more members of the group actively seeking employment.

Source: Faces of Joblessness Analysis, see Appendix 1

The Faces of Joblessness analysis presented in this report sheds further light on the labour market situations and circumstances of those foreign-born individuals that do experience labour-market problems. Results show that Finland's foreign-born jobless frequently belong to groups that have some labour-market attachment (Group 2, "Unstable work", Group 4, "Urban jobseekers") or who do not work due to care responsibilities (Group "Female carers") see Figure 3.23 below).

Group 6. Young people with low skills and no work experience ("Low skilled youth")

This cluster, accounting for 9% of the jobless, are the youngest group, with an average age of just 32. It is very homogenous group, all having no prior work experience at all, and therefore low work-related skills and, given their characteristics, are likely to experience unsuccessful job search. Related to the three primary barriers shown in

Figure 3.8, education levels are low, with 46% below upper-secondary level.

### Key characteristics:

- 57% are aged 29 or below, 33% aged 30-49, and 10% aged 50-64. The average age is 32.
- All have low skills (100%)
- Many are low educated (46% less than upper secondary)
- None have past experience (100%)
- Many already report health difficulties (47%)
- Few employment opportunities exist for their profile (100%)
- Many are discouraged, and few (29%) report actively seeking employment
- Many are poor (61% in bottom income quintile)
- Average equivalised income: 17,200 EUR per year net of taxes and benefits
- High benefit receipt (including 59% receiving housing benefit, 41% receiving sickness/disability benefit and 39% receiving social assistance at some point during the reference year)

# Figure 3.8. Group 6: Low skilled youth

Panel A: Incidence and overlap of most common barriers



Panel B: Cluster size, (% of jobless)



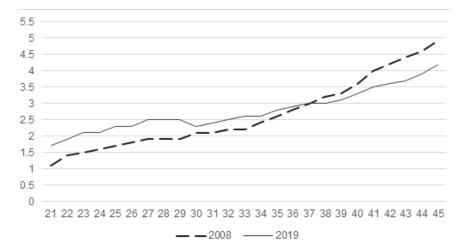
Notes and source: See Figure 3.1

Low education and unsuccessful job search often go hand in hand with mental health issues among youth. Indeed, despite their young age, close to half (or 47%) in this group have developed health concerns close to twice as high as that in the working age population more widely (see Figure 2.1). This is in line with

depression and substance abuse being widespread among the in NEET in Finland (OECD, 2019<sub>[31]</sub>). Jobsearch activity is weak, with only 29% saying that they were actively seeking employment, and benefit receipt is common (41% receive sickness or disability support and two out of three receive housing benefits), as are weak work incentives (for 27%, earnings-replacement benefits are "high" relative to potential in-work earnings) Indeed, while overall claimant rates for the disability pension have been falling in Finland in recent years, receipt has increased for younger age groups (Figure 3.9 Panel A), with younger disability pension claimants concentrated in regions with lower employment rates (Figure 3.9 Panel B).

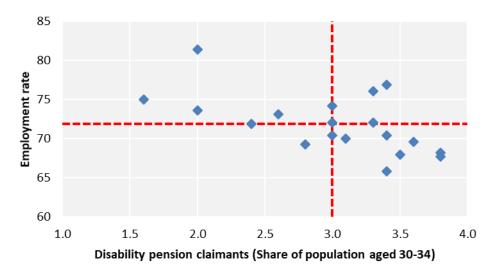
Despite several common characteristics among group members, their household incomes vary quite substantially. The majority are relatively poor with over 60% falling in the lowest income quintile. However, 18% live in households with substantial other income.

# Figure 3.9. Young people are increasingly claiming disability pensions particularly in low employment regions



Panel A: Disability pension claimants as a percentage of the population, by age

Panel B: Disability benefit claimants among the population aged 30-34 Percent, by regional total employment rate (15-64), 2019



Note: Red dashed line represents average across regions Source: Statistical Database of the Finnish Centre for Pensions

# Group 7. Prime age and older individuals with health difficulties and limited job opportunities ("Prime-age low skilled")

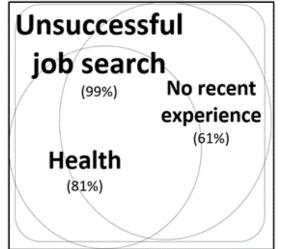
If early labour market difficulties are left unaddressed, they can follow individuals throughout their working lives. Indeed, alongside the group of low skilled youth, there is a further – similarly sized – group of older low-skilled workers. This group has an average age of 51. In contrast to the young low-skilled, a large proportion (37%) are actively seeking work, though they share some of the principal barriers with their younger peers in Group 6..

# Key characteristics:

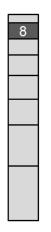
- Average age of 51 with 6% aged 29 or below, 50% aged 30-49, and 44% aged 50-64.
- The majority report severe health limitations (81%)
- Many have low skills (61%)
- Many are unemployed (51%) or ill/disabled (30%).
- All have some experience with 48% having worked recently
- They are concentrated in elementary occupations (58%)
- Many have become discouraged and a minority (37%) report actively seeking employment
- All have a profile that renders them susceptible to unsuccessful job search.
- Average equivalised income: 18,617 EUR per year net of taxes and benefits
- High benefit receipt (including 62% claiming unemployment, 51% claiming sickness/disability, 45% claiming housing support and 29% claiming social assistance at some point during the year)
- Many are poor (55% in bottom income quintile)

# Figure 3.10. Group 7: Prime-age low skilled

Panel A: Incidence and overlap of most common barriers



Panel B: Cluster size, (% of jobless)



Notes and source: See Figure 3.1

Close to half (48%) hold less than an upper secondary education, 61% have low work-related skills, and nearly all have a profile that renders them vulnerable to unsuccessful job search. Fully 81% report that they are severely limited in their activities by health concerns. All of this group have worked at some point over their career (the majority concentrated in elementary occupations 58%) though only 48% have worked recently (within the reference year). Indeed, the length of the unemployment spell of members in this group is among the highest of all clusters (see Appendix 2: Latent Class Results and many of the individuals in this group are likely to have drifted into long-term unemployment as labour market difficulties compounded

over time. To prevent this group from expanding – particularly in light flows into unemployment resulting from the Covid-19 crisis, early access to training and upskilling are likely to be key.

Participation in adult education in Finland is among the highest in the OECD. This is partially due to the Adult Education Allowance which provides income replacement for up to 15 months to individuals who engage in lifelong learning and partly due to the ability to access unemployment support alongside study courses that are longer than those organised by the PES (see Box 3.4). However, while participation rates among older and unskilled workers remain higher than in many other OECD countries, there exist large gaps in participation rates between old and young workers, and between the low- and highly skilled. Furthermore, employees in occupations characterised by declining employment, who are likely to have been exposed to technological change, participate only modestly in adult education, especially if they are older or less-skilled (Asplund, Kauhanen and Vanhala, 2019[26]).

This group are not affluent, and with an average disposable income of 18,300 euros per year, some 80% are in the bottom two income quintiles and 55% are in the bottom 20%. The majority rely on unemployment support (62%) and 51% claiming sickness and disability support. Receipt of means-tested benefits is also common, with close to half (45%) claim housing support and 29% receiving social assistance. It is worth noting that, as in other groups, receipt of all these benefits is reported for the year as a whole, and they are therefore not necessarily received at the same time.

# Box 3.4. Finnish Policy at a Glance: Self-Motivated Studies and Labour Market Training

This box highlights two of the policies utilised within Finnish employment services that aim to strengthen the education and skills of jobseekers.

### Self-motivated Studies supported with unemployment benefit

The aim of self-motivated studies is to improve the employability of jobseekers without any specialised vocational training, by giving them to opportunity to obtain a vocational qualification while continuing to claim the unemployment benefits they would be entitled to if they were in unemployment. The intervention provides jobseekers with an opportunity to receive unemployment benefit for self-motivated studies for up to two years.<sup>1</sup> Fewer than 8% of participants in self-motivated studies are long-term unemployed. Only full time studies can be supported by unemployment benefit.<sup>30</sup>

Referral to Self-motivated Studies is made if the PES office's assessment indicates that a claimant studies will improve the claimants vocational skills and chances of finding a job. There are no requirements as to the duration of the studies, but unemployment benefit to support your studies can only be paid for a maximum of 24 months per qualification or degree. Basic education can be supported for a maximum period of 48 months.

Since the beginning of 2019, the unemployed may also receive unemployment benefit while completing short-term studies (up to six months) that provide vocational skills or support self-employment. In exchange, participants are obliged to seek and accept full-time work, as well as to participate in employment services.

#### Labour Market Training

Labour market training incorporates various types of training programmes including initial vocational training, retraining for those changing occupation, and also academic training. Programmes can last from a few days to more than a year. As with Self-Motivated Studies unemployment benefits during continue the under same terms as during unemployment. In addition, labour market training participants may receive additional travel and accommodation allowances. Only around one in ten of labour market training participants are the Long-Term Unemployed.

Note: 1. Prior to 2010 the programme was called Training Allowance and was targeted only to longer-term unemployed. From 2010 onwards, the measure was widened to all registered unemployed for whom agreement has been reached with the PES office that such training will enhance employment prospects. Accordingly the size of the measure increased significantly, from less than 2 000 participants in 2009 to almost 35 000 in 2016 (OECD, 2016<sub>[6]</sub>).

Source: KELA and  $\,$  (OECD, 2019\_{[42]}).

Group 8. Individuals with high non-labour income ("Limited incentives")

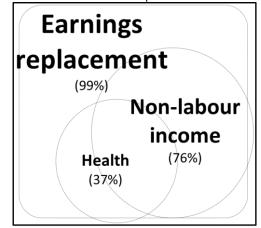
A further group of jobless individuals can be characterised as those facing limited financial incentives to work. This is the smallest of the clusters and accounts for just 4% of the jobless.

### Key characteristics:

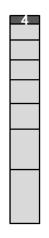
- Average age of 34 with 49% aged 29 or below, 48% aged 30-49, and 3% aged 50-64.
- Virtually all have a high earnings replacement (99%)
- All have a high non-labour income (100%)
- Some report health difficulties (37%)
- A sizeable minority have low work related skills (27%)
- Nearly all have some recent work experience (98%)
- Most (65%) report that they are not actively seeking employment
- Many are relatively affluent (65% in top two income quintiles)
- Average equivalised income: 32 720 EUR per year net of taxes and benefits
- 45% received unemployment benefits at some point during the course of the year

# Figure 3.11. Group 8: Limited incentives to work

Panel A: Incidence and overlap of most common barriers



Panel B: Cluster size, (% of jobless)



Notes and source: See Figure 3.1

These individuals are mostly young with an average age of just 34, nevertheless, 37% report health difficulties.

This group tend to live in households with a high level of income that is independent of their work effort and additionally receive earnings replacement benefits that are high relative to their potential labour market earnings. Close to half of this group (45%) receive unemployment support. Indeed, Finland operates a comparative generous benefit system for young people such that, overall, almost 80% of people aged 16-

29 receive some form of benefit (including housing for students) and one in three receiving out of work benefit) (OECD, 2019<sub>[32]</sub>).

# 3.2. Targeting and tailoring interventions

Grouping the jobless in terms of their main employment barriers can help to design interventions that are targeted and tailored to people's needs and circumstances. However, in the current labour-market context in the wake of the COVID-19 outbreak, policymakers may need to make difficult decisions regarding the allocation of finite resources across different groups. More generally, labour-market integration strategies typically cannot tackle everybody's employment barriers at the same time. Instead, they may require setting priorities between groups ("targeting"), with policy attention initially focussed on strengthening employment for some groups more than on others. In addition, for any given target group, policy design involves choosing the intervention or set of interventions that is likely to have a strong impact on employment outcomes ("tailoring"). This is especially relevant for the (majority of) jobless who face multiple concurrent employment barriers.

The results of the Faces of Joblessness analysis do not provide an outright answer on where to prioritise policy efforts and resources. But the detailed map of the barriers and characteristics of potential target groups can inform and guide debates in this respect, by making trade-offs explicit and ensuring that policy decisions account for the circumstances of jobless people.

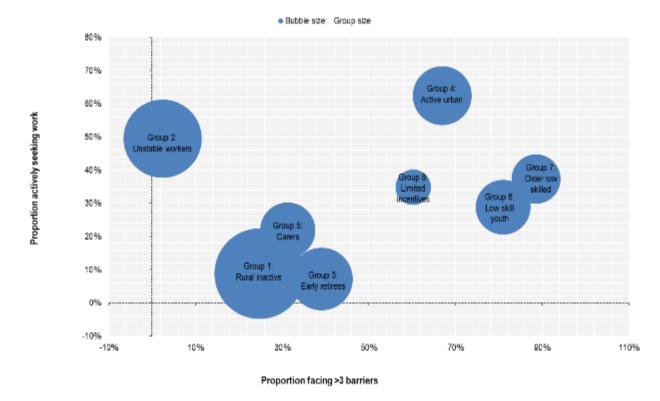
# 3.2.1. Targeting: Identifying priority groups

For targeting purposes, circumstances that can be of particular interest include, on one hand, the degree of socio-economic disadvantage that different groups face. For instance, from an equity perspective, somebody with high poverty risks would be a high priority for support. On the other hand, policymakers may wish to consider the likelihood that a given intervention results in successful labour-market integration. For instance, in a scenario with limited government resources, somebody who is very "distant" from the labour market may be less of a priority for immediate re-integration.

This section considers some of the trade-offs that can arise in prioritising policy attention to certain groups. It illustrates them using information for the eight salient groups of jobless people in Finland that were identified above.

### Focus on "low-hanging fruits", or on those with the greatest need for support?

Prior to the COVID-19 pandemic, and the concomitant measures taken to contain it, the Finnish government had been making progress towards the stated employment-rate target of 75%. By March 2020, however, year-on-year employment fell for the first time in almost five years. If the capacity for delivering effective employment-support becomes stretched by a continuing inflow of new jobseekers and rising unemployment-to-vacancy ratios, one strategy may be to focus available resources on the 'low hanging fruits' in terms of labour-market integration. For instance, members of Group 2 ("unstable work") are largely job-ready, with no or limited numbers of obvious employment barriers (see Figure 3.12). Many of them report active job search and may currently receive relatively little support within the Finnish Public Employment Service, where a heavy counsellor caseload and early streaming to sort jobseekers according to their support needs can limit attention to more job-ready clients. However, if growing labour-market slack makes successful job search more difficult, this group may require additional support to reduce the risks that they would slip into longer-term joblessness as the labour-market situation deteriorates.



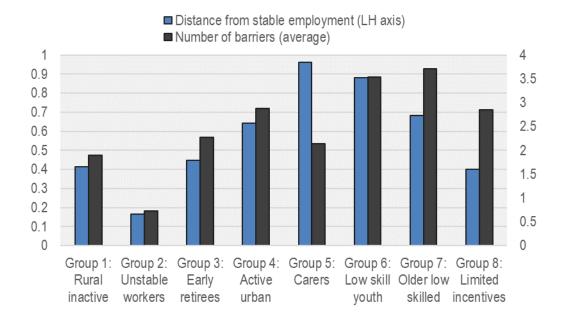


The average number of barriers in each group gives some indication of their distance to stable employment. But it is a relatively crude measure, as the same barrier may be more or less binding for different individuals, e.g. depending on their other barriers, but also on their individual characteristics (e.g. age, gender, region) or household circumstances (such as family situation). The analysis that follows provides a richer assessment of people's effective distance from a "good" labour-market outcome, such as stable non-marginal employment. It does so by estimating the likelihood of stable non-marginal employment barriers and other circumstances. The approach is summarised in Box 3.5. Results, presented in Figure 3.13, confirm that Group 2 ("unstable work"), are indeed those with the smallest distance from the labour market, followed by Group 8 ("Limited motivation"), and Group 1 ("Rural inactive"). Groups 1 and 2 are also particularly sizeable, and this may be a further argument for additional policy effort towards strengthening and supporting their labour-market integration.

**62** |

Source: OECD Secretariat based on Faces of Joblessness methodology (see Appendix 1)

# Figure 3.13. Distance from stable employment



#### Averages across group members

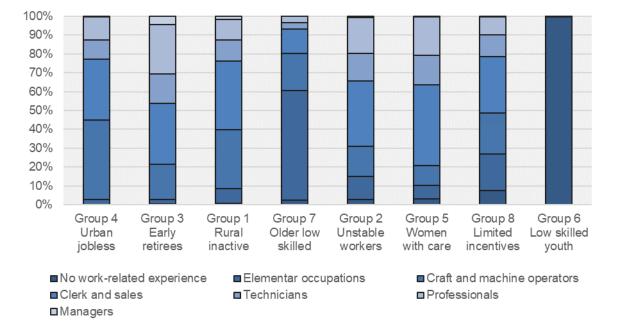
Note: "Distance from stable employment" is measured as the probability of being in the target population (jobless or in unstable or marginal employment), given the individual set of barriers and other circumstances, see Box 2.1 for a definition of the target population and Box 3.5 for further details of the estimation of distance from stable employment.

Source: OECD Secretariat based on Faces of Joblessness methodology (see Appendix 2)

A very different targeting strategy emerges if, instead, policy is guided by an equity objective to support those with the greatest needs – even if this requires greater efforts to "bridge" people's distance from a successful employment outcome. For instance, Group 6 ("Low skilled youth") and Group 7 ("Prime-age low skilled") not only face a large number of barriers, but are very distant from the labour market. Individuals within these groups are likely to need holistic support that may incorporate multiple and co-ordinated interventions. This may require more resources, yet – particularly in the case of Group 6 ("Low skilled youth") – the long term payoff may be substantial.

### Mobilise and maintain existing or future skills?

As labour markets strengthen, demand for specific skilled workers may provide opportunities for those with previous work experience. A desire to retain and mobilise such skills may shift attention to increasing incentives for lengthening effective working lives for some groups, such as Group 3 ("Skilled retirees"). Close to half of this group are likely to hold significant professional or management skills (Figure 3.14). A focus on the long-term payoff of policy investments, on the other hand, may suggest focusing policy efforts on the younger jobless, including Group 6 ("Low skilled youth"). Most of these individuals do not currently hold skills that are demanded in the labour market and many are held back by multiple barriers, including ill-health. But with most of their adult life ahead of them, investments into effective prevention and promotion measures for these youth, such as second-chance education and training, will reap dividends for many years.



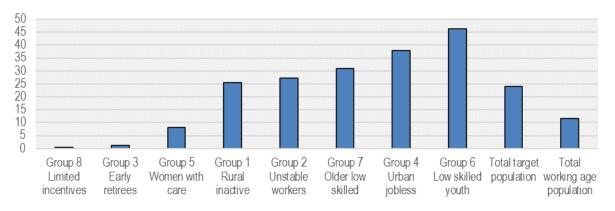
### Figure 3.14. Incidence of occupations in each group

Note: Groups ordered according to the proportion with experience in occupations requiring skills higher than those in elementary occupations. Group 6 contains no individuals with work experience, hence this group shows as having no work-related skills. Source: OECD Calculations based upon EU-SILC data

### Alleviate poverty risks?

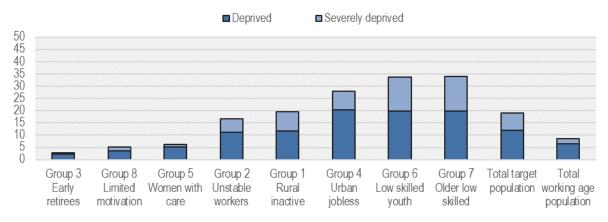
Labour-market integration is a key pillar in strategies to alleviate low-income risks and address inequality. Poverty levels are relatively low in Finland and the proportion of the working age population classified as at risk of poverty or social exclusion is among the lowest in the European Union. Among the jobless, however, poverty rates are significantly higher (Figure 3.15 Panel A). Such poverty during working-age impacts not only on old-age poverty risks, but affects the current and future well-being of household members, including children. Clearly, from an equity perspective, channelling income and employment support to those with the greatest poverty risks is an important priority. While access to stable employment is a key determinant of income, poverty risks do not necessarily coincide with the distance from the labour market. For instance, while group 2 ("Unstable work") are the group that has the smallest distance to stable employment, they nonetheless have a relatively high risk of poverty or exclusion. Conversely, other groups (such as group 5 ("Carers") who are far from stable employment have a relatively low risk of facing poverty or exclusion (Figure 3.15, Panel A). Patterns across groups are broadly similar when looking at other indicators of socio-economic exclusion, such as material deprivation (Panel B). However, certain groups, most notably group 6 ("Low-skilled youth") and group 7 ("Prime-age low skilled") are both distant from the labour market, and face a high risk of poverty, social exclusion, and material deprivation.

# Figure 3.15. Groups at risk of poverty or exclusion



### Panel A: At risk of poverty or social exclusion (AROPE)





Notes: 1. At risk of poverty or social exclusion, abbreviated as AROPE, corresponds to the sum of persons who are either at risk of poverty, or severely materially deprived or living in a household with a very low work intensity. Persons are only counted once even if they are present in several sub-indicators.2. Material deprivation refers to the inability for individuals or households to afford those consumption goods and activities that are typical in a society at a given point in time, irrespective of people's preferences with respect to these items. Source: OECD Calculations based upon EU-SILC data

# 3.2.2. Tailoring: Identifying the most important barriers

For any given target group, effective policy intervention requires an understanding of which of these barriers are most relevant for people's employment outcomes. In other words, for sequencing and coordinating suitable policy measures, it is useful to know the extent to which addressing various employment barriers can be expected to actually move individuals closer to employment. For instance, if out of work individuals face skills shortages, what impact may addressing these shortages have on the probability that they remain out of work (or in unstable, or limited work)?

Tailoring policy interventions to people's needs and circumstances is made more challenging by the fact that a majority of jobless Finns face several different barriers concurrently. Policies aimed at alleviating just one employment barrier may be ineffective if they are implemented in isolation and if other remaining barriers continue to impede productive employment. That is to say, there may be synergies in tackling multiple barriers concurrently, or in a suitably sequenced manner. In terms of the above example, the question may then become whether addressing skills shortages would have the biggest impact on labour-

market success, whether some other intervention may have a more substantial effect, or whether a combination of different measures may be needed for achieving the intended outcome.

# Box 3.5. Calculating the expected impact of addressing barriers in each group

The empirical work underpinning the discussion in this section proceeds in two steps. A first step estimates the relationship between joblessness or weak labour market attachment, and the labour market barriers that form the basis of the groups outlined in Section 3.1. This provides an estimate of the proximity of each group to stable employment given *existing employment barriers* and circumstances. A second step then uses the estimated relationships to infer the extent to which *changes in specific employment barriers* affect the likelihood of "good" or "bad" employment outcomes. These "vignettes" are defined separately for each group on the basis of the set of barriers that are most prevalent in the group.

# Step 1: Estimating the probability of facing labour market difficulties

In order to estimate the distance from employment of individuals in each group, the analysis employs a logistic regression where the dependent variable is a binary indicator to designate whether the individual in question faces labour market difficulties (defined, as in the rest of this paper, as unemployment, inactivity, unstable employment, or employment with restricted hours or near-zero earnings). Because the same barrier may be much more limiting for one jobless person than for another, separate estimations are undertaken for each of the eight groups identified in Section 3.1 in order to ensure that the estimated coefficients are group specific. Model specifications are consistent across groups and include, as independent variables, the labour market barriers defined in Section 2.2 (education, skills, health, non-labour income, participation tax rates and unsuccessful job search), interactions between these barriers, and controls for age, sex, degree of urbanisation, and migrant status.<sup>1</sup>

### Step 2: Inference on the effects or "removing" selected labour-market barriers

To provide an estimate of the impact of each of the barriers to employment on the probability of facing labour market difficulties and the potential benefit that may result from policy aimed at assuaging these barriers, the next step then estimates the marginal effects of removing each of the major barriers.

The use of nonlinear models such as logistic regression can result in significant interpretation difficulties. Indeed, the raw coefficients of such models are often not of immediate interest. The "marginal effects" (i.e. statistics computed from model predictions for different values of the control variables) allow summarising the entire vector of estimated parameters into a single value using the same metric as the dependent variable (here the probability of facing labour market difficulties). For example, by examining the marginal effect of the health barrier we can compare the probability of labour-market difficulties of an average individual both with, and without, poor health.

In practice, such marginal-effect calculations compare two hypothetical populations – e.g., one in which all individuals face the health barrier, and one in which no-one faces this barrier. Aside from this difference, these two hypothetical populations are identical (they hold constant all other independent variables in the model). Since the only difference between these two hypothetical populations is whether or not they face a certain barrier (e.g., reported health problems), it is possible to conclude that this barrier is the cause of any difference in the dependent variable – the probability of facing labour market difficulties. Standard errors (computed by means of the Delta method), allow inference on the estimated gaps and their statistical significance and the confidence intervals that result are presented, alongside the marginal effects results in Appendix 4.

### Step 3: Estimating synergies from tackling combinations of different barriers

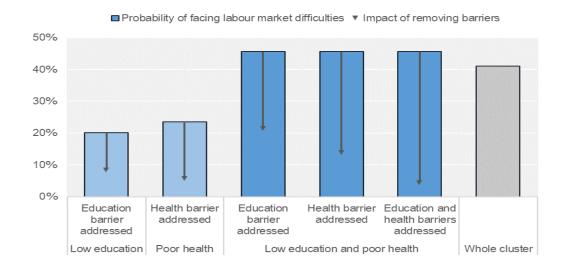
In order to ascertain the extent to which there are synergies in alleviating multiple barriers concurrently, the analysis of the Section 3.2 then goes on to examine the marginal effects of pairwise (and in some cases three-way) interactions of the major barriers facing each group. That is, in examining the impact of removing two major barriers (for example Barrier A and Barrier B) we can say that there are likely to be synergies in addressing these barriers concurrently if the marginal effect of removing Barrier A is larger for somebody who faces Barrier B alongside Barrier A, than for an otherwise similar individual who faces Barrier A in isolation. The sets of barriers examined (so-called "vignettes") are specific to the circumstances of each group. In this manner, the use of such a vignette-based analysis facilitates the communication of complex statistical results in a comparative perspective that is tailored to the specific circumstances of each group. This can facilitate the identification of policy mechanisms that are likely to be efficient in reducing the probability of facing labour market difficulties.

The analysis below illustrates how the Faces of Joblessness framework can help to assess the impact of different barriers and to tailor policy interventions accordingly. It does so by applying the same statistical model introduced above ("Step 2" in Box 3.5). As the model relates the existence or intensity of barriers to employment outcomes, it is possible to undertake "what-if" thought experiments that remove individual barriers one at a time, or several of them in combination, and estimate how this would affect the probability of stable employment for a given individual or for a group as a whole.<sup>31</sup> In a nutshell, the analysis examines the roles that individual barriers play in determining the distance from stable employment, and provides an estimate of the impact that removing these barriers would have in reducing this distance. Groups 1 ("Rural inactive"), 2 ("Unstable work"), 3 ("Skilled retirees"), 6 ("low-skilled youth"), 7 ("Prime-age low skilled"), and 8("Limited incentives") are examined below. The results for groups 4 ("Urban active") and ("Female carers") are available in Appendix 5 because the major barriers facing these groups are less amenable to the marginal analysis employed in this section (see Box 3.5).

### Group 1 ("Rural inactive")

Two of the major barriers facing Group 1 are poor health (which affects 61% of the group) and low education (which affects 32% of the group), 16% of the group face both barriers concurrently. Figure 3.16, below, highlights the impact of addressing these barriers on the probability of facing labour market difficulties. In the absence of intervention, those in Group 1 whose only labour market barrier was a low level of education, would be expected to face labour market difficulties with a 20% probability, all else equal. Those with poor health only, would be likely to face labour market difficulties with a somewhat higher probability (23%). When it comes to individuals who face *both* of these barriers concurrently, however, the probability of labour-market difficulties increases markedly, indicating that nearly one in two such individuals would be experiencing joblessness (or unstable or marginal employment).

# Figure 3.16. Addressing key barriers facing Group 1 ("Rural inactive")



Estimates of the impact of employment barriers on the probability of joblessness

Source: OECD Calculations based upon EU-SILC data (see Box 3.5)f

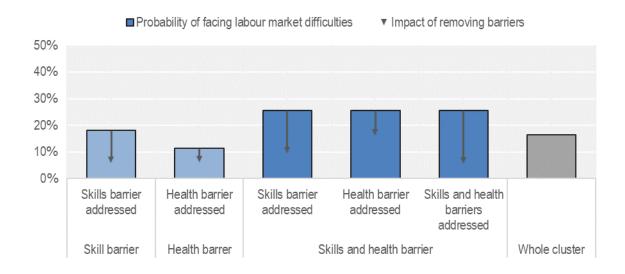
A policy intervention aimed at addressing the labour market barrier created by low level of education would cut the probability of joblessness by more than 50% (12 percentage points for those facing the education barrier alone, and 24 percentage points for those who face both educational and reported health barriers concurrently). A policy intervention that successfully tackled the "health limitations" barrier would cut the probability of labour market difficulties by an even bigger margin (by 18 percentage points for those facing the reported health barrier alone, and 31 percentage points for those facing both health and educational barriers). Finally a policy that addressed *both* the health and education barriers would reduce the distance from the labour market measure to almost zero, by lowering the probability of joblessness to under 5%.

Importantly, therefore, among the individuals in Group 1, there are substantial potential synergies arising from policies that successfully address both education and health-related barriers to full-time and stable employment. Indeed, addressing these barriers concurrently would reduce the probability of facing labour market difficulties by an additional 15 percentage points. This can have important implications for the efficiency of employment policy for the individual; if multifaceted support needs go unaddressed, they may still be unable to move into stable employment. Given the magnitude of this group, the presence of such synergies may also have implications for policy evaluation; interventions that effectively target one barrier may be deemed ineffective when evaluated, due to their limited impact on aggregate employment figures.

# Group 2 ("Unstable work")

Group 2are the group that is closest to stable employment – both in terms of the number of barriers that they face, and in terms of the extent that the barriers they face impede their participation in stable employment. As discussed in Section 3.1, the major barriers affecting this group are health limitations, the availability of independent income, and holding only a low level of work-related skills. Of this group, just 9% face at least two barriers. Individuals facing both poor health and a low level of skills are the most likely to face labour market difficulties and will find themselves out of work or in unstable employment with over 25% probability (Figure 1.15).

# Figure 3.17. Addressing key barriers facing Group 2 ("Unstable work")



Estimates of the impact of employment barriers on the probability of joblessness

Source: OECD Calculations based upon EU-SILC data (see Box 3.5

For Group 2, the most mileage comes from addressing the low level of skills this group hold. Indeed, the probability of facing labour market difficulties reduces by 12 percentage points among those facing skills barriers only, and by 18 percentage points among those facing skills and reported health barriers.

Policies aimed at addressing the health limitations of this group would do well to address their skills concurrently to ensure that a low level of skills does not constitute a bottleneck impeding the efficiency of health interventions. Indeed, among those facing both health and skills related, addressing health alone reduces the probability of their facing labour market difficulties by just 11 percentage points, while addressing both barriers doubles the impact of the intervention.

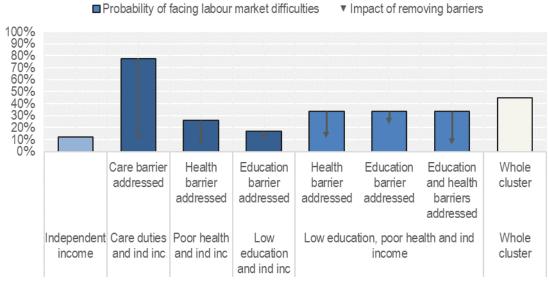
# Group 3 ("Skilled retirees")

The barriers facing the largest proportion of members of Group 3 are poor health, low education and access to an income independent of their labour market effort.

Nearly all (96%) of the group have access to an income independent of their labour effort), suggesting that for many members of this group, withdrawal from the labour market is the result of a choice based upon lack of financial need. Nevertheless, the probability of facing labour market difficulties among those for whom access to an independent income is the only barrier remains below 10%. This probability increases, in some cases substantially so, among those facing additional barriers concurrently (Figure 3.18).

Individuals who have a low level of education and report health difficulties (alongside having an independent income) are 7 percentage points more likely to experience labour market difficulties than those who report health difficulties and have an independent income only. They are 16 percentage points more likely to experience labour market difficulties than those who face just educational barriers and independent income. Addressing the low level of education alone does little to bring these individuals closer to the labour market. However addressing their health concerns has a more substantial impact reducing the probability they face labour market difficulties.

# Figure 3.18. Addressing key barriers facing Group 3 ("Skilled retirees") Estimates of the impact of employment barriers on the probability of joblessness



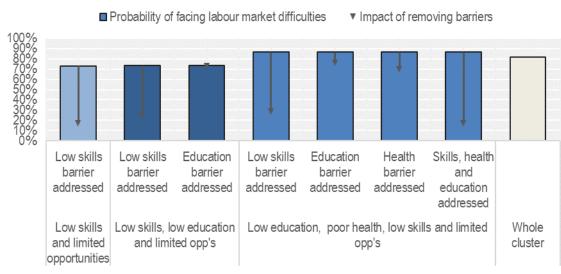
Source: OECD Calculations based upon EU-SILC data (see Box 3.5)

# Group 6 ("Low skilled youth")

Given the relatively poor labour market situation of young workers in Finland, facilitating entry into the labour market among Group 6 – low skilled youth – has the potential to have a substantial impact on the employment rate in the long term. The entirety of Group 6, the low-skilled youth, face both the skills barrier and the unsuccessful job search barrier. Those facing these two barriers alone are likely to face labour market difficulties with a probability of 73%. Those facing additional barriers such as low education or poor health are even more likely to face labour market difficulties. Indeed close to nine of every ten individuals facing all four barriers are likely to struggle to access stable full-time employment. Addressing the skills barrier faced by this group is likely to be the most efficient way to move these youth toward stable employment.

These results have important implications for policy design. Indeed, while much thought has gone in to efforts to increase the education among youth with a low level of education the results below suggest that, while sufficient education may be a necessary prerequisite to obtain employment-related skills, they may not, alone, be sufficient to ensure access stable employment. Improving school-to-work transitions will also necessitate a better link between education and the labour market, as well as sufficient incentives for employers to offer quality apprenticeships (OECD, 2019[21]).

# Figure 3.19: Addressing key barriers facing Group 6 ("Low-skilled youth") Estimates of the impact of employment barriers on the probability of joblessness



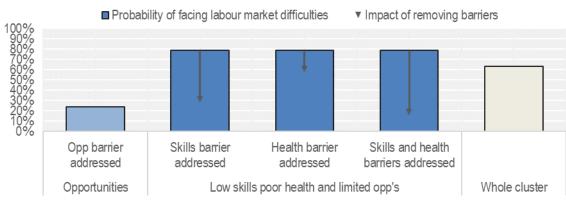
Source: OECD Calculations based upon EU-SILC data (see Box 3.5)

# Group 7 ("Prime-age low skilled")

The older low-skilled individuals of Group 7, are closer to stable employment than there younger counterparts of Group 6. Close to two in every three members of this group is likely to experience labour market difficulties, while close to four in every five of those facing all three of the major barriers characterising this group – unsuccessful job search, poor health, and low skills – will face labour market difficulties. As with the younger cohort of Group 6 addressing the skills deficiencies of these individuals is likely to have the largest impact on their chances of accessing stable employment while addressing skills and health concerns concurrently is likely to have an even bigger impact.



Estimates of the impact of employment barriers on the probability of joblessness



Source: OECD Calculations based upon EU-SILC data (see Box 3.5)

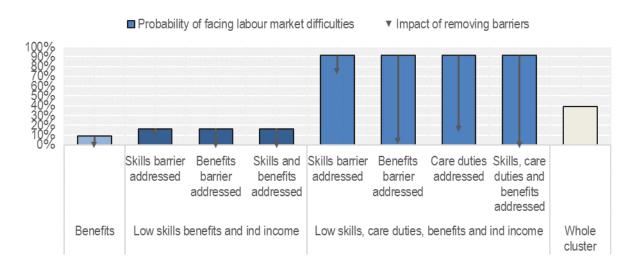
Similar results for tailoring policies towards groups 4, and 5 are presented in Appendix 5.

# 72 |

### Group 8 ("Limited motivation")

Finally, individuals in Group 8, those with other income sources, tend to face multiple barriers. Almost all, however, have a high level of earnings replacement benefits relative to the shadow wage that they could be expected to earn in full-time work given their profile. There is a large difference in this group between the distance to stable employment among those facing multiple barriers and those who additionally face the care barrier.

### Figure 3.21: Addressing key barriers facing Group 8 ("Limited motivation") Estimates of the impact of employment barriers on the probability of joblessness



Source: OECD Calculations based upon EU-SILC data (see Box 3.5).



Following the outbreak of COVID-19, it is expected that government finances will weaken substantially in 2020 as the decline in economic activity reduces tax revenue and increases unemployment expenditures (Ministry of Finance, 2020[23]). The impact of the global slowdown upon Finland's exports – upon which the economy relies heavily – is likely to exacerbate the impact and lengthen the pathway to recovery. As the immediate crisis responses and stimulus measures are rolled back, it will be vital to adjust public finances to a level that the economy can sustain. As the focus turns from income support and transfers, to boosting the productive capacity of the economy, plans are being made to front-load additional spending on skills enhancement, and employment support (Ministry of Employment and the Economy, 2020[23]). This will be necessary, in the context of increasing flows into unemployment, to prevent those that are relatively job ready from slipping into longer term joblessness.

If such expenditures are to be reconciled with tight spending limits in the longer term, however, efforts will need to be careful selected, efficiently sequenced and judiciously targeted at those who stand to benefit the most. Now, more than ever, it is fundamental to recognise the complex set of barriers that prevent the jobless from fully engaging in the labour market. The Faces of Joblessness analysis provided in this report can provide the basis to tailor, to target and to combine policy interventions in a manner that maximises their impact on the prospects of stable employment.

This study has identified the scope for employment growth in Finland, and provided a "birds-eye" view on employment barriers of the jobless population using granular data on the circumstances of each individual. Results aim to inform policy efforts to enhance the effectiveness of activation and employment-support measures by making them accessible and suitably targeted to those who need them most. By highlighting the complexity of people's employment difficulties, and the prevalence of multiple simultaneous barriers, they also support a dialogue about sequencing and co-ordinating policy interventions across institutions and levels of government.

The survey data that was available for this study brings together a wealth of information on the labourmarket, income and living circumstances of individuals and their families, including self-reported limitations that cannot be captured using non-survey data. They are therefore particularly suited for exploring different types of employment barriers and provides a rich mapping of joblessness in Finland. However, survey data typically become available with a certain time lag, are subject to reporting errors, and they draw on a subsample of the population that may preclude analysis of specific small groups that can be of specific policy interest (e.g. smaller regions, or residents with a specific migration background).

Drawing on the present analysis, there are several options for adding further granularity to the results, and for making them more timely in order to facilitate a more regular monitoring of employment difficulties in Finland:

Widening the array of barriers examined: Statistics Finland has a vast panoply of data sources
that could provide rich ground for extensions to the work presented in this report. Accessing this
data would enable future work do delve into a number of further barriers that have not yet been
investigated in detail – including mental health barriers, barriers resulting from geographic isolation
and from tight labour markets in specific labour market segments.

- Deepening the analysis of sub-groups of interest. delving in more depth into the complex set of barriers that affect certain subgroups of the Finnish population that often find themselves among the jobless could be a further avenue for future work. Alongside the barriers outlined in this report, migrants, for example, may face a complicated set of barriers including: linguistic barriers, barriers resulting from foreign or unrecognised qualifications, limited work experience in Finland or restrictions on their work rights. Disabled jobseekers, may face barriers that depend upon their specific disability or that may depend upon the sector in which they hold their qualifications and experience. Understanding these complex sets of barriers and the extent to which each distances the jobseeker from stable employment would provide important insights to orient policy and resources.
- Monitoring evolving support needs as the impact of Covid-19 on the Finnish labour market unfolds: With a large influx of new jobseekers, and a growing incidence of longer-term unemployment, the provision of suitably tailored employment support will be essential for keeping out-of-work spells as short as possible. Monitoring the sets of barriers facing the jobless as they evolve will support labour-market institutions and employment support measures to adapt.



# 5.1. Appendix 1: Typology of employment barriers and their estimation in Finland

## Limited work-related capacities:

• Low education. An individual is classed as facing an educational barrier if the highest qualification they hold is a lower-secondary degree or lower (ISCED-11).<sup>32</sup> Unfortunately, in the Finnish SILC data used in this report, many of foreign-born individuals do not have their education level coded. As a result this paper has taken the approach of modelling the probable education level on the basis of the educational distribution within the native population of individuals with comparable characteristics (sex, age, work activity status, sector, occupation, labour market income, and region).

• Low professional skills. If the person's most recent occupation is in the bottom two categories of the ISCO-08 classification system, this paper assesses that their capacity to work is compromised by their low skills.

• Health limitations. Individuals reporting that they face longer-lasting physical or mental limitations in daily activities are classified as facing health related capacity barriers. In the Finnish SILC data used in this report, health limitations are only recorded for the primary respondent of the survey (the 'reference household person'). However, given that the primary respondent is randomly assigned, this paper is able to model the reported health limitations of other household members on the bases of the distribution of reported health limitations of the primary responders with comparable characteristics (disability benefits received, sex, age, region level of education, current economic status).

• Care responsibilities. Labour market barriers relating to care responsibilities tend to stem from two different sources; those relating to the care of young children, and those relating to the care of older household members. This report identifies the former case via: (i) identifying households with children under the age of 12 who do not have formal childcare for a minimum of 30 hours per week (ii) identifying potential caregivers within the household as those who are not engaged in other activities outside the home and do not themselves require care. Barriers resulting from the responsibility to care for another adult within the household are calculated in a similar manner for those households containing an adult who are not working and whose activities are severely limited by health concerns. adult if an individual has a (minor or adult) family member who requires care and is either the only potential care giver in the household who is economically inactive or working part-time because of care responsibilities.

• Past work experience. The importance of past work experience in maintaining work capacity is captured through two related barriers. The first measures whether an individual has worked (or earned income) during the reference year, the second captures whether an individual has ever undertaken paid work. Future work could strengthen the understanding of the intensity of work experience using data on the years of paid contribution from tax records, or the months in employment from Folk administrative data.

## Limited financial work incentives:

• Non-labour household income. Individuals may face limited financial incentives to work if they live in a high-income household. If the household's income (adjusted for household size and excluding the

work-related income of the individual) is high, relative to the median household income of the working age population, the individual is said to face limited financial work incentives.

Earnings-replacement benefits. If an individual's out-of-work benefits are high relative to their earnings potential, an individual is characterised as potentially facing a financial motivation barrier. For those who are not currently in work, this barrier is based upon a comparison of the individuals shadow labour income (the income that an individual with similar observed characteristics would be expected to earn in work) to the benefits they receive. For those that are currently working, this barrier is based on a comparison of the earned income, to the shadow benefits that individual could expect to claim if they were to stop working. Shadow labour incomes are modelled via a wage equation on the basis of education, age, sex, region, degree urbanisation, health skill, migration status, as well as higher order polynomial of age and interactions between age sex, sex, education, degree of urbanisation and migration status. Expected benefits withdrawal is computed on the basis of the sum of (i) all means tested components of each personal benefit, (ii) all personal components of means tested household benefit. Where this information is missing in the SILC data benefit withdrawal is estimated on the basis of a regression building upon information including (education own Im income, age sex region degree urbanised household type, old household, number adults working, number of children, health status household earned income and migration status, as well as higher order polynomials of household income, own income, and age). Taxes are estimated using EUROMOD, with shadow taxes estimated on the basis of (estimated gross shadow labour and benefit income education, non-labour income, age sex, region, degree urban, household type, old household, number adults working, number of children, health status household earned income and migration status, as well as higher order polynomials of benefit and non-benefit income, non-labour income, and age). This information is used to calculate the net shadow labour income.

## Work opportunities:

• Unsuccessful job search. If an individual's job search is said to be impeded by the availability of suitable job opportunities if they have a "high" risk of not finding a job despite active job-search during at least 12 months, and willingness to take up employment (as stated at the moment of the SILC interview). This risk is estimated in a regression incorporating information on region, degree of urbanisation, age, gender, level of professional skills and education, migrant and health status. Individuals with an estimated risk that is higher than the mean value are considered to face an elevated risk of unsuccessful job search. This barrier to some extent also captures discrimination, to the extent that such discrimination is based upon observable characteristics.

Additional barriers for future work: Statistics Finland has a vast panoply of data sources that could provide rich ground for extensions to the work presented in this report. Accessing this data would enable work do delve into a number of further barriers that have not yet been fully investigated.

• Linguistic barriers. Finland has a short history of hosting migrants, yet growth – in per capita terms – has been amongst the fastest in the OECD. Migrants face a number of additional barriers to work however, these can vary substantially across different groups of migrants. Aggregate employment figures relating to migrants in Finland, mask a large degree of heterogeneity. Future work could build upon data recording the mother tongue of the individual, and the year of their arrival, to build a measure of linguistic distance and the extent of the barrier that language poses.

• Mental health barriers. In the context of the high prevalence of mental health problems in Finland – the highest in the OECD – and the high share of individuals receiving incapacity benefits, follow-up work could build on the measurement of health-related capacity limitations using medical reimbursements and measures of access to health services to disentangle mental from physical disabilities.

• Geographic isolation. When individuals live far from labour markets this can make it a challenge to find work within a commutable area.

## **76** |

• Labour market tightness. While a number of indicators of labour demand exist at a national or regional level, depicting demand-related constraints at the micro-level is a challenge and requires capturing the availability of vacancies in the particular labour-market segment that is relevant to the individual given their skills, experience, location etc. Follow up work would build on local vacancy rate data and job search by sector, using this alongside information of each individuals sector specific education and experience to gage the tightness of the relevant labour market segment.

# 5.2. Appendix 2: Latent Class Results

Using the 2017 SILC data for Finland, the latent class algorithm, outlined in Appendix 1, leads to a model with **8 groups**. Table A.1.1 shows the estimated parameters; the share of individuals facing each employment barrier, in each latent group. In addition, the first row of Table A.1.1 shows the proportion of the target population that are located in each group. Groups are ordered by size; colour shadings are used to highlight barriers with higher (dark blue) and lower (light blue) frequencies in each group.

## Table B.1. Latent class estimates

	inactive	workers	retirees	jobseekers	carers	youth	low skilled		ru
Group Size (Target population=100)	26	20	12	11	10	9	8	4	10
Low education	32	5	14	23	5	46	48	11	2
Low or no work-related skills	8	15	3	3	10	100	61	27	2
Care responsabilities	5	0	4	10	98	14	3	19	1
Health limitations	61	21	43	53	8	47	81	37	4

Percentage of individuals with selected characteristics, by group

Note: Section 2.2 describes the indicators and applicable thresholds. Group sizes refer to the target population as defined in Section 2.1. Colour shadings identify categories with high (dark blue) and lower (light blue) frequencies. Complementary categories (e.g. "high" professional skills) are omitted. Additional information on model selection and model specification is provided in Appendix 1. Source: OECD calculations based upon EU-SILC 2017

# Table B.2. Characterisation of the latent groups

## Percentage of individuals with selected characteristics, by group

		1 Rural inactive	2 Unstable workers	3 Skilled retirees	4 Urban jobseekers	5 Female carers	6 Low-skilled youth	7 Prime-age low skilled	8 Limited motivation	Target Pop
Number of ind	ividuals (%)	26	20	12	11	10	9	8	4	100
Number of ind	ividuals (frequency, in thousands)	210	158	100	90	79	77	63	32	810
Unstable jobs		20	67	22	5	45	2	25	74	31
Restricted wor	king hours	2	5	3	1	0	0	5	6	3
Reason for	r No better job opportunities									30
	d Housework or care responsabilities									3
hours (% of,	Other reasons									67
Workers with z	zero or near-zero earnings	5	16	8	1	3	0	7	12	7
Women*		49	55	55	26	91	45	38	59	52
Age groups*	Youth	3	36	0	4	23	57	6	49	18
	Prime age	33	55	15	60	69	33	50	48	43
	Old-age	64	9	85	36	8	10	44	3	38
Age (average)		55	38	60	51	37	32	51	34	47
Main activity during the reference period	Employed FT	0	2	0	0	0	0	0	0	0
	Employed PT	3	12	3	1	0	0	5	16	5
	Self-employed FT	2	7	5	0	0	0	0	2	3
	Self-employed PT	1	5	1	0	0	0	0	1	1
	Unemployed	31	48	18	71	28	47	51	39	40
	Retired	15	2	52	7	4	3	7	2	13
pened	Unfit to work/disable	41	5	14	18	0	32	30	9	21
	Housework	3	8	4	2	60	11	1	13	10
	Other inactive	3	12	3	1	6	7	6	18	6
Activity at the time of interview	Employed	11	50	14	2	20	0	13	46	19
	Unemployed	26	31	13	69	17	42	42	24	32
	Inactive	63	19	72	29	63	58	45	30	49
Length of uner	mployment spell <sup>†</sup>	11.1	9.3	11.2	12.7	9.9	11.0	11.7		10.9
Actively seekin	ng a job at the time of the interview	9	49	7	62	22	29	37		27
Level of	Low	32	5	14	23	5	46	48	11	23
education	Medium	51	61	40	54	52	43	43	66	51
(ISCED)	High	17	34	45	23	43	10	8	23	26

Note: Section 2.2 describes the indicators and applicable thresholds. Group sizes refer to the target population as defined in Section 2.1. Colour shadings identify categories with high (dark blue) and lower (light blue) frequencies. Complementary categories (e.g. "high" professional skills) are omitted. Additional information on model selection and model specification is provided in Appendix 1. Individual unemployment durations refer to the reference period (13 monthly observations, i.e. 12 consecutive monthly observations and the moment of the survey interview). The average unemployment duration is calculated across individual records with strictly positive values and is top-coded at 12 months.

\* The variable enters as an additional indicator in the latent class model. See Appendix 1for details.

† Average across observations with strictly positive values.

Source: OECD calculations based upon EU-SILC 2017

## Table B.3. Characterisation of the latent groups (continued)

#### Percentage of individuals with selected characteristics, by group

		1 Rural inactive	2 Unstable workers	3 Skilled retirees	4 Urban jobseekers	5 Female carers	6 Low-skilled youth	7 Prime-age low skilled	8 Limited motivation	Target Pop
Number of indi	ividuals (%)	26	20	12	11	10	9	8	4	100
	No work-related skills	1	3	0		3	100	3	8	11
	Elementar occupations	8	12	2		7	0		19	11
Work-related	Craft and machine operators	31	16	19		10	0		22	22
skills (ISCO)	Clerk and sales	36	35	32		43	0		30	30
( ,	Technicians et al.	11	15	16	10	16	0		11	11
	Professionals	11	19	26		20	0		9	14
	Managers	2	1	5		0	0		1	1
Migrant		1	6	2		8	7		12	5
Equivalent disp	posable income (€/year - average)	19449	20480	37758		22958	17194		32710	22331
	Bottom quintile	41	41	2			61		4	37
Position in the	Second quintile	30	26	6	20	37	20	22	15	24
income	Third quintile	16	15	21	11	23	7	9	17	15
distribution	Fourth quintile	9	11	31	9	15	8	9	25	13
	Top quintile	4	7	41	3	8	3	4	40	11
AROPE (euros	stat methodology)	26	27	1	38	8	46	31	0	24
Material	No material deptivation	80	83	97		94	66		95	82
deprivation	Deprived	12	11	2	20	5	20	20	3	12
(Eurostat)	Severe	8	5	0		1	14		2	7
	Sickness and disability recipients (%),	51	14	24	32	6	41	51	24	32
	they receive, in average <sup>†</sup>	15028	7665	14416	11841		9036	12011		12696
	Unemployment benefits recipients (%),	38	62	25	73	38	49	62	45	48
	they receive, in average <sup>†</sup>	9372	8485	12028	10712	9877	6708	9420	8786	9311
Benefits -	Social Assistance recipients (%),	20	19	1	31	7	39	29	10	20
Recipiens and average amounts (€/year)	they receive, in average <sup>†</sup>	2692	2327		2707		4187	2550		2886
	Housing Benefits recipients (%),	32	42	3	55	17	59	45	15	34
	they receive, in average <sup>†</sup>	3,028	2,716		3,238	4,375	3,992	2,989		3,206
	Family-related benefits recipients (%),	16	32	7	20	88	27	9	54	27
	they receive, in average <sup>†</sup>	4293	5158		3559	11873	7048		6411	7254
	Old-age Benefits recipients (%),	16	3	53	7	4	4	8	2	14
	they receive, in average <sup>†</sup>	96		23158						18513
	Total benefit recipiency	96.22	97.22	98.22	99.22	100.22	101.22	102.22	103.22	104.22
	Single	40	31	11	44	0	26	53	2	29
	Couple without children	38	29	74	29	8	27	34	22	35
Household	Couple with children	12	27	8	17	81	20	8	48	24
type	2+ adults without children	5	4	7	4	3	10	3	17	5
	2+ adults with children	2	4	1	1	1	4	1	7	2
	Lone parents	3	6	0	5	6	12	2	5	5
Have children*		9	24	5	16	87	24	7	43	22
Number of children <sup>†</sup>		1.7	1.5		1.5	2.1	1.9		1.6	1.8
Age of the youngest child <sup>†</sup>		6	5		7	2	3		5	4
Live in rural are Densely populated area		16	49	34	67	36	36	38	35	36
	Intermediate area	34	31	32		35	32	33	38	32
	Thinly populated area	50	20	35		29	32	29	27	32
Household with	o other working household members	25	44	53	31	79	31	24	89	41
Number of sim	ultaneous barriers (average)	1.9	0.7	2.3	2.9	2.1	3.5	3.7	2.8	2.2

Note: Section 2.2 describes the indicators and applicable thresholds. Group sizes refer to the target population as defined in Section 2.1.Colour shadings identify categories with high (dark blue) and lower (light blue) frequencies. Complementary categories (e.g. "high" professional skills) are omitted. Additional information on model selection and model specification is provided in Appendix B. Individual unemployment durations refer to the reference period (13 monthly observations, i.e. 12 consecutive monthly observations and the moment of the survey interview). The average unemployment duration is calculated across individual records with strictly positive values and is top-coded at 12 months.

\* The variable enters as an additional indicator in the latent class model. See Appendix 1for details.

 $\ensuremath{^{+}}\xspace$  Average across observations with strictly positive values.

Source: OECD calculations based upon EU-SILC 2017

# 5.3. Appendix 3: Latent Class Analysis and Model Selection

The segmentation method used in this note is Latent Class Analysis (LCA). This method exploits the interrelations of an array of indicators through a fully-specified (i.e. parametric) statistical model for organising the target population into homogeneous groups. In the present framework, the indicators represent employment barriers and the statistical algorithm identifies population sub-groups sharing similar barriers to employment, e.g. "health limitations and no recent work experience" for Group 1.

LCA has three main advantages relative to other common segmentation (or "clustering") methods:

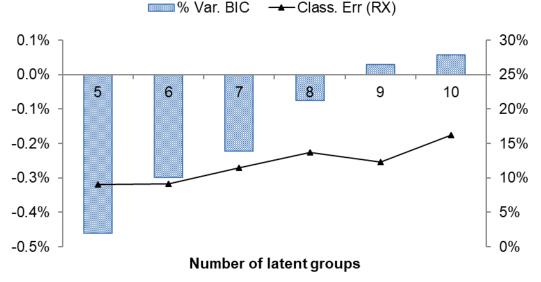
1) Formal statistical tests guide the selection of the optimal number of groups and other model's features;

2) LCA does not allocate individuals into specific groups in a deterministic way but, instead, provides probabilities of group membership, thus reducing possible classification errors in any post-estimation analysis;

3) LCA deals easily with common data-related issues such as missing data and complex survey designs.

Latent Class Analysis does not automatically provide an estimate of the optimal number of latent classes. Instead, models with different number of classes are estimated sequentially and the optimal model is chosen based on a series of statistical criteria. To summarise, the model selection process starts with the definition of a standard latent-class model that is repeatedly estimated for an increasing number of latent classes (Step 1).<sup>33</sup> The choice of the optimal number of classes is primarily based on goodness-of-fit and error-classification statistics (Step 2, see also Figure C.1), and then on the analysis of potential misspecification issues (Step 3). Fernandez et al. (2016) describes these steps in details and provides guidelines for practitioners interested in adapting the approach to specific analytical needs or data.

Figure C.1 summarises graphically Step 2 outlined above for the Finnish SILC 2017. The blue bars show the percentage variations of the Bayesian Information Criterion (BIC, Schwartz 1978)<sup>34</sup> for increasing numbers of latent groups, whereas the black line shows, for the same groups, the classification error statistics (Vermunt and Magidson,  $2016_{[22]}$ ).<sup>35</sup> In general, a smaller value of the BIC indicates a more optimal balance between model fit and parsimony, whereas a smaller value of the classification error statistics means that individuals are well-classified into one (and only one) group. In Figure C.1 the BIC is minimised for a model with between 8 and 9 classes, and the classification error of 14% indicates that the model provides a good representation of the heterogeneity in the underlying data. A model with 8 classes was therefore chosen.





Post-estimation tests based on the Bivariate Residuals (Vermunt and Magdison, 2005) show for the 18class model some residual within-group correlation between eight pairs of indicators. This indicates that the model violates to some extent the Local Independence Assumption (LIA).16 Increasing the number of latent classes always reduces the residual dependencies between indicators but this comes at the cost of a higher classification error. For instance, the 23-class model has no signs of local dependencies but the classification error is high at 25%. Following Fernandez et al. (2016) and Vermunt and Magdison (2005) the residual dependencies between indicators is addressed with the so-called direct effects; these are adhoc terms that enter the specification of the likelihood function to model explicitly the joint probabilities of pairs of indicators conditional on group membership. The inclusion of direct effects eliminates any residual correlation between the relevant pair of indicators but it also requires repeating the model selection process, as the new baseline model with local dependencies may lead to a different optimal number of classes. For the new baseline model with direct effects the BIC points to the 13-class model, which is the favourite solution described in this note.

# 5.4. Appendix 4: Marginal effects of removing barriers to employment.

Available upon request.

# 5.5. Appendix 5: Additional results of "tailoring" analysis – Groups 4, and 5

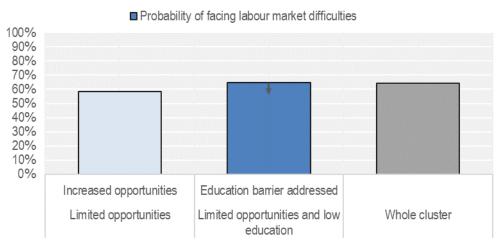
## 5.5.1. Group 4 ("Urban active")

Access to stable employment among members of Group 4 is largely impeded by the propensity for unsuccessful job search among jobseekers with the profiles of these individuals. Indeed, the entirety of Group 4 face the unsuccessful job search barrier. Of these individuals, one in every two additionally have health concerns, while over one fifth has a low level of education.

Source: OECD calculations based on EU-SILC 2017

Those individuals facing unsuccessful job search barriers are likely to face labour market difficulties with a 58% chance (Figure A-5.2). Those who, additionally, have only a low level of education are 7 percentage points more likely to experience labour market difficulties. Addressing the low levels of education among this group, however, will only have a very limited impact on their labour market prospects in the absence of strengthening their job search. In light of the centrality of education in determining the extent of employment opportunities – both in the labour market, and in the methodology employed in this paper, it is hard, however, to assign a meaningful interpretation to results that separate the education barrier from the job search barrier, where they jointly occur.



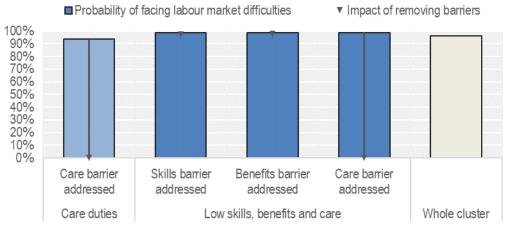


Source: OECD Calculations based upon EU-SILC data (see Box 3.5)

# 5.5.2. Group 5 ("Female carers")

Close to the entirety of Group 5 have care responsibilities that impede them from working, and 94% of those with care responsibilities in this group are likely to face labour market difficulties. This result is, to some extent, a function of the way that the care responsibilities barrier is defined (inactivity is a requirement of those deemed to be facing a care barrier) Alongside the labour market barrier created by their care responsibilities, an additional 43% of this group have a high level of income that is independent of their labour market activities, while 12% have a high earnings replacement ratio as a result of the benefits they receive. Those, within this group, who face multiple barriers, such as those with care responsibilities who have low skills and receive a high level of benefits relative to their potential earnings are even less likely to occupy stable employment. However, reducing benefits, or addressing skills deficiencies, is likely to have only a marginal impact as long as the need to provide care responsibilities remains unaddressed (Figure A-5.3).

# Figure A-5.3. Addressing key barriers facing Group 5, ("Female carers") Estimates of the impact of employment barriers on the probability of joblessness



Source: OECD Calculations based upon EU-SILC data (see Box 3.5)

# References

Asplund, R., A. Kauhanen and P. Vanhala (2019), <i>Workers in Declining Occupations: Modest Participation in Adult Education (in Finnish)</i> , Research Institute of the Finnish Economy (ETLA), Helsinki.	[33]
European Commission (2019), Your social security rights in Finland, European Commission, Brussels.	[30]
Eurostat (2016), Labour market policy statistics qualitative report Finland, 2015, http://ec.europa.eu/social/main.jsp?catId=1143&intPageId=3227&langId=en.	[29]
Eurostat (2000), <i>Employment and Commuting Labour Force Survey Extraction</i> , <u>http://appsso.eurostat.ec.europa.eu/nui/</u> .	[5]
Fernandez, R. et al. (2016), Faces of Joblessness: Characterising Employment Barriers to Inform Policy, <u>https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2786038</u> .	[39]
Finnish Institute for Health and Welfare (2020), Social protection expenditure and financing: Statistical report 10/2020, https://www.thl.fi/tilastoliite/tilastoraportit/2020/Liitetaulukot/Tr10_20liitetaulukot.pdf.	[11]
Hiilamo, H., M. Merikukka and A. Haataja (2018), "Long-Term Educational Outcomes of Child Care Arrangements in Finland", SAGE Open, Vol. 8/2, <u>http://dx.doi.org/10.1177/2158244018774823</u> .	[23]
Kyyrä, T. (2015), "Early Retirement Policy in the Presence of Competing Exit Pathways: Evidence from Pension Reforms in Finland", <i>Economica</i> , Vol. 82/325, pp. 46-78.	[38]
Kyyrä, T. et al. (2019), The Impact of the Activation Model on the Unemployed and the Operation of TE Offices.	[15]
Kyyrä, T. and T. Paukkeri (2018), "Does experience rating reduce sickness and disability claims? Evidence from policy kinks", <i>Journal of Health Economics</i> , Vol. 61, pp. 178-192, <u>http://dx.doi.org/10.1016/j.jhealeco.2018.07.007</u> .	[9]
Kyyrä, T. and H. Pesola (2020), "The labor market in Finland, 2000-2018", <i>IZA World of Labor</i> , Vol. 421, <u>http://dx.doi.org/10.15185/izawol.421.v2</u> .	[2]
Liukko, J. et al. (2017), "Effectiveness and incentive effects of experience rating in disability insurance: A questionnaire study on employers' views", <i>Studies</i> , No. 03/2017, Finnish Centre for Pension, Helsinki.	[32]
Ministry of Economic Affairs and Employment (2012), Discrimination in the Finnish Labour	[22]

Market - An Overview and a Field Experiment.

Ministry of Employment and the Economy (2020), Report of the working group to assess the economic impact of the coronavirus crisis and explore ways to return to a sustainable growth path (in Finnish), <a href="https://tem.fi/artikkeli/-/asset_publisher/selvitysryhma-arvioi-koronakriisin-taloudellisia-vaikutuksia-ja-tieta-takaisin-kestavan-kasvun-uralle">https://tem.fi/artikkeli/-/asset_publisher/selvitysryhma-arvioi-koronakriisin-taloudellisia-vaikutuksia-ja-tieta-takaisin-kestavan-kasvun-uralle</a> .	[27]
Ministry of Finance (2020), <i>Economic Survey: Spring 2020</i> , <u>http://urn.fi/URN:ISBN:978-952-</u> <u>367-285-7</u> .	[26]
Ministry of Finance (2019), <i>Final report of the working group on promoting the employment of older people (In Finnish)</i> , <u>https://api.hankeikkuna.fi/asiakirjat/d2b523c5-77e2-4709-b404-b330f71deab2/f9e4ed0a-6852-4f08-8e43-0e46ec6b50cc/JULKAISU_20190311125000.PDF</u> .	[18]
Ministry of Social Affairs and Health (2019), <i>Involving all in working life: Results and recommendations from the OTE Key project Çareer opportunities for people with partial work ability'</i> , Ministry of Social Affairs and Health.	[8]
Ministry of Social Affairs and Health (1997), <i>Social Assistance Act: No. 1412/1997</i> , https://www.finlex.fi/en/laki/kaannokset/1997/en19971412.pdf.	[21]
Neumark, D. (2020), "Age Discrimination in Hiring: Evidence from Age-Blind vs Non-Age-Blind Hiring Procedure", <i>NBER Working Paper</i> , No. 26623, National Bureau of Economic Research, Cambridge.	[36]
OECD (2020), Short term Labour Market Statistics database, <u>https://www.oecd-</u> ilibrary.org/employment/data/labour-market-statistics_lfs-lms-data-en.	[3]
OECD (2019), Investing in Youth: Finland, Investing in Youth, OECD Publishing, Paris,, https://doi.org/10.1787/1251a123-en.	[24]
OECD (2019), Pensions at a Glance: OECD and G20 Indicators, OECD Publishing, Paris., https://doi.org/10.1787/b6d3dcfc-en.	[10]
OECD (2019), The OECD Tax Benefit Model for Finland: Description of Policy Rules for 2019.	[13]
OECD (2019), Working Better With Age, Ageing and Employment Policies, OECD Publishing, Paris, https://doi.org/10.1787/c4d4f66a-en.	[34]
OECD (2019), Working Better with Age: Ageing and Employment Policies, OECD Publishing Paris, <a href="https://doi.org/10.1787/c4d4f66a-en">https://doi.org/10.1787/c4d4f66a-en</a> .	[17]
OECD (2018), <i>Employment Outlook 2018</i> , OECD Publishing Paris, https://doi.org/10.1787/empl_outlook-2018-en.	[14]
OECD (2018), OECD employment outlook 2018, OECD Publishing, Paris.	[37]
OECD (2018), Working Together: Skills and Labour Market Integration of Immigrants and their Children in Finland,, OECD Publishing, Paris,, <u>https://doi.org/10.1787/9789264305250-en.OECD</u> .	[25]
OECD (2016), Back to Work: FInland: Improving the Re-employment Prospects of Displaced Workers, OECD Publishing, Paris, <u>https://doi.org/10.1787/9789264264717-en.</u>	[6]

OECD (2015), <i>Fit mind fit job: From evidence to practice in mental health and work</i> , OECD Publishing Paris, <u>https://doi.org/10.1787/9789264228283-en</u> .	[16]
OECD-EU (2018), LMP Interventions for the Long Term Unemployed: An initial assessment.	[7]
Official Statistics of Finland (OSF) (2020), <i>Employment [e-publication].</i> , <u>http://www.stat.fi/til/tyokay/index_en.html</u> .	[4]
Oikeusministerio [Finnish Ministry of Justice] (2016), <i>Eläketukilaki 2016 [Act on Pension Assistance for the Long-term Unemployed]</i> , https://www.finlex.fi/fi/laki/ajantasa/2016/20161531.	[1]
Ojala, S., J. Nätti and M. Kauhanen (2015), "Työn Laatu Ja Myöhempi Työura Osa- Ja Määräaikaisessa Työssä Työsuojelurahaston tutkimushanke 2013–2014", Working papers, No. 90/2015, The Finnish Work Environment Fund, Helsinki.	[35]
Polvinen, A. et al. (2018), "Working while on a disability pension in Finland: Association of diagnosis and financial factors to employment", <i>Scandinavian Journal of Public Health</i> , <u>https://doi.org/10.1177/1403494817738460</u> .	[12]
Reipas, K. (2019), <i>Muistio Eläketurvakeskus</i> ,, <u>https://www.etk.fi/wp-</u> <u>content/uploads/lisapaivien-ikarajan-nosto-4-4-2019.pdf</u> .	[19]
Sieppi, A. and J. Pehkonen (2019), "Parenthood and gender inequality: Population-based evidence on the child penalty in Finland", <i>Economics Letters</i> , <u>http://dx.doi.org/10.1016/j.econlet.2019.05.034</u> .	[20]
Vermunt, J. and J. Magidson (2016), Technical Guide for Latent GOLD 5.1: Basic, Advanced, and.	[28]
von Werder, M. and A. Thum (2013), "Extending working life in Finland", <i>Working Document</i> , No. 387, Centre for European Policy Studies, Brussels.	[31]

## Notes

<sup>1</sup> Age-dependency ratios are a measure of the age structure of the population. They relate the number of individuals that are likely to be "dependent" on the support of others for their daily living – youths and the elderly – to the number of those individuals who are capable of providing such support.

<sup>2</sup> In addition to the direct costs of unemployment, such as unemployment benefits, employment services and employment measures, the report also considered indirect costs, such as loss of tax revenue, social and health services expenditure, and loss of income for the unemployed. Unemployment security and employment services accounted for EUR 5.6 billion of these costs. The estimated share of the unemployed in income support and housing benefit was 1.1 billion. The loss of tax revenue and unemployment insurance premiums was 4.1 billion.

<sup>3</sup> Pension assistance for elderly long-term unemployed persons (see <u>https://www.kela.fi/web/en/pension-assistance</u>)

<sup>4</sup> In addition, relying on administrative data, such tools are only able to cover a subset of the out-of-work population – largely the registered unemployed. Those individuals who are not registered with the Public Employment Service, those with no, or weak labour market attachment, remain outside the scope of such profiling.

<sup>5</sup> The "Competitiveness Pact" which entered into force in mid-2016 (following agreement with employer organizations and unions) introduced a wage freeze for 2017. The Pact also reduced employers' indirect labor costs, cut holiday bonuses for public sector employees, and extended annual working time by 24 hours without additional compensation. Alongside this, in 2016, the unpaid waiting period for unemployment benefits was lengthened from 5 days to 7 days, and the duration of income-related benefits was shortened from 500 to 400 days for those who worked longer than 3 years before becoming unemployed, and to 300 days for those whose employment record is shorter than 3 years.

<sup>6</sup> With the exact figure depending on working-age population projections.

<sup>7</sup> The reduction is dependent on the number of months between the retirement age, and the age of early retirement. For example, if retirement is 64 and an individual retires early at 61 (ie 36 months early) the penalty is equal to 36\*0.4% = 14.4%. Thus, the portion of the pension withdrawn early will be reduced by 14.4% (See https://www.tyoelake.fi/en/different-pensions/flexible-partial-old-age-pension/)

<sup>8</sup> There are also no limits on receiving benefits such as those for unemployment or sickness.

<sup>9</sup> See <u>https://www.ilo.org/public/english/bureau/stat/isco/</u> for more details of ISCO classifications

<sup>10</sup> According to PIAAC data, 55% of the population aged 25-64 takes part in job-related learning every year; this is the fourth highest rate in the OECD, behind Denmark (58%), New Zealand (57%) and Norway (56%).

<sup>11</sup> See <u>https://www.stat.fi/tup/suoluk/suoluk\_tyoelama\_en.html#employmentrate,personsaged15to64</u>

<sup>12</sup> Finland's migrants population is very diverse and the Uralic roots of the Finnish language render it among the more difficult languages to learn. Aside from Estonians (and to a lesser extent Russians), most new arrivals in Finland come from very different language families.

<sup>13</sup> Reductions were also partly driven by the introduction of periodic interviews with unemployed job seekers in 2017 in an effort to keep the job seeker register up to date. This removed an estimated 20,000 to 30,000 individuals – who had moved into employment or into inactivity but failed to inform the PES – from the job seeker register. Prior to their removal, these individuals were, in most cases, classified as long-term unemployed.

<sup>14</sup> The duration of unemployment here is calculated based on consecutive unemployment days.

<sup>15</sup> Though these numbers are drawn from a 2019 publication, they refer to data that was collected in 2011 (Statistics Finland Survey on employment and work ability (Performed in conjunction with the Labour Force Survey). The age of these data presents a good indication that follow up work is required in this area.

<sup>16</sup> The nine day minimum applies for employees employed for greater than or equal to one month prior to illness

# <sup>17</sup> https://www.kela.fi/web/en/child-benefit-amount-and-payment

<sup>18</sup> Calculations made by KELA have shown that those who failed to satisfy activation requirements during the initial 3-month period, are also more likely than other unemployed to meet them in subsequent periods (see <u>https://tutkimusblogi.kela.fi/arkisto/4938</u>)

<sup>19</sup> In 2019, approximately 65,000 persons retired on an earnings-related pension. Of them, 44,500 persons (71%) retired on an old-age pension. This was 4.400 persons (9%) less than in 2018. The number of new retirees on a disability pension grew slightly in 2019 compared to 2018. Roughly 20,300 persons retired on a disability pension in 2019, which was 400 persons more than in 2018.

<sup>20</sup> The obligations in the activation model do not apply if a person has an unprocessed application for a disability pension. And indeed, the reductions in the unemployment benefits that accompanied the introduction of the activation model were matched with a concurrent increase in disability pension claimants.

<sup>21</sup> In addition, basic allowance may continue to be paid after the maximum payment period until the age of 65 in so-called additional days.

<sup>22</sup> Born in 1957 or after – the age limit is 60 for those born in 1955 or 1956

<sup>23</sup> An amendment to the Act on Early Childhood Education and Care, effective as of 1 August 2020, means that equal access to early childhood education and care will be reinstated for all children. For example, the child of a parent who is unemployed or on childcare leave will then be entitled to full-time early childhood education and care.

<sup>24</sup> A recent study has found that mothers in middle income households make the most use of the municipal supplements. This finding was explained by the child day-care fees, are income dependent (see <a href="https://www.jyu.fi/edupsy/fi/tutkimus/tutkimushankkeet/kotisivut/childcare/en">https://www.jyu.fi/edupsy/fi/tutkimus/tutkimus/tutkimushankkeet/kotisivut/childcare/en</a>).

<sup>25</sup> The government is also looking into a managed increase in work-related immigration.

<sup>26</sup> Since the pension reform of 2017, the general retirement age has risen by three months per year, and will continue to do so until it reaches 65 years. The new retirement ages apply to persons born in 1955 or later. The increase in the extended period of unemployment benefits has been introduced to bridge the gap created by the increasing the retirement age. The minimum age for eligibility to this extended period of unemployment benefit has been previously been raised and now stands at 61 years.

<sup>27</sup> The Degree of urbanisation (DEGURBA) is a classification that indicates the character of an area. The latest update of the classification is based on 2011 population grid and the 2016 Local Administrative Units (LAU) boundaries. Based on the share of local population living in urban clusters and in urban centres, it classifies Local Administrative Units (LAU or communes) into three types of area: cities (densely populated areas), towns and suburbs (intermediate density areas), rural areas (thinly populated areas). Densely populated areas defined as those in which at least 50% of the population lives in urban centres. Intermediate density areas defined as those where less than 50% of the population lives in rural grid cells and less than 50% of the population lives in rural grid cells.

<sup>28</sup> See <u>https://www.te-palvelut.fi/te/en/information/use te services/customers of teservices/</u>

<sup>29</sup> Discrimination arising from observable characteristics such as age or migrant status are captured via the presence of these variables in the identification of the barrier for lack of opportunities.

<sup>30</sup> Studies covered include: those that aim at completing a degree at a university or a university of applied sciences; general upper secondary studies intended for young people, or studies whose extent is on average 5 credits at minimum, or 4.5 ECVET points a month, or 25 hours a week. The studies must lead to: a vocational qualification or a further or specialist vocational qualification; a Bachelor's or a Master's degree at a university or a higher education institution or completion of modules of these degrees. The studies may also comprise further and continuing education or open university or open university of applied sciences education in compliance with the Act on vocational education or the Act on vocational adult education.

<sup>31</sup> Clearly some barriers are easier to address than others, and some cannot generally be "addressed" in any straightforward or acceptable way. For instance, the availability of an income that is independent of labour effort is beneficial for the individual concerned, even if it reduces the need for earning additional employment income. While the barrier "substantial non-labour income" therefore provides important context for understanding the motivations for working or not working, reducing such income is of course not a reasonable policy target.

# <sup>32</sup> See <u>http://uis.unesco.org/sites/default/files/documents/international-standard-classification-of-</u> education-isced-2011-en.pdf

<sup>33</sup> A standard latent class model means that the likelihood function is derived under the so-called Local Independence Assumption (LIA). See (Fernandez et al., 2016<sub>[34]</sub>) for details.

<sup>34</sup> The BIC summarises into a single index the trade-off between the model's ability to fit the data and the model's parametrisation: a model with a higher number of latent classes always provide a better fitting of the underlying data but at the cost of complicating the model's structure.

<sup>35</sup> The classification error shows how-well the model is able to classify individuals into specific groups. To understand the meaning of the classification error index it is important to keep in mind that LCA does not assign individuals to specific classes but, instead, estimates probabilities of class membership. One has therefore two options to analyses the results: allocate individuals into a given cluster based on the highest probability of class-membership (modal assignment) or weighting each person with the related class membership probability in the analysis of each class (proportional assignment). The classification error statistics is based on the share of individuals that are miss-classified according to the modal assignment.