Connecting People with Jobs

Evaluating Latvia's Active Labour Market Policies

OECD

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Foreword

Giving people better opportunities to participate in the labour market improves well-being and strengthens economic growth. Better labour market and social protection policies help countries to cope with rapid population ageing by mobilising potential labour resources more fully. Many OECD countries achieved record employment levels prior to the global financial crisis, but in all countries employment rates differ markedly across population groups. High unemployment, weak labour market attachment of some groups in society, and frequently unstable, poor-quality employment reflects a range of barriers to working or moving up the jobs ladder. In many countries, the crisis has accentuated long-standing structural problems that are causing these disadvantages. It is a major challenge for policy makers in the coming years to address these problems and make OECD labour markets and, thus, OECD economies more inclusive.

Therefore, the OECD Employment, Labour and Social Affairs Committee is carrying out a set of reviews of labour market and social protection policies to encourage greater labour market participation and better employment among all groups in society with a special focus on the most disadvantaged, who face the greatest barriers and disincentives to finding good work. This includes a series of country studies, *Connecting People with Jobs*, which provide an assessment of how well activation policies help all groups to move into productive and rewarding jobs and a number of policy recommendations that could improve the situation.

This report on Latvia is the fifth country study published in this series. It discusses the evolution and performance of active labour market policies in Latvia since 2012, as the Latvian labour market emerged from the particularly severe effects of the global financial crisis. The report assesses the success of selected activation measures in Latvia, focussing in particular on evaluating training for the unemployed, measures to support mobility and entrepreneurship for Latvia's regions, and wage subsidies targeting Latvia's most vulnerable groups.

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Acronyms and abbreviations

AIC	Academic Information Centre
AIKA	Quality Agency for Higher Education (*Augstākās izglītības kvalitātes aģentūra*)
ALMP	Active Labour Market Policy
CEDEFOP	European Centre for the Development of Vocational Training (*Centre européen pour le development de la formation professionnelle*)
CSB	Central Statistical Bureau of Latvia
CSDD	Road Traffic Safety Directorate (*Ceļu satiksmes drošības direkcija*)
CV	Curriculum Vitae
CVT	Continuing Vocational Training
DB	Disability Benefit
EACEA	Education, Audiovisual and Culture Executive Agency
EC	European Commission
ENQA	European Association for Quality Assurance in Higher Education
EQAR	European Quality Assurance Register for Higher Education
ESF	European Social Fund
EU	European Union
EUR	Euro
EURES	European Employment Services
Eurostat	European Statistical Office
EU-SILC	European Union Statistics on Living Conditions
GDP	Gross Domestic Product
GMI	Guaranteed Minimum Income
IAP	Individual Action Plan
IDB	Inter-American Development Bank
IJSP	Individual Job Search Plan
IKVD	State Education Quality Service (*Izglītības kvalitātes valsts dienest*)
ILO	International Labour Organization
ICT	Information and Communications Technology
IT	Information Technology
JUMP	Immediate Action Program for Lowering Youth Unemployment (*Jugend mit Perspektive*)
LFS	Labour Force Survey
LHS	Left-hand side
LPM	Linear Probability Model
LTU	Long-Term Unemployed
LVL	Latvian Lats
MIC(s)	Measure(s) to Improve Competitiveness
MoES	Ministry of Education and Science of Latvia
MW	Minimum Wage
NACE	Statistical Classification of Economic Activities in the European Community (*Nomenclature statistique des activités économiques dans Communauté européene)*
NGO(s)	Non-Governmental Organisation(s)
OCMA	Office of Citizenship and Migration Affairs of Latvia
OLS	Ordinary Least Squares
OSH	Occupational Safety and Health

PES	Public Employment Service
PWP	Public Work Programme
RHS	Right-hand side
SEA	Latvian State Employment Agency
SEC(s)	Sector Expert Council(s)
SOPA	Latvian Social Assistance Administration Information System
SSIA	State Social Insurance Agency of Latvia
STEM	Science, Technology, Engineering, and Mathematics
UN DESA	United Nations Department of Economic and Social Affairs
VECC(s)	Vocational Education Competence Centre(s)
VDAB	Public Employment Service of Flanders (*Vlaamse Dienst voor Arbeidsbemiddeling en Beroepsopleiding*)
VET	Vocational Education and Training
WAPES	World Association of Public Employment Services
YG	Youth Guarantee

Executive summary

This review discusses the evolution and performance of active labour market policies in Latvia since 2012, as the Latvian labour market emerged from the particularly severe effects of the global financial crisis. In the immediate aftermath of the crisis, Latvia experienced one of the largest increases in the unemployment rate – 15 percentage points – of any OECD country and Latvian workers experienced a drop in both real and nominal wages. Yet the recovery from the crisis was relatively strong and rapid, and Latvia's unemployment rate halved between 2010 and 2015. Nevertheless, in 2018, the unemployment rate was still at 8%, close to pre-crisis levels in Latvia, but above the OECD average. Moreover, long-term unemployment has remained a challenge in Latvia: in 2017, just seven other OECD countries had a higher proportion of the labour force unemployed for 12 months or more.

Latvia's Inclusive Employment Strategy 2015-2020 places significant emphasis on developing and improving active labour market policies to help unemployed people access good jobs, with a particular focus on disadvantaged groups. While participation in active labour market policies remains relatively low in Latvia, the menu of such policies has expanded and diversified in recent years. There has been a shift away from public works towards providing employment incentives alongside rehabilitation for the long-term unemployed, while programmes have also been introduced to promote job seekers' mobility across Latvia's regions.

The bulk of this review is devoted to evaluating selected active labour market policies in Latvia. In particular, the review focusses on three types of activation measures: (1) training; (2) measures to support mobility and entrepreneurship for Latvia's regions; and (3) wage subsidies for Latvia's most vulnerable groups. The analysis uses detailed linked administrative data collected by several key agencies in Latvia between January 2012 and October 2017 and specialised econometric techniques to estimate the effectiveness of the selected measures.

Training for the unemployed has had positive effects on labour market outcomes, although the voucher system used to allocate training may be improved. Participants in both formal trainings – which seek to build specific, accredited skills – and non-formal trainings – which seek to build more general skills such as languages and information and communications technology – experienced an increase in their chances of finding a job and in their earnings. While these effects differed according to the gender, age, and social assistance receipts of training participants, virtually all types of participants benefited from taking part. In addition, combining training for the unemployed with other active labour market policy measures, especially measures to support regional mobility, appeared to boost effectiveness. Nevertheless, even though the voucher system used to disperse training carries many advantages, some disadvantaged groups may need additional support when using their vouchers, training providers are not distributed evenly across municipalities which sharpens the need for supporting regional mobility, and the voucher system currently in place in Latvia may compound so-called lock-in effects.

Active labour market policies have also been explicitly deployed to address, and even exploit, the sizeable differences in labour market outcomes between Latvia's regions. The Riga region and surrounding Pieriga region have substantially lower unemployment rates and higher job vacancy rates than the other regions in Latvia and there has been a long-run trend of individuals migrating towards urban and suburban areas. Since 2013, the Latvian State Employment Agency has offered financial support to those accepting job offers more than 20km away, a programme that increased the probability of an unemployed person moving to take up a job by around one-half.

The Latvian State Employment Agency also offers a targeted programme of subsidised employment, which has helped many disadvantaged groups (re)connect with the labour market. The long-term unemployed, older workers, and young people were all more likely to hold jobs – even non-subsidised ones – after a spell of subsidised employment. Nevertheless, employment subsidies impose a heavy administrative burden on employers, which may discourage their participation. Moreover, after the end of any employment subsidies there are no clear positive effects on the labour market outcomes of persons with disabilities.

The analysis undertaken in this review suggests several key policy messages, which may improve the performance of active labour market policies in Latvia:

- Introduce possibilities for less severe sanctions when individuals turn down job offers, but require that unemployed persons without family commitments accept job offers from anywhere in Latvia.
- Simplify the tool used to profile unemployed people, better link it to different streams of activation measures, and improve its accuracy by profiling unemployed people as soon as they register with the State Employment Agency and making better use of existing statistical information.
- Extend activation measures to those who are not (yet) unemployed and provide online services to those unemployed people who are more likely to resume work quickly.
- Revise the voucher system used to disperse training for the unemployed, by reducing the time for which individuals must wait to receive a voucher and lengthening the time for which vouchers are actually valid, in order to limit lock-in effects.
- Monitor choice and competition in the training voucher system as the number of training providers is reduced and ensure that caseworkers are able to provide special support to those disadvantaged voucher recipients who need help in exercising effective choice.
- Enhance regional mobility support for training participants, extend regional mobility support for families by arranging for additional access to credit, and link access to regional mobility support to the profiling tool rather than requiring people to have been unemployed for at least two months before becoming eligible.
- Consider differentiating the programme of employment subsidies for persons with disabilities according to the degree of assessed disability or work capacity.
- Continue to invest in building and maintaining a well-functioning data infrastructure and develop mechanisms for conducting ongoing monitoring and evaluation of active labour market policies.

Assessment and recommendations

Latvia's labour market has recovered from the large shock of the financial crisis

In the aftermath of the financial crisis, Latvia had experienced one of the largest increases in unemployment – 15 percentage points – among all OECD countries and falling real as well as nominal wages. During a strong recovery, Latvia's unemployment rate halved between 2010 and 2015. At 8% in 2018, it was close to pre-crisis levels but remains above the OECD average. Latvia's employment and participation rates have risen beyond pre-crisis levels and OECD averages, respectively reaching 63% and 78% in 2018. However, most sectors have not fully regained the absolute levels of employment they exhibited before the crisis, substantial numbers of unemployed persons have left the labour force or emigrated from Latvia over the past decade, and high unemployment rates persist in some regions and demographic groups, such as youth and older men.

In recent years, instances of unmet labour demand have become more frequent, and workers with certain skills as well as in some services are in short supply. Strong wage growth has resumed, partly reflecting the minimum wage increases from 2007 onwards, which resulted in the highest relative increase in minimum wages observed in OECD countries in the period 2007-2016. However, the wage premium for workers with a tertiary education, compared to workers with upper secondary education, remains lower in Latvia than in many other OECD countries. Comparatively few new hires (35% in 2016) have a fixed-term contract, and over-qualification is rare. Estimated employment in the shadow economy reached the lowest level in 2017 since 2009.

Long-term unemployment is one of the main challenges for Latvian labour market policy

The rate of long-term unemployment was 3.3% in 2017 (as a share of the labour force), almost twice the OECD average (1.8%) but one of the lowest among the countries that were heavily affected by the financial crisis. In 2017, about two-fifths (38%) of all unemployed persons in Latvia were long-term unemployed (i.e. for at least 12 months) and 15% had been unemployed for four years or more. The share of long-term unemployed is higher among men than among women (45% compared to 37%).

Discouraged workers – often regarded as hidden unemployment – do not engage in job search because they believe that no work is available for them. Despite recent decreases, the number of discouraged workers remains comparatively high in Latvia. They represented 4% of Latvia's non-employed working-age population in 2017, the third-highest share in European OECD countries. Six out of ten discouraged workers have been without employment for at least 12 months.

Latvia's menu of Active Labour Market Policies (ALMPs) has expanded in recent years, but comparatively few unemployed persons register and participate

A number of Active Labour Market Policies (ALMPs) have been introduced since 2012, typically targeting disadvantaged groups. This includes: a programme promoting job seekers' mobility across Latvian regions; a programme for the motivation and rehabilitation of (long-term) unemployed persons; a programme with aiming to prevent unemployment of older workers by raising their skills; and, in the context of the EU Youth Guarantee, several programmes targeting unemployed youth. Overall, the focus has shifted away from public works since 2012 towards employment incentives and rehabilitation. Further ALMPs are being developed through Latvia's Inclusive Employment Strategy 2015-2020. This strategy has three overarching policy goals: reduced barriers to employment for disadvantaged groups; better of balancing labour supply and labour demand; and creating an institutional and tax environment that facilitates employment. Specific goals notably include improving ALMPs, promoting regional labour mobility, and targeting groups with a high risk of unemployment. The results of this OECD Review seek to inform the evaluation of the progress made on implementing the Inclusive Employment Strategy and form the basis for the next Employment Strategy.

Only 11% of registered unemployed persons participated in an ALMP measure in 2016, one of the lowest shares among European OECD countries. Latvia's public spending on ALMPs (0.19% of GDP) is substantially below the OECD average (0.53% of GDP). The role that ALMPs can play is also limited by low registration of job seekers with Latvia's public employment service, the State Employment Agency (SEA). Roughly half of all unemployed persons – a low share in comparison with other European OECD countries – were registered in the past few years, and just three-quarters of long-term unemployed persons were registered. Many unemployed persons therefore cannot be reached for support with job search or participation in ALMPs. Job seekers who are not currently unemployed account for a very small share (0.26%) of persons registered with the Latvian public employment service compared with other European OECD countries. Estimates further suggest that the number of registered vacancies in Latvia may have been below 20% of all hires for most of the past decade. The public employment service could use web-scraping methods to include unregistered vacancies that are advertised elsewhere.

Profiling of unemployed persons and sanctions could be used more effectively

In order to select and prioritise participation in ALMPs among the registered unemployed persons, Latvia's public employment service uses a profiling tool (introduced in 2013) in combination with an individual action plan. However, most of the information used for profiling relies on self-declared answers from the unemployed person, who may refuse to answer at all. In this context, a greater role could be given to statistical information from the data collected by the SEA on job prospects and the caseworker's assessment. While profiling currently places persons in one of 39 groups, a much smaller number of groups coupled with a greater focus on those most at risk of long-term unemployment may be more effective in practice. Most importantly, the groups should be linked to much more differentiated service streams in terms of employment and training support. This way, the available resources can be better targeted at high-risk groups, while very limited support for low-risk groups could largely or entirely be provided through online services. The example of the Netherlands could be useful when deciding who to support exclusively via online services and how these services should be provided. The individual data used for

profiling could also be used to generate automated referrals to specific vacancies given the characteristics of the unemployed person.

Sanctions for unemployed persons are strict in Latvia in comparison with other OECD countries, except for one aspect: the first job offer may be rejected without consequences. Sanctions lead to the loss of the entire benefit and of access to ALMPs, which likely reduces the role they can play in practice. Less severe sanctions might be more readily applied and could effectively change behaviour while maintaining access to benefits and ALMPs in principle. In 2016, almost all sanctions were applied due to missing appointments or deadlines, while sanctions played almost no role in the context of job search and ALMP participation. Sanctions were especially likely to apply to unemployed persons not receiving unemployment benefits and often occurred around the time when unemployment benefits expire.

Unemployment benefits decline over time and the level of social assistance is low

Unemployment benefits depend on years of contribution and decline over time. Those who have adhered to the system for at least 30 years receive up to 65% of prior average wages. Stepwise lower replacement ratios apply with fewer years of contribution, down to 50% for 9 years or less. The full benefit is paid for the first three months, three-quarters are paid for the next three months, and half is paid for the last three months. Unemployed persons may otherwise be eligible for means-tested benefits that raise their income to a Guaranteed Minimum Income (GMI) level of EUR 53 per month per person in 2018 plus housing benefits. Despite this assistance, the income of targeted households relative to median incomes in Latvia remains low compared with targeted households in most other OECD countries. The income of a single person receiving these benefits amounted to only 10% of the median income in 2016, and the income of a married couple receiving benefits amounted to 14% of the median income for those without children and 22% for those with children.

Dependency on unemployment and GMI benefits is limited

Unemployment benefits are provided for up to nine months and gradually decline in value after the first three months. During the period from January 2012 to October 2017, one third of unemployment benefit recipients exhausted the nine-month duration of their benefits, while about half of beneficiaries left unemployment benefits within six months. This reflects both the higher chances of finding employment during this period and the reduction of the benefit to 50% of the granted amounted after the sixth-month mark.

The GMI is a mean-tested benefit offered to persons in need and can be combined with unemployment benefits, if the latter are sufficiently low. In 2017, only 0.5% of the population aged 15 and above received GMI benefits, down from 4% during the economic crisis. More than half of all GMI beneficiaries received the benefit for 6 months or less. The probability of leaving the GMI benefit in a given month declines with time spent on the benefit, falling below 8% after 19 months. Although the number of GMI recipients has decreased since the crisis, the share of those who rely on the benefit for 19 months or more has increased and reached 17.5% in 2016-17. Reliance on GMI benefits is higher for persons aged 55 and older (they represent half of all GMI beneficiaries) and for persons with disabilities (17% of all GMI beneficiaries). Moreover, old age and disability status are correlated with reliance on GMI benefits for longer periods and this correlation has become stronger over time.

Co-operation of municipalities and the public employment service has strong potential for the activation of social assistance recipients

Recipients of GMI benefits are required to register with the SEA as well as the municipalities that are responsible for the delivery and management of social assistance. GMI beneficiaries made up one-fifth of all registered long-term unemployed persons over the period 2012-2017. The often complex situations of long-term unemployed persons require a holistic approach and call for effective co-operation between the SEA and municipal social services. A pilot programme introduced in 2013 intensified efforts to place persons who had been registered unemployed for 20 years or more, while encouraging the SEA and municipal social services to explore various forms of practical co-operation. The outcomes of this pilot indicated large potential benefits from closer co-operation: 40% of the pilot programme's participants – who comprised (very) long-term unemployed persons – took up employment, compared to just 16% of a group of comparable non-participants. While the intensity of co-operation thus far depends on the initiative and efforts of individual staff members in both institutions, a regular format for these exchanges has not been set up across Latvia. This should be established to embed this co-operation more firmly in the institutional architecture.

Growing numbers of persons with disabilities may need additional support to return to sustainable employment

The number of recipients of disability benefits has grown more strongly in Latvia than in almost all other European OECD countries since 2007. The stock of disability benefit recipients (aged 18 or more) increased by 17% between 2012 and 2017, reaching 106 200 persons in October 2017. This may reflect high exposure to risk factors during the crisis and poor attitude to health checks and medical visits. A comparatively high tax wedge limits the labour supply incentives for benefit recipients. The increasing numbers of disability benefit recipients may also be driven by the higher generosity of disability benefits and the limited duration of unemployment benefits. Although the vast majority of disability benefit recipients (85%) are persons of working age, their labour market outcomes are relatively poor. Only one quarter of them were employed in 2017 and 9% were registered as unemployed. When only disability benefit recipients of working age are considered, their employment rate is higher, at 36% in 2017. Additionally, only 16% of the disability benefit spells recorded during the observation period from January 2012 to October 2017 were short spells of less than 12 months. Moreover, this is an underestimation of the actual share given that many observed spells are censored: some spells that appear to last less than 12 months because they are cut short by the lack of data after October 2017 may actually last longer than 12 months.

The probability of leaving disability benefits is low, typically less than 1.5% at any time. A clear spike is observed at 12 months of benefit receipt (2.6% probability of leaving the benefit), when eligibility is reassessed. The majority of those who left the benefit took up the old-age state pension, which offers a more generous benefit than the disability scheme, at least for persons with moderate disabilities (group III). About one third of all disability benefit recipients aged 15-64 went back to employment one month after the end of their disability benefit spell. These transitions concern mainly persons, possibly with less severe health conditions, who remained active in the labour market while receiving the disability benefit. Inactivity during one's disability benefit spell is indeed a strong predictor of subsequent labour market outcomes. Less than 2% of all disability benefit recipients who

were not employed during the last 6 months of their disability spell were employed immediately after the end of their spell.

Training has remained an important component of Latvia's menu of ALMPs

Despite other changes in the landscape of ALMPs in Latvia in the past five years, training has continued to be a vital strategy for connecting unemployed people with good jobs. Between 2012 and 2017, the number of training participations per year – a figure which potentially counts the same individual more than once if they participated in multiple trainings – averaged 6 600 for formal vocational training (henceforth "formal training") and 15 900 for non-formal training. During this period, 74 700 individuals were registered with the SEA in any given month, on average. Formal trainings typically aim to build specific new skills such as social care, project management or welding, with participants working towards a professional qualification. Formal training takes between 22 and 202 days to complete, lasting 91 days on average. By contrast, non-formal trainings build more general skills, including languages and Information and Communications Technology (ICT) skills, but do not necessarily lead to a formal qualification. Non-formal training lasts 42 days on average.

Formal and non-formal training are distinguished from so-called "Measures to Improve Competitiveness" (MICs), which have far wider coverage but are considerably shorter in terms of duration and contact time. Between 2012 and 2017, there were around 80 000 participations per year in MICs. These MICs typically comprise short courses and workshops, concentrating on how to write CVs, how to succeed during interviews, and how to network effectively. MICs only last 1 day and require just 7 hours of contact time on average. Given their size and their wide coverage, the main analysis of training (in Chapter 3) does not focus on evaluating the effects of MICs, except in conjunction with formal and non-formal training measures.

Specialised econometric techniques are needed to evaluate training

The design and improvement of successful training programmes, and indeed all ALMPs, relies on solid empirical evidence, which typically comes from monitoring and evaluation of existing programmes. This allows policymakers to build both the efficiency and effectiveness of ALMPs. In Latvia, there are sizeable opportunities for this type of evidence-based policymaking, given the extent of detailed and linkable administrative data on individuals' participation in ALMPs, their labour market outcomes, their background characteristics, and their receipt of social assistance.

The central problem when evaluating ALMP measures is to compare what actually happened to participants – in terms of their subsequent labour market outcomes – with what *would have happened* had they not participated in the ALMP measure. This counterfactual cannot be observed in practice, so evaluators typically try to approximate it by comparing participants with a comparison group of individuals that did not participate. However, simply comparing those individuals who participated in training with those who never participated in training does not produce reliable estimates of the effects of training in the context of ALMPs in Latvia, because individuals begin their training at very different times throughout their unemployment spells. It is only those individuals that spend a sustained spell in unemployment who will be assigned to training. Individuals that spend only a short spell in unemployment and who quickly find work themselves are unlikely to be assigned to training. This latter group is likely to have better labour market outcomes in the future,

regardless of their non-participation in training, so they do not serve as a suitable counterfactual for training participants.

This review uses specialised econometric techniques to estimate the effects of training accurately. It looks at individuals who have spent a certain number of months in unemployment, and compares those who begin training in a given month with those who are still waiting for training, another ALMP measure, or some other way out of unemployment. The quality of these comparisons is improved by controlling for key observed characteristics – such as age, education, and some aspects of individuals' employment histories – between those that begin training and those who are still waiting.

The main outcomes on which the review focusses are individuals' chances of employment and individuals' earnings upon (re)entering employment, after a given number of months after training starts. The earnings estimates represent the effects on the *flow* of earnings measured at a given time (a certain number of months) after the start of training. They do not capture the *stock* of earnings that may be foregone while training is being completed and returning to work is not possible (or is much more difficult).

Both formal and non-formal training have positive effects on individuals' labour market outcomes

Formal and non-formal training increased individuals' likelihood of finding a job and increased earnings among those who found a job. The point estimates of the employment effects were overall larger for formal training than for non-formal training, and these differences between formal and non-formal training were statistically significant over all time horizons. Looking at labour market outcomes 18 months after the start of training (by which time training will have finished) formal training participants experienced a 7.7 percentage point increase in their employment chances while non-formal training participants experienced a 4.9 percentage point increase. By contrast, the point estimates for the earnings effects were somewhat larger for non-formal training, with these differences between formal and non-formal training being statistically significant over most time horizons. After 18 months, non-formal training participants experienced a 5.8% increase in their monthly earnings compared with a 2.2% increase for formal training participants (although this does not take into account the stock of earnings foregone whilst participating in training). Nevertheless, it is important to note that the effect on earnings can only be estimated for those individuals that successfully gained a job. This may dampen the estimates of the effects of formal training on earnings, relative to non-formal training, because formal training increased the likelihood that individuals had a job by more. As such, more formal training participants – with lower earnings potential – would have been included in the estimation of the effects of formal training on earnings, making this estimated effect appear lower.

The positive effects on earnings and employment emerge relatively quickly, and persist over a long time horizon. For employment, the effects are positive and significant after 12 months for formal training and after just 6 months for non-formal training. The slower onset of any effects for formal training is consistent with their taking longer to complete. Similarly, for earnings, it takes 18 and 12 months for positive and significant effects to appear for formal and non-formal trainings respectively (notwithstanding any earnings foregone during the training itself). All of these effects remain positive with very little decay even after 36 months, demonstrating the persistence of training's impact.

These results warrant a certain level of optimism about the effectiveness of Latvia's training programmes for the unemployed. Indeed, comparing the results of this review to recent meta-analyses, Latvia's training programmes for the unemployed appear successful relative to similar programmes in other countries. This relative success may partly be down to contextual factors, especially given the large pool of individuals that became detached from the labour market during the financial crisis and the skills shortages that persist in some sectors. However, certain aspects of training for the unemployed in Latvia may have helped to foster good results: for one, the breadth of formal and non-formal training courses offered chimes with cross-country evidence that ALMPs that are in some sense adaptable are more likely to succeed.

While trainings' effects are heterogeneous, there are positive effects for virtually all sub-groups

Certain sub-groups appear to benefit more than others from Latvia's training programmes – at least in terms of the point estimates – with three results meriting particular attention. Firstly, while women benefit slightly more than men from formal training in terms of the chances of finding a job, the inverse is true for non-formal training, with these differences widening over time. Secondly, younger workers – those aged less than 30 years old – experienced weaker employment effects, at least from formal training. Thirdly, the long-term effects on the employment chances of social assistance recipients are substantially larger than those who did not receive social assistance.

Nevertheless, one of the most striking features of the results is that training's effects remain positive even when the sample is divided up according to individual characteristics. Thus, rather than justifying increased specialisation in the way that ALMP measures are assigned per se, the results indicate that training has the potential to work for many different types of unemployed individuals.

Combining training with other ALMP measures increases its impact on labour market outcomes

When training is combined with other ALMP measures, there is a larger impact on participants' labour market outcomes. Firstly, providing Measures to Improve Competitiveness (MICs) before training slightly improves the effects on employment and earnings for both formal and non-formal training. The SEA is currently seeking to reduce the number of MICs by bundling some of them in with non-formal training courses, so as to improve the quality of training programmes and MICs overall. Yet it will be important to ensure this reform does not limit access to MICs for those participating in formal training, either by maintaining some independent MICs to which all registered unemployed individuals have access or by combing MICs with formal training as well as non-formal training. Secondly, providing mobility support – a programme in which individuals may receive EUR 100 per month to cover the costs of travel to or accommodation at training sites more than 15 kilometres away – increases, sometimes sizeably, the effects of both formal and non-formal trainings. Indeed, in one particularly striking result, receiving non-formal training with mobility support yields a 23.1% increase in earnings after 18 months, compared with an increase of 5.5% for those receiving non-formal training without mobility support. In part, this may be because those training participants taking up mobility support are more motivated than those who do not (and such differences in motivation were not captured by the control variables included in the analysis). More fundamentally, however, mobility support is likely to improve the match between specific

trainings and participants, offering a larger boost to participants' labour market outcomes. The individual action plans should develop combinations of ALMPs that harness these complementarities and respond better to the widely differing needs and constraints faced by beneficiaries.

Training is provided through vouchers to promote choice and competition

Since 2011, training for the unemployed has been provided through a voucher system in Latvia. The vouchers consist of a physical document, issued at the local SEA branch office, which carries a cash-equivalent value and can be redeemed at pre-approved training providers. Vouchers afford participants more choice over the type of training that they do and over their training provider, potentially improving the match between voucher recipients' needs and the training that is actually provided. In addition, voucher systems may improve the quality and performance of training providers by promoting competition. This last point is of particular importance for Latvia. Prior to 2011, there were notable examples of training providers having extremely long procurement contracts, such that performance deteriorated over time. The introduction of the voucher system therefore sought to take this procurement step out of the equation, instead using vouchers to allocate training transparently.

Some voucher recipients may need more support to ensure they can effectively exercise choice

Caseworkers in voucher systems face a difficult balance between supporting clients in using their vouchers and not overly interfering such that they effectively make choices on their clients' behalf. On the one hand, caseworkers are likely to have a good understanding of clients' needs given their regular interactions with them and their experience of assigning clients to different ALMP measures. On the other hand, assuming that voucher recipients know their needs best, it may be difficult to reap the full benefits of having a voucher system – in terms of choice and competition – if caseworkers are too heavy-handed in their support. In Latvia, the SEA already gives caseworkers many opportunities to support voucher recipients to make choices effectively during their regular meetings. Caseworkers are able to recommend particular occupations or types of training programmes from the full list of programmes for which vouchers are eligible.

Certain disadvantaged groups may need more support from caseworkers in order to exercise effective choice. In Latvia, age and language abilities appear to influence rates of voucher redemption, which may serve as a proxy for individuals' ability to exercise effective choice. Individuals lacking at least basic Latvian language skills are 7 percentage points less likely to redeem their vouchers than those with basic (or higher) Latvian language skills. Similarly, individuals aged 15-24 years are 7 percentage points less likely than those aged 55 years or more to redeem their vouchers. However, young people may be directed to long courses organised by the Ministry of Education and Science outside the voucher system, which increases non-redemption rates. In any case, restricting caseworkers' opportunities to support clients' choices over how they use their vouchers may be counterproductive among those sub-groups who are already struggling to redeem their vouchers.

Special effort is needed to promote competition between training providers in certain remote and rural areas

Training providers are not spread evenly across Latvia, meaning that some voucher recipients may struggle to find suitable training options locally. There are large clusters of rural municipalities, especially in the Kurzeme and Zemgale regions, which contain no officially accredited training providers at all. All other things equal, this may hamper choice for voucher recipients and limit competition between training providers in such areas.

One way to address this issue would be to boost the number of training providers in areas that currently have relatively few training providers, but such an approach does not currently seem to be tenable in Latvia. Indeed, the SEA is in the process of reducing the number of accredited training providers, a reform which is motivated in part by the fact that it is difficult to fill certain training classes (especially in remote and rural areas), which lengthens the time voucher recipients must wait to begin training and increases possible lock-in effects. To do this, the SEA is making the selection criteria for becoming an SEA-accredited training provider more stringent, which also serves to boost quality amongst those providers that survive.

With the number of training providers declining, support for regional mobility for training participants is even more important and may need to be enhanced, to make sure all voucher recipients can access a wide range of training providers. Although overall receipts of mobility support grew in 2016 and 2017, just 9% of formal training participants and 7% of non-formal training participants received mobility support. The expansion of mobility support may need to go further to promote effective choice, especially in areas with relatively few training providers.

Latvia's voucher system may leave individuals unsure about their status, potentially compounding lock-in effects

Vouchers are technically valid for a very short period in Latvia, at just 14 days. However, individuals are assigned to the training voucher programme in advance of actually receiving the voucher. During this time, they are expected to search for suitable training providers and training programmes, potentially at the expense of searching for a job. The period between assignment to the training voucher programme and actual receipt of the voucher can be very long: 46 days on average for formal trainings and around 96 days on average for those non-formal trainings focused on foreign languages and ICTs.

While it is unlikely that waiting times can be fully eliminated, the specific procedure for assigning vouchers in Latvia may compound lock-in effects. Although voucher recipients-to-be are told of their assignment to the training voucher programme in advance, it is not clear (1) whether they fully believe the voucher will arrive after this waiting period and (2) whether they know how long the waiting period will be (especially if it depends on classes filling up). As such, the intensity with which they should search for training providers during this period may be unclear, potentially making this search longer and less effective. An alternative would be to disburse the voucher earlier but then make vouchers valid for longer, as in other countries. In Germany, for example, training vouchers for the unemployed are typically valid for three months. This may help to clarify the status of voucher recipients, ensuring that they devote sufficient effort to finding a suitable training provider, even if there is a subsequent waiting period before training starts.

Large differences between regions imply gains to inter-regional mobility

According to several indicators, the divide between regions in Latvia is one of the strongest among OECD countries. The unemployment rate, the youth unemployment rate and the share of long-term unemployed among all unemployed all vary considerably across Latvia's regions, with densely populated Riga and the surrounding Pieriga region exhibiting the lowest levels. In addition, the same two regions exhibited the highest supply of job vacancies in 2016, relative to total employment in the region. Within regions, rural areas appear to offer less favourable labour market conditions: while rural areas accounted for 39% of all employed persons in 2016, they also accounted for 45% of the registered unemployed, 51% of recipients of guaranteed minimum income benefits and 56% of discouraged workers.

The observed long-run trends in migration flows between Latvian regions highlight the attractiveness of urban and suburban areas, especially the surroundings of Riga but also regional centres. Compared with other European OECD countries, regional mobility in Latvia reaches an intermediate level: in recent years (2013-16), an annual estimate of 1.3% of the population of working age (15-64) changed their region of residence. The mobility of unemployed persons in Latvia is somewhat higher (estimated at 1.4%). Young unemployed persons (15-34) exhibit a rather high willingness to move within Latvia: in 2016, 26% were willing to move to another region for a job, compared with an EU average value of 20%. However, their willingness to commute for a job is comparatively low (44% compared with an EU average of 64%). Rapidly increasing rent levels in Riga and the surrounding region of Pieriga likely discourage some regional mobility.

An ALMP programme contributes significantly to greater regional mobility of unemployed persons

In 2013, the SEA introduced an ALMP programme that offers support with taking up distant job offers (at least 20 km from the current residence) or with attending distant training measures, by reimbursing costs for transport or housing. The cumulated number of participants approached 9 200 by the end of 2017, and participants are typically younger than 35, unmarried and not highly educated. Using three eligibility rules for participation in the programme, the OECD has carried out an impact evaluation of this programme. In a difference-in-difference approach, the evaluation examines whether the job-related mobility of eligible groups of unemployed persons increased more strongly after the introduction (or extension) of the programme than the job-related mobility of comparable yet ineligible unemployed persons.

The results suggest an overall positive effect of the programme (and its extension) on the job-related mobility of unemployed persons. The introduction of the programme appears to have increased the probability that unemployed persons move in a particular month to take up a job by one-half. Offering the programme under the Youth Guarantee and extending eligibility to public-sector jobs had further, albeit smaller, positive effects on job-related mobility of unemployed persons. Specific analyses for certain groups of unemployed persons confirm that the programme and its extension have also raised the job-related mobility of recipients of social assistance. Job-related mobility of two other target groups, persons with disabilities and residents of the region of Latgale, appears positively affected by the introduction of the programme but unaffected by its extensions. Further results indicate that job-related mobility of unemployed persons declines with unemployment duration: the probability of moving elsewhere to take up a job is highest during the first three months of unemployment, then falls steadily as the duration increases up to a duration of 13-18 months, after which this probability stays roughly constant.

While families might need more support for mobility, young and single persons should face greater obligations to move

The limitation of financial support under this programme to EUR 400 limits expenses for the SEA but seems low for couples and especially for families who often face substantially higher up-front costs of moving. One way that the SEA could allow for higher amounts is to arrange for small loans from a third party. To increase take-up of the programme, stricter mobility requirements could apply to unemployed persons who are single or whose partner does not hold a local job. In particular, young unemployed persons without family commitments at the place of residence should be expected to move anywhere in Latvia in order to take up employment, given that support for mobility is available. Under current rules, offers of jobs that cannot be reached within one hour on public transport can be declined without consequences. In addition, whether or not an unemployed person has access to a car could be included as a criterion for a distant job offer being suitable or not.

Currently, unemployed persons only become eligible for support with regional mobility after an unemployment duration of two months. As unemployed persons might often be able to shift out the beginning of the job beyond the two-month mark, this condition might have little relevance for eligibility but tend to delay employment. Instead of the two-month waiting period, eligibility for the programme could be tied to poor job prospects as established by profiling. Some participants in the programme move to take up high-skilled jobs, and public support for their mobility is probably not necessary in these cases and such job offers could be non-eligible for mobility support. Linking eligibility for the programme to a certain profiling outcome, for example, would exclude some who do not need support for mobility, freeing up resources for those who do.

The programme for entrepreneurship can access an untapped potential of entrepreneurs among unemployed persons

To some extent, policymakers can also address unemployment across Latvia's regions by fostering entrepreneurship and start-ups in order to generate sustained employment growth within the regions themselves. The number of self-employed persons has been on the rise in most of Latvia's regions. In Pieriga, it rose by 40% between 2012 and 2016, although there are concerns that this may reflect the introduction of the microenterprise tax law that is thought to be associated with an increase in bogus self-employment. Growth in the number of firms is around 5% per year both in urban and in rural areas in Latvia, which is one of the highest values among OECD countries covered by these data. With respect to entrepreneurship in the digital economy, Latvia's well-developed broadband infrastructure can help rural regions catch up with cities.

Survey data from 2015 suggest that 3% of all unemployed persons in Latvia would like to become self-employed, more than the average for EU countries. However, only 2% of unemployed persons in Latvia moved into self-employment in 2016. The discrepancy highlights an untapped potential of entrepreneurs, which appears larger than in any other EU country. Latvia's ALMP programme for entrepreneurship and self-employment can therefore play an important role for reducing unemployment across regions. The programme assists participants with the formulation of business plans, provides feedback, and supports the implementation of approved business plans with grants of up to EUR 3 000 as well as monthly stipends at the level of the minimum wage. Between 2012 and 2017, participants whose business plan was approved exhibited higher employment rates four or more months after the end of the programme than participants whose business plan was not approved

(65%-70% compared with around 60%). Out of 377 persons who received a grant for their start-up or self-employment in the period 2008-2014, 71% were still in this business two years later, a survival rate comparable to those observed in similar programmes in other European countries. The programme also offers good chances of obtaining grants to participants with disabilities and long-term unemployed persons. Participants who are residents of regions outside Riga are at least as likely as other participants to receive a grant.

A well-targeted programme of subsidised employment is offered to vulnerable groups

Latvia devotes one fifth of its ALMP expenditures to a programme offering subsidised employment in the private sector for the most vulnerable groups of unemployed persons. The subsidy covers up to 50% of the total wage cost and the subsidy should not exceed the minimum wage (or 1.5 times the minimum wage for some persons with disabilities). The maximum duration of the subsidy is six months for youth and 12 months for most other unemployed persons, although the duration can go up to 24 months for the long-term unemployed (LTU), persons with disabilities, and some other vulnerable groups. The subsidy is paid to a broad range of employers under the condition that they hire a candidate from the pool of eligible unemployed persons registered with Latvia's public employment service. In order to minimise substitution effects, the vacancy should be first advertised for a minimum of four months before a subsidised employee can be hired and the selected candidate should not have been an employee of the same firm in the past year. The same person can participate in the programme more than once, but a minimum of one year should occur between two spells of subsidised employment. During the period from January 2012 to October 2017, about 10% of employment subsidy participants had participated in the programme more than once. Nevertheless, this estimate represents the lower bound of the extent of repeated participation, as participation before January 2012 and after October 2017 cannot be observed in the available data.

A total of 9 000 persons participated in the programme between 2012 and 2017. Persons with disabilities represented close to one third of all the participants in employment subsidies, while young persons (aged 20-29) and persons aged 55 or more represented 28% and 11% respectively. Tight targeting of subsidies is a key determinant of their success, along with the size of their indirect effects such as deadweight losses (persons who benefit from the programme but who would have found a job even without participation), lock-in effects, and displacement effects. The existing evidence from such programmes in other countries suggests that subsidies should not be provided at the very start of the unemployment spell in order to minimise deadweight losses. In that sense, Latvia's targeting of the LTU is in line with well-established facts in the empirical literature. Moreover, by targeting vulnerable groups, who would otherwise have limited chances of finding employment in the absence of the subsidy, this programme minimises deadweight losses.

Participation in the subsidised employment programme implies some administrative burden for employers

Heavy bureaucratic procedures and stringent conditions imposed on employers, may jeopardise their willingness to participate in the programme, especially if the extent to which they benefit is considered to be low. In Latvia, participation in subsidised employment entails some administrative burden for employers that could potentially be reduced. Firstly, to be selected for participation in the programme, employers have to prepare and submit to the SEA a list of documents, including those certifying their

compliance with tax and other duties. Many of these documents can easily be requested by the SEA through the online system and should not require additional work from the hiring firm. Secondly, employers are required to submit to the SEA monthly reports on the hours worked by the subsidised employee so that the subsidy can be calculated and paid. Again, this can be a substantial administrative burden especially for small-sized companies (up to four employees) who represent close to half of the employers participating in this programme in Latvia. Finally, the requirement to assign a qualified supervisor for every unemployed person hired through the programme is welcome but can also constitute an obstacle for some employers. Although the supervisor is paid a wage supplement from the state budget, the requirement that his/her qualifications should match those needed for the subsidised position is likely to be an additional hurdle for small businesses.

The subsidised employment programme has a positive effect on employment

The probability of obtaining subsidised employment among eligible persons is very low. It is close to 3% for persons who have been unemployed for at least 12 months and even lower for youth and older unemployed persons. For persons with disabilities, the likelihood is 6.6%.

The evaluation of employment subsidies' effectiveness conducted in this review relies on comparing the labour market outcomes of participants (the intervention group) with similar eligible unemployed persons who did not receive employment subsidies (the comparison group). Two sets of estimations are implemented because the time that must be spent in unemployment to become eligible for employment subsidies differs for certain groups: some individuals (including young people) must wait just six months to become eligible while others must wait 12 months from the start of the unemployment spell. The second group is likely to capture the LTU, including those unemployed persons who have not been treated as a priority by caseworkers and those who have spent time participating in other ALMPs. It should also be noted that some groups – including persons with disabilities – become eligible for employment subsidies immediately after registering. In any case, the intervention group comprises those persons who received the employment subsidy within 6 months of becoming eligible for participation in the programme. To increase the comparability of the intervention and comparison groups, the estimations include a rich set of controls for personal characteristics, household composition, and location.

Participation in the programme is associated with a higher probability of employment, which declines quickly over time. Two years after the point at which they become eligible (six months of unemployment), programme participants are 16 percentage points more likely than similar unemployed individuals in the control group to be employed. The estimated effects are large but are not very different from those found in similar settings in other countries and when similar econometric techniques are applied. They reflect to a great extent the fact that many of these persons still hold a subsidised job two or even three years after becoming unemployed.

When individuals who remain in (or return to) subsidised jobs are excluded from the analysis, the estimated effect of the programme is smaller (i.e. ten percentage points at 24 months after they become eligible for person who become eligible after six months of unemployment) but remains positive and statistically significant up to four years after the moment when the individual became eligible. Separate analyses conducted for the different target groups show that when only non-subsidised jobs are considered, the estimated effect of the programme is positive and significant up to four years after the clock start for youth and for older unemployed persons (to a lesser extent).

However, no effect is found for persons with disabilities. This result seems in line with anecdotal evidence that employers tend to let persons with disabilities go after the end of the subsidy. The short-lived increase in the maximum duration of the subsidy for persons with disabilities in 2014 led to some increase in the average duration of the subsidy for this group, but was not correlated with improved labour market outcomes. More in-depth analysis would be required to fully understand the absence of an effect for persons with disabilities, but this is not possible given the small number of persons affected by the change. However, the lack of any correlation between the longer subsidy duration and improved labour market outcomes suggests that such programmes may have limited effectiveness for this group as a whole. One option for consideration would be to differentiate the treatment of persons with disabilities according to their assessed degree of disability and barriers to work. For those with severe disabilities, a longer subsidy duration could be considered, while for those with milder disabilities, a shorter subsidy duration could be coupled with strong social services. Moreover, the level of the subsidy could vary according to the unemployed person's assessed disability and could also change over time.

Latvia's rich administrative data should be used for regular monitoring and impact assessment of ALMPs

Latvia has a remarkable administrative data system in place, which makes it possible to link individual-level data from various sources and, in turn, analyse important labour market policy questions as well as many other socio-economic research and policy questions. This review has benefited from enormous efforts from the SEA and its data operator, UNISO, the State Social Insurance Agency, the Office of Citizenship and Migration Affairs, and ZZ Dats who maintain the municipal information system data base with the support of Latvia's 118 (out of 119) municipalities and who agreed to extract their data on social assistance. A rich set of administrative data was provided to the OECD and was linked by the OECD team, which allowed for an in-depth and rich analysis of the impact of selected ALMPs to be carried out. Crucially, the linked administrative data made it possible to track individuals over relatively long time horizons, allowing both the short-term and longer-term impacts of programmes to be identified, and thus providing a better understanding of the mechanisms through which ALMPs may operate. Moreover, the detailed information on the participation of registered unemployed persons in all types of ALMP measures and on their interactions with the SEA allowed the review to explore how the effects of different elements of labour market policies interact. At the same time, having information on each individual's personal characteristics made it possible to control for observable differences between those participating and those not participating in a programme, reducing bias in the estimated impact of each programme that was evaluated.

Efforts to maintain detailed and linkable administrative data should continue in order to facilitate regular monitoring and evaluation of the effectiveness of activation measures. This data collection can also serve to answer other policy-relevant questions going beyond the field of activation policies. Such efforts require investment in human resources to build the necessary technical skills. This could be easily achieved in Latvia where investment in ICT skills has been high. Lessons from other OECD countries (e.g. Estonia, the Netherlands, Norway, Germany, Flanders in Belgium) could be used to further boost Latvia's capacity in this field.

Key policy recommendations

General operation of the State Employment Agency

- Establish a regular and structured format for co-operation between the SEA and the municipalities, following the positive results of the 2013 pilot targeting the very long-term unemployed.
- Reconsider the requirements for the registration of vacancies so as not to unduly discourage employers for doing so i.e. by requiring detailed wage information. Wage information in ranges could be requested instead.
- Introduce possibilities for less severe sanctions in case of refusal of job offer, e.g. temporary benefit reductions.
- Require young unemployed persons without family commitments to accept job offers from anywhere in Latvia. For all unemployed persons, take access to a car into account in case-by-case decisions of whether a job offer is suitable.
- Revise the profiling tool of unemployed persons and its use along the following lines:
  - Reduce the number of groups and link them to differentiated service streams.
  - Ensure the profiling tool is available and used at the moment of registration with the SEA.
  - Rely more on easily available and reliable statistical information than self-declared information from the unemployed person.
- Consider providing online services to unemployed persons who are more likely to resume work quickly according to the outcomes of the profiling tool.

Training programmes

- Enhance the ongoing programme to support regional mobility for those receiving training, especially in areas such as Kurzeme and Zemgale where there are relatively few training providers, to allow voucher recipients to access a larger pool of training programmes.
- Consider reforming the specific procedure for assigning vouchers to limit lock in effects by:
  - Shortening or eliminating the period when registered unemployed individuals are aware that they have been assigned to the training voucher programme but have not yet received their voucher.
  - Lengthening the time for which vouchers are actually valid past the current two-week period, to support effective choice.
- Consider additional ways to reduce the lock-in effects by allowing training to happen alongside job search.
- Continue to consolidate the provision of training for the unemployed to reduce waiting times, but carefully monitor the effects this has on choice for voucher recipients and on competition between training providers.

- Ensure caseworkers have the capacity to provide special support to those voucher recipients most in need of help in exercising effective choice, including individuals without a basic command of the Latvian language and young people.
- Ensure that ongoing reforms that bundle together *Measures to Improve Competitiveness* with non-formal training do not reduce access to such measures for formal training participants.

Programme for subsidised employment

- Reduce the burden on employers by using the IT system to transmit the monthly information required on hours worked to calculate the amount of the subsidy to be paid.
- Consider differentiating the conditions of the employment subsidy for persons with disabilities according to the degree of assessed disability, barriers to work and/or work capacity, e.g. by:
  - Extending the duration of the subsidy and possibly reducing its amount for persons with severe disabilities for whom this is a unique way to get a job. In these cases, the subsidy should also be considered as a tool for social inclusion.
  - Reducing the duration of the subsidy for those with milder disabilities and strengthening the employment and social services provided to them during the period of subsidised employment.
- Maintain the programme for temporary public works, which can be scaled up to serve as a safety net in difficult economic conditions.

Programme promoting regional mobility of unemployed persons

- Explore how greater support for mobility can be offered to families, e.g. through small loans that the State Employment Agency arranges with a credit providers.
- Abolish the limitation of the programme to persons who have been unemployed for at least two months but link eligibility to profiling outcomes that determine the need for such mobility support and exclude certain occupations and/or highly paid jobs from those eligible for support.

Data collection

- Continue the investment in building and maintaining a well-functioning data infrastructure.
- Develop a mechanism for automatic monitoring and evaluation of the outcomes of ALMPs with minimal human resource requirements on a regular basis.
- Use the experience acquired and lessons learned through the OECD Review and other data analyses conducted in the past to build the capacity to perform systematic impact evaluations of ALMPs, internally or in co-operation with experts.

Chapter 1. Trends and challenges in the Latvian labour market

This chapter provides an overview of recent economic and labour market developments in Latvia, draws on a range of data sources to analyse current unemployment from several angles and identifies vulnerable groups of jobseekers in the Latvian labour market.

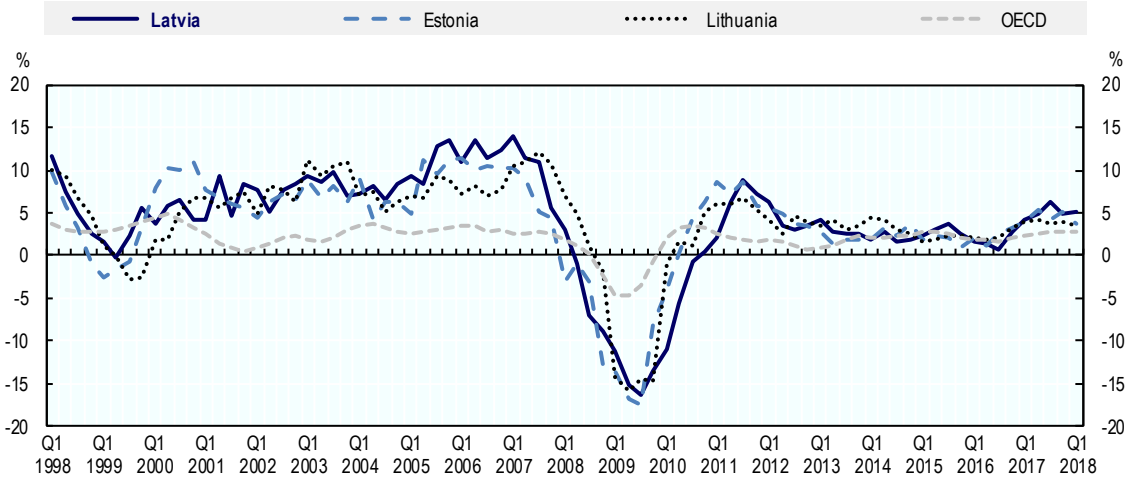
The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Recent labour market trends: from crisis to stagnating recovery

Over the last two decades, developments on Latvia's labour market were shaped by a long economic boom before 2008, an especially severe recession in the years 2008-2010 and a strong recovery (Figure 1.1). The boom before 2008 was fuelled by the prospect and initial effects of Latvia's accession to the European Union in 2004, which led to an abundant supply of credit at low interest rates and expectations of rapid income gains (Blanchard, Griffiths and Gruss, 2013[1]). Wages and house prices rose quickly, encouraging consumption and thereby reinforcing an economic upward spiral (OECD, 2015[2]).

Figure 1.1. Boom, bust and recovery in the Baltic states, 1998-2018

GDP growth compared to the same quarter in the previous year, seasonally adjusted, in percentages



Note: OECD is a weighted average excluding Lithuania.
Source: *OECD Quarterly national accounts database*, https://stats.oecd.org/Index.aspx?DataSetCode=QNA.

StatLink https://doi.org/10.1787/888933960270

When access to credit became more restricted in 2007, the falling house prices undermined consumption – a development that was greatly aggravated by the sudden stop of lending from foreign banks at the beginning of the financial crisis in September 2008 (Åslund and Dombrovskis, 2011[3]). While the Latvian GDP had been growing at an average rate of 10% annually between 2000 and 2007, it declined by about one-quarter between 2007 and 2010 (OECD, 2015[2]). Coinciding with the bust after Latvia's boom, the global financial crisis thus had an especially strong impact on Latvia, much stronger than in most other OECD countries but very similar to the impact on Estonia and Lithuania, where a comparable boom period had preceded the crisis (Figure 1.1).

In all three Baltic states, the severe recession was soon followed by a strong recovery (Figure 1.1). Latvia's economic growth since 2011 has been one of the highest in Europe (OECD, 2015[2]) and climbed to 5% in the first quarter of 2018. The economic situation is expected to improve further as Latvia benefits from robust domestic consumption, from growing export markets in both the euro area and the Russian Federation, as well as from resuming investment of EU funds (OECD, 2017[4]). While negative effects of recent sanctions against the Russian Federation and of Russian counter-sanctions may have been

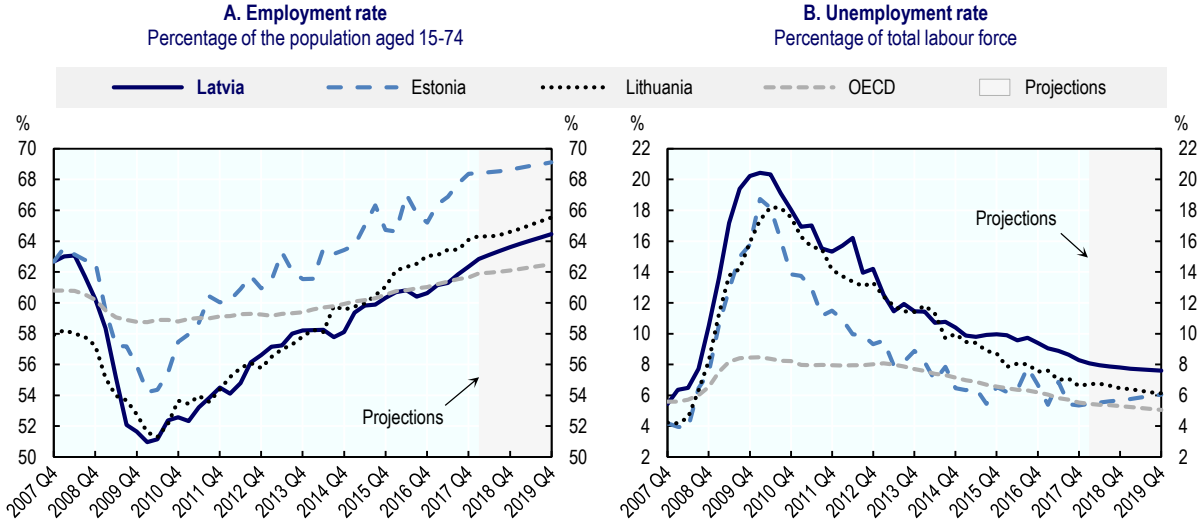
very limited (Oja, 2015[5]), geopolitical tensions with Russia remain perhaps the largest risk for the Latvian economy (OECD, 2017[4]).

The recession strongly reduced employment and increased unemployment

Efforts to respond to the crisis unfolding between 2007 and 2009 could not prevent large impacts on wages and employment. Latvia's currency at the time, the lat, had been pegged to the euro since 2005. Maintaining a stable exchange rate and meeting the Maastricht criteria to eventually join the European currency union were political priorities (Purfield and Rosenberg, 2010[6]) and Latvia could indeed adopt the euro in January 2014. To the large shock of the global financial crisis, Latvia therefore did not react with an external devaluation, but with an internal devaluation that requires a reduction of domestic prices – including wages – to regain competitiveness on exports markets. Because prices and wages adjust only slowly, the short-run adjustment of the labour market fell on employment.

By consequence, employment and unemployment in Latvia exhibited dramatic changes (Figure 1.2). The employment rate for the population aged 15-74 fell from 63% in Q1 2008 to 51% in Q1 2010 (Panel A). While employment rates also declined rapidly in Estonia and Lithuania (by close to 10 and 7 percentage points, respectively), the fall in Latvia was significantly larger. Unemployment rates rose steeply over this period, by 13-15 percentage points in all three Baltic states (Panel B). Coming from a slightly higher initial level, only Latvia's unemployment rate reached 20% of the total labour force. These large movements contrast with very moderate changes in the average employment and unemployment rates for the OECD area and underline the severity of the crisis impact on the Baltic states.

Figure 1.2. Employment trends in the Baltic states, 2007-2017 (projections to 2019)



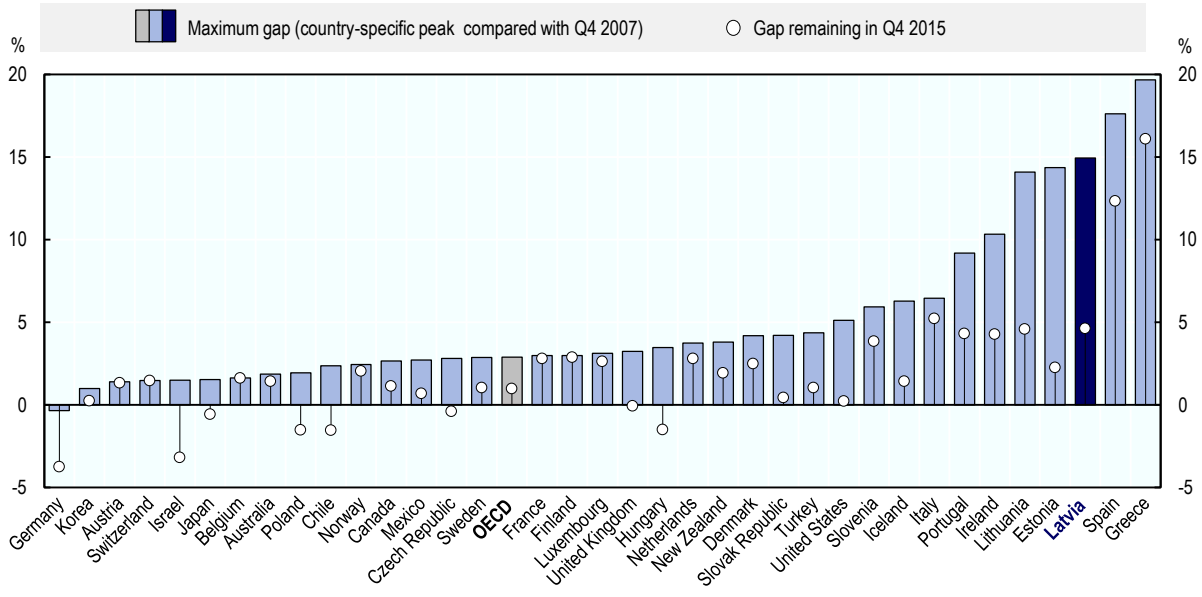
Note: OECD is a weighted average excluding Lithuania.
Source: OECD calculations based on *OECD Economic Outlook Database (No. 103),* May 2018, http://stats.oecd.org//Index.aspx?QueryId=51396.

StatLink https://doi.org/10.1787/888933960289

The rise of unemployment in Latvia by up to 15 percentage points was substantially higher than in most other OECD countries that were heavily affected by the crisis, including Portugal and Ireland where unemployment rose by up to 9 and 10 percentage points, respectively (Figure 1.3). The rise in Latvia was only exceeded by the increases observed in Spain and Greece of up to 18 and 20 percentage points, respectively. By the end of 2015, however, the gap in Latvia had fallen below 5 percentage points, approaching the gaps in Portugal and Ireland and underlining the relative speed of Latvia's recovery. The gap had remained very large in Spain and Greece (12 and 16 percentage points, respectively).

Figure 1.3. Change of unemployment in OECD countries over the financial crisis, 2007-2015

Percentage-point change in the unemployment rate since the onset of the crisis (Q4 2007)



Note: The OECD average does not include Lithuania.
Source: OECD (2016[7]), *OECD Employment Outlook 2016*, https://doi.org/10.1787/empl_outlook-2016-en.

StatLink https://doi.org/10.1787/888933960308

During the recovery, unemployment halved but stagnated above pre-crisis levels

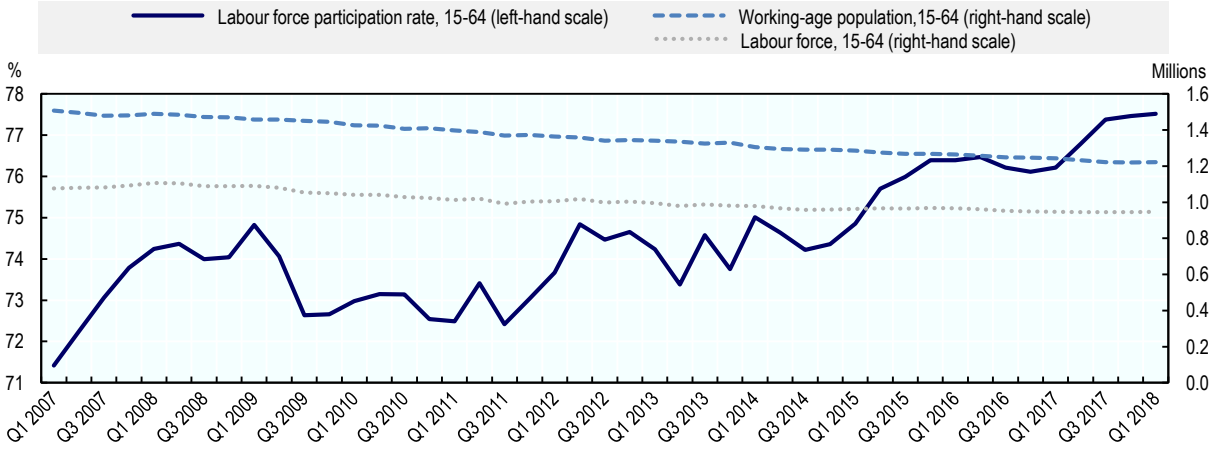
Already in 2010, Latvia's unemployment rate started falling and the employment rate started rising again (Figure 1.2, Panel B). Between Q1 2010 and Q1 2015, the unemployment rate halved, falling from above 20% to just below 10%. However, the decline has since slowed down, and the unemployment rate is projected to stay around 8% in 2018/2019. This unemployment rate is still somewhat higher than before the financial crisis. It also corresponds to one and a half times the average unemployment rate for the OECD area, and this difference is expected to remain throughout 2018/2019.

The evolution of Latvia's employment rate shares some of the same features. However, its recovery has continued since 2010 at roughly the same pace (Figure 1.2, Panel A). By early 2018, the employment rate reached the highest pre-crisis levels (63%), and it is expected to approach 65% in 2019. Already matching the OECD average, Latvia's employment rate could thus exceed it significantly for the first time since 2008.

The gradual slowdown of the improvement in Latvia's unemployment rate suggests that its recovery after the financial crisis may be approaching its end. The unemployment rate already appears to have stabilised at a level well above the OECD average, and the projections shown in Figure 1.2 highlight the risk that the unemployment rate remains by and large unchanged despite robust economic growth and expanding employment. At this stage, further reductions of unemployment might require policies that address structural unemployment rather than cyclical unemployment linked to crisis effects.

The participation rate in Latvia has recently climbed beyond pre-crisis levels (Figure 1.4). After a drop in 2009 largely offset increases observed in 2007/2008, the participation rate had recovered by 2012. During 2015 and 2017, it rose to significantly higher levels. At close to 78% in early 2018, Latvia's participation rate substantially exceeds the OECD average (72% in 2017) as well as those in other OECD countries that suffered heavily from the financial crisis, such as Greece (68%), Spain and Portugal (both 75%). Only few OECD countries exhibited substantially higher participation rates than Latvia: Iceland (88%), Switzerland (84%), Sweden (83%), New Zealand (81%) and the Netherlands (80%).

Figure 1.4. Evolution of labour market participation in Latvia, 2007-2018



Source: *OECD Short-Term Labour Market Statistics*, https://stats.oecd.org/index.aspx?queryid=35253.

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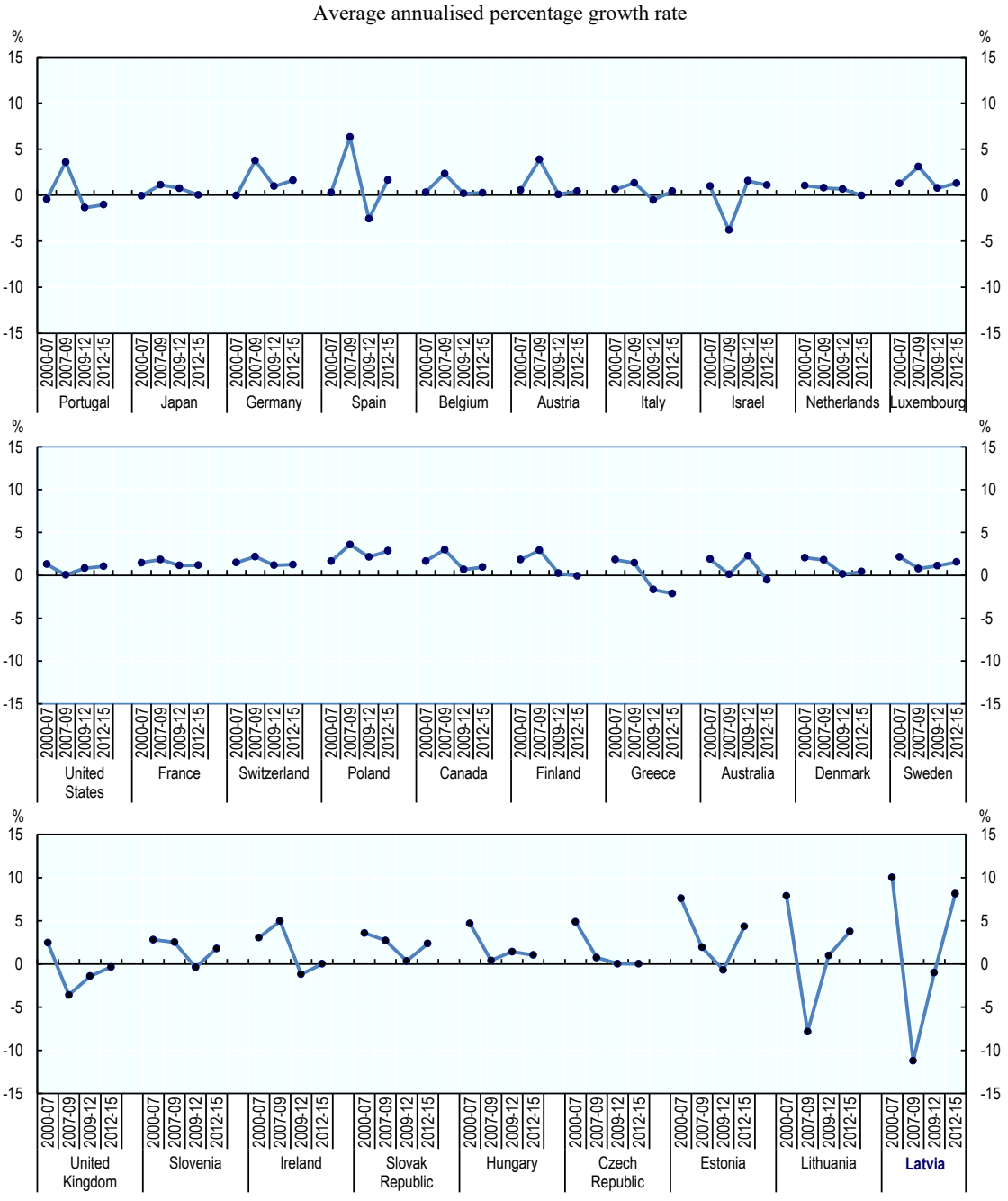
However, Figure 1.4 also indicates that the rise in the participation rate is partly driven by demographic developments. Latvia's population of working age (15-64 years) fell significantly between 2007 and 2018, due to population ageing and high levels of emigration (OECD, 2016[8]). The active population of working-age also declined over this period, but not as much as the total population of working age. The narrowing gap between them translates into a rising participation rate.

After a large decline, strong growth of real wages has resumed

As part of Latvia's internal devaluation, wages came under heavy downward pressure (Figure 1.5). After real wages had grown by 10% annually in the period Q1 2000 to Q4 2007, they declined by 11% annually in the period Q4 2007 to Q1 2009. In the following years, real wages stabilised and returned to strong growth between 2012 and 2015, but without fully offsetting the earlier decline. These swings in real wages were the most extreme observed among OECD countries, and considerably larger than in other OECD countries that were strongly affected by the financial crisis, such as Greece, Ireland,

or Spain. Comparable real wage changes were only observed in Lithuania and, albeit to a much smaller extent, in Estonia, which again highlights parallels between developments in the Baltic states. Latvia was unique among the Baltic states to also experience declining nominal wages – a fall by 6% annually in the period Q4 2007 to Q1 2009 (OECD, 2015[2]). In the public sector, nominal wages were cut by up to 30% (Raudla and Kattel, 2013[9]).

Figure 1.5. Real wage changes in OECD countries, 2007-2015



Note: Time periods respectively refer to 2000Q1-2007Q4, 2007Q4-2009Q1, 2009Q1-2012Q4 and 2012Q4-2015Q4.
Source: OECD (2016[7]), *OECD Employment Outlook 2016*, http://dx.doi.org/10.1787/888933384391.

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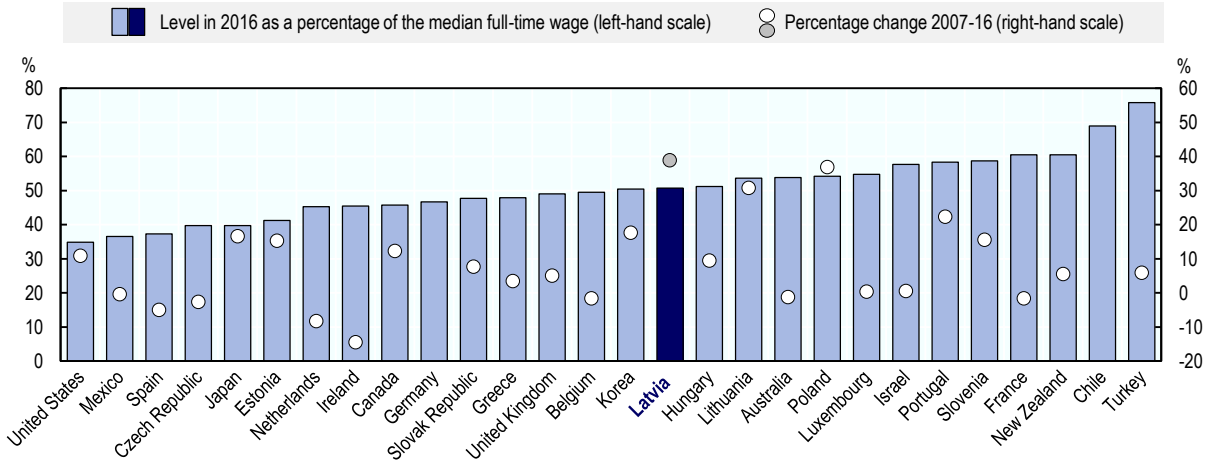
The downward pressure on wages may have been alleviated to some extent by considerable rises in Latvia's legal minimum wage. During the crisis period, the minimum wage in nominal terms rose from LVL 2 045 (the national currency before the euro) in 2007 to LVL 2 726 in 2008, then to LVL 3 067 in 2009/2010 and LVL 3 408 in 2011-2013. In relative terms, the minimum wage represented 37% of the median wage of full-time workers in 2007, rose to 47% in 2009 and reached 51% in 2011. After receding slightly in the following years, the minimum wage again equalled 51% of the median wage in 2016 (Figure 1.6). While this level did not stand out among OECD countries, the increase of Latvia's minimum wage in relative terms was stronger than in any other OECD country: between 2007 and 2016, it increased by 39%. The only comparable increases in OECD countries were observed in Lithuania (31%) and Poland (37%). In nominal terms, Latvia's minimum wage more than doubled over this period.

Figure 1.6. Evolution of national minimum wages in OECD countries, 2007-2016



Note: Percentage increases cannot be calculated for Chile and Germany because values for 2007 are missing.
Source: *OECD Minimum Wage Database*, http://dx.doi.org/10.1787/data-00313-en.

StatLink https://doi.org/10.1787/888933960365

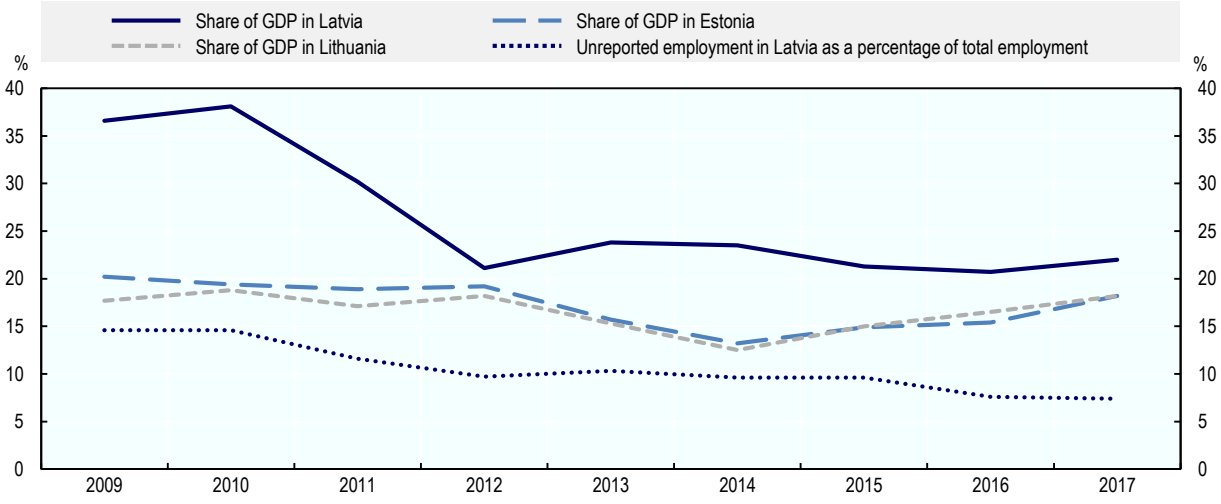
As stressed in OECD (2016[10]), the rapid rise of Latvia's minimum wage may have had a strong impact because comparatively many workers earned wages in 2010 that would fall below the minimum wage in subsequent years. Especially for labour market entrants without significant work experience and for low-skilled workers, the minimum wage may be too high compared to their productivity, so that their chances of finding employment are undermined. However, as Zasova (2011[11]) points out, this reasoning does not apply where low wages are recorded by official statistics but workers informally receive higher wages in practice, so-called envelope wages. Based on survey data, Žukauskas and Schneider (2016[12]) estimate that almost four-fifths (79%) of those who worked at least partly in the shadow economy in 2015 received envelope wages, more than the corresponding shares for Lithuania (70%), Estonia (66%) and Poland (64%). The remainder are unregistered self-employed, who accounted for 21% in those working in Latvia's shadow economy compared to 38% in Lithuania, 29% in Estonia and 13% in Poland.

The shadow economy has likely shrunk during the recovery

Using surveys among entrepreneurs, Putniņš and Sauka (2018[13]) can combine estimates of envelope wages and wages paid to undeclared employees with estimates of undeclared

business income. They find that Latvia's shadow economy is sizeable but in recent years considerably smaller than during the crisis period: according to their results, the shadow economy accounted for around 37% of GDP in 2009/2010, then began decreasing to 30% in 2011 and has since been fluctuating between 20% and 24% (Figure 1.7). Throughout this period, the estimated shadow economy in Latvia was larger than those in Estonia and Lithuania (18% in 2017). Undeclared employment in Latvia was estimated at 15% of total employment in 2009/10, fell to 12% in 2011 and then continued declining, reaching 7% in 2017.

Figure 1.7. Estimates of the shadow economy in the Baltic States, 2009-2017



Source: Putniņš, T. and A. Sauka (2018[13]), "Shadow economy index for the Baltic countries 2009-2017", SSE Riga, Riga, www.sseriga.edu/sites/default/files/2018-07/sseriga_shadow_economy_index_2009-2017.pdf.

StatLink https://doi.org/10.1787/888933960384

One interpretation of the estimates in Figure 1.7 is that some economic activity shifted to the shadow economy during 2008-2010 in an effort to reduce costs by saving on taxes and social security contributions (Vanags, 2012[14]). This shift may have reversed when the situation in the formal economy improved during the recovery. Because the shadow economy may have provided many with an alternative to the formal economy, the dramatic changes of Latvia's GDP, employment and unemployment in the wake of the financial crisis should not be taken fully at face value. Production that shifted to the shadow economy would result in a loss of GDP in the formal economy, and likewise for employment – among those counted as unemployed, some likely worked informally. While the observed changes in GDP, employment and unemployment may therefore overestimate the true adjustment, the shadow economy could in all likelihood only dampen the adverse effects and not nearly offset them.

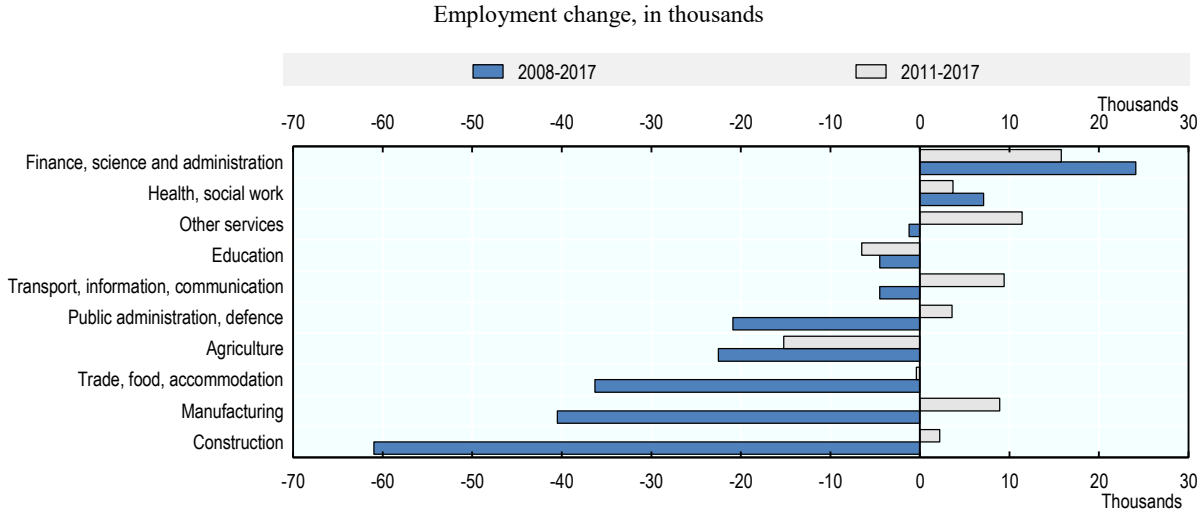
Some sectors thrive but others have not recovered

While total employment in Latvia's formal economy has recovered in recent years, it is still below pre-crisis levels: 895 000 persons were employed in 2017, according to data from Latvia's Central Statistical Bureau. This level significantly exceeded total employment in 2010 (851 000) and at the beginning of the recovery in 2011 (862 000). However, total

employment reached the same level as in 2017 already in 2013 and has since tended to fluctuate rather than grow. Given the decline of the working-age population, it seems unlikely that total employment can return to the substantially higher level at the end of the boom in 2008 (1.06 million) in the next years.

In addition, the recovery of employment has been uneven across sectors: employment in 2017 was in some sectors higher than in 2008, but in most sectors it was still much lower than in 2008 (Figure 1.8). In the sector comprising finance, insurance, real estate, business administration and support service as well as professional, scientific and technical activities, employment was 29% higher in 2017 than in 2008. Employment gains also occurred in health and social work (plus 15%), partly driven by high demand in these occupations from public employers in response to legal requirements. In all other sectors shown in Figure 1.8, employment in 2017 was still lower than in 2008, despite often substantial employment growth in the period 2011-2017. Employment in construction has not nearly recovered from the end of Latvia's housing boom, falling by one-half between 2008 and 2017. Another large decline was observed in agriculture, where employment was still decreasing in the period 2011-2017 and fell by 27% between 2008 and 2017. Over these years, employment in public administration and in manufacturing (including mining, energy, water and waste management) fell about as strongly (minus 25% and 22%, respectively), but returned to substantial growth of around 6% in the period 2011-2017.

Figure 1.8. Evolution of employment in Latvia by sector, 2008-2017



Note: Sectors are categorised according to NACE Rev. 2 at one-digit level. Manufacturing includes mining, energy and water (letters B-E) and other services include entertainment and household services (letters R-U).
Source: OECD calculations based on data from the Central Statistical Bureau of Latvia, www.csb.gov.lv/en.

StatLink https://doi.org/10.1787/888933960403

This uneven development across sectors likely complicates the reduction of unemployment. The skills demanded for positions in the two thriving sectors will often not match the skills of unemployed jobseekers whose experience or training falls into different sector. In so far as sectors were concentrated in certain Latvian regions, those who lost their jobs in these sectors might often be unable to take up new jobs unless they move to another region. The slow

recovery of sectors also means that unemployed persons with skills specific to these sectors might not have used their skills in years, which makes them less employable.

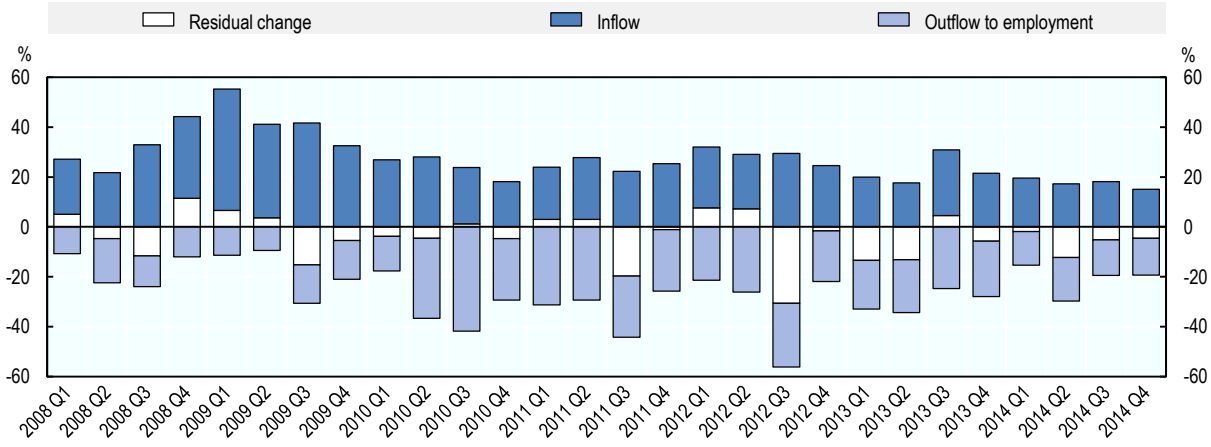
In the next few years, the uneven development of employment in sectors might well continue. According to recent CEDEFOP projections, a substantial increase in employment is only expected in business and market-oriented services (plus 2% between 2017 and 2020). Limited increases are expected for manufacturing, trade and transport as well as construction. Decreasing employment is forecast for non-marketed services and especially for the primary sector and utilities (minus 6%).

Not all unemployed have benefited from the recovery

Since employment in many sectors has not recovered, not all of those who became unemployed in the wake of the economic crisis have eventually found formal employment in Latvia again. Instead, many may have retreated from the labour market and moved to inactivity, the shadow economy or another country. Figure 1.9 depicts an attempt to estimate the flow of persons who left unemployment but did not take up formal employment in Latvia. This flow is estimated as the residual change of unemployment levels after accounting for total inflows and for outflows to employment. The underlying data on labour market flows were constructed by Fadejeva and Opmane (2016[15]) from changes in individual labour market status observed in Latvia's Labour Force Survey.

Figure 1.9. Flows into and out of unemployment in Latvia, 2008-2014

Estimated components of change in the unemployment stock



Note: Inflows are shown as positive numbers, outflows as negative numbers. Quarterly inflows are approximated as the number of persons who have been unemployed for up to three months. The residual change is the remainder implied by observed changes in the unemployment stock. Because data on unemployment duration refer to a particular point in time, those with very short unemployment durations are poorly covered. Therefore quarterly inflows are underestimated and the residual change sometimes implies additional inflows.
Source: OECD calculations based on data constructed in Fadejeva and Opmane (2016[15]) "Internal labour market mobility in 2005-2014 in Latvia: The micro data approach", *Baltic Journal of Economics* and obtained from the authors, and on data from Latvia's Central Statistical Bureau, www.csb.gov.lv/en.

StatLink https://doi.org/10.1787/888933960422

The results in Figure 1.9 suggest that substantial numbers of persons who left unemployment did not take up formal employment in Latvia, even during the recovery. At least 160 000 exits from unemployment during 2008-2014 (28% of all outflows) were not

part of the flow into formal employment in Latvia. The true figures are most likely higher because total inflows are underestimated, which leads to an underestimation of residual outflows. To some extent, these outflows may reverse if substantial numbers of emigrants return in the context of Brexit, so that the initial effect might be to raise unemployment in Latvia (Box 1.1).

Discouraged workers remain comparatively frequent

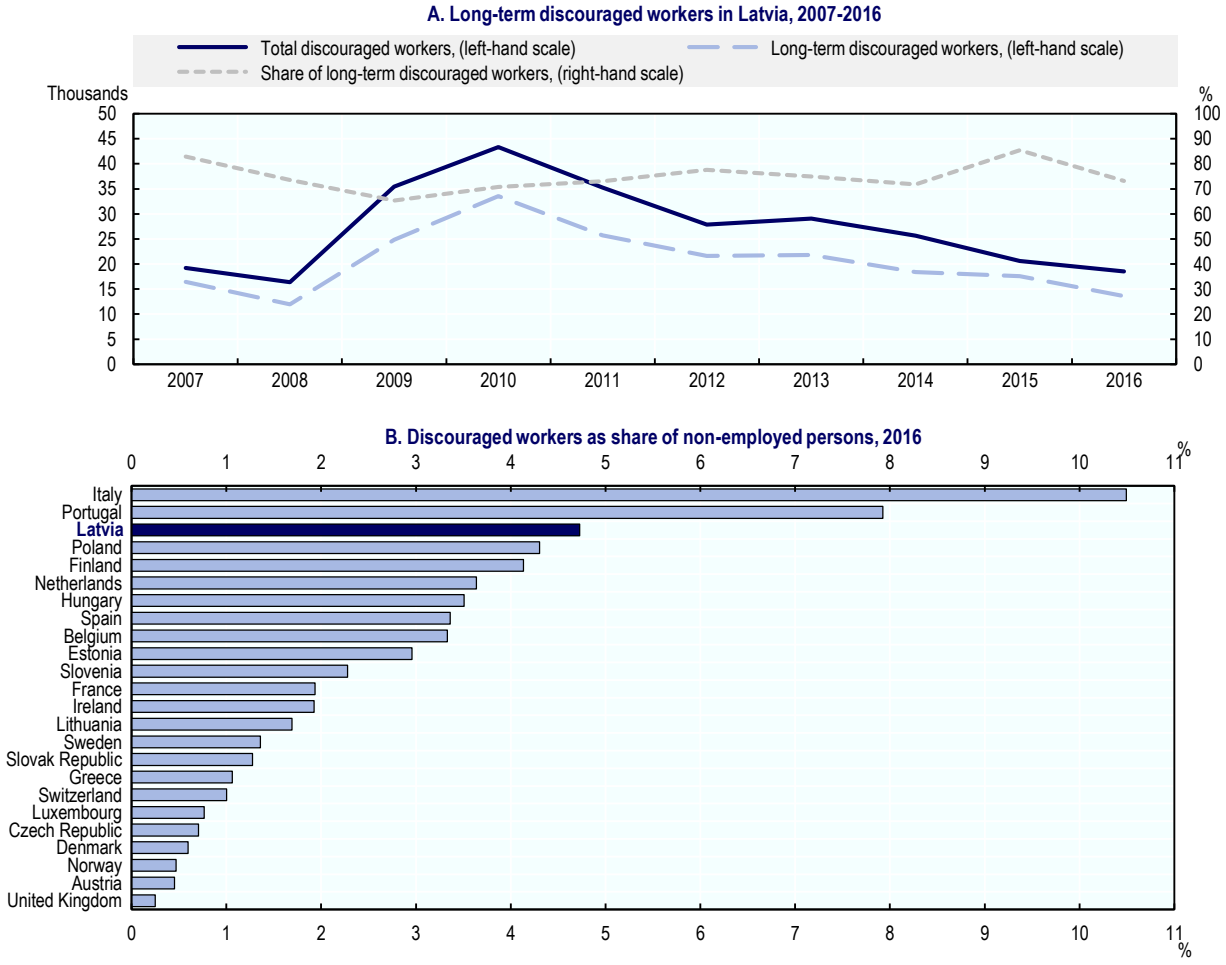
Labour force survey data allow identifying those inactive persons of working age who do not seek work (anymore) because they believe that they will not find any. Persons with this self-reported, subjective belief are known as discouraged workers and are often regarded as hidden unemployed – they would be counted as unemployed if they actively sought work. The number of discouraged workers in Latvia returned to pre-crisis levels of about 20 000 in 2015 and 2016, after nearly tripling during the crisis years and reaching 47 000 in 2010 (Figure 1.10, Panel A). The number of long-term discouraged workers – those who have been without employment for more than 12 months – followed a very similar trajectory. Their share among all discouraged workers remained above 70% throughout the recovery and temporarily climbed to 85% in 2015.

Despite the recent decreases, the number of discouraged workers remains high in Latvia in comparison to other European OECD countries (Figure 1.10, Panel B). They represented 5% of Latvia's non-employed working-age population in 2016, exceeding the corresponding shares in all but two European OECD countries: Portugal (8%) and Italy (11%). Several countries that were heavily affected by the financial crisis exhibited much lower shares of discouraged workers, such as Spain (3%), Ireland (2%) and Greece (1%). In Estonia and Lithuania, the corresponding shares amounted to 3% and below 2% in the period 2012-2016, respectively, after increasing only mildly in the wake of the financial crisis. For labour market policy in Latvia, these findings highlight the particular challenge to reach persons who have retreated from the labour market and lack motivation to search for jobs, also in a context of improving labour market conditions. According to evidence from the Latvian Labour Force Survey for 2012-2016, three-quarters of discouraged workers wish having a job (see Chapter 2). To better understand the barriers faced by discouraged workers, their individual characteristics are examined towards the end of this chapter.

The increase in labour demand is accelerating

During the recovery, the prospects of finding a job have improved due to rising labour demand: the vacancy rate in Latvia rose from 1.4% of all non-agricultural positions in the first quarter of 2012 to 2.5% in the first quarter of 2018, largely exceeding pre-crisis levels of around 2% (Figure 1.12). While Latvia's vacancy rate was initially on a par with that of Estonia and the EU average, the subsequent increase was significantly stronger in Latvia. However, much of this increase occurred only during the first quarter of 2018: previously, the vacancy rate in Latvia had gradually increased to 1.9% in the last quarter of 2017.

Figure 1.10. Discouraged workers in Latvia and other OECD countries



Note: All measures refer to persons aged 15-64 years. Discouraged workers are identified as inactive persons who do not seek work because they believe that none is available. They are considered long-term whenever more than 12 months have elapsed since the last job, not counting those who have never worked.
Source: OECD calculations based on the European Labour Force Survey (Eurostat), http://ec.europa.eu/eurostat/web/lfs/overview.

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Most sectors of the Latvian economy exhibited vacancy rates from about 1% to about 3% of all positions in the first quarter of 2018. Especially high values were observed in wholesale and retail trade (3.1%) accommodation and food services (3.4%), construction (3.8%), and public administration (5.1%). In some cases, high vacancy rates might not only reflect high labour demand but also working conditions that make these jobs unattractive. At the lower end, only 0.6% of all positions in education were recorded as vacant.

Box 1.1. Labour market outcomes of returning Latvian emigrants

Just over 3 000 Latvian citizens returned from abroad in 2017 (Siliņa-Osmane, 2018[16]). This helps explain why return migrants contribute at least initially Evidence on the labour market outcomes of return migrants in recent years suggest that they contribute, at least initially, to unemployment in Latvia (Figure 1.11). At 28% in the first year after return, their unemployment rate in Latvia is much higher than it had been abroad one year earlier, and it is twice as high as the average unemployment rate in Latvia (Panel A).

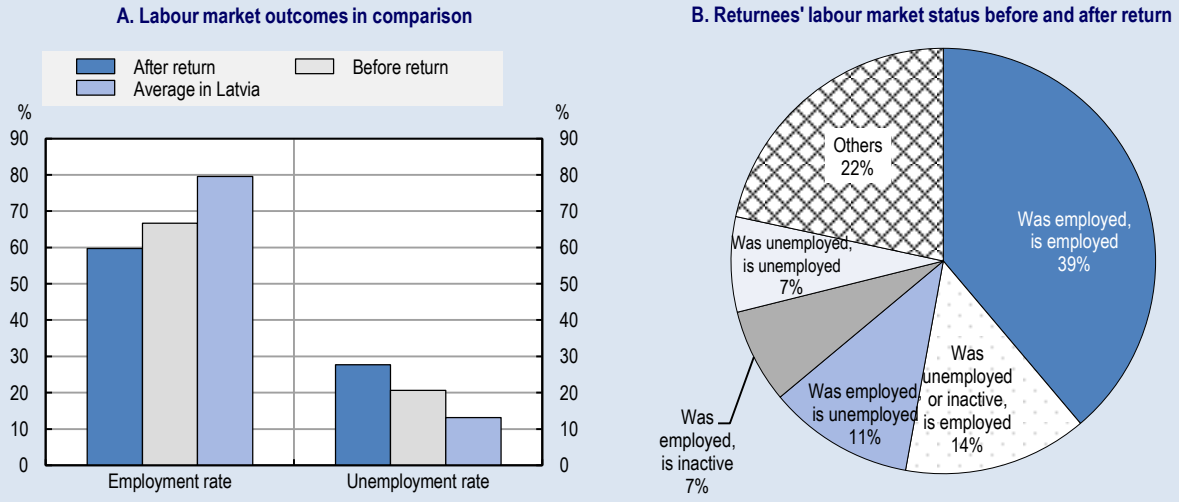
The very high unemployment rate – and a correspondingly low employment rate – one year after return highlight the challenge for returnees of integrating in the Latvian labour market. In fact, a substantial share of returnees of working age (15-64) change labour market status: while 14% change from inactivity or unemployment abroad into employment in Latvia, 11% change from employment abroad into unemployment in Latvia (Figure 1.11, Panel B). The latter group likely includes some who return to Latvia after losing their job abroad, but also many who choose to return e.g. for family reasons without having a job lined up in Latvia. According to a survey of return migrants in 2016 (Hazans, 2016[17]), the primary motives for return are related to family and friends in Latvia (indicated by 60%), while few had returned due to an attractive job offer (6%).

That returning emigrants at least initially face problems to find employment in their home country is not unique to Latvia. Martin and Radu (2012[18]) document that emigrants returning to Central and Eastern European countries are more often inactive than the general population and, in the first year after return, also more often unemployed. However, returning emigrants who find employment can earn substantially higher wages than their peers who did not emigrate, according to the results in Hazans (2008[19]) for Latvia, in Martin and Radu (2012[18]) for nine Central and Eastern European countries including Latvia and in Tverdostup and Masso (2016[20]) for Estonia.

Reintegration policies can support return migrants in their efforts to settle in Latvia again. A report on reintegration policies at the local level found that 25% of municipalities, especially often those in regions Latgale and Vidzeme, consider reintegration of return migrants a very relevant policy issue (Žabko et al., 2017[21]). Ensuring that children of return migrants can enter school or kindergarten – which often requires learning Latvian – appears to be the main challenge. Supporting these pupils is therefore one of the most frequent reintegration policies (indicated by 14% of surveyed municipalities), alongside assistance with finding accommodation (11%) and the provision of information targeted at return migrants (8%). In 2018, the Ministry of Environmental Protection and Regional Development launched a pilot project aimed at coordinating reintegration efforts across regions (Siliņa-Osmane, 2018[16]). As part of this initiative, financial support of up to EUR 9 000 is available to return migrants for starting a business.

Future return migration to Latvia could be affected when the United Kingdom exits from the EU ("Brexit"). The United Kingdom hosts more emigrants from Latvia than any other OECD country (OECD, 2015[22]). By 2016, a total number of 113 000 citizens of Latvia were residing in the United Kingdom, based on data from the Office for National Statistics (Salt, 2016[23]). This number declined slightly in comparison to 2015 (117 000) and 2014 (121 000). The number of employed among them fell more strongly over these years: from 73 000 in 2014 and 68 000 in 2015 to 64 000 in 2016.

Figure 1.11. Labour market outcomes of emigrants returning to Latvia, 2012-2016



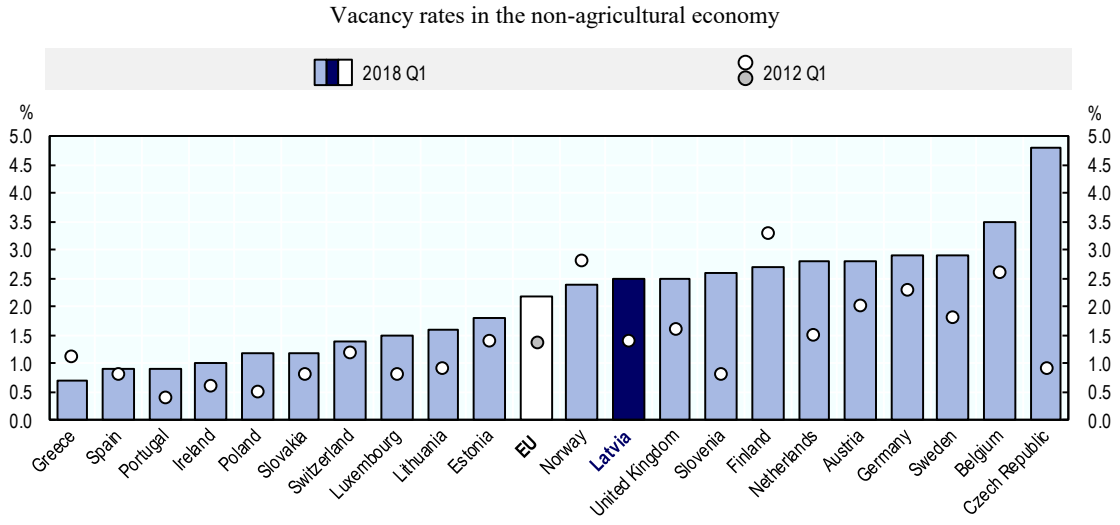
Note: Returning emigrants refers to native-born persons who were living outside Latvia one year before. Covers persons of working age (15-64). (Un)employment rates do not include persons recorded as retired, disabled, in education or military service.
Source: OECD calculations based on European Labour Force Survey (Eurostat), http://ec.europa.eu/eurostat/web/lfs/overview.

StatLink https://doi.org/10.1787/888933960460

The status of EU citizens currently allows Latvians to move freely to the United Kingdom, take residence and find work without the need for residence or work permits. This may change profoundly: depending on the outcome of negotiations between the United Kingdom and the European Union, Latvian citizens' residence and access to the labour market may be subject to conditions, annual quotas or limited durations.

If such limitations on the rights of Latvians in the United Kingdom do not only apply to newly arriving emigrants but also to those who are already resident, outmigration of Latvians from the United Kingdom will likely increase. Survey results compiled by M. Hazans and reported in OECD (2016[8]) indicate that economic factors and search for better quality of life where the main drivers of Latvian emigration. Therefore, restrictions on labour market access in the United Kingdom could prompt many Latvians to move elsewhere, notably to other countries in the EU. Given the recovery of the Latvian economy in recent years and the family ties of Latvian emigrants, some of them might also return to Latvia.

Figure 1.12. Labour demand in European OECD countries, 2012 and 2018



Note: Vacancy rates give vacant positions as percentage of all positions (filled and vacant). Data do not cover positions in agriculture, private households and extra-territorial organisations and are not seasonally adjusted.
Source: Eurostat Labour Market Statistics, http://ec.europa.eu/eurostat/web/labour-market.

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Shortages of skilled labour contrast with rather low wage differentiation

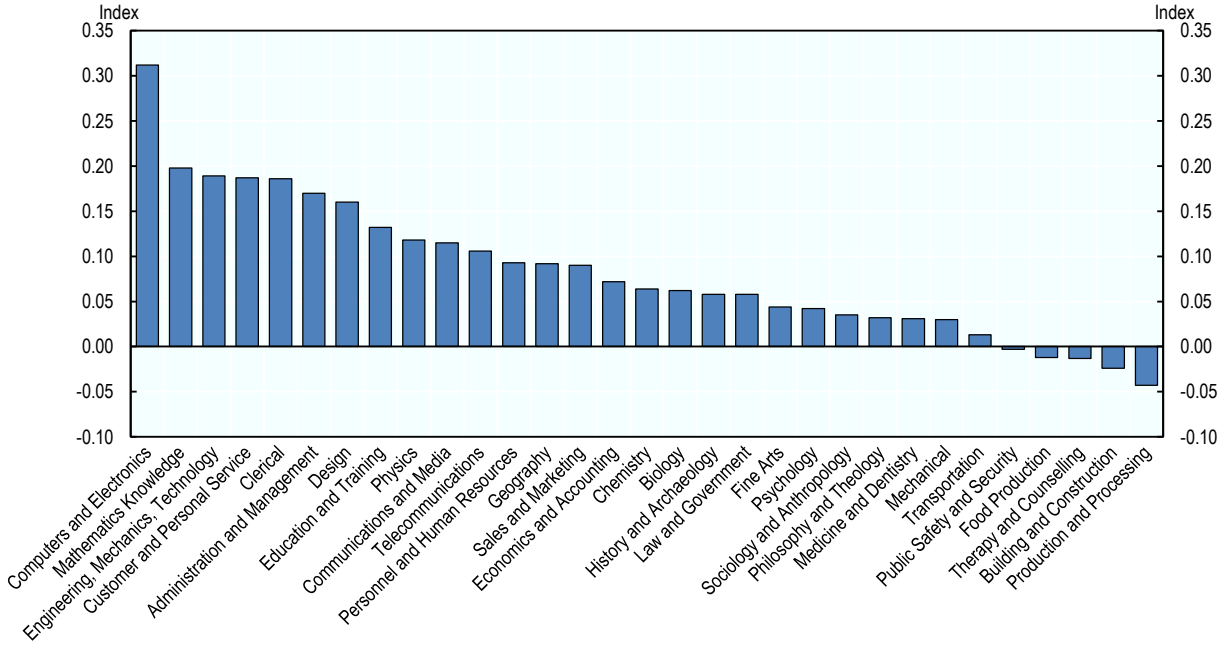
In some parts of the Latvian economy, labour shortages have developed over recent years. According to the business and consumer surveys of the European Commission's Directorate General for Economic and Financial Affairs, one in five employers in Latvia indicated that labour shortages hold back their production in the last quarter of 2017 (seasonally adjusted). While this share did not stand out compared to other European OECD countries, it marked the highest level for Latvia since 2008. From 2013 to 2016, the share in Latvia had fluctuated around only one in ten employers.

The labour shortages appear to arise in particular for skilled labour, but also for service workers. For skills in terms of specific knowledge, Figure 1.13 shows the most recent available indicators for shortages and surpluses in Latvia. Overall, these indicators suggest significant shortages of many types of skills. By far the most severe shortages were observed for skills in computers and electronics, followed by roughly equal shortages in mathematical and engineering skills, service skills and administrative skills. The largest surpluses occurred for skills in building and construction and skills in production and processing.

Figure 1.14 provides further indications that labour demand in Latvia is strong relative to labour supply, so that many employers have to offer attractive working conditions to fill their vacancies. Most employers appear to offer permanent contracts to new hires: only 35% of new hires in 2016 received a fixed-term contract, which was the third-lowest proportion among European OECD countries. It is also rather rare that employees in Latvia are overqualified for their job. At 13%, Latvia's over-qualification rate in 2015 fell into the lower half of European OECD countries. While Finland, the Czech Republic and Poland exhibited significantly lower over-qualification rates (7%-10%), Portugal's over-qualification rate was almost double that in Latvia (25%).

Figure 1.13. Skill needs in the Latvian economy, 2015

Indicators for the intensity of shortages (positive values) or surpluses (negative values)



Source: *OECD Skills for Jobs Database*, www.oecdskillsforjobsdatabase.org/.

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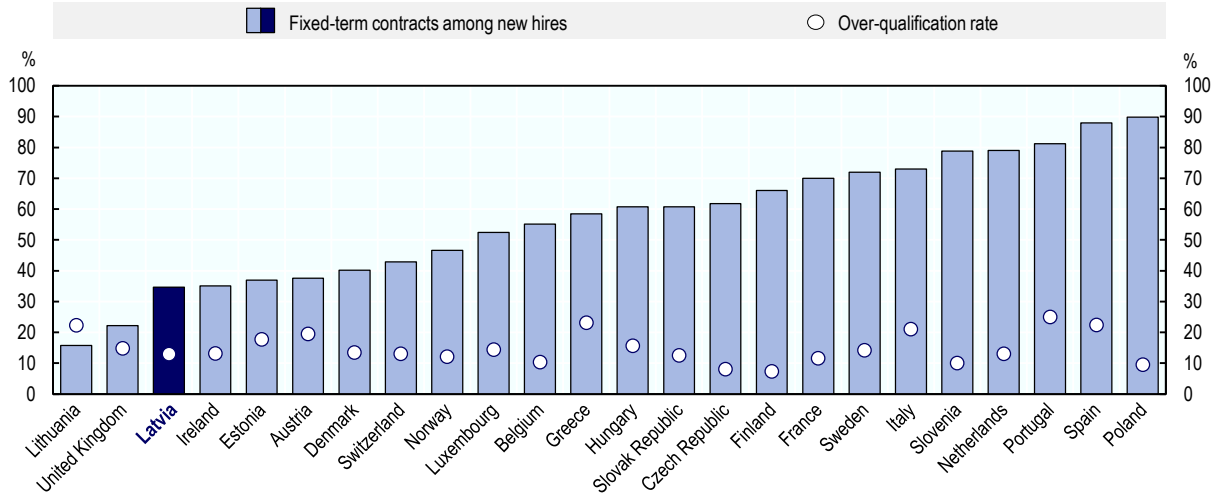
Figure 1.14. Contract duration for new hires and over-qualification rates in European OECD countries, 2015/2016

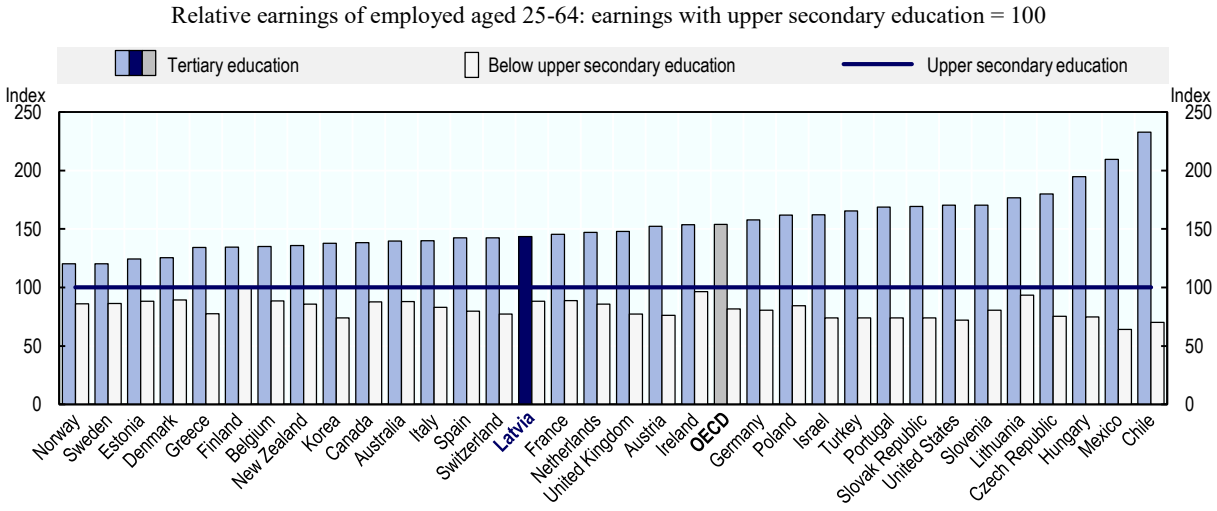


Note: Over-qualification rates refer to 2015, the share of fixed-term contracts among new hires refers to 2016. Hirings are estimated as the number of employees aged 15-64 (not counting self-employed and family workers) who have started a job with a new employer in the last three months.
Source: OECD calculations based on *OECD Skills for Jobs Database*, www.oecdskillsforjobsdatabase.org/ and the European Labour Force Survey (Eurostat), http://ec.europa.eu/eurostat/web/lfs/overview.

StatLink https://doi.org/10.1787/888933960517

At the same time, the average wage premium associated with skills in terms of formal degrees remains rather low in Latvia: employees' earnings with a tertiary education are 143% of earnings with upper secondary education (Figure 1.15). Most OECD countries exhibit a higher premium for a tertiary education. Similarly, the premium for upper secondary education is rather low in Latvia: earnings with lower education still reach 88% of earnings with upper secondary education. However, in the case of Latvia, figures refer to wages net of income tax, which tend to be less differentiated than gross wages.

Figure 1.15. The wage premium for skills in OECD countries, 2015 or latest available year



Note: OECD is the unweighted average of the countries shown in the chart. Only full-time earners with income from employment are included. Data for Ireland, Latvia, Mexico and Turkey refer to earnings net of income tax. Data refer to 2014 for Belgium, Canada, Denmark, Finland, Poland, Spain and to 2013 for France and Italy.
Source: OECD (2017[24]), *Education at a Glance 2017: OECD Indicators*. http://dx.doi.org/10.1787/eag-2017-en, Table A6.1.

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Macro and micro-level characteristics of unemployment in Latvia

This section focuses on specific aspects that, at the macro level, help characterise current unemployment in Latvia in comparison to other OECD countries and, at the micro level, identify demographic and socio-economic groups who experience unemployment particularly often or more often for long durations.

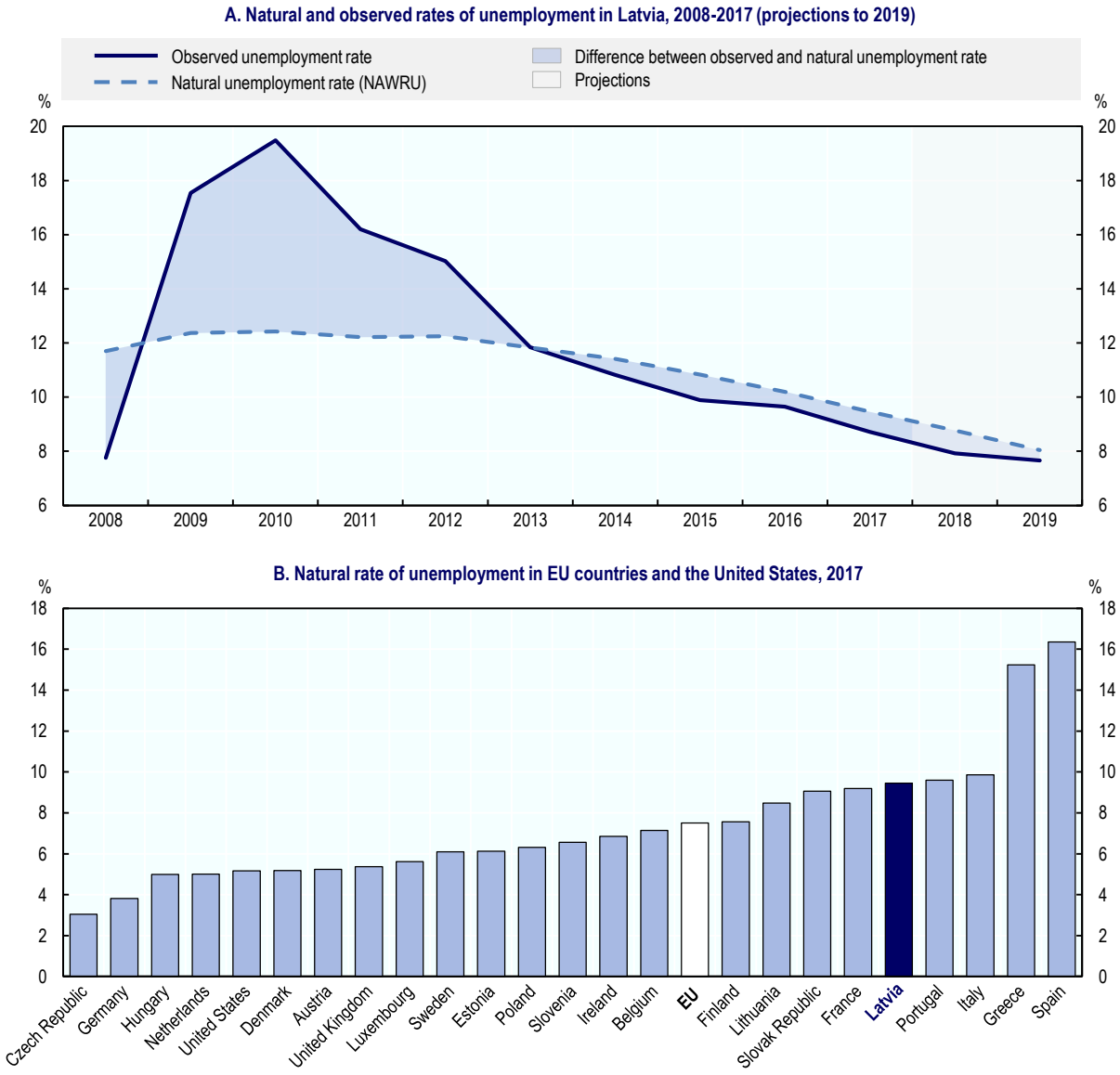
Remaining unemployment may be largely structural

For the period 2009-2012, Figure 1.16, Panel A shows that the observed unemployment rate in Latvia far exceeded the estimated natural rate of unemployment, i.e. the unemployment rate that prevails when cyclical forces on the labour market are in equilibrium. This suggests that the especially high levels of unemployment in these years were largely cyclical, reflecting the end of Latvia's boom and the impact of the financial crisis. Since 2013, however, the observed unemployment rate has been close to the natural rate of unemployment, which suggests that unemployment in recent years can primarily be explained by structural factors.

Latvia's natural rate of unemployment in 2017 is estimated at 9%, a high level in comparison to other OECD countries (Figure 1.16, Panel B). Similar natural rates of

unemployment are estimated for France, the Slovak Republic, Italy and Portugal, while estimates are substantially higher only for Greece and Spain (15-16%). Estimates are lower for Lithuania (8%) and Estonia (6%), suggesting that Latvia is most affected by structural unemployment among the Baltic States.

Figure 1.16. Structural component of the Latvian unemployment rate



Note: The natural unemployment rate refers to the non-accelerating wage rate of unemployment (NAWRU), i.e. the rate of unemployment consistent with constant wage inflation.
Source: *OECD Economic Outlook No. 103* – May 2018, http://stats.oecd.org//Index.aspx?QueryId=51396 for observed unemployment rate in Panel A; and AMECO Database of the European Commission's Directorate General for Economic and Financial Affairs, https://ec.europa.eu/info/business-economy-euro/indicators-statistics/economic-databases/macro-economic-database-ameco/ameco-database_en for natural rate of unemployment in both Panels.

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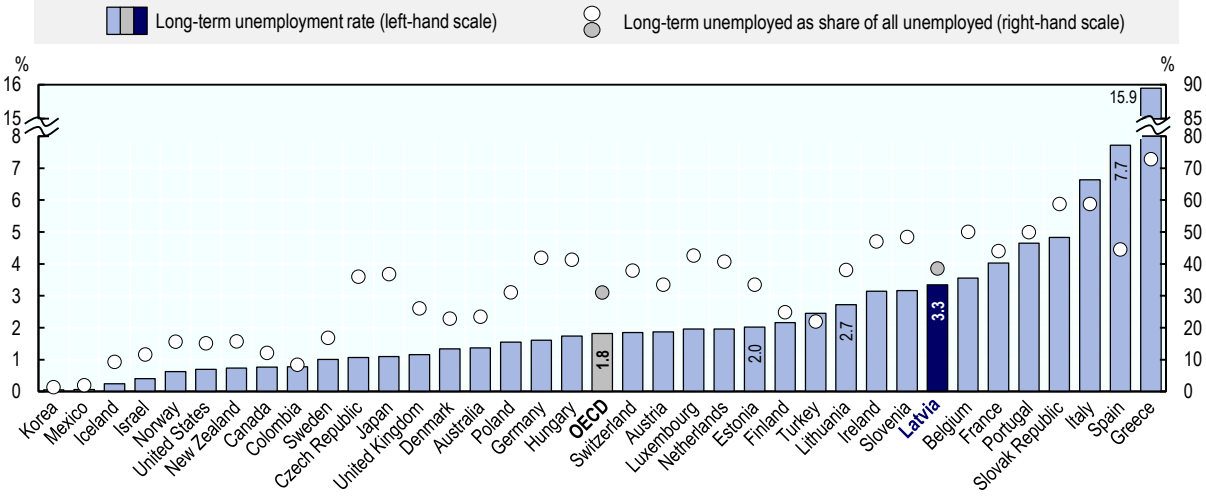
The finding of comparatively high structural unemployment in Latvia aligns with various estimates of Latvia's natural rate of unemployment provided in the literature. According to estimates by Krasnopjorovs (2015[25]), Latvia's natural rate of unemployment stood at 11% in 2014 and was very close to observed unemployment rates in 2013 and 2014 after large cyclical divergences in earlier years. Ebeke and Everaert (2014[26]) estimate the natural rate of unemployment to be about 13% at the end of 2013, with an average level of 12.3% over the period Q1 2002 to Q4 2014. Based on data from 1990 to 2013 and from 1996 to 2008, respectively, Blanchard, Griffiths and Gruss (2013[1]) and Meļihovs and Zasova (2009[27]) obtain estimates of 13.3%, and 11%. While Anosova et al. (2013[28]) do not estimate a natural rate of unemployment, they conclude that the rise of unemployment in the wake of the crisis and the subsequent recovery were predominantly cyclical, in line with Figure 1.16, Panel A.

Two-fifths of the unemployed have been unemployed for more than one year

At 3.3% in 2017, the rate of long-term unemployment (unemployment for 12 months or more) in Latvia is close to twice the OECD average (Figure 1.17). Only seven OECD countries exhibited higher long-term unemployment rates than Latvia, while rates were lower notably for Estonia (2.0%) and Lithuania (2.7%). At the same time, Latvia's long-term unemployment rate was one of the lowest among the countries that were heavily affected by the financial crisis. Long-term unemployed made up about two-fifths (38%) of all unemployed in Latvia in 2017. While this share substantially exceeded the OECD average (31%), it roughly matched the shares in the Czech Republic, Japan and Switzerland, and was close to the shares in the other Baltic States. Significantly higher shares were again observed in other countries that were heavily affected by the crisis.

Figure 1.17. Long-term unemployment in OECD countries, 2017



Note: Long-term unemployment (LTU) refers to persons unemployed for 12 months or more. The long-term unemployment rate refers to the level of LTU divided by the labour force aged 15 to 64. OECD is a weighted average and does not include Lithuania.

Source: *OECD Labour Force Statistics Datasets:* http://stats.oecd.org//Index.aspx?QueryId=9594, http://stats.oecd.org//Index.aspx?QueryId=9571 and http://stats.oecd.org//Index.aspx?QueryId=9593.

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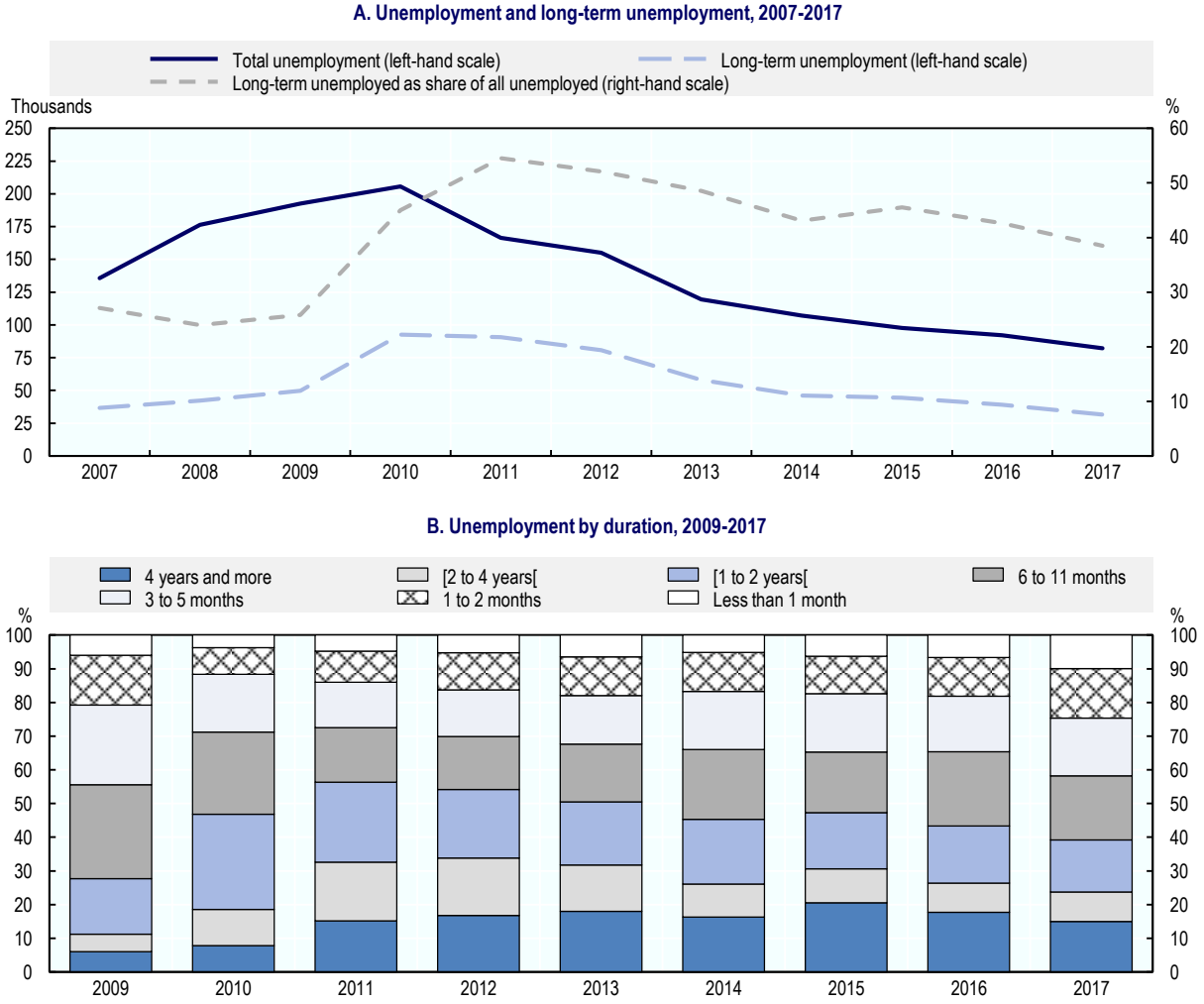
In the wake of the financial crisis, long-term unemployment in Latvia had increased strongly, albeit somewhat later than total unemployment – large numbers of newly unemployed persons became long-term unemployed only over time (Figure 1.18, Panel A). During the recovery, long-term unemployment decreased steadily. At 32 000 in 2017, the level of long-term unemployment was about one-third of the level in 2010 and below pre-crisis levels. The share of long-term unemployment in total unemployment has, however, remained above pre-crisis levels: despite a declining tendency, it only fell to 38% in 2017, compared with 20-30% in the period 2007-2009.

Figure 1.18. Unemployment duration in Latvia



Note: Panel A refers to persons aged 15-64 and Panel B to persons aged 15-74.
Source: *OECD Labour Force Statistics Datasets:* http://stats.oecd.org//Index.aspx?QueryId=9594, http://stats.oecd.org//Index.aspx?QueryId=9571 and http://stats.oecd.org//Index.aspx?QueryId=9593 and Central Statistical Bureau of Latvia, http://www.csb.gov.lv/en.

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Persons with especially long unemployment durations persistently make up a substantial share of total unemployment in Latvia (Figure 1.18, Panel B). Since the beginning of 2011, the share of unemployment durations of four years or more has fluctuated between 15%

and 21% of total unemployment, without a clear tendency to decrease or increase. The highest shares were recorded as recently as 2015. In 2017, durations of four years or more accounted for 15% of the unemployed, below but still close to the average for the period since 2011 (17%). The sustained decline in the overall share of long-term unemployment, which fell below 40% in 2017, was most strongly driven by the declining share of unemployment durations from two to four years. Long durations of unemployment can have serious adverse effects on jobseekers' ability to find suitable employment: valuable skills and know-how may be lost when they are not used, professional contacts and networks can dissolve over time, and in some cases jobless persons might adopt detrimental habits that can permanently undermine their employability, such as regular alcohol abuse.

Staying jobless for a long duration can be demoralising: the unemployed jobseekers might reduce the intensity of their job search if they experience it to be pointless, to the extent that they give up altogether and join the ranks of discouraged workers (Krueger and Mueller, 2011[29]). This can broadly be confirmed for Latvia, using data from the European Labour Force Survey for 2007-2016: up to one month after the end of their last job, only 7% of persons not in employment are discouraged workers, i.e. they consider it pointless to engage in job search. The share rises to around 9% for 1-5 months after the last job, and further to around 10% for 6 months to 4 years. Among those who last held a job more than four years ago, 15% are discouraged workers.

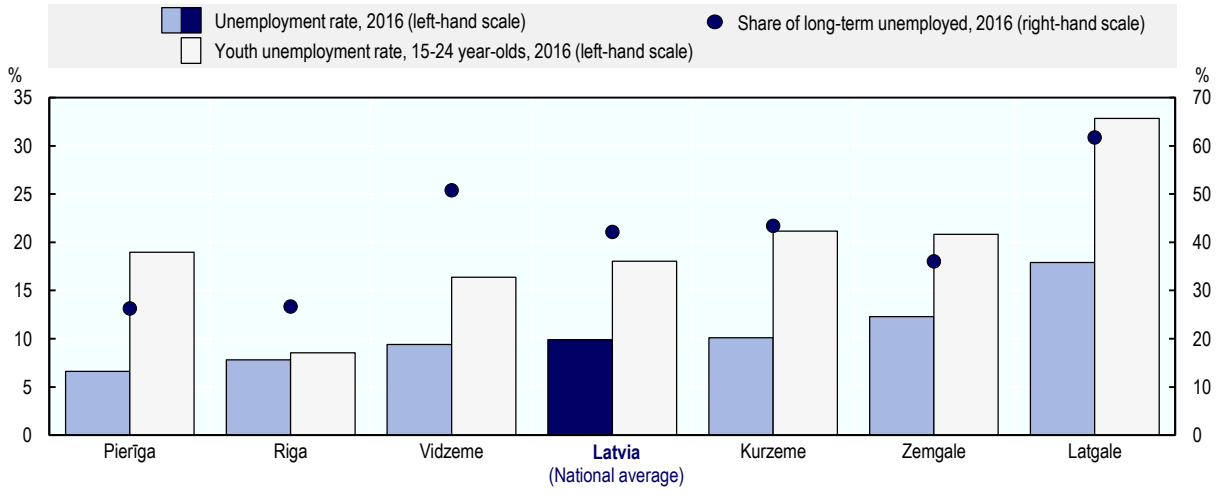
Interregional differences in unemployment are large

Across Latvian regions, the incidence of unemployment, youth unemployment and long-term unemployment varies widely (Figure 1.19). In Riga and Pieriga, unemployment rates were comparatively low in 2016 (between 6% and 8%), while rates of 12% and 18% were recorded in Zemgale and Latgale, respectively. In the age group 15-24, unemployment rates significantly exceeded 20% in Vidzeme and Latgale, but were about half as high in Riga and Pieriga. Similarly, the share of long-term unemployed was about 1.5 times as high in the former two regions as in the latter two.

Data from the Central Statistical Bureau show that employment levels have recovered in Riga, Pieriga and Zemgale between 2010 and 2016 (but still remain below pre-crisis levels), while hardly any employment gains have been observed in Latgale, Kurzeme and Vidzeme. The divergence is linked to the performance of sectors in these regions. Employment in construction declined strongly and permanently in all Latvian regions. Employment in trade, accommodation and food-related services also declined strongly in most Latvian regions. In addition, strongly falling employment in industry has affected Riga, Kurzeme and Latgale, but not the other regions. Kurzeme and Latgale further had to deal with a strong and permanent employment decline in agriculture and fishing, as well as in public administration.

With different employment prospects across regions, raising the mobility of unemployed persons becomes a policy objective, so that they can go where the jobs are. Chapter 4 of this Review evaluates a programme intended to encourage taking up jobs offers that would require moving or commuting over significant distances. Alternatively, unemployed persons can be supported in setting up businesses in their current location, and Chapter 4 also offers an assessment of a programme that fosters entrepreneurship among unemployed persons through coaching and the provision of grants.

Figure 1.19. Unemployment in Latvian regions, 2016



Note: The share of long-term unemployed refers to the percentage of unemployed who are unemployed for 12 months and over.
Source: Central Statistical Bureau of Latvia, www.csb.gov.lv/en for unemployment rates, and Latvian Labour Force Survey (CSB), www.csb.gov.lv/en/statistics/statistics-by-theme/social-conditions/unemployment/tables/metadata-employment-and-unemployment.

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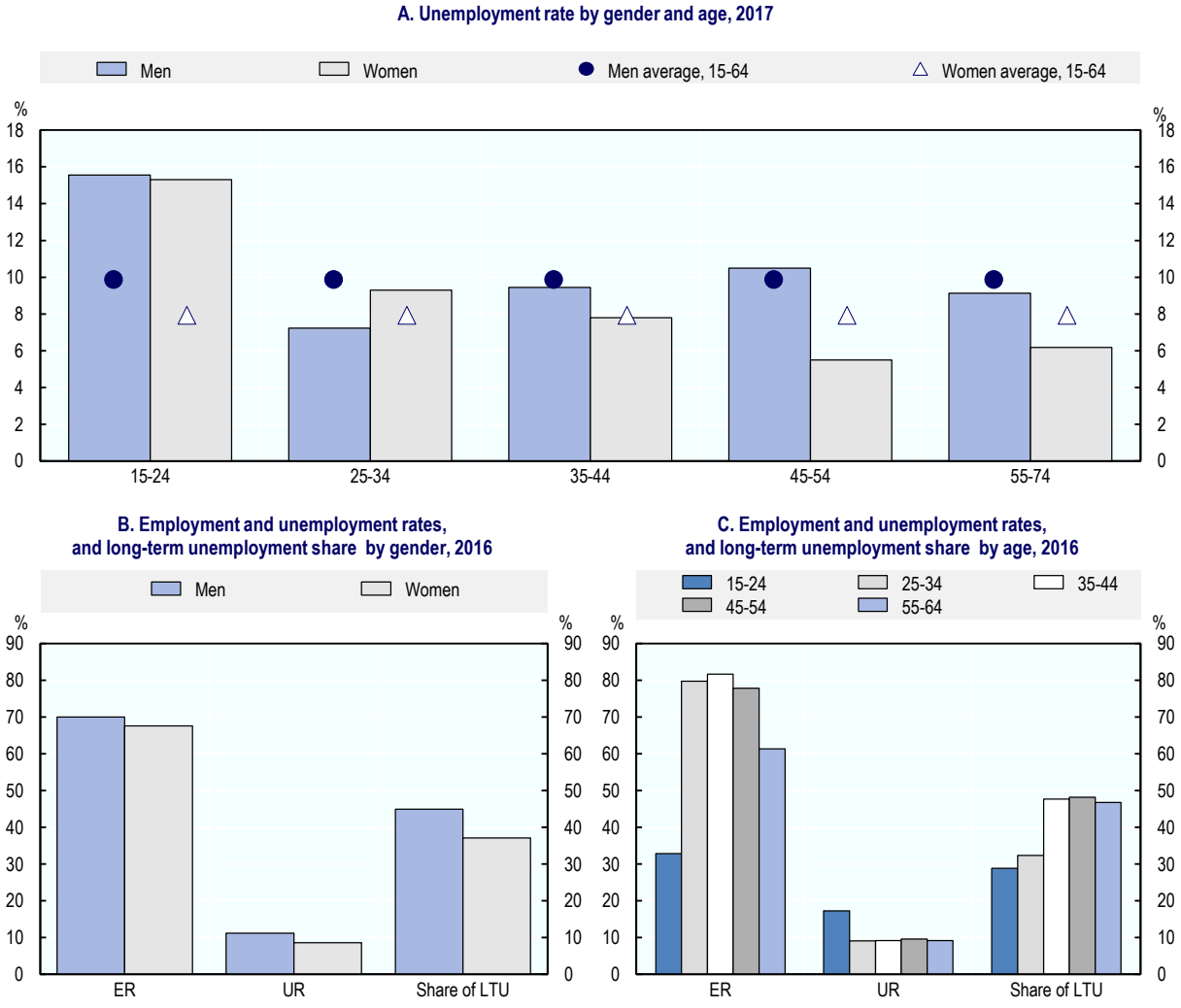
Unemployment rates are higher for youth and older men

Unemployment rates by age group indicate that those aged 15-24 face a substantially higher risk of unemployment, with a rate of around 15% in 2017 (Figure 1.20, Panel A). While this applies to men and women alike, only men exhibit relatively high unemployment rates at ages 45 and above. By contrast, women in these age groups have especially low unemployment rates (at most 6%). While 45% of all male unemployed are long-term unemployed, this applies to only 37% of unemployed women (Panel B).

The difference in unemployment rates at ages 45 and above partly reflects higher educational attainment among women in these age groups, notably a larger share with a high education level. According to further results for 2016 based on the same data (the European Labour Force Survey), 41% of the female labour force aged 45-54 have a high education level, compared with 21% of the male labour force. This holds similarly in the age group 55-64: while 38% of the female labour force are highly educated, only 24% of the male labour force reach this level. As unemployment rates are lower for high education levels (see below), women's higher educational attainment translates into lower unemployment rates than observed for men.

Figure 1.20. Employment and unemployment in Latvia by sex and age group, 2016/2017



Note: ER: Employment rate, UR: Unemployment rate, LTU: Long-term unemployed (12 months and over). Annual rates in Panel A were calculated as averages of quarterly rates.
Source: Central Statistical Bureau of Latvia, www.csb.gov.lv/en for unemployment rates by gender and age group, and OECD calculations based on European Labour Force Survey (Eurostat), http://ec.europa.eu/eurostat/web/lfs/overview.

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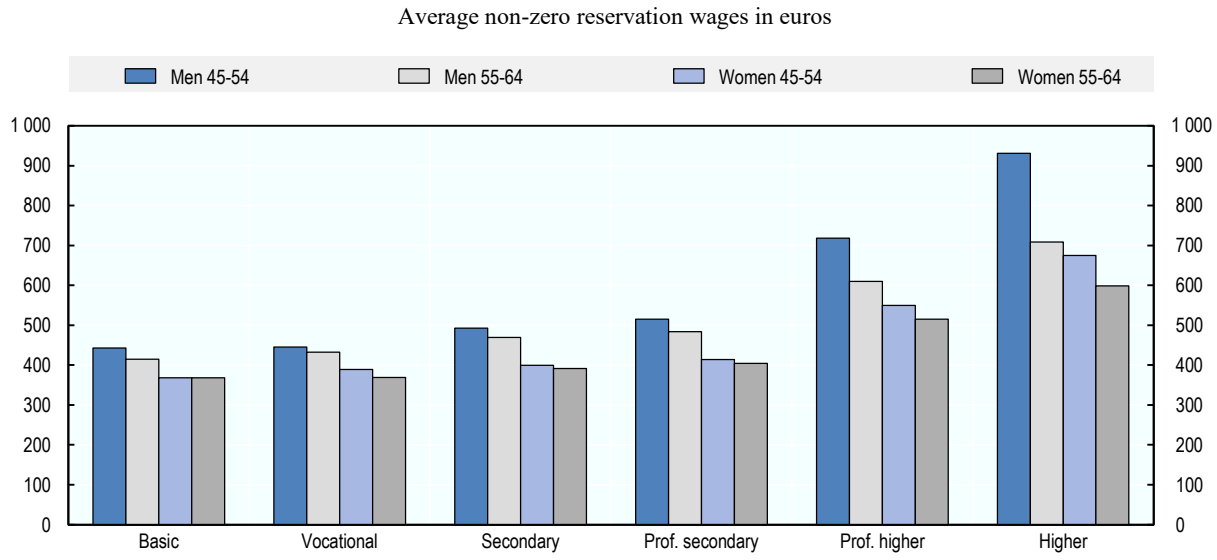
However, in both age groups, women also exhibit lower unemployment rates than men with the same level of education. For example, the unemployment rate for women aged 45-54 with a low education level was 15% in 2016, compared with 24% for low-educated men aged 45-54. These differences likely result from several factors. Jobless women appear more likely to retreat from the labour market: in the age group 45-54, 32% of women not in employment are unemployed rather than inactive, compared with a figure of 42% for men. In the age group 55-64, this disparity is especially large: only 12% of women not in employment are unemployed rather than inactive, but still 21% of men. The differences in unemployment rates could also reflect differences in the reservation wages of the unemployed: especially in the age group 45-54, reservation wages of unemployed men are

substantially higher than for women with the same level of education Figure 1.21. These reservation wages might be based on previous wages and specific experience rather than current labour market prospects, so that they become an obstacle to finding employment in new job roles, sectors or even occupations where this experience is partly irrelevant. Such changes to a very different work environment may, however, be necessary for those who are affected by unemployment after the age of 45.

Figure 1.21. Gender gap in reservation wages of registered unemployed aged 45-64 by educational attainment, 2012-2017



Note: Only registered unemployed who seek full-time employment are included. Age and education refer to the point in time when the reservation wage was indicated towards Latvia's public employment service.
Source: OECD calculations based on the *BURVIS Database* of the State Employment Agency.

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In the average for the age groups 45-54 and 55-64, the low unemployment rates of women cancel with the high unemployment rates of men. As a result, only the average unemployment rate of those aged 15-24 stands out, reaching 17% in 2016 while averages for other age groups remained below 10% (Figure 1.20 Panel C). The age groups 15-24 and 55-64 have in common that they exhibit substantially lower employment rates (33% and 61%, respectively) than other age groups (about 80%).

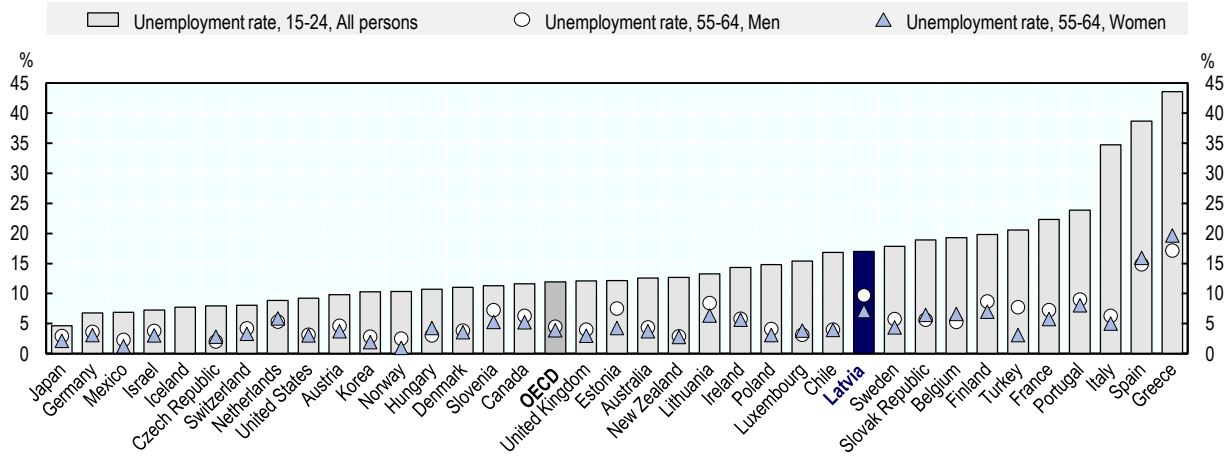
The share of long-term unemployed is about one-half for all age groups from 35, while this share is significantly lower for younger age groups (Figure 1.20, Panel C). At an early stage of the working life, it may be easier to avoid long-term unemployment by changing between occupations or regions than at a stage when one is committed to a particular occupation and region. To some extent, however, this result also reflects that many young labour market entrants cannot possibly be long-term unemployed because they have not yet participated in the labour market for more than a year.

While high in comparison to other age groups, the unemployment rate of those aged 15-24 does not appear particularly elevated in comparison to other OECD countries (Figure 1.22). In 2017, other countries that were heavily affected by the financial crisis exhibited substantially higher youth unemployment rates than in Latvia. At 12%, the OECD average

was nevertheless substantially lower than the youth unemployment rate in Latvia. With regards to older men, however, the situation in Latvia stands out: the unemployment rate of men aged 55-64 (10%) was one of the highest among OECD countries and was exceeded only in Spain (15%) and Greece (17%). At 2.6 percentage points, the gap to the unemployment rate of women aged 55-64 was higher in Latvia than in all other OECD countries except Estonia and Turkey. These findings suggest that older men are an especially vulnerable group on Latvia's labour market.

Figure 1.22. Unemployment rates of youth and older workers in OECD countries, 2017

Percentages of the labour force in the respective group



Note: Information on unemployment rates for older workers is not available for Iceland. OECD is a weighted average and does not include Lithuania.
Source: *OECD Labour Force Statistics Database, Short-Term Labour Market Statistics*, http://stats.oecd.org//Index.aspx?QueryId=36499.

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In Latvian active labour market policy, unemployed persons aged 55 and above are considered a vulnerable group. They are therefore eligible for a programme of subsidised employment: for up to one year, direct subsidies to an employer decrease the costs of employing a person in the programme. The employment of persons with disabilities can be subsidised for up to two years. Chapter 5 in this Review focuses on the situation of some of the most vulnerable groups among the unemployed and evaluates the impact of the subsidised employment programme.

Many long-term unemployed lack education or work experience

Employment and unemployment rates in Latvia differ widely between levels of education (Figure 1.23, Panel A). Between those with a high education level and those with a low education level, employment rates differed by 50 percentage points in 2016. While the unemployment rate of those with a high education level stood at 4%, it reached 21% for those with a low education level. The shares of the long-term unemployed were around 45% for unemployed with low and medium education levels, but 27% for unemployed with a high education level.

A high education level thus seems to be associated with a substantially lower risk of unemployment and long-term unemployment. Employment in Latvia has for years

exhibited a trend towards greater employment of the highly-educated and smaller employment of the low-educated. Further analyses using the same data as in Figure 1.23 show that the employment share of highly-educated persons increased from 24% in 2007 to 37% in 2016. Over the same period, the employment share of low-educated persons declined from 13% to 8%, and that of medium-educated persons from 63% to 55%.

Upgrading the skills of unemployed persons is therefore a key concern for active labour market policy in Latvia, as in virtually all OECD countries. In terms of participants, training is the most used active labour market programme in Latvia, and a number of training programmes allow unemployed persons to acquire a formal qualification. Chapter 3 of this Review offers a detailed evaluation of the main training programmes for unemployed persons in Latvia. It examines effects that only materialise after several years and gives special attention to the role of training in reducing long-term unemployment.

In principle, low formal education levels may be mitigated by work experience and skills learnt on the job. Yet the lack of prior work experience is especially wide-spread among unemployed with low education levels, concerning 30% of them in 2016 but only 20% and 23% of unemployed with high and medium education levels, respectively (Figure 1.23, Panel A). The lack of prior work experience also implies a high risk of long-term unemployment, which affects close to three-quarters of unemployed without experience, in both educational groups (Figure 1.23, Panel B). For unemployed persons with work experience, the shares of the long-term unemployed are far lower: 31% for those with high and medium education levels and 38% for those with a low education level.

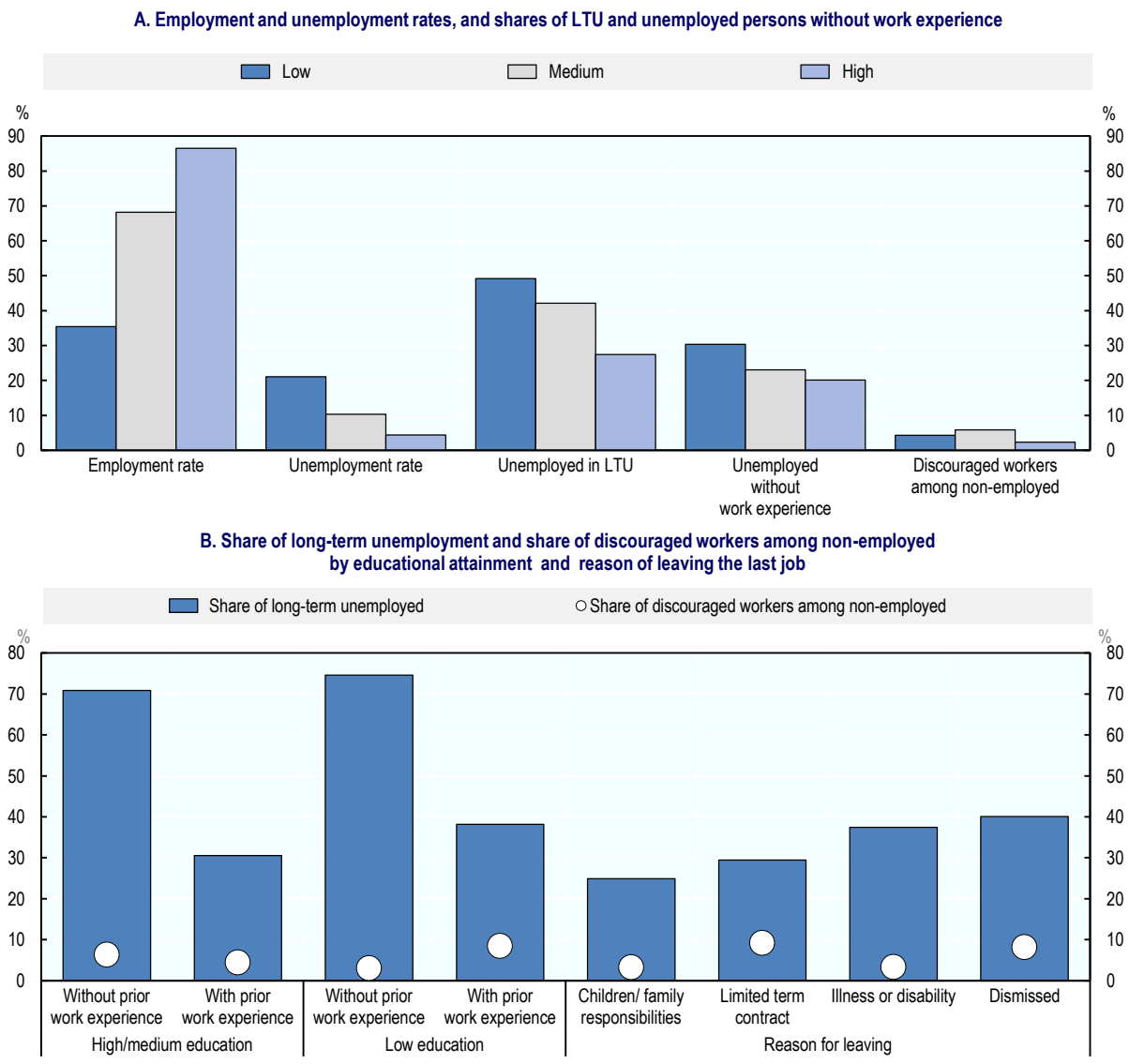
The risk of long-term unemployment also depends on how the previous job ended (Figure 1.23, Panel B). The share of long-term unemployment is relatively high among persons who stopped working because of illness or disability and those who were dismissed (37% and 40%, respectively). It remains comparatively low in those cases where a limited-term employment contract ended (29%) and for those who chose to leave a previous job in order to look after children or due to other family responsibilities (25%). In line with this result, further analyses do not find a strong role for demographic characteristics of households: both unemployment rates and the share of long-term unemployment do not appear systematically linked to the presence of young children or elderly in the household.

Discouraged workers are most frequent at medium education levels, where they account for 6% of those not in employment (Figure 1.23, Panel A). The corresponding share among the low-educated with prior work experience approaches 9%, but reaches only 3% among low-skilled without work experience (Figure 1.23, Panel B). This reflects large differences by age groups: further analyses show that the share of discouraged among low-educated persons is above 8% in all age groups except for the age group 15-24 (1%), where many do not yet have work experience. The share among low-educated aged 45-54 stands out, surpassing 16%. The share of discouraged workers is also relatively high among those who were dismissed from their last job or reached the end of a fixed term (8%-9%), but is much lower where the last employment ended for family or health reasons (3%).

The findings in this and the previous section highlight the importance of individual characteristics and employment histories. Evidence from 2007-2010 on persons with persistent labour market difficulties suggests that certain characteristics often occur together, so that several groups can be delimited (Ferré, Immervoll and Sinnott, 2013[30]). The largest such groups in Latvia were identified as single older persons who are unemployed or disabled (22% of persons with persistent labour market difficulties), single young men with a low education level (18%), older unemployed workers who are nevertheless able to work (14%). Three further groups – stay-at home mothers with a small

child, low-educated male breadwinners in rural areas and self-employed older men – each accounted for a share of about 10%.

Figure 1.23. Employment, unemployment and discouraged workers in Latvia by educational attainment and employment history, 2016



Note: LTU: Long-term unemployment (12 months and over). To ensure sufficient sample sizes, all figures on discouraged workers are based on data for 2015/16. Persons aged 15-64.
Source: OECD calculations based on European Labour Force Survey (Eurostat), http://ec.europa.eu/eurostat/web/lfs/overview.

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Over the last years, active labour market policy in Latvia has responded by differentiating measures more strongly between target groups. A host of measures that specifically target young persons aged 15-29 were introduced under the Youth Guarantee. One of the most recently introduced programmes – the special programme for the activation of long-term unemployed – takes a holistic approach towards the individual situation of long-term

unemployed persons, who often face multiple barriers to finding employment. More generally, a profiling system introduced in 2013 seeks to ensure that the measures taken by Latvia's public employment service are well targeted. Chapter 2 of this Review describes current labour market policy in Latvia in comparison to other OECD countries, with a focus on the functioning of the public employment service (the State Employment Agency, SEA) and the delivery of its services and activation measures.

In conclusion, the older men in Latvia, youth and persons with a low level of education are especially often affected by unemployment. The risk that it turns into long-term unemployment is especially high for unemployed without prior work experience, but relatively low for unemployed with a high education level. Living in some rural regions also appears linked to a higher risk of unemployment or long-term unemployment, or both as in the case of Latgale. Although total levels of unemployment and long-term unemployment in Latvia have fallen comparatively rapidly during the recovery from the financial crisis, long-term unemployment still presents a challenge and many sectors have not returned to pre-crisis levels of employment.

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OECD Short-Term Labour Market Statistics, Unemployment Rates by age and gender, http://dotstat.oecd.org//Index.aspx?QueryId=36499.

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Chapter 2. Design and delivery of Latvia's labour market policies

This chapter provides overviews of both active and passive labour market policies in Latvia. First, it presents the set of active labour market policies available to jobseekers. Second, it provides a brief description of the social benefits system and its possible implications for work incentives. The chapter then reviews the activities of the main actors involved in the design and implementation of labour market policies and most importantly of the State Employment Agency (SEA) and municipalities. Special attention is given to the SEA's engagement with jobseekers and employers, the role of caseworkers and the co-operation between the SEA and municipalities.

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.

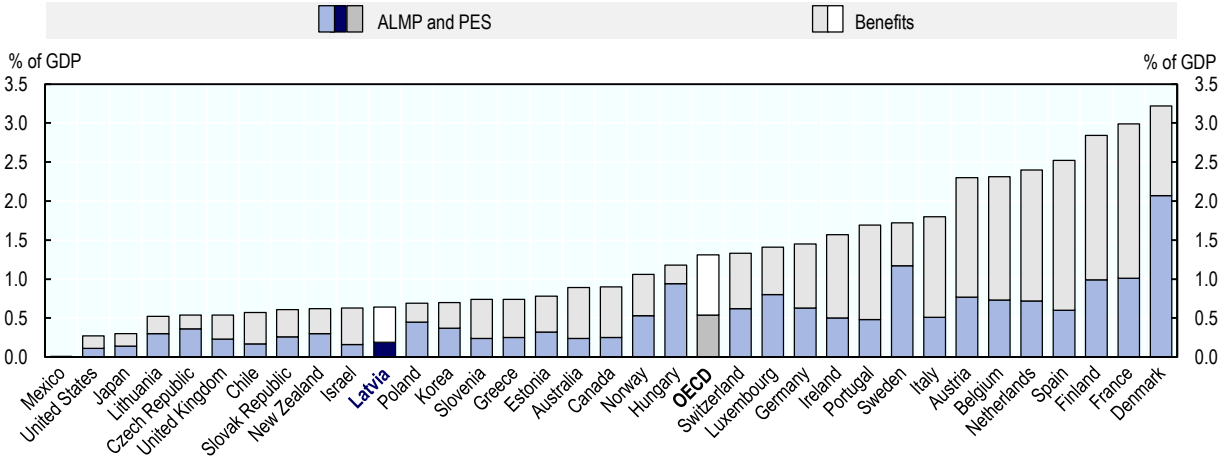
Active labour market policies

This chapter presents a detailed overview of the system of labour market policies in Latvia. It describes the main measures, discusses a range of practical issues in the delivery of policies, and provides new analyses where statistics were thus far unavailable. After giving an overview of Latvia's active labour market policies (ALMP), the chapter proceeds to passive labour market policies, i.e. benefit schemes. It then turns to how labour market policies are designed and implemented. Notable institutional actors are Latvia's public employment service, the State Employment Agency (SEA), as well as municipalities.

Overall, ALMP in Latvia receive little public spending in comparison to other OECD countries (Figure 2.1). In 2016, expenditures in Latvia were equivalent to 0.19% of GDP, representing the sixth-lowest ALMP budget among OECD countries. On average, OECD countries devoted 0.53% of GDP to ALMP. These figures include all expenditures on the PES, although such expenditures are not only generated by ALMP. At 0.45% of GDP, expenditures on passive labour market policies were not as low in comparison to other OECD countries, but still well below the OECD average (0.77%).

Figure 2.1. Public spending on labour market policies in OECD countries

Expenditure as percentage of GDP, 2016



Note: ALMP: Active labour market policies. PES: Public employment service. Active policies include expenditure on the PES or other administration, training, employment incentives, supported employment, direct job creation and start-up incentives, while benefits include expenditure on income maintenance and early retirement. Figures for France, Greece, Italy and Spain refer to 2015 and those for the United Kingdom refer to 2011/12. The figure for Greece does not include expenditure on the PES/ administration. See Grubb and Puymoyen (2008[1]) "Long time series for public expenditure on labour market programmes", *OECD Social, Employment and Migration Working Papers*, No. 73, https://doi.org/10.1787/230128514343 for more details on categories.

Source: OECD/Eurostat Labour Market Programme Database, http://dx.doi.org/10.1787/data-00312-en, *Public expenditure and participant stocks on LMP Dataset*, http://stats.oecd.org//Index.aspx?QueryId=8540.

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While most OECD countries spent more on benefits than on ALMP, the imbalance was especially strong in Latvia: expenditure on benefits was more than twice as high as expenditure on ALMP (Figure 2.1). Substantially higher ratios – around three times the expenditure on ALMP – were only observed in Australia, Israel and Spain. At 1.4, the average ratio for OECD countries was considerably lower. Latvia's spending on ALMP

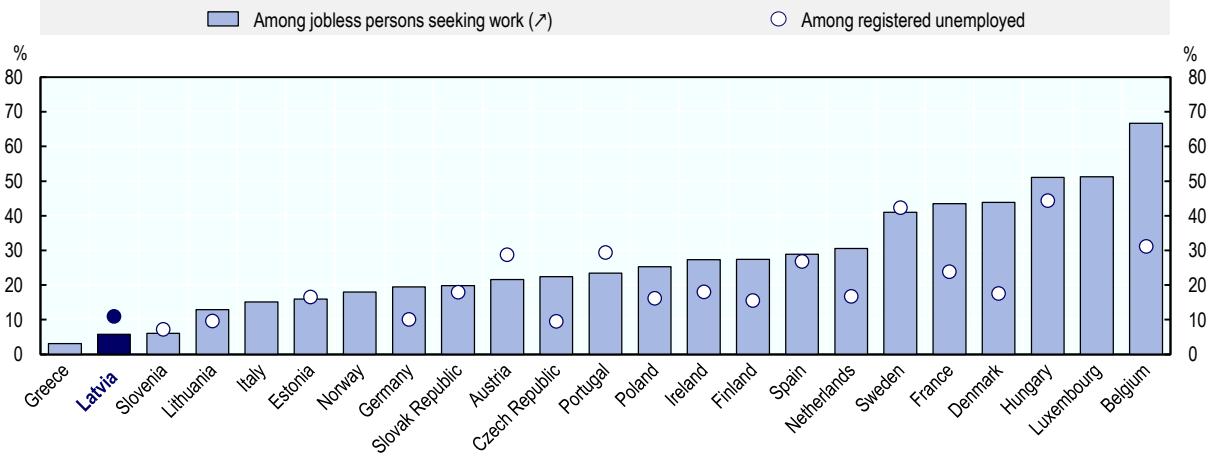
therefore appears low not only in comparison to other OECD countries, but also in comparison to the expenditure on benefits.

Participation in active labour market policies is very low in Latvia

Low expenditure on ALMP in Latvia is reflected by low participation of unemployed persons in ALMP measures. Figure 2.2 shows participants among all unemployed and the registered unemployed. The two measures can differ significantly, but both indicate Latvia as having one of the lowest participation in ALMP among the European OECD countries: in 2016, only 11% of the registered unemployed in Latvia and less than 6% of jobless persons who seek work participated in ALMP. While figures were only somewhat higher for Estonia and Lithuania, participants there accounted for 10% and 17% of the registered unemployed, respectively, and for 13% and 16% of jobless persons who seek work. In Poland, one-quarter of jobless persons who seek work participated in ALMP, and this proportion rises to two-thirds in Belgium. In this context, short training measures and workshops e.g. on job search skills are not counted as ALMP. Enlarging the use of ALMP has become one of the primary objectives of Latvia's Inclusive Employment Strategy 2015-2020 (Box 2.1), especially with regards to disadvantaged groups on the labour market, such as long-term unemployed, persons with disabilities, older workers and jobseekers under 25.

Figure 2.2. Participation in ALMP among registered unemployed and jobless persons seeking work, European OECD countries

Total share participating in ALMP, 2016



Note: ALMP: Active labour market policies. Data reflect participants in training, employment incentives, supported employment and rehabilitation, direct job creation and/or start-up incentives. Data for registered unemployed in Ireland and the Netherlands and data for jobseekers in Italy refer to 2014. Where figures are missing, data were unavailable.
Source: Eurostat Labour Market Policy Database, http://ec.europa.eu/eurostat/web/labour-market/labour-market-policy/database.

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Box 2.1. Latvia's Inclusive Employment Strategy 2015-2020

Latvia's Inclusive Employment Strategy 2015-2020 was announced in August 2014 at an inter-ministerial meeting of State Secretaries, was subsequently approved by the cabinet and has since been implemented under the auspices of the Ministry of Welfare. The funds for the implementation of the Strategy are largely provided by the European Union, notably through the European Social Fund (ESF).

Three overarching policy objectives are formulated in the Inclusive Employment Strategy (Ministry of Welfare, 2015[2]). The first is to make Latvia's labour market more inclusive by reducing barriers to the employment of disadvantaged jobseekers, including long-term unemployed, persons with disabilities, youth and older workers. Specific policy goals under this heading include: extending and better targeting ALMP, increased use of career counselling, promoting regional labour mobility, raising participation rates in groups with a high risk of unemployment and fostering social entrepreneurship. The concrete efforts towards these goals include improved profiling of unemployed persons, closer co-operation between the SEA and the municipal social services to focus on long-term unemployed persons and recipients of social assistance, implementation of the Youth Guarantee and development of an active ageing strategy.

The second overarching goal is bringing labour supply and demand in Latvia more into balance. The specific goals under this heading include greater availability and precision of information on the labour market, effective training of unemployed persons, promoting entrepreneurship among the unemployed and fostering improvements in the quality of jobs. One of the concrete efforts towards these goals is the collection of labour market information from various sources on a single platform used for monitoring and forecasting. The third overarching policy objective is the creation of an institutional environment that is conducive to employment, with the specific goal to develop a system of taxes and benefits that favours employment, also of disadvantaged jobseekers.

While most policy goals of the Inclusive Employment Strategy are not formulated in quantifiable terms, explicit targets have been set in relation to long-term unemployment (Ministry of Welfare, 2015[2]): by 2020, the long-term unemployed should not represent more than 15% of all unemployed persons and not more than 2.5% of the labour force. In early 2013, long-term unemployed represented 54% of all unemployed, according to the Latvian Labour Force Survey. This share has since fallen to 44% in early 2015 and 38% in early 2017. The long-term unemployed also still represented more than 4% of the labour force in 2016 (see Chapter 1). The ambitious targets of the Inclusive Employment Strategy for the reduction of long-term unemployment may therefore prove difficult to reach by 2020.

Progress towards the goals of the Inclusive Employment Strategy has recently been made with the introduction of a preventive programme to prolong the employment of older workers, the first creation of a legal framework for social enterprises in Latvia, and with significant amendments to tax legislation that are set to reduce the tax wedge for labour income. A reform of Latvia's policies towards persons with disabilities is in preparation and might well include changes for ALMP. A mid-term review of the Inclusive Employment Strategy will be undertaken over the course of 2019 and several policies pursued may be adapted accordingly in scale and scope.

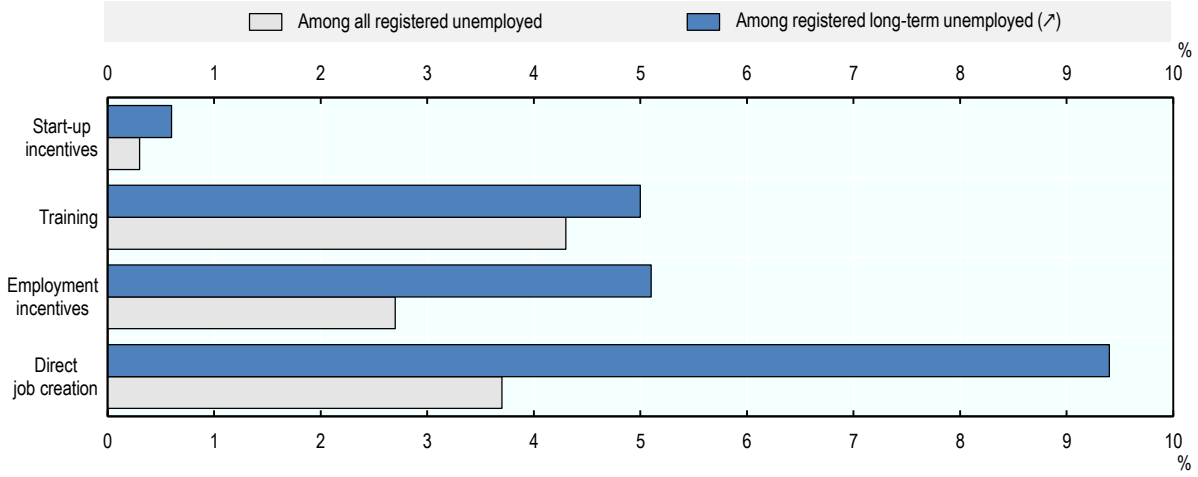
Recently introduced ALMP programmes focus on disadvantaged groups

Latvia's menu of ALMP has expanded in recent years. Table 2.1 shows how numbers of participants in the various programmes have evolved since 2012. Introduced in 2013, a programme promoting jobseekers' mobility across Latvian regions has since grown substantially. Programmes introduced in the following years focus throughout on disadvantaged groups on Latvia's labour market. Several programmes were set up in 2014 specifically for young persons (ages 15-29) in the context of the Youth Guarantee – the commitment of EU Member States to offer every young person either employment or education within four months of leaving school or becoming unemployed. In 2016, a programme was set-up for the motivation and rehabilitation of long-term unemployed as well as unemployed with disabilities or addiction problems. The most recent programme started in 2017 with the aim of preventing unemployment of older workers by raising their skills and promoting active ageing strategies in firms.

Registered long-term unemployed in Latvia are more likely than other registered unemployed to be included in measures of ALMP (Figure 2.3). Using the grouping of ALMP programmes indicated in Table 2.1, the largest difference arises for direct job creation measures (above all Latvia's public works programme): more than 9% of registered long-term unemployed participated in such measures in 2016, compared with little 4% of all registered unemployed. Long-term unemployed were also substantially overrepresented in measures for employment incentives. In total, one in five registered long-term unemployed (14%) participated in ALMP measures in 2016, close to twice the share of all registered unemployed.

Figure 2.3. Participation of registered unemployed in ALMP in Latvia by unemployment duration

Share participating in ALMP, 2016



Note: ALMP: Active labour market policies.
Source: Eurostat Labour Market Policy Database, http://ec.europa.eu/eurostat/web/labour-market/labour-market-policy/database.

StatLink https://doi.org/10.1787/888933960745

Table 2.1. Active labour market policy measures in Latvia, 2012-2018

Participants (entrants)

	2012	2013	2014	2015	2016	2017	2018
Labour market services: Total	**244 189**	**188 905**	**227 165**	**186 561**	**193 020**	**182 252**	**153 693**
Basic competency measures*	148 940	127 632	125 643	110 420	88 725	78 737	62 399
Career counselling	89 119	57 173	94 589	75 874	104 081	102 522	91 050
Ergotherapy/Health checks*	94	43	51	267	214	989	244
Psychotherapy	6 036	4 057	6 882				
Training: Total	**25 988**	**36 882**	**26 546**	**17 401**	**23 597**	**20 572**	**18 667**
Non-formal training*	14 698	21 169	16 398	13 271	16 149	13 772	14 219
Vocational training*	8 383	8 580	6 156	3 684	6 796	6 218	4 269
Workshops for young people (YG)		272	501	428	649	579	169
Life-long learning for employed	2 460	6 376	3 069				
Technical support for persons with disabilities	375	386	390	18	3	7	10
Training for SEA inspectors	72	99	32				
Employment incentives: Total	**1 319**	**2 120**	**6 568**	**6 181**	**9 622**	**10 969**	**10 988**
Promotion of regional mobility*		182	205	163	161	243	252
Promotion of mobility in ALMP			332	549	3 421	3 921	4 098
Training at the employer	8	116	76	121	178	313	426
Subsidised employment for vulnerable groups*	1 311	1 822	1 598	1 372	1 513	1 384	1 030
Student summer employment			4 287	3 804	4 239	4 975	5 160
First work experience (YG)			70	172	110	133	22
Supported employment/ rehabilitation: Total	**9**	**146**	**204**	**164**	**3 964**	**54 318**	**53 979**
Motivation for persons with addictions	9	146	204	164	241	300	268
Motivation for long-term unemployed					3 723	54 018	53 711
Direct job creation: Total	**32 025**	**33 568**	**20 191**	**9 303**	**12 080**	**14 175**	**13 332**
Temporary public works	31 166	32 129	19 225	8 430	10 937	13 032	12 921
Work experience in NGOs (YG)	859	1 439	966	873	1 143	1 143	411
Start-up support*	**319**	**173**	**198**	**244**	**298**	**211**	**213**
Total of all measures	**303 849**	**261 794**	**280 872**	**219 854**	**242 581**	**282 497**	**250 872**

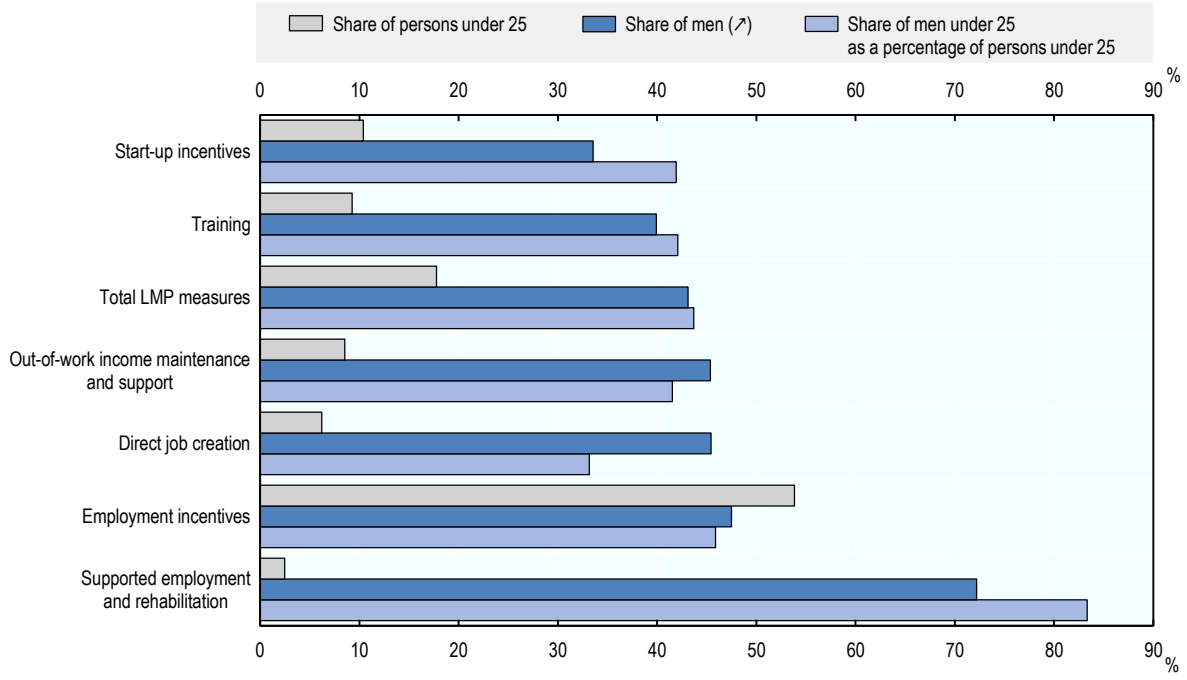
Note: *: The corresponding figures include measures offered under the Youth Guarantee.
YG: These measures have been offered under the Youth Guarantee since 2013, and are thus limited to persons aged 15-29 (in the case of subsidised employment, the part of the programme catering to young persons is provided under the Youth Guarantee).
Basic competencies refer to short courses e.g. on job search. Labour market services can include "persons seeking employment" who do not qualify as unemployed; the total number of these jobseekers was 223 in 2014.
Technological support for persons with disabilities includes adaptation of workplaces and sign language.
Source: State Employment Agency of Latvia, www.nva.gov.lv/.

StatLink https://doi.org/10.1787/888933961011

In most kinds of measures, men accounted for around 40% of new participants (Figure 2.4). But they made up 72% in supported employment or rehabilitation. As this kind of ALMP is often used in the context of long-term unemployment, the predominance of male participants likely reflects that men make up a large majority of the long-term unemployed (see Chapter 1). Their share is especially large (83%) among persons under 25 in supported employment or rehabilitation. By contrast, in direct job creation, men accounted for a

substantially lower share among persons under 25 (33%) than among all new participants (45%). In most kinds of ALMP measures, however, men's share of new participants under 25 closely corresponded to men's share of all new participants, which makes it unlikely that participants in ALMP measures were somehow selected with a gender bias: any such bias would have had to be applied consistently across age groups. Instead, it appears likely that the gender distribution among participants reflects the gender distribution among unemployed persons who are eligible for a given kind of ALMP.

Figure 2.4. Characteristics of participants in ALMPs (entrants), Latvia, 2016



Note: ALMP: Active labour market policies. Data refer to participants starting a measure in 2016.
Source: Eurostat Labour Market Policy Database, http://ec.europa.eu/eurostat/web/labour-market/labour-market-policy/database.

StatLink https://doi.org/10.1787/888933960764

Next, this chapter briefly describes the ALMP programmes, grouped as in Table 2.1 with the exception that the large number of labour market services are not counted towards ALMP. Delivered by the SEA in group sessions or individually, these services provide career counselling and address certain basic competencies of jobseekers. Career counselling is intended to offer advice on education and training, occupational choice and professional development based on the jobseeker's interests and abilities. Measures for basic competencies seek to help jobseekers navigate the labour market in Latvia and abroad, notably through short courses in job search skills such as writing CVs and performing in interviews.

Training is largely provided through vouchers

The largest group of ALMP programmes, representing one-fifth of all participants in ALMP in 2018, provide some form of training (Table 2.1). More than 4 000 participants in 2018 were involved in vocational training that leads to either a formal professional

qualification (following an examination) or a certificate for professional skills. The length of the course normally ranges from 160 to 320 hours for a certificate and from 480 to 1 280 hours for a formal professional qualification, so that a course can require 6 months in full-time education. In 2016, participants had most frequently enrolled in social care (about 900 participants), office administration (500), project management and welding (400 each), as reported in SEA (2017[3]). A programme for non-formal training involved more than three times as many participants as the programme for vocational training (about 14 000 in 2018) but the length of these courses was limited to 60-160 hours. Such courses often cover languages, IT skills or driving. The most frequent non-formal courses in 2016 were in basic IT skills (2 100), advanced IT skills (1 400), and English at elementary level (1 200). However, altogether 2 200 participants also took courses in the Latvian language at various levels of proficiency.

Both vocational and non-formal training courses are allocated through a voucher system. The vouchers specify the kind of training that they are valid for, and their face value reflects the length of the training. Courses may be offered by accredited private or public training providers. In a number of OECD countries, vouchers have been used in the context of adult training, mainly because they allow for a certain freedom of choice and because they can induce competition between training providers. However, it has also been observed that low-skilled jobseekers tend to benefit less: using the voucher and finding an effective training provider may depend, for example, on intrinsic motivation, existing related skills, or the person's location. Weber (2008[4]) and Barnow (2009[5]) offer observations on the role of vouchers in ALMP in Austria and the United States, respectively.

Registered unemployed are eligible for training essentially whenever additional training is needed to place them in a job. This is assessed on an individual basis but with the help of a profiling tool discussed below. Participation in vocational training therefore includes both jobseekers with qualifications that are outdated or no longer demanded and those who have never gained a professional qualification. Especially vocational training provided under the Youth Guarantee represents a second chance for young persons to obtain a professional qualification at all, and courses may take up to nine months in their case. A detailed discussion of training programmes and an analysis of the extent to which different kinds of training have helped the unemployed in Latvia to find employment are included in Chapter 3.

Comparatively small training programmes offer workshops for young persons or training at the (future) employer. The workshops allow young persons who lack qualifications or work experience to explore between one and three occupations in vocational schools for some weeks, while receiving a monthly allowance of EUR 60, or EUR 90 in the case of persons with disabilities. Training at the employer is an option when an employer offers a job for a very specific skill set. If the employer arranges for the necessary training of a registered unemployed person and commits to employing this person for at least 6 months after the training phase, the SEA can cover parts of the salary for the first 6 months.

Programmes that support life-long learning were part of Latvia's ALMP until 2014 but have since been organised under the responsibility of the Ministry of Education and Science. The current programme targets employed persons with a low skill level and older workers. Vocational training including formal qualifications is available through the programme, as well as career counselling and the certification of professional competencies. The selected participants only have to bear 10% of the training costs. In 2017, close to 13 000 persons were supported under the programme.

A shift from public works to employment incentives and rehabilitation

Two programmes targeting long-term unemployed persons or those in need of some form of rehabilitation accounted for more than half of all participants in ALMP in 2018. A special activation programme for the long-term unemployed was only introduced in 2016 but involved 3 700 participants in its first year and jumped to 54 000 in both 2017 and 2018 (Table 2.1). This programme takes a holistic approach to persons who have been unemployed for 12 months or more, persons with disabilities who have not worked for 12 months or more, and persons with addiction problems. It arranges for career counselling as well as psychological support sessions, assessments of mental and physical health, mentoring and motivation courses. The latter are not conducted by the SEA but by other service providers and may be combined with paid work experience from four to 12 weeks. During the motivation course, participants receive a tax-free stipend of EUR 150 per month. The comparatively small but longstanding Minnesota programme is addressed specifically at unemployed persons with addiction problems. Within 28 days, external service providers (registered medical institutions) guide participants through 12 steps designed to treat addiction to alcohol or other drugs. The programme covers the costs of treatment and accommodation.

Direct job creation takes place in Latvia's programme for temporary public works. This programme, adapted from an earlier programme in 2009, has provided support to a large number of unemployed who had exhausted their unemployment benefits (Strokova and Damerau, 2013[6]). It still had more than 30 000 participants in both 2011 and 2012, then decreased to 9 000 participants in 2015. Numbers have since recovered somewhat and exceeded 13 000 in 2018, which represented 14% of all participants in ALMP (Table 2.1). The programme arranges for non-market jobs that are specifically created by municipalities or non-profit organisations. This includes repair and maintenance work on local infrastructure and auxiliary tasks in social care or municipal services such as schools and kindergartens. According to SEA (2017[3]), 3 000 such jobs were created in 2016, half of them in Latgale alone. They could nevertheless serve more than 10 000 participants because participation is limited to four months in every 12 months. Registered unemployed are eligible if they have been unemployed for at least 6 months or have not held a job for at least 12 months. They earn a monthly remuneration of EUR 150 and their social security contributions are paid by the programme. Another programme classified as direct job creation is only available under the Youth Guarantee and supports young persons who work in NGOs with a monthly allowance of EUR 90 for up to 6 months. This is intended to provide them with work experience at an early stage.

For some of the most vulnerable groups of unemployed – long-term unemployed, persons with disabilities and those aged 55 or above – a programme is available (partly offered under the Youth Guarantee) that subsidises their employment for longer time periods, up to 12 months but up to 24 months in some cases, notably for persons with disabilities. When an unemployed person from any of these groups is hired, the subsidised employment programme can reimburse half of the total wage costs to the employer, albeit not more than the legal minimum wage or 1.5 times the legal minimum wage in the case of persons with disabilities. In addition, expenses for adapting workplaces can be covered, and mentoring is provided in some cases. Chapter 5 empirically evaluates the impact of this programme.

While around 1 500 persons participate each year in subsidised employment for the most vulnerable groups (except in 2018, when about 1 000 participated), a programme for student summer employment has grown to around 5 000 participants annually by 2018 (Table 2.1). This programme subsidises work experience during the summer holidays for

students in secondary education (aged 15-20). Municipal and other public institutions account for a large share of the employers. For a comparable programme in the United States, Davis and Heller (2017[7]) found that it prompted substantial behavioural changes but did not necessarily improve job prospects. Another programme introduced in 2014 under the Youth Guarantee subsidises the first employment of young persons for up to 12 months, paying the employer EUR 200 per months in the first and EUR 160 in the second half of the year (more in the case of persons with disabilities). While this programme has remained small, the high number of participants in student summer employment has increased total participation in employment incentives to 11 000 participants in 2018, or one-ninth of all participants in ALMP.

Rising participation in employment incentives was also driven by a programme promoting regional mobility within Latvia. It offers registered unemployed to reimburse up to EUR 100 per month of transport or housing costs they incur when attending a training course or taking up employment at a distance of least 15 kilometres from their residence, for the entire duration of the training or for the first four months of employment. As with subsidised employment, the part of this programme catering for young persons is provided under the Youth Guarantee. A first impact evaluation of this programme and its role in promoting regional mobility is undertaken in Chapter 4.

A small number of unemployed persons receive support for setting up a business or becoming self-employed (0.2% of all participants in ALMP in 2018). To be eligible, registered unemployed do not only need to express their intention to become an entrepreneur, but crucially need to demonstrate the necessary qualifications for the specific field in which they wish to establish themselves, as well as some knowledge in business administration. Participants are assisted with the development of a business plan and can receive up to EUR 3 000 as a start-up grant and, for the first 6 months, a monthly allowance at the level of the legal minimum wage. Chapter 4 offers an assessment of support for entrepreneurship or self-employment.

Until 2016, all ALMP programmes in Latvia catered for persons who are currently not employed. In January 2017, a programme was introduced that seeks to prevent that older employees lose their jobs. It promotes active ageing strategies to firms and offers career counselling, basic competency measures, workplace adjustment and measures for occupational health to employees aged 50 and above who are at risk of unemployment. This is deemed to be the case if they work part-time or at low wages, encounter health issues that reduce their work capacity, possess at most a secondary level of education, or are constrained by care obligations in the family. The programme is intended to involve 3 000 participants by 2023. For a similar programme in Germany, Dauth and Toomet (2016[8]) identify a small positive effect on the probability to remain employed.

Participation in ALMP is agreed in Individual Job Search Plans

When a newly unemployed person comes to register with the State Employment Agency, Latvia's public employment service, the caseworker draws up an Individual Job Search Plan (IJSP). This plan details the rights and obligations of the unemployed person. Based on the result of a profiling tool, the stated interests of the unemployed person and the assessment of the caseworker, particular ALMP measures are identified as suitable and are included in the IJSP. The IJSP is reviewed in every following meeting with the caseworker and can be amended according to how the job search and participation in ALMP have proceeded thus far. Such meetings are mandatory and should take place at least once in two months. In addition, a newly unemployed person is expected to participate in an initial

information session that presents rights and obligations, job search methods and ALMP programmes.

Eglīte, Krūze and Osis (2013[9]) assessed the entire registration process at the SEA for unemployed persons. They found that the first interview typically lasts for about 15 minutes only (which has since been extended to about 45 minutes), that a majority of unemployed persons consider the IAP helpful and that four-fifths learn about the various services available at the SEA during the interview. However, after the interview, Russian-speaking persons appeared significantly less informed than others about start-up incentives, and persons aged 15-24 appeared significantly better informed about employment opportunities abroad. Overall, only 6% did not know which steps they should take next.

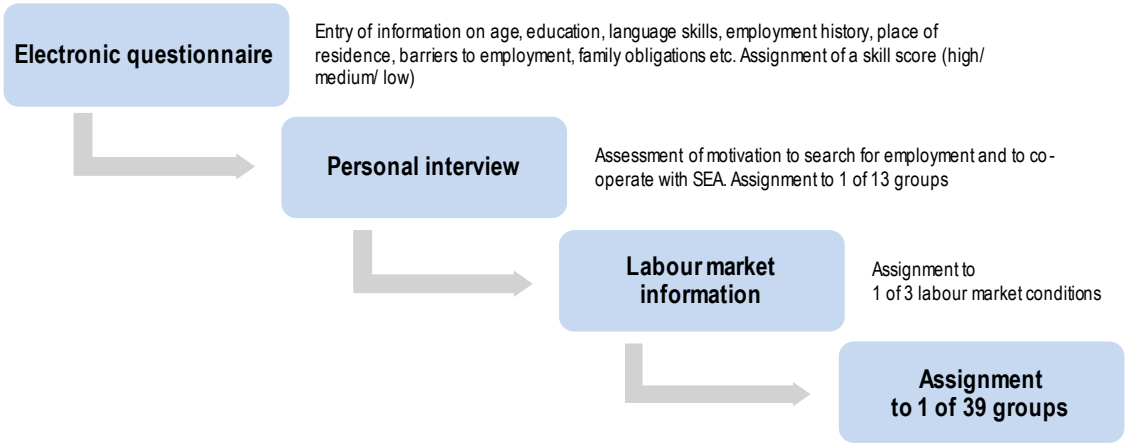
The profiling tool could be used more effectively in practice

The State Employment Agency, Latvia's public employment service, operates a profiling tool that is applied to all registered unemployed. It was gradually introduced in 2013 and rolled out by November 2013. It is typically used to identify early on those unemployed persons who are at risk of becoming long-term unemployed, and to select ALMP measures that are appropriate in their individual situation (OECD, 2015[10]). One of the reasons for the introduction of the tool was the need to ensure same services provided to persons with similar needs (detachment from the labour market) across the different local offices and caseworkers. The model uses both an econometric model and a counsellor's assessment of clients' motivation. It classifies clients in 39 groups depending on the probability they have to resume employment, combined with the results of self-assessed skills and motivation. Then, the system suggests a set of services and frequency of future visits to the different groups.

Figure 2.5 depicts the main steps of the profiling tool used in Latvia. A person who registers as unemployed initially fills out a questionnaire, typically online. The information gathered includes characteristics such as age and education as well as aspects of the individual situation such as employment history and family obligations. All answers exclusively reflect the self-assessment of the unemployed person. Some of the answers then translate into a skill score defined on a three-point scale. The econometric analysis predicts the client's likelihood of finding a job by using information from the information system about the average length of unemployment for the groups of clients with the same demographic profile as him/her. The data used reflect the situation in the last 27 months and are updated every time a new client is registered and the profile is constructed for him/her.

A personal motivational interview with a SEA counsellor constitutes the second step. The counsellor uses a set of 12 pre-defined questions to assess the client's motivation to cooperate with the SEA and motivation to search for a job and the client's self-assessment of their skills and fills in the respective form in the profiling system. Here, a two-point scale is used (high vs. medium or low), so that the two motivation scores combine to four possible outcomes, for each of the three levels of the skill score. This leads to 12 groups; to highlight a group with particular risk, however, those with a low skill score and two low motivation score are separated out as an additional group. Finally, a three-point scale for current labour market conditions is used (i.e. without taking differences by region, education or occupation into account). The unemployed person is thus ultimately classified in one of 39 groups. Usually after 6 months, the motivation of the client and willingness to cooperate with the SEA are re-assessed, but this can happen earlier if there are substantial changes in the situation of the unemployed person.

Figure 2.5. The profiling tool used by Latvia's public employment service, 2017



Source: OECD Secretariat based on information from the State Employment Agency, www.nva.gov.lv/.

Feedback from the local SEA branch shows mixed views about the use of the profiling tool. On the one hand, it helps counsellors to detect problems and propose appropriate measures for the different clients, but at the same time, it requires a longer time spent with the client. Branch workers also report the unwillingness of some clients to respond to the profiling questions. The profiling tool suggests a set of methods, ALMPs and priority order of receiving services. However, these suggestions constitute only one input into the counsellor's effort to tailor his/her work with the client and develop the individual action plan (IAP), leaving some degree of discretion to the counsellor.

While the outcome of the profiling informs the IAP for the unemployed person and therefore also which ALMP measures are to be taken, it is not possible in practice to use a significantly different approach to each of the 39 groups. Profiling tools in other OECD countries including Australia, Austria and Germany seem to distinguish fewer groups (OECD, 2015[10]). Profiling tools also differ in the mix of information that is used as input, ranging from self-assessment of jobseekers to the caseworker's assessment and to statistical results (Konle-Seidl, 2011[11]). In the case of Latvia's profiling tool, the role of the jobseeker's self-assessment has a bigger role to play relative to that of statistical information. The role of statistical results could be strengthened by accounting for the large regional differences in labour market conditions.

A number of evaluations of the profiling tool and its use have been conducted so far with the aim to strengthen its use and improve the labour market outcomes of the registered unemployed. In 2016, the SEA commissioned a first evaluation of the profiling tool to SIA Ernst & Young Baltic, with a focus on how well the ALMP measures selected after profiling correspond to the individual situation of the unemployed person. The evaluation concerns persons observed in 2015 and 2016 (two full years of observations) and the outcomes examined are those observed 6 months after profiling was conducted. The study evaluates the impact of the profiling method on the placement of the unemployed and assesses the effectiveness of the support measures proposed to the unemployed. It compares the outcomes of profiled and non-profiled clients. On average, non-profiled unemployed are more likely to find employment 6 months after registration, but differences between the two groups are not statistically significant. The authors of the evaluation suggest that these differences may be driven by differences in unobserved characteristics, including

differences in motivation between the two groups, which is not measured for the group of the unemployed who have not been profiled.

The study recommended changes to the profiling matrix and greater efforts by caseworkers to encourage participation in the most appropriate ALMP measures based on the profiling outcome, while discouraging participation in other measures (SEA - Nodarbinātības valsts aģentūra, 2017[3]). With regards to the use of data in the SEA's operations more generally, Box 2.2 outlines potential data-driven services that could help address some of the challenges encountered by the SEA. A number of these services have been implemented in other OECD countries.

Box 2.2. Potential data-driven services in Latvia's State Employment Agency

Like other public employment services, Latvia's State Employment Agency (SEA) collects a large amount of data through its interaction with jobseekers as well as employers and by monitoring ALMP measures. These data can substantially support the SEA's work in several ways – through better targeting of ALMP measures to certain jobseekers, by raising the quality of services delivered, and by guiding internal performance management.

Statistical profiling of jobseekers draws on both the characteristics of the jobseeker to be profiled and on observations of previous jobseekers with similar characteristics. In Latvia as in several other OECD countries, statistical profiling is used to identify early on those jobseekers who have a high risk of becoming long-term unemployed (see Desiere, Langenbucher and Struyven (2019[12]) for an overview of current practice in OECD countries). This does not only allow concentrating the efforts of the public employment service on high-risk jobseekers, but also providing leaner services to jobseekers who do not need help with finding employment.

As a result of profiling, the interaction with jobseekers can therefore vary strongly. In the Netherlands, for example, initially only high-risk jobseekers are invited for an interview with a caseworker, while the interaction with low-risk jobseekers is typically limited to online services unless their unemployment duration approaches 6 months (Desiere et al. (2019[12])). Similarly, an IAP is concluded early on for high-risk jobseekers in Ireland, but only after 6 months for low-risk jobseekers. Along these lines, the interaction with jobseekers in Latvia could be targeted more strongly on those who have been profiled as having a high-risk of long-term unemployment. Greater reliance on online services in the interaction with low-risk jobseekers could be inscribed in Latvia's Digital Agenda and e-Government Strategy, which aims at providing more and more public services online.

The SEA has also used profiling outcomes to identify suitable ALMP measures: a set of recommended measures is associated with each profiling group, and measures are ordered by priority. Using the available data, this approach could be broadened and refined at the same time: based on the experience with similar previous jobseekers, a statistical indicator for the expected time until employment is found could be calculated for each available ALMP measure but tailored to key characteristics of the jobseeker. For each jobseeker, the caseworker could then identify the ALMP measures that appear most promising in a statistical sense. The indicators would ideally update automatically as more data is collected over time.

A problem highlighted in this chapter – that many vacancies and many jobseekers are not registered with the SEA – might have data-driven solutions. Through web scraping

methods, it may be possible to identify unregistered vacancies advertised elsewhere. By engaging with an external service provider, the Dutch public employment service obtains roughly one-third of the vacancies on its website from web scraping. Tailored lists of suitable vacancies from various sources could be sent to jobseekers on a regular basis, complementing their job search efforts. These lists could be further adapted to reflect the kind of vacancies that the individual jobseeker is interested in, by using data on the jobseekers' clicks on vacancies in the lists or in the SEA's vacancy database. For example, the Flemish public employment service in Belgium has begun analysing such click data from their vacancy database (Desiere et al. (2019[12])).

It may also be possible to identify unregistered jobseekers, for example discouraged workers or some recipients of disability pensions. To this end, data sources such as the Latvian Labour Force Survey may be used to identify combinations of characteristics that are often exhibited by persons who are not registered with the SEA but who wish to find employment. These insights can be used to target outreach efforts to unregistered jobseekers such that the contacted individuals have a high probability of being an unregistered jobseeker. High labour demand in Latvia currently offers a favourable context for efforts of this kind.

Finally, data could provide useful inputs to SEA's performance management system. In order to account for regional labour market differences, SEA branches could be profiled based on regional indicators for labour demand and the characteristics of unemployed persons served by the branch. Performance benchmarks could then be defined for groups of SEA branches with similar profiles. This approach is taken in Germany (Blien, Hirschenauer and Thi Hong Van, 2010[13]). The performance evaluation of caseworkers could distinguish between jobseekers profiled as low-risk and those profiled as high-risk, as the latter may be substantially harder to place with an employer. This could help maintain incentives for caseworkers to give high-risk jobseekers the necessary attention.

Unemployment insurance and social benefits

This section briefly discusses the design of unemployment insurance and related working-age social benefits in Latvia. Unemployment insurance is publicly provided in Latvia as part of compulsory social security. Eligibility is determined as a function of paid contributions (through formal employment or self-employment) for at least 12 of the preceding 16 months. Registration with the SEA is a formal prerequisite. The level of the benefit depends on recipients' social security contributions. Those who have adhered to the system for 30 years or more receive up to 65% of the average wage on which contributions were based. This proportion falls to 60% for 20-29 years, 55% for 10-19 years, and 50% for nine years or less. The unemployment benefit is paid for up to nine months but declines over time: the full benefit is paid for the first three months, three-quarters are paid for the next three months, and half is paid for the last three months. The quickly declining level of Latvia's unemployment benefit gives recipients a strong incentive to find employment relatively soon. It thereby contributes to preventing long-term unemployment and also puts pressure on reservation wages. At the same time, this increases incentives to participate in ALMP measures only to receive a stipend (e.g. in training measures) that offsets some of the decline in the unemployment benefit.

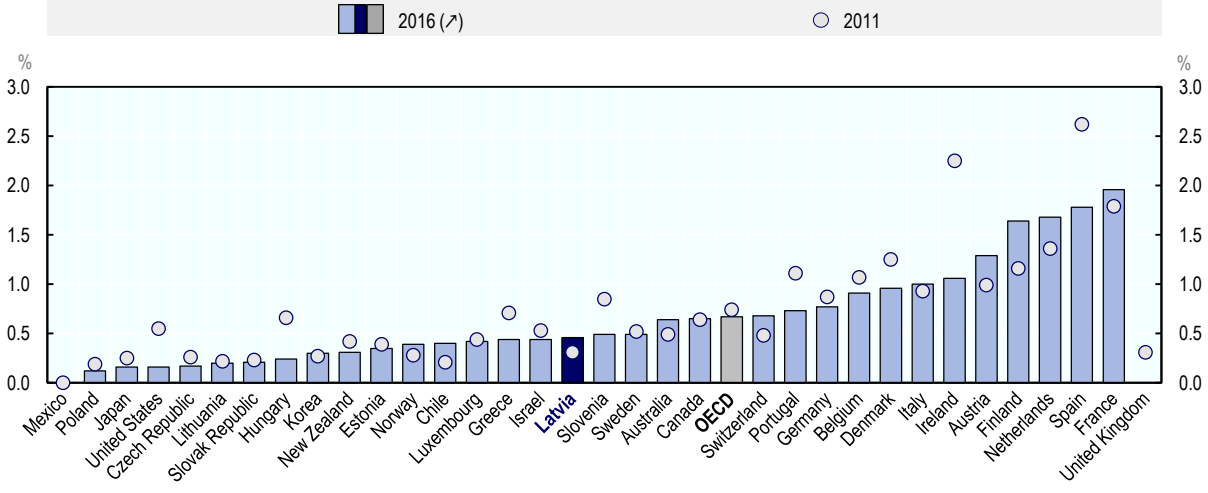
Unemployment benefits may be too high for some and too low for others

The amounts paid as unemployment benefit can vary extremely widely in Latvia. According to OECD (2018[14]), the amounts of the Latvian unemployment benefit can range from 9% to 269% of the average wage in 2016. As a share of the national minimum wage, it can range from 25% to 767%. These ranges were the largest among all OECD countries for which data were available (except possibly for Finland, where no upper limit existed). In addition, the lower end of the ranges in Latvia were among the lowest, when compared with the ranges in other OECD countries. These findings suggest that some amounts may be too low to provide effective insurance against unemployment, while others may be too high to maintain incentives for job search.

Figure 2.6 shows expenditures of OECD countries on unemployment benefits, as a share of GDP. This measure avoids problems of incomparability that might arise from the (often non-linear) dependence of benefits on prior wages and from benefits' varying maximum duration. In 2016, Latvia spent less than 0.5% of its GDP on unemployment benefits. This level was low in comparison to many other OECD countries and also significantly below the OECD average (0.7% of GDP), but still somewhat higher than in Lithuania and Poland (around 0.2%). Although the design of Latvia's unemployment benefit was changed in January 2012, expenditures in 2016 were close to the level in 2011. The permanently low spending on unemployment benefits in Latvia contrasts with the situation in other OECD countries that were severely affected by the economic crisis. Ireland, Portugal, Slovenia and Spain spent considerably more on unemployment benefits in 2011, but their expenditures have since declined strongly.

Figure 2.6. Expenditures on unemployment benefits and unemployment assistance in OECD countries

Percentage of GDP, 2011 and 2016



Note: Data include unemployment insurance and, where applicable, unemployment assistance. Data refer to 2010 instead of 2011 for France and Greece and to 2015 instead of 2016 for France, Greece, Italy and Spain; recent data for the United Kingdom are not available. Lithuania is not included in the OECD average.
Source: OECD/Eurostat Labour Market Programme Database, http://dx.doi.org/10.1787/data-00312-en, *Public expenditure and participant stocks on LMP Dataset*, http://stats.oecd.org//Index.aspx?QueryId=8540.

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Several conditions for unemployment benefit receipt in Latvia have become stricter in recent years (Langenbucher, 2015[15]). For example, after three months of registered unemployment, job offers have to be accepted also when they are unrelated to the occupation of the unemployed person. Also the requirements for geographical mobility have increased (see Chapter 4 for details). Nevertheless, a score based on such requirements of occupational and geographical mobility, as well as on the required availability during participation in ALMP, still places Latvia in the most permissive quarter of OECD countries (Immervoll and Knotz, 2018[16]).

A sickness benefit is available for persons temporarily unable to continue working because of an accident or disease. Eligibility needs to be established through medial certificates. The (taxable) sickness benefit pays 80% of the previous wage for up to 26 weeks. The benefit can be extended subject to the approval by a medical commission. If the health condition meets the relevant criteria, the medical commission can also award a disability benefit.

The level of social assistance is comparatively low

As Latvia's social security system does not offer unemployment assistance beyond the unemployment benefit, unemployed persons rely on social assistance whenever they are not eligible for the unemployment benefit or when it has expired. Access to the Guaranteed Minimum Income (GMI) is means-tested. A household qualifies if it is classified as needy with a monthly income below EUR 128 per person and lack of savings, and secondly, the net income per person in the household has been below the level of the GMI for the last three months. In this context, social benefits from municipalities and child allowances are not considered income.

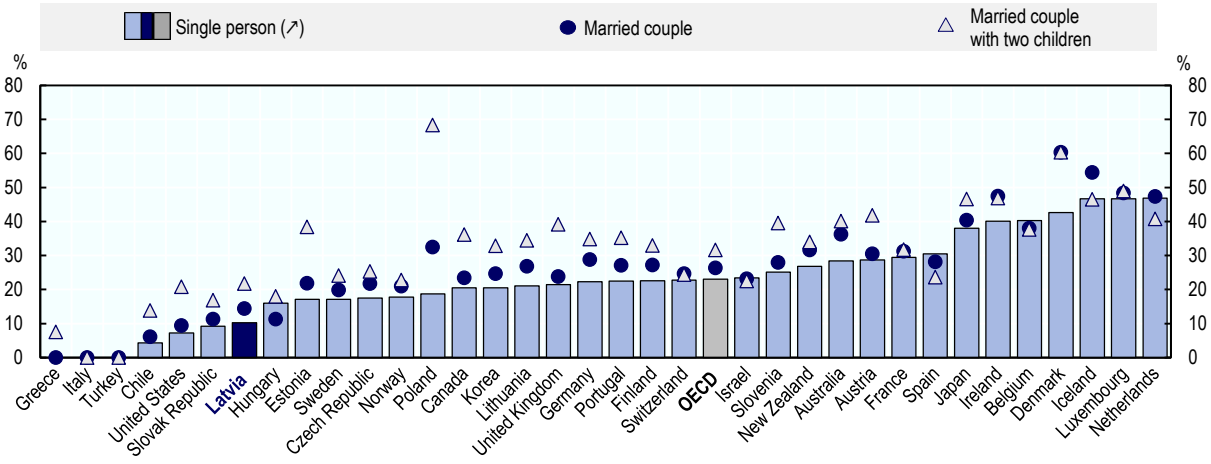
For 2018, the national level of the GMI was set to EUR 53 per month per person. The level is based on an agreement between municipalities and the Ministry of Welfare, but does not follow from any particular methodology related to incomes or costs of living (Frazer and Marlier, 2016[17]). Municipalities, which are in charge of paying social assistance benefits, have the possibility to set a higher GMI level for their residents and for particular groups, such as persons with disabilities, retirees, and families with children.

Benefit payments are calculated as the difference between the existing household income and the guaranteed level of household income, i.e. the individual level of GMI times the number of persons in the household (Republic of Latvia, 2009[18]). In 2012, 95 000 persons (4.6% of the Latvian population) received on average EUR 35 per month, and about 90% of them were not in employment (Cālīte, Balga and Ālere-Fogele, 2014[19]). The GMI is typically combined with a housing benefit that is also available to households classified as needy. It is likewise paid by municipalities and its level varies, not least due to wide differences in housing costs.

In comparison to other OECD countries, the targeted households remain relatively poor in Latvia despite social assistance: except for households with children, relative incomes of households who receive minimum income benefits are higher in the vast majority of OECD countries (Figure 2.7). In Latvia, the income of a single person receiving GMI benefits amounted to only 10% of the median income in 2016, while the income of a married couple receiving benefits reached 14%. Figures were lower in Chile, the United States and the Slovak Republic. Married couples with children were in a somewhat more favourable situation in Latvia: at 22% of the median income, their relative income with benefits approached the corresponding levels in Norway and Israel.

Figure 2.7. Relative levels of social assistance in OECD countries

Net income of recipients of minimum income benefits, as a percentage of median net income, 2016



Note: Supplements are not included. Zero values indicate the absence of minimum income benefits. The OECD average refers to 35 OECD member countries excluding Lithuania.
Source: OECD Database on Tax and Benefit Systems, http://www.oecd.org/els/benefits-and-wages.htm, and *Key Indicators Dataset*, http://stats.oecd.org//Index.aspx?QueryId=68227.

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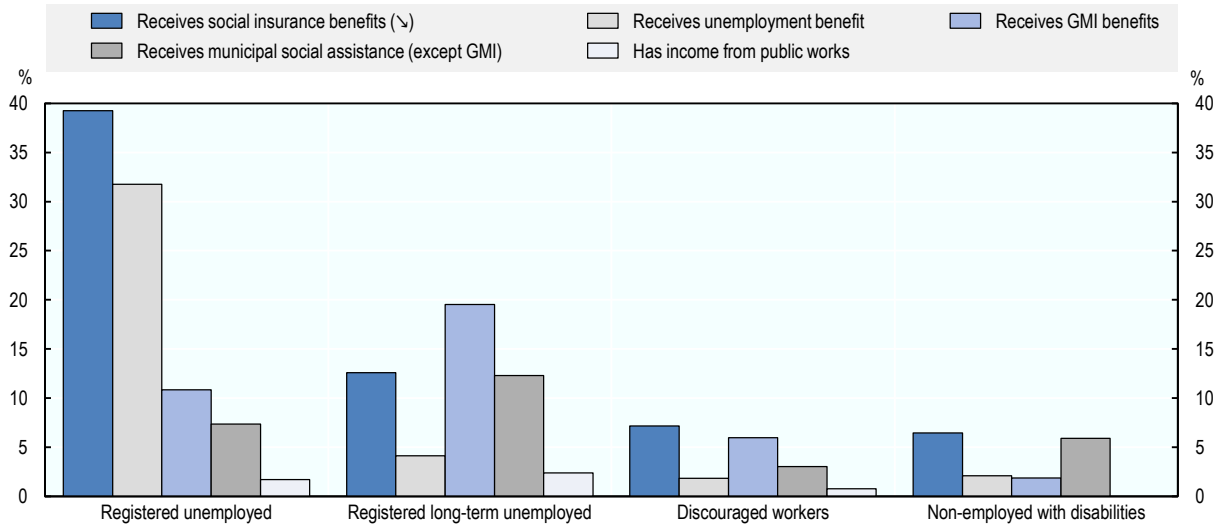
According to data from the Latvian Labour Force Survey for 2012-2016, close to half of all GMI benefit recipients have low levels of educational attainment, while those with a tertiary level of education represent less than 1% of recipients. Young persons are relatively rare among the recipients, whereas the age groups 35-44, 45-54 and 55-64 each account for roughly one quarter of recipients.

About one in five long-term unemployed persons receive GMI benefits, whereas this share is about half as high for all registered unemployed persons (Figure 2.8). Among discouraged workers, only 6% receive GMI benefits. Using data for 2010, Gotcheva and Sinnott (2013[20]) found that overall 3% of Latvia's population received GMI benefits, and 14% of those in the lowest quintile of the income distribution. They conclude that the strong targeting at the lowest quintile, in which 90% of GMI benefits were granted, is associated with low coverage, so that many households classified as needy do not receive these benefits.

The number of disability benefit recipients is growing quickly

Support for persons of working age with disabilities is provided in Latvia through three mutually exclusive benefits, depending on the insurance coverage. Firstly, a disability pension is available for those who have been in the social security system for at least three years and have been assessed by a state medical commission after referral by a general practitioner. The medical procedure distinguishes three degrees of disability: very severe (classified in group I), severe (group II) and moderate (group III). The level of the disability pension is determined individually, based on the degree of disability, whether or not the disability developed early in life, the prior average wage, and the number of years in the social security system. Whenever a person has adhered to the social security system for less than three years, the minimum amount of the disability pension applies. The disability pension is not means-tested but subject to income tax.

Figure 2.8. Receipt of benefits and social assistance in Latvia by situation in the labour market, 2012-2016



Note: GMI: Guaranteed Minimum Income. Labour market status is ranked in decreasing order of the category *Receives social insurance benefits*. Covers persons of working age (15-64). Social insurance benefits include unemployment benefits as well as benefits for sickness, maternity, childbirth, child care, etc. Discouraged workers are identified as inactive persons who do not seek work because they believe that none is available. Sample sizes are too low to identify the share with income from public works among non-registered unemployed, non-registered long-term unemployed and persons with disabilities who are not in employment.
Source: Latvian Labour Force Survey (CSB), www.csb.gov.lv/en/statistics/statistics-by-theme/social-conditions/unemployment/tables/metadata-employment-and-unemployment.

StatLink https://doi.org/10.1787/888933960821

Secondly, a person who is covered by social security and whose disability is the consequence of an accident at work or an occupational disease is eligible for the so-called compensation for the loss of work capacity, instead of the disability pension. The degree of disability is assessed by the same state medical commission. The percentage of the prior average wage that is paid as benefit depends on the loss of work capacity, from 35% in the case of a 25% loss of work capacity up to 80% in case of a total loss of work capacity. This benefit is likewise not means-tested but subject to income tax (except under the tax regime for micro-entrepreneurs).

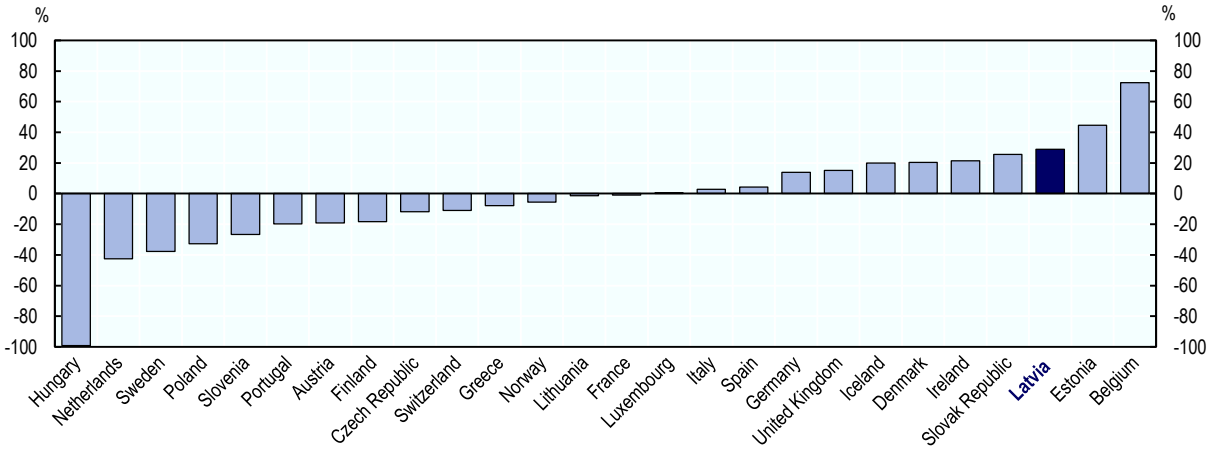
Thirdly, the state social security benefit covers cases which are not covered by the disability pension nor the compensation for the loss of work capacity, notably because a minimum insurance duration is not met. A precondition for this benefit is at least five years of residence in Latvia. The monthly level of the benefit is fixed for each degree of disability: EUR 102 in group I (EUR 171 in case of disabilities since childhood), EUR 90 in group II (EUR 149) and EUR 64 in group III (EUR 107). This benefit is not taxable.

In 2015, the number of recipients of disability benefits exceeded 96 000 and approached 99 000 in 2016, according to the Eurostat Social Protection Database. In 2007, this number was still below 75 000. Figure 2.9 shows that the number of recipients of disability benefits has grown especially fast in Latvia between 2007 and 2015 (+29%), compared to other European OECD countries. While men represented the majority of recipients in Latvia in 2015 (50 000), growth over the period 2007-2015 was substantially stronger for women

(+35%) than for men (+24%). Similarly, figures from the OECD Social Expenditure Database indicate that the number of state social security benefits has grown relatively quickly between 2007 and 2014. In 2007, these benefits made up 22% of all disability benefits, rising to 25% in 2011 and 27% in 2014. According to Latvia's Centre for Disease Prevention and Control, a growing number of disability benefits are granted due to tumours and circulatory system diseases. Benefits for persons with disabilities have also been extended – in particular, allowances for special care needs were introduced in 2007 and are mostly received by women.

Figure 2.9. Growth in recipients of disability pensions, European OECD countries

Change in percentages, 2007-2015



Note: Data refer to total disability pensions. For Poland, the change refers to 2007-2016.
Source: Eurostat Social Protection Database, https://ec.europa.eu/eurostat/web/social-protection/data/database.

StatLink https://doi.org/10.1787/888933960840

A high tax wedge limits labour supply incentives

The social benefits available to working-age persons may in some cases have implications for the willingness to work: benefit receipt can seem preferable to employment, notably when there may be opportunities for informal work at the same time. In Latvia, the disability benefits are the most attractive benefits because they are potentially unlimited and provide a significantly higher income than the GMI. It is therefore very important to ensure that the medical assessment procedure remains sound and accurate. A key determinant for labour supply incentives are the financial gains from taking up work rather than receiving benefits (Fernandez et al., 2016[21]).

In comparison to other OECD countries, the tax wedge in Latvia appears high for low incomes (the tax wedge is defined as the sum of income tax and social security contributions net of benefits, divided by total labour costs). For example, the tax wedge reaches 40% of labour costs for someone working at the minimum wage, a higher level than in almost all other OECD countries (OECD, 2016[22]). According to the European Commission (2017[23]), changes to tax legislation implemented in recent years have hardly reduced the tax wage for low incomes. However, a tax reform implemented in January 2018 will reduce the tax wedge for low-income earners and families with children over the coming years.

Maintaining labour supply incentives is especially important for disadvantaged groups in the labour market: taking up some (even marginal) employment makes it significantly more likely that a person is employed in the long run, rather than unemployed (Caliendo, Künn and Uhlendorff, 2016[24]). Simulating the situation in Estonia, Brixiova and Égert (2012[25]) found that reducing the tax wedge especially for low-wage workers would lead to a decrease in the rate of long-term unemployment.

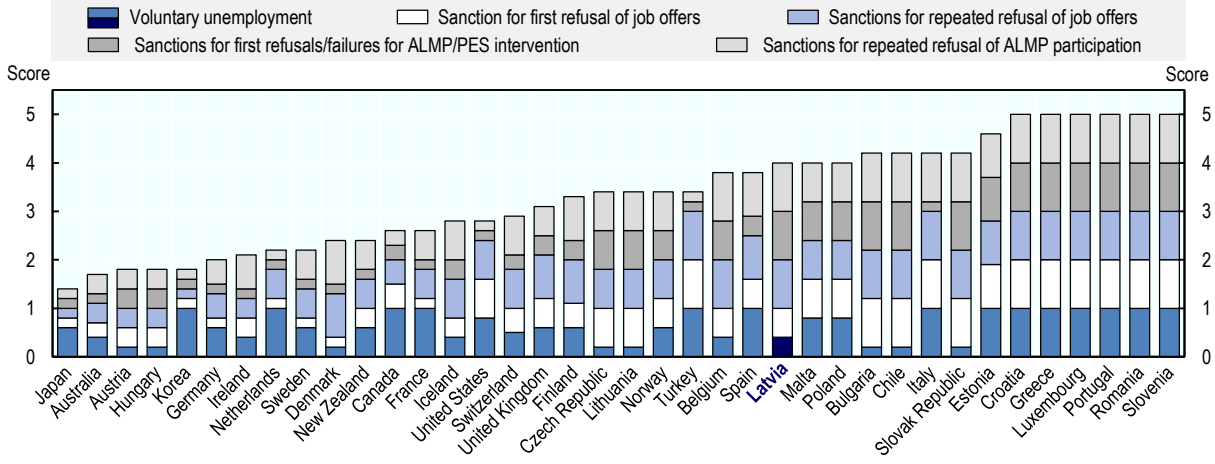
Sanctions are strict but cannot be applied gradually

In Latvia, recipients of the unemployment benefit face a number of conditions and obligations (Langenbucher, 2015[15]). A person who becomes unemployed by resigning from a job can receive the unemployment benefit only after a waiting period of two months, and there is no justification for a resignation that would lead to an exception from the waiting period. A registered unemployed person must not miss scheduled meetings without a good reason, is obliged to participate in the ALMP measures specified in the IAP, must not refuse suitable job offers more than once, and should document at least three job applications in a two-month period (at least one job application in regions with high unemployment). Persons who fail to comply with these rules typically lose the status of registered unemployed, so that unemployment benefit payments are terminated and the remaining entitlement is lost.

Sanctions in Latvia are strict in comparison to other OECD countries, yet not as strict as those in some OECD countries that were also severely affected by the economic crisis, such as Greece, Italy, Portugal and Slovenia (Figure 2.10). In only two respects, sanctions are not as strict in Latvia as in some other OECD countries: the first job offer may be rejected without consequences, and other countries impose longer waiting times for persons who resigned from their job.

Figure 2.10. Strictness of sanctions applicable to unemployment benefits in OECD and EU countries

Scored from 1 (most lenient) to 5 (most strict), 2017



Note: ALMP: Active labour market policies. PES: Public employment service.
Source: Immervoll, H. and C. Knotz (2018), "How demanding are activation requirements for jobseekers", *OECD Social, Employment and Migration Working Papers*, No. 215, OECD Publishing, Paris, https://doi.org/10.1787/2bdfecca-en, Figure 8.

StatLink https://doi.org/10.1787/888933960859

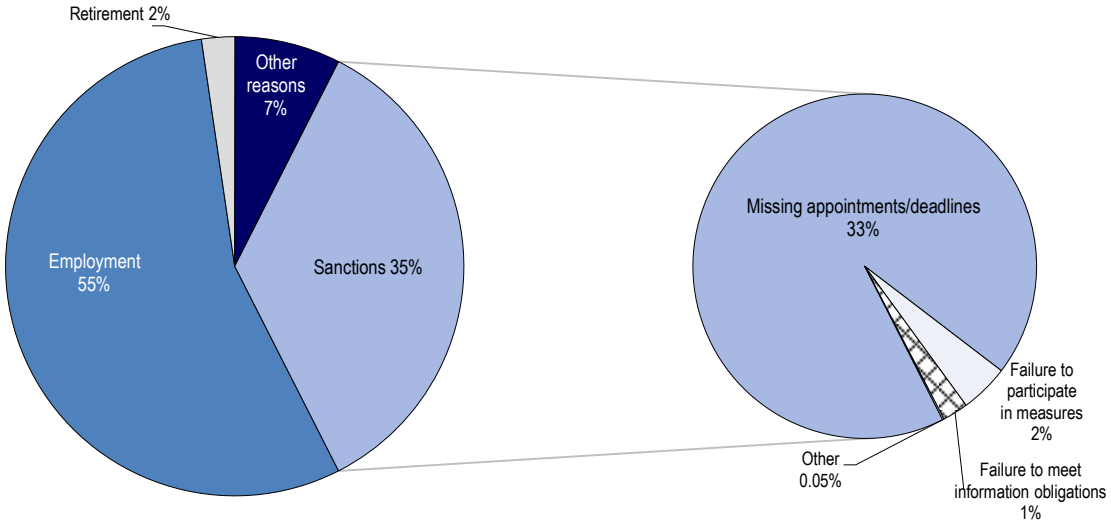
Recipients of GMI benefits who are of working age have to register with the SEA, within one month of filing for benefits and have to sign an IAP, similarly to recipients of unemployment benefits. Depending on the IAP, they may therefore face the same requirements as recipients of the unemployment benefit. The typical sanction in their case is also losing the status of registered unemployed, leading to the suspension of their benefits. Other reasons for suspending benefit payments include providing incomplete or false information, refusing medical examination or treatment, failing to collect benefits awarded by the state social security system and missing scheduled appointments with the municipal social service (Republic of Latvia, 2009[18]). In general, municipal social services and benefit recipients also agree on an IAP, and benefit payments may be suspended if it is violated in bad faith. However, given the role of the GMI for basic income maintenance, benefits are not normally suspended for more than three months. Recipients of disability benefits are expected to work within their capacity, as determined by the degree of their disability. While disability benefits are not suspended in order to sanction behaviour, renewed medical examinations may change the assessed degree of the disability.

The existing sanctions applied in Latvia therefore appear limited to suspending the entire benefit, at least temporarily. Reductions in the level of the benefit are notably absent, as are other less severe sanctions such as additional obligations in terms of appointments or documentation. However, using less severe sanctions may have by and large the same effects on compliance, while avoiding the harshness of benefit suspension especially for those who have no other source of significant income. In addition, less severe sanctions could be used as a motivation in circumstances where benefit suspension is either not justified or would do more harm than good.

Figures from the SEA on the use of sanctions in 2016 offer some hints that less severe sanctions would have a role to play. While sanctions terminated the status of registered unemployed in 37 000 cases, almost all (93%) were due to missing a scheduled appointment or a deadline (Figure 2.11). Failure to participate in an ALMP measure accounted for and failure to meet information obligation (including giving false information) accounted for 5% and 1% of all sanctions, respectively. By contrast, refusing more than one job offer and failure to search for work only accounted for about 0.1% of sanctions in 2016. It thus appears that sanctions are hardly used whenever they do not have to be used or when they might be applied mistakenly, based on limited information. In these situations, less severe sanctions might still be used, with positive effects on compliance. Over the last few years, the share of sanctions among outflows from the status of registered unemployed steadily declined, from 46% in 2012 to 35% in 2016.

Table 2.2 shows which characteristics among registered unemployed persons were linked with sanctions in 2016/2017. They are relatively unlikely to be sanctioned while they still receive unemployment benefits: the risk is below 40% of that found for non-recipients. In terms of unemployment duration, the risk of sanctions is highest between seven and 12 months of unemployment, around the time when unemployment benefits cease. Sanctions are therefore much more likely to occur when unemployed persons have little to lose. Unemployed persons aged 15-24 exhibit a similarly low risk of being sanctioned, compared to the age group 35-44. Women are substantially less likely to be sanctioned than men, and persons who participated in public works exhibit more than twice the probability of being sanctioned of non-participants.

Figure 2.11. Outflows from the status of registered unemployed by reason, Latvia, 2016



Source: State Employment Agency.

StatLink https://doi.org/10.1787/888933960878

Table 2.2. Observable determinants of losing unemployment status due to sanctions, 2016/2017

Logit analysis for registered unemployed persons aged 15-64

	Compared to:	Odds ratio
Age between 15 and 24	Age between 35 and 44	0.36
Age between 25 and 34	Age between 35 and 44	1.09
Female	Male	0.75
Married	Not married	0.77
With disabilities	Without disabilities	1.38
Secondary education	Basic education	1.23
Higher education	Basic education	0.73
Receiving unemployment benefit	Not receiving it	0.38
Receiving social assistance	Not receiving it	1.51
Needy status	Not in needy status	1.53
Participated in public works	Not participated	2.39
Unemployed for 4-6 months	Unemployed up to 3 months	0.74
Unemployed for 7-12 months	Unemployed up to 3 months	1.80
Unemployed for 13-18 months	Unemployed up to 3 months	1.37
Resident in Pieriga	Resident in Riga	0.95
Resident in Vidzeme	Resident in Riga	0.84
Resident in Kurzeme	Resident in Riga	1.11

Note: Only results that are statistically significant at the 5% significance level are reported. Categories not reported are therefore not statistically different from the reference category in the second column. Higher education includes higher professional education, secondary education does not include secondary professional or vocational education.
Source: OECD analysis using linked administrative data from *BURVIS* (SEA), the State Social Insurance Agency (SSIA), the *Social Assistance Database* (SOPA) and the *Population Register* (OCMA).

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Sanctions ideally raise transitions to employment, but they can also raise transitions out of the labour force and might put pressure on reservation wages. Analysing a reform in the United Kingdom in 1996 that significantly increased job search requirements for recipients of unemployment benefits, Petrongolo (2009[26]) found that those subject to the new requirements were more likely to move to disability benefits and tended to have lower salaries in the following years. Van den Berg, Uhlendorff and Wolff (2017[27]) consider unemployed men younger than 25 in Germany who face similarly strict sanctions as unemployed persons in Latvia – their benefits are routinely suspended for three months. The study finds that sanctions raised transitions to employment but at lower wages, and also raised transitions out of the labour force. Busk (2016[28]) reports results from Finland that highlight the design of the unemployment benefit: recipients of flat-rate benefits reacted to sanctions by moving to employment, while recipients of benefits based on prior wages rather moved out of the labour force.

The role of the State Employment Agency in ALMP

This section focuses on the delivery of Latvia's labour market policy by various institutional actors. It discusses the role of each institution, their activities in practice and some of the challenges they face. Most attention is given to the State Employment Agency (SEA), Latvia's public employment service that is responsible for the design and delivery of all ALMP, provides services to employers and pays unemployment benefits. A second focus is placed on municipalities, which are in charge of social assistance and co-operate with the SEA on ALMP for recipients of social assistance.

Almost all SEA staff possess a tertiary education

The total number of SEA staff was 840 in 2017, after 862 in 2016. Three-quarters of them (625 staff) belong to one of 28 local offices, while the remaining quarter (215 staff) belong to the SEA's central office and work in management, oversight of ALMP, accounting and finance, human resources and IT as well as statistics and legal issues. Job profiles are divided mainly into caseworkers (22% of all staff), staff working with employers (11%), as well as career counsellors and staff who implement specific projects funded by the European Social Fund (ESF). The latter notably includes measures provided under the Youth Guarantee.

The vast majority of SEA staff is made up by women – in 2016, men only represented 7%, (SEA - Nodarbinātības valsts aģentūra, 2017[3]). Half of them were between 40 and 59 years old, while 40% were aged between 20 and 39. Almost all (98%) possessed a tertiary level of education, and this level is also expected of all new recruits. About 45% of staff had the status of civil servant. The turnover rate stood at 11% in 2016 but was significantly higher in Riga than in rural areas, likely because SEA wages are less competitive in Riga's high-wage environment.

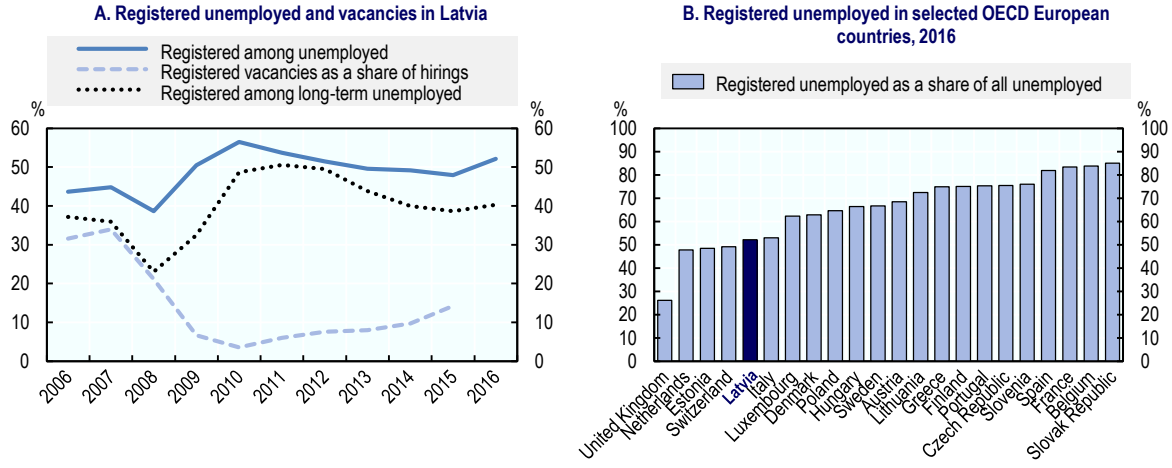
A large part of the financial resources available to the SEA are provided by the European Union. In 2016, grants notably from the ESF and co-financing from Latvia's national budget together accounted for 83% of the SEA's budget (SEA - Nodarbinātības valsts aģentūra, 2017[3]). The remainder derived from social security contributions – up to 10% of annual expenditures from social security contributions may be allocated to ALMP. A proposal for the SEA's annual budget is drawn up by the Ministry of Welfare and requires approval by parliament. In addition to changes due to staff turnover, the strong dependence on ESF funding induces some volatility in the budget as specific projects begin

or expire, which also explains the slightly lower level of staff in 2017 compared with 2016. ESF funding of ALMP under the Youth Guarantee expired in 2018.

Low registration of jobseekers and vacancies limits the SEA's role in matching

A public employment service (PES) such as the SEA can play a key role for matching on the labour market. As precondition for effective intermediation in matching, the PES has to be aware of jobseekers and vacancies in the first place, and is ideally in direct contact with both sides. In practice, however, the reach of the PES is often limited to a fraction of jobseekers and vacancies, and Latvia's SEA is not an exception: registered unemployed persons accounted for about half of all unemployed persons in the last few years, and the number of registered vacancies may have been below 20% of all hirings until at least 2015 (Figure 2.12, Panel A). The first measure is based on data from the European LFS and is thus comparable across European OECD countries. It indicates that comparatively few unemployed in Latvia are registered with the PES (Figure 2.12, Panel B). The second measure comes with caveats. Especially when unemployment is high, many vacancies are filled quickly and do not enter a count at a particular point in time (e.g. at the end of the month). By contrast, hirings are all observed unless employment ended very soon again. This factor biases the estimated share of registered vacancies downwards and helps explain the extremely low values in 2009-2013. A factor that partially offsets this bias is the retraction of unfilled vacancies.

Figure 2.12. Registered parts of vacancies and unemployed persons



Note: The share of registered unemployed is obtained from micro data, using as base all those who are unemployed according to the ILO definition. Long-term unemployment is defined as 12 months or more. Hirings are estimated as the number of employees (not counting self-employed and family workers) who have started a job with a new employer in the last three months. The share of registered vacancies is then obtained as the annual average of quarterly vacancies, divided by hirings. Latvia's methodology of vacancy collection changed in Q4 of 2015, so that the 2016 value is not comparable. Covers persons aged 15-64.
Source: OECD calculations based on data from the European Labour Force Survey (Eurostat), http://ec.europa.eu/eurostat/web/lfs/overview and (for data on vacancies) the Central Statistical Bureau of Latvia, www.csb.gov.lv/en.

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The changes over time in Figure 2.12, Panel A plausibly suggest that the share of registered unemployed was comparatively high in 2010/2011. In these years, many unemployed had lost their jobs only recently and could obtain unemployment benefits, provided they

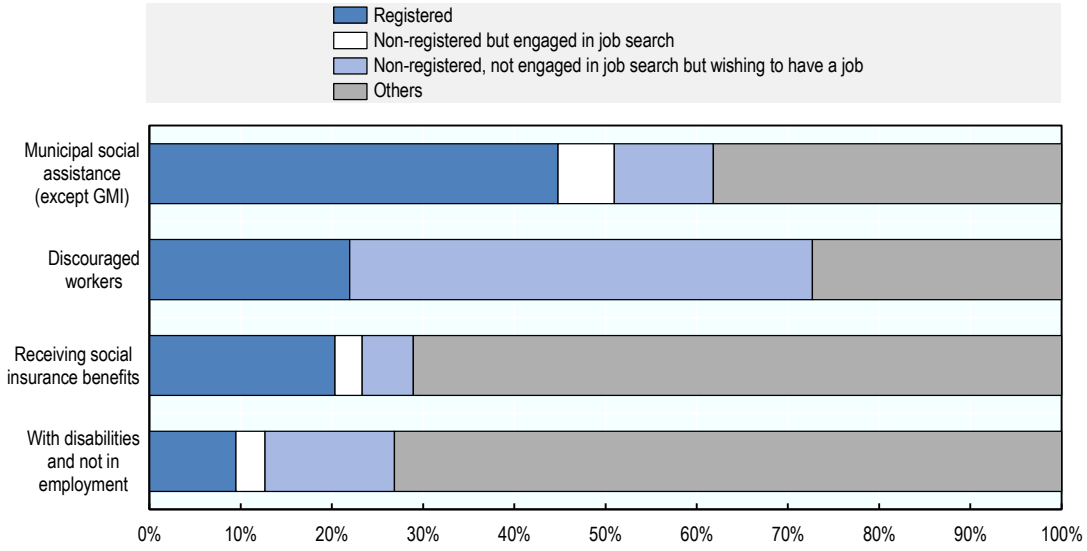
registered. At roughly the same time, registered vacancies were especially low compared with all hirings, likely because vacancies could easily be filled without involving the SEA, given a large pool of unemployed persons. Similarly, the strong rise of registered vacancies relative to all hirings in 2015/2016 might reflect employers' rapidly increasing difficulties to find suitable candidates without recurrence to the SEA (see Chapter 1). In addition, a requirement has been introduced for public sector employers to register their vacancies.

Recent amendments (applied since January 2019) to Latvia's labour code would require all employers who register their vacancies to also indicate a wage range. While this information is useful for jobseekers, might contribute to their protection and might help prevent informal payments, wage information can be sensitive information for employers, often disclosed only at later stages in the recruitment process. In particular, employers might not want to share this information with other employers who compete with them for the same jobseekers. If required to publicly disclose a wage range, some employers might therefore not register vacancies that they would otherwise register with the SEA. However, sufficiently broadly defined wage brackets could still be acceptable to them. More generally, in order to encourage registration of vacancies as much as possible, registration should be as easy as possible.

While persons who received unemployment benefits or GMI benefits have to register with the SEA, Figure 2.13 indicates the extent of registration in some other groups of jobseekers. In 2012-2016, registered persons accounted for less than one-quarter of discouraged workers, persons receiving social insurance benefits and persons with disabilities who were not in employment. This share reached 45% among persons receiving municipal social assistance other than GMI benefits, such as housing benefits and reimbursements of medical expenses. Figure 2.13 further indicates a potential of jobseekers in these groups that were not registered with the SEA. Some of the non-registered persons were engaged in job search, and substantial shares in all groups wished having a job although they were neither registered nor engaged in job search: around 10% of persons receiving municipal social assistance, persons receiving social insurance benefits and persons with disabilities who were not in employment, and just over half of all discouraged workers.

On the other hand, not everyone who is registered with the SEA engages in job search. Based on the same data as in Figure 2.13, one-quarter of those registered with the SEA in 2012-2016 were not engaged in job search. However, most persons in this particular group (72%) nevertheless wished having a job. The proportions vary only little across age groups. The share of those not engaged in job search only stood out in the age group 55-64, where it approached one-third of those registered. Among those who do not engage in job search, the share who wish having a job was lowest in the age group 15-24 (65%). In addition to the challenge of reaching out to non-registered jobseekers, there is thus also some scope for activating more of the registered jobseekers.

Figure 2.13. Job search and registration with the SEA in selected groups, 2012-2016



Note: GMI: Guaranteed Minimum Income. Covers persons of working age (15-64). Being engaged in job search is defined as having undertaken job search activities in the four weeks prior to taking the survey or waiting for a job to start if a job has already been found. Discouraged workers are identified as inactive persons who do not seek work because they believe that none is available: they are by definition not engaged in job search.
Source: Latvian Labour Force Survey (CSB), https://www.csb.gov.lv/en/statistics/statistics-by-theme/social-conditions/unemployment/tables/metadata-employment-and-unemployment.

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Many long-term unemployed persons have little incentive to register

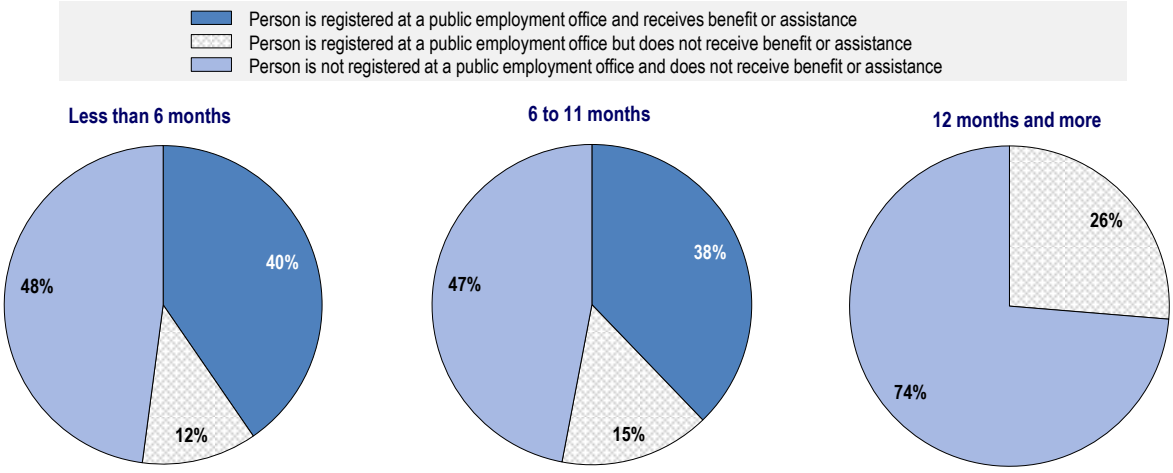
When the unemployment benefit has expired after nine months, or after 11 months in case of an initial waiting period, an unemployed person can receive benefit payments due to the GMI. Registration with the SEA is a precondition for these benefits. Because of the means test involved, however, many unemployed persons are not eligible for these benefits and consequently reluctant to stay registered with the SEA, especially if this requires them to attend unwanted meetings or ALMP measures. In practice, they simply miss one of the next scheduled appointments, which contributes to the very frequent terminations of the official unemployment status due to missed appointments, as mentioned above.

Figure 2.14 shows how receiving the unemployment benefit and registration with the SEA are linked to unemployment duration. Among those with unemployment duration below 6 months, 52% were registered with the SEA in 2017 and 40% received unemployment benefits. Almost the same share (53%) of those with durations from 6 to 11 months was registered. At unemployment durations of 12 months or more, however, three-quarters were not registered and no-one still received unemployment benefit. Because the share of non-registered persons is substantially larger among the long-term unemployed, focussing on registered unemployed persons especially neglects the long-term unemployed.

The results in Figure 2.14 further highlight that relatively few of the short-term unemployed receive unemployment benefits. Given that unemployed persons who are entitled to unemployment benefits can be expected to collect them (unless benefit amounts are very low), this indicates that many are either not eligible under the current rules or were eligible but lost their entitlement due to sanctions. A further reason may be that access to

unemployment benefits has become more difficult for seasonal workers. Across all durations, only 24% of all unemployed in 2017 were registered with the SEA and received unemployment benefits, another 18% were registered but did not receive unemployment benefits, and 58% were neither registered nor receiving benefits.

Figure 2.14. Registration with the public employment service and receipt of unemployment benefit by unemployment duration in Latvia, 2017



Note: Covers unemployed persons aged 15-64. Unemployment benefit is paid for up to nine months and may initially be delayed by two months if the unemployed person resigned from the previous job.
Source: OECD calculations based on the European Labour Force Survey (Eurostat), http://ec.europa.eu/eurostat/web/lfs/overview.

StatLink https://doi.org/10.1787/888933960935

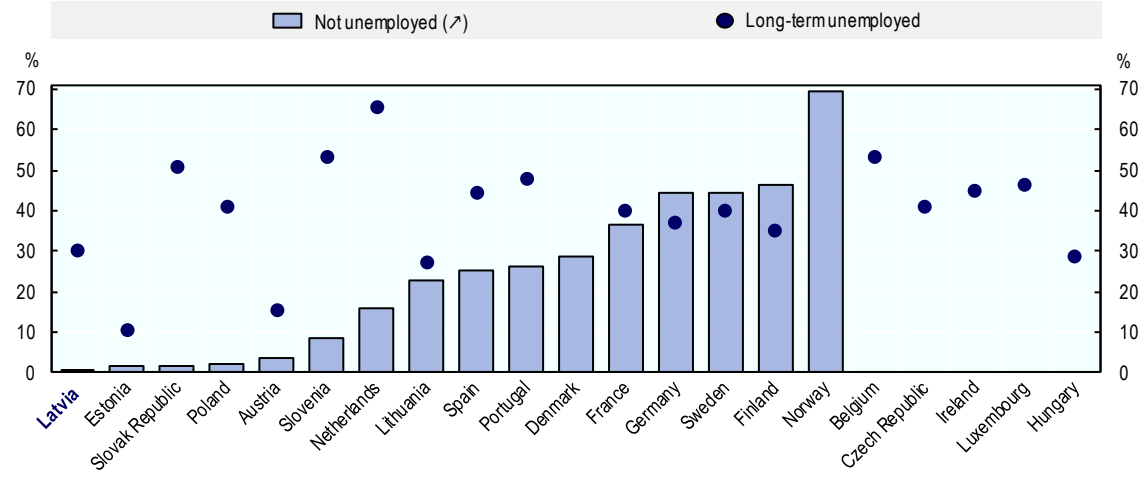
For European OECD countries, Figure 2.15 characterises those who were registered with the public employment service in 2016. Long-term unemployed accounted for 30% of those registered in Latvia. This share was rather low in comparison: while similar shares were also observed in Lithuania and Hungary, significantly lower shares were only observed in Austria and Estonia (16% and 10%, respectively). Latvia stood out, however, by registering hardly any persons who were not classified as unemployed by the public employment service (0.26%), such as employed persons who look to change jobs, participate in career counselling or engage in training. To some extent, this reflects that programmes for life-long learning were shifted to the Ministry of Education and Science. By contrast, persons who are not unemployed represented almost 70% of those registered in Norway and more than 40% in Finland, Germany and Sweden. In most European OECD countries, a significant share of registered persons are not unemployed.

In line with the results in Figure 2.12, around half of the unemployed persons in Latvia made the SEA part of their job search in 2015 (Figure 2.16). The share was highest for those with unemployment durations from 6 to 11 months (57%) and lowest for the long-term unemployed (46%). Three job search methods were used substantially more often by all unemployed persons, irrespective of the duration of unemployment: asking friends and family about vacancies, studying published job advertisements, and direct applications to employers. The long-term unemployed relied comparatively strongly on direct applications. If the maximum search effort is defined as everyone using every available job search method, those with unemployed durations below 6 months and the

long-term unemployed appear to exert similar job search efforts overall (reaching 42% and 43% of the maximum search effort, respectively). Those with durations from 6 to 11 months appear to be especially engaged in job search (reaching 46% of the maximum).

Figure 2.15. Groups of jobseekers registered with the public employment service in selected OECD countries

Shares among all jobseekers registered with the public employment service, 2016



Note: *Not unemployed* refers to jobseekers who are not eligible to be counted as unemployed. *Long-term unemployed* refers to registered unemployed who have been unemployed for 12 months or more. Data refer to 2015 for the "long-term unemployed" in Poland and to the "not unemployed" in the Netherlands.
Source: Eurostat Labour Market Statistics, http://ec.europa.eu/eurostat/web/labour-market.

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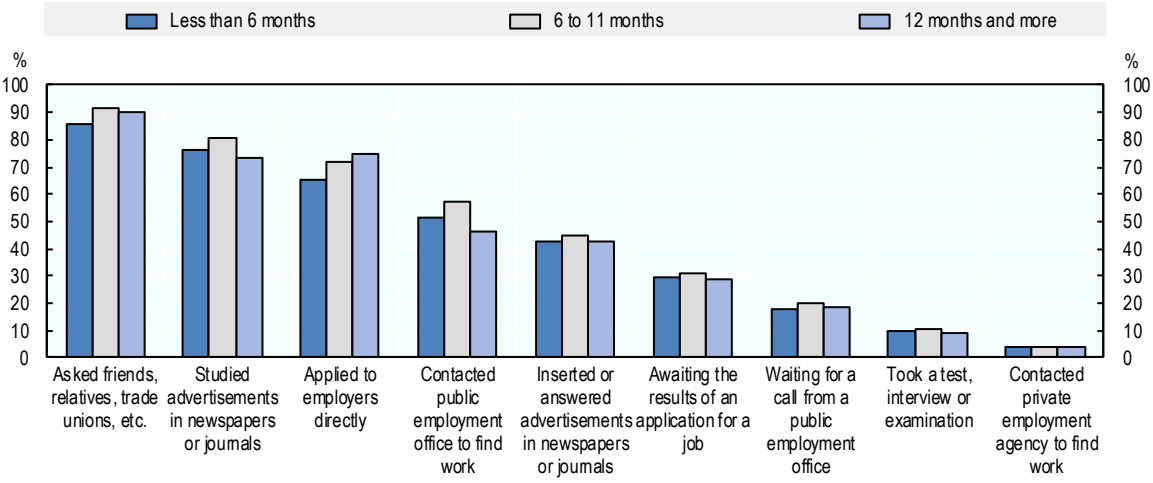
Figure 2.16. Job search of unemployed persons in Latvia, by unemployment duration

Share of unemployed who indicate using the job search method, 2015



Note: Data refer to persons aged 15-64.
Source: European Labour Force Survey (Eurostat), http://ec.europa.eu/eurostat/web/lfs/overview.

StatLink https://doi.org/10.1787/888933960973

Engaging employers more in the work of the SEA requires trust

For employers, the incentive to engage with a PES is less clear than for unemployed persons who are entitled to unemployment benefits. It is therefore plausible that the share of registered vacancies is lower than the share of registered unemployed persons, as indicated by Figure 2.12. In principle, a PES can facilitate recruitment, especially when a number of positions need to be filled within a short time horizon. In practice, however, the added value of a PES for employers strongly depends on the services offered to them and on the available candidates. Evidence from the German vacancy survey suggests three main reasons why employers who are currently recruiting do not engage with the PES: they expect that the candidates available from the PES would not be suitable (Müller, Rebien and Stops, 2011[29]). Small enterprises also find it complicated to use the services offered by the PES or are not aware of them. Holzner and Watanabe (2016[30]) similarly argue that employers expect candidates from the PES to be less suitable on average than other candidates. However, they also point out that employers may want to engage with the PES because the probability to fill vacancies at relatively low wages could be higher in this context than in a more competitive environment. These findings align with circumstantial evidence – including from Latvia – that employers engage especially rarely with the PES when they seek to fill positions requiring high skills and offering high wages, likely because suitable candidates for such positions have a comparatively low risk of unemployment and are therefore difficult to find in the pool of candidates from the PES.

The services that the SEA offers to employers include publication of vacancies, access to a database of candidates, arranging interviews, accompanying candidates to job interviews, and organising job fairs. In 2012, the services for employers were evaluated in the context of the support through the ESF, using a random sample of 3 600 employers, of which 800 had used SEA services (Eglīte et al., 2012[31]). Based on interviews with executives at the surveyed employers, it emerged that employers primarily engaged with the SEA by publishing vacancies, using the database of candidates and participating in ALMP programmes that involve training at the employer. In addition, private job placement services turn to the SEA for advice on legal provisions and regulations. Overall, employers were rather satisfied with the services provided by the SEA, and more than one-quarter of those currently using some SEA service intended to also explore other SEA services. However, only one-fifth of surveyed executives who have used SEA services considered them a significant help in the selection of candidates.

In various contexts, the survey detected dissatisfaction with the administrative burden, notably requirements for documentation (Eglīte et al., 2012[31]). This was expressed by employers who participated in ALMP measures for training as well as by local government officials involved in running the temporary public works programme. While respondents appeared to understand the rationale for the required documentation, they believed that simplifications would be possible and that the benefit from SEA services might only justify taking on the administrative burden when several positions are to be filled simultaneously. Administrative requirements may have decreased in recent years, notably in the context of the SEA's "Strategy for the co-operation with employers 2017-2019". The website of the SEA, considered by respondents as a key source of information and gateway to services, has been restructured and made more user-friendly.

The survey further provided numerous hints that employers consider direct working relationships with SEA representatives very important for successful co-operation. For example, employers in rural areas were generally more satisfied with SEA services, not least due to more extensive personal contact. More direct contact and more individual

co-operation were also among employers' main suggestions for improvement. Employers also indicated that direct contacts allowed them to gather information about SEA services more easily. Their responses align with results from Switzerland on greater success with placements where PES staff have good working relations with employers (Frölich et al., 2007[32]).

In contrast to more anonymised contact, the trust in established working relations enables caseworkers to credibly recommend selected candidates as suitable for the particular employer. At the same time, caseworkers can learn about open positions that are not advertised publicly. While the available staff resources limit the possibilities for extensive direct contact with employers, exceptions can be made for employers who frequently use SEA services and hire from its pool of candidates: in 2018, the SEA began assigning individual consultants to especially large employers.

SEA caseworkers play a crucial role especially for the long-term unemployed

Figure 2.17 shows crude yet internationally comparable measures of caseloads: the number of registered unemployed persons per staff member of the PES and per office of the PES. The latter measure can also serve as an indication of accessibility of the PES in the sense that it is widely present through local offices. By one measure, Latvia falls into the same range as a number of other European OECD countries with up to 100 unemployed persons per member of staff, while substantially higher ratios (100-300) are observed in Belgium, Lithuania, the Netherlands and Slovenia (Figure 2.17, Panel B). Much higher ratios (600-1 000) occur in Chile and Mexico. By another measure – unemployed persons per PES office – Latvia ranges in the middle of the OECD for which data are available (Figure 2.17, Panel A). While the number of unemployed persons per office in Latvia is thus in the same range as in Denmark and the United Kingdom (4 000-6 000), substantially lower ratios are observed in France, Germany, Hungary and New Zealand.

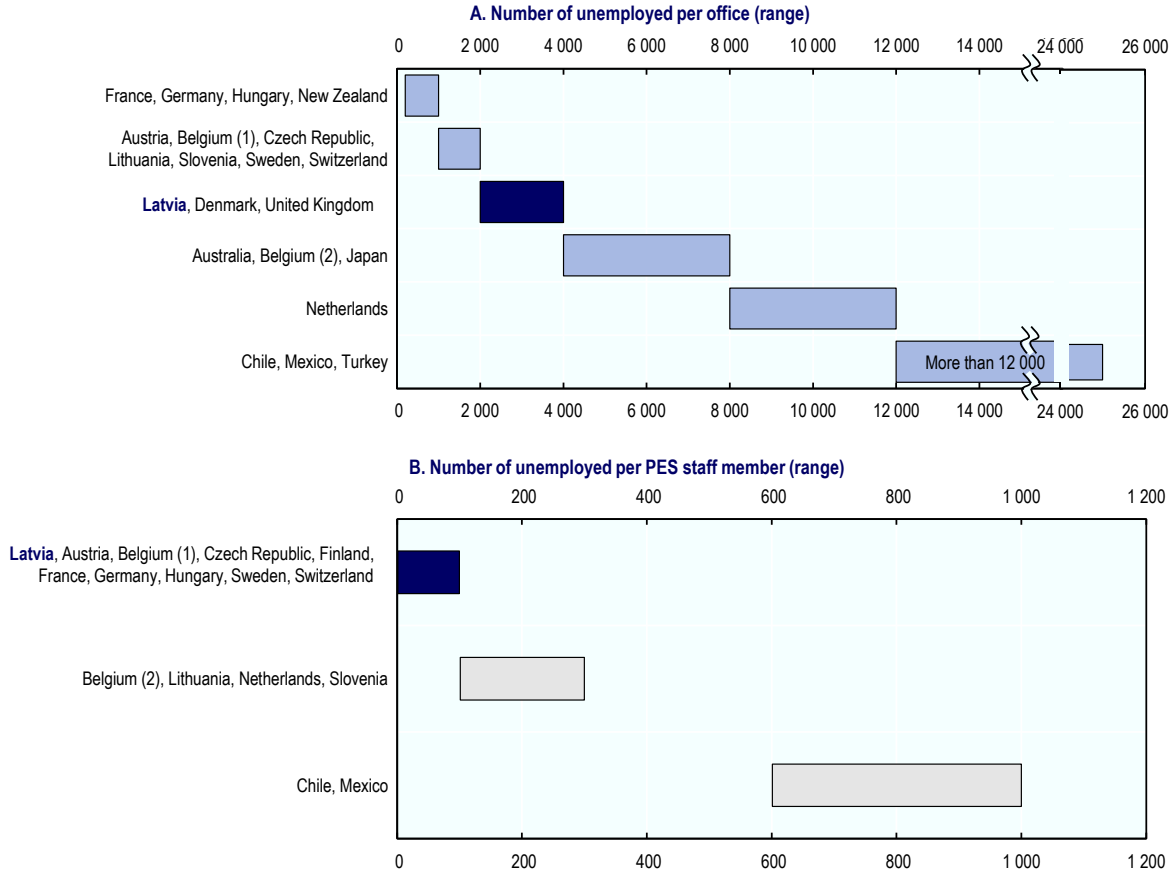
Depending on how many staff of the PES are not caseworkers, however, the caseload per caseworker can be considerably higher than shown in Panel B of Figure 2.17. In Latvia, the monthly caseload per caseworkers was between 350 and 500 in 2017. The caseload also varied substantially across regions, being especially high in Riga and relatively manageable in many rural areas.

On this background, caseworkers who are under strong pressure even have an incentive to allocate less time and effort to complex cases than to other cases: given that they lack the time to treat complex cases with the necessary care, it could seem more promising to focus on those unemployed persons who can still be placed with little time invested. By consequence, unemployed persons who are initially disadvantaged would then face a higher probability of not being placed and thus becoming long-term unemployed, which would compound their disadvantages. Provided there is a reliable profiling tool, caseworkers could be incentivised by some kind of premium to also treat those cases that the profiling classified as complex. However, this premium must be independent of unemployment duration, as it might otherwise create a perverse incentive to produce long unemployment durations (OECD, 2015[10]).

The SEA currently approaches this challenge in several ways. While caseworkers do not specialise in more or less complex cases, rotation within local offices leads them to focus regularly on the complex cases for some time. Guidelines developed in 2016 recommend monthly meetings for rather complex cases and make monthly meetings compulsory after unemployment duration of three months, compared to bi-monthly meetings during the first three months (SEA - Nodarbinātības valsts aģentūra, 2017[3]). The use of e-services is

extended in order to save time on less complex cases. Whenever the monthly caseload falls below 350, the local office has the choice between reducing the caseworker's working hours and allowing the caseworker more time per case.

Figure 2.17. Caseloads of public employment services in selected OECD countries, 2014



Note: PES: Public employment service. Data for Latvia refers to 2016. Numbers of unemployed use the ILO definition and include both registered and non-registered persons. Belgium (1) refers to VDAB, Belgium (2) refers to Brussels-Actiris.

Source: OECD/IDB/WAPES (2016[33]), *The World of Public Employment Services: Challenges, capacity and outlook for public employment services in the new world of work*, IDB, Washington, D.C., https://doi.org/10.1787/9789264251854-en based on the WAPES-IDB 2014 Survey and the World Bank's World Development Indicators Database, https://data.worldbank.org/indicator.

StatLink https://doi.org/10.1787/888933960992

In recent years, several OECD countries have experimented with reducing caseloads at least temporarily. The observed results typically include a positive effect on transitions into employment. For example, an experiment in Germany allowed only a few local offices to reduce caseloads by hiring more caseworkers (Hainmueller et al., 2016[34]). This lead to intensified counselling, greater placement efforts, shorter unemployment durations and lower local unemployment rates. For the Netherlands, the fact that caseloads vary across local offices and over time was exploited to estimate the effect of lower caseloads, and a significant positive impact on exit from unemployment was found for short-term unemployed persons (Koning, 2009[35]). Both studies concluded that additional caseworker

resources were cost-effective, leading to net savings. Numerous similar results were obtained for instances of more intensive counselling (Parent and Sautory, 2014[36]).

Internal training at the SEA aims at raising the capabilities of caseworkers and other staff. In 2016, a number of workshops were organised on specific topics of ESF projects, in addition to training on recurrent issues such as public procurement, customer service skills, IT skills, coaching methods and recent legal changes (SEA - Nodarbinātības valsts aģentūra, 2017[3]). In order to learn from the experience of other PES, SEA representatives participated in 50 events in 2016, including meetings in the framework of the Baltic Employment Services Co-operation Agreement.

While a large share of caseworkers is proficient in Russian, the Law on the State Language determines that only the Latvian language should be used, and this includes SEA offices in regions where a majority of the population speaks Russian in everyday life. It is not clear how many interactions between unemployed persons and caseworkers therefore suffer from communication problems. In addition, many unemployed persons might be bilingual, but especially some low-skilled unemployed persons might face a language barrier in SEA offices that undermines their chances to fully benefit from SEA services.

A number of studies suggest that there are gains from similarity between the caseworker and the unemployed person. For example, Behncke, Frölich and Lechner (2010[37]) report positive effects on transitions to employment for pairings of caseworkers and unemployed persons from the same social group, defined by age, gender, education and nationality. Further such results were found by Egger and Lenz (2006[38]) and Lagerström (2011[39]) for Switzerland and Sweden, respectively. The underlying reason for these findings could be caseworker's attitude or effort: Granqvist, Hägglund and Jakobsson (2017[40]) found that caseworkers' attitudes play a significant role for outcomes. The fact that nationality or origin appear to be one criterion of similarity suggests that a common native language may contribute to effective interactions between caseworkers and unemployed persons.

Performance in the SEA is managed through objectives at various levels

The SEA operates under the supervision of Latvia's Ministry of Welfare and is governed through management by objectives. The ministry formulates annual policy goals to be implemented by the SEA. In 2017, these goals included reducing long-term unemployment and ensuring better support for persons with disabilities. Based on such goals, the director of the SEA develops a strategy for their implementation, which leads to assignments for local offices. Within local offices, targets for individual staff members are set at the beginning of the year and performance is evaluated at the end of each quarter. In 2016, 56% of SEA staff were rated as performing according to expectations, and 41% were rated as exceeding expectations (SEA - Nodarbinātības valsts aģentūra, 2017[3]). The remainder were rated as either excellent or in need of improvement.

At the levels of local offices and individuals, the annual targets are integrated in a set of existing targets that reflect the permanent objectives of the SEA. Indicators used to assess the performance of local offices range from the number of participants in ALMP and transitions rates into employment to the long-term unemployment rate, the youth unemployment rate and the rate at which registered vacancies are filled (Kalvāne, 2015[41]). In addition, the use of modern technologies such as e-services or reviews of internal data has become a performance indicator. In setting targets for local offices, differences between regions and the characteristics of unemployed persons are taken into account.

Activating recipients of social assistance also depends on municipalities

The social service departments of the Latvian municipalities are in charge of recipients of benefits due to the GMI and housing benefits, both of which are provided by municipalities. Local social workers draw up an IAP that specifies agreed measures to improve the recipient's situation (Republic of Latvia, 2009[18]). This approach is applied to every recipient except retired persons, persons with disabilities and persons aged below 21 who pursue full-time education. Recipients who violate the IAP may be sanctioned. However, social workers have discretion in practice to determine when the IAP has been violated. They are likely reluctant to impose sanctions because, as noted before, the only available sanctions are harsh, suspending benefit payments for three months and thereby often aggravating the situation of the recipient.

Since recipients of benefits from municipal sources are required to register with the SEA, ALMP measures normally take place through the SEA. However, some municipalities engage in additional efforts to activate recipients of social assistance. For example, the city of Riga implemented a profiling system in 2017/2018. About 30 recipients of social assistance met with various specialists, who then conferred to jointly identify the most promising course of action given the individual situation they assessed. As with the level of benefits from municipal sources, such additional efforts depend on the budget of the municipality and are less likely to occur in relatively poor areas.

Recent efforts foster more co-operation between the SEA and municipalities

Given the responsibility of municipalities for social assistance, the co-operation between municipalities and the SEA is an important factor for activating social assistance recipients and is needed for a consistent approach across institutions (see OECD (2016[22]); an overview of integrating services for vulnerable groups is given in OECD (2015[42])). While the allocation of responsibilities between the two institutions is not always clear in practice, a 2013 survey of staff in both institutions found that the co-operation was good, and that more regular contact was called for (Cālīte, Balga and Ālere-Fogele, 2014[19]). A pilot programme for closer co-operation in the same year indicated large potential benefits from joint approaches to the complex cases of social assistance recipients (Box 2.3).

The SEA and municipalities also come in contact in the implementation of the temporary public works programme: it is the responsibility of the SEA whom and when to select for these ALMP measures, but the places available in public works are determined by municipalities and can change greatly with seasons. Similarly, opportunities for child care are provided by municipalities but are also an important input in activation, allowing unemployed persons to take up full-time employment or participate in training. In the light of the various reasons for close co-operation between the SEA and municipalities, a regular format for these exchanges could be established. Thus far, the intensity of co-operation depends on the initiative and efforts of individual staff members in both institutions.

Box 2.3. A pilot programme to activate longstanding recipients of social assistance

For nine months in 2013, Latvia's State Employment Agency (SEA) conducted a pilot programme across its local offices with a focus on persons who had been registered as unemployed for 20 years – essentially since the beginning of the SEA. Most of them had been receiving social assistance for years, provided by municipal social services. In total, the programme involved close to 2 700 unemployed persons as well as 187 caseworkers and 34 career counsellors within the SEA.

The programme largely took an exploratory approach. Its aim was not only to work more intensively with the selected long-term unemployed, but also to identify the individual barriers to employment they faced and to experiment with different methods of addressing the barriers. These methods included more frequent meetings, longer spells in ALMP measures, and tools such as job-search diaries. A second set of goals was to achieve a better and more structured co-operation between the SEA and municipal social services, while exploring which forms of co-operation prove most effective.

The implementation proceeded in four steps. First, caseworkers and career counsellors examined the individual situation of the unemployed person in depth, to then identify appropriate ALMP measures. In a third step, the measures were coordinated with municipal social services and aligned with their activities. Local offices of the SEA were given considerable discretion in how to organise this co-operation, so that a variety of formats were tried out. Finally, local offices evaluated the progress of unemployed persons and their own experiences with different methods and co-operation formats.

The pilot programme proved surprisingly effective. Almost 40% of participants took up employment, compared to a job-finding rate of 16% for non-participants. While it is not known for how long participants stayed employed, the fact that they were activated at all may have fundamentally changed the dynamics of their situation. In total, two-thirds of participants were no longer registered as unemployed when the programme ended.

In the co-operation between the SEA and municipal social services, joint meetings of their representatives with the unemployed person were considered especially useful. While the levels of staff in the SEA might not allow implementing the pilot programme permanently, its results exemplify the potential of holistic approaches to the often complex situations of long-term unemployed.

Several policy levers can help make Latvia's labour market more inclusive

In conclusion, a number of issues arise from this chapter's assessment of labour market policy in Latvia. Compared with other OECD countries, Latvia spends little on active labour market policies and few unemployed persons participate in ALMP measures (where short training and workshops are not counted as ALMP measures). However, Latvia's menu of ALMP programmes has expanded in recent years, with increasing efforts to make the labour market more inclusive for disadvantaged groups such as the long-term unemployed. This included a shift in participation from public works to employment subsidies and rehabilitation, thereby creating more possibilities for unemployed persons to become competitive in the primary labour market rather than going through cycles in supported employment.

A number of challenges remain with regards to the inclusiveness of the Latvian labour market. In particular, many jobseekers do not register with the SEA and thus cannot benefit from most of its services. This problem is especially wide-spread among the long-term unemployed. Only a fraction of discouraged workers is registered although a large majority of them wishes having a job. New tools and new partnerships can help address the challenges for Latvia's labour market policy. The profiling tool implemented by the SEA could be used more effectively. In several aspects of the SEA's operations, there is scope for improvements through information and communication technologies. Sanctions that are more gradual could be introduced, so that sanctions do not necessarily result in the complete loss of benefits. Results from a pilot project further suggest that close co-operation between the SEA and municipalities could boost transition rates from long-term unemployment into employment.

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Chapter 3. Latvian labour market policies for skills and employability

Training for the unemployed has remained a key component of active labour market policy in Latvia. This chapter assesses how effective such trainings have been in helping unemployed people access good jobs and considers how training provision could be improved using detailed, linked administrative data. The chapter finds that training for the unemployed has had positive effects on individuals' chances of (re-)entering employment and on earnings among those who found a job. While these effects differed according to the gender, age, and social assistance receipts of training participants, virtually all types of participants benefited from taking part in training for the unemployed. In addition, combining training with other active labour market policy measures, especially measures to support regional mobility, appeared to boost effectiveness. On implementation, the chapter directly considers the implications of providing training for the unemployed through a voucher system.

Introduction

Despite changes in the landscape of active labour market policies (ALMPs) in Latvia in recent years, training has remained an important strategy for connecting people with jobs. Training has continued to be important because historical trends in the organisation of Vocational Education and Training (VET) provision, a weak tradition of lifelong learning, emigration, and changing employer demands have resulted in skills shortages in some occupations and sectors. Providing unemployed individuals with these skills may help them integrate into the labour market. This chapter assesses how effective those trainings provided under Latvia's menu of ALMPs have been in helping unemployed individuals access good jobs and then considers how training provision could be improved.

The chapter shows that trainings have had positive impacts on unemployed Latvians' labour market outcomes, but that the effects may differ (1) for certain sub-groups and (2) when training is combined with other ALMPs. At 18 months after the start of training, formal trainings increased participants' likelihood of being employed by 7.7 percentage points while non-formal trainings increased participants' likelihood of being employed by 5.3 percentage points.[1] The sub-group analysis further suggests that: (1) women may have derived higher benefits from formal training while men may have derived higher benefits from non-formal training; (2) workers aged more than 30 years old derived higher benefits from training, especially formal training; and (3) social assistance recipients derived higher benefits from formal training, at least in the long run. Despite these differences, however, it is striking that formal and non-formal trainings appear to have positive effects on the labour market outcomes of virtually all sub-groups considered in the analysis. At the same time, combining training with mobility support and short "Measures to Improve Competitiveness" may boost its effectiveness.[2]

On implementation, the chapter discusses the delivery of training programmes through vouchers. While several key advantages to providing training through vouchers are outlined, three key risks are identified, which may warrant supplementary policy work. *First*, vouchers are less likely to be redeemed by (1) the young and (2) those with a weaker command of the Latvian language, suggesting caseworkers may need to provide additional support help certain groups use their vouchers. *Second*, there is substantial variation in the number of training providers across Latvia's municipalities, underlining the importance of supporting regional mobility to foster the choice and competition on which the success of voucher systems rely. *Third*, individuals have to wait a long time to actually receive their vouchers: this may lead to periods when voucher recipients-to-be are unsure of their status, potentially compounding lock-in effects and prolonging unemployment spells. This latter point resonates with a trade-off policymakers typically face when implementing training for the unemployed, between building productivity among participants – which results in better long-term labour market outcomes but potentially takes time – and getting people back into work quickly.

The chapter proceeds as follows. The first main section sets the scene by describing skills shortages in Latvia, explaining the factors that have shaped the uptake of VET, and outlining reforms to the broader vocational and higher education systems that have followed in recent years. The second section uses detailed linked administrative data to assess the impact of formal and non-formal trainings for the unemployed – managed by Latvia's State Employment Agency (SEA) – which form part of Latvia's menu of ALMPs. The third section explores the implementation of these training measures in more detail, looking especially at the implications of delivering training through vouchers. The final section briefly concludes.

Developing skills in Latvia

This section examines where skills shortages in Latvia arise, documents trends in enrolment in VET and higher education, and considers how the VET and higher education systems have been reformed in recent years. This discussion of the broader trends in skills development in Latvia provides the background for the evaluation of training for the unemployed that comes in the following section.

Certain skills are in shortage in Latvia

Certain occupations in Latvia – many of which require some level of vocational education (either at the secondary or tertiary level) or some other type of tertiary education – are characterised by shortages of skilled labour, according to the *OECD Skills for Jobs Database*. This database calculates the extent of shortage in a particular occupation according to (1) wage growth, (2) employment growth, (3) growth in hours worked, (4) the unemployment rate, and (5) the growth in the proportion of workers who are underqualified. This information is presented in detail in Chapter 1. The database reports that there are key shortages in Latvia's service sector, with shortages for workers with skills in customer and personal services and in sales and marketing being especially large. There are also shortages of workers with advanced quantitative and engineering skills (including in computers and electronics and telecommunications) that would typically rely on an education involving science, technology, engineering and mathematics (STEM), as well as shortages of workers with administrative and management skills.

Alongside the occupation-specific skills outlined above, employer surveys indicate that Latvian employers also need workers who possess cross-cutting skills, including Information and Communications Technology (ICT) skills and foreign languages. User-level computer skills and English language skills were required or preferable in approximately half of all vacancies published in 2018 (EURES, 2018[1]). In addition, Russian language skills were required or preferable in almost three-quarters of vacancies posted, with the demand for Russian being highest amongst employers in Riga and the Latgale region.

Hiring practices are also consistent with there being specific skills shortages in Latvia, although such practices may also simply reflect relatively high job quality in the country and employers' optimistic perceptions of the workforce. The 2016 European Labour Force Survey indicates that just 35% of new hires were offered fixed-term contracts (the third lowest proportion in the OECD) meaning that the vast majority of new hires were offered permanent contracts. This may exemplify the additional incentives Latvian employers provide in order to attract workers with the right skills. However, it may also be that jobs are simply of higher quality, on average, in Latvia, perhaps due to the legal framework that governs hiring practices. Indeed, fixed-term contracts are only allowed in certain situations in Latvia, including seasonal work, replacement of absent employees, or casual work not normally performed within a particular firm (ILO, 2019[2]).[3] At the same time, the high prevalence of hiring under-qualified candidates and the low prevalence of hiring over-qualified candidates in Latvia compared with other OECD countries (as per the *OECD Skills for Jobs Database*) is also consistent with there being skills shortages. Yet hiring of under-qualified candidates may also arise when employers have optimistic perceptions of the workforce and are willing to take on candidates whose skills they then build on-the-job.

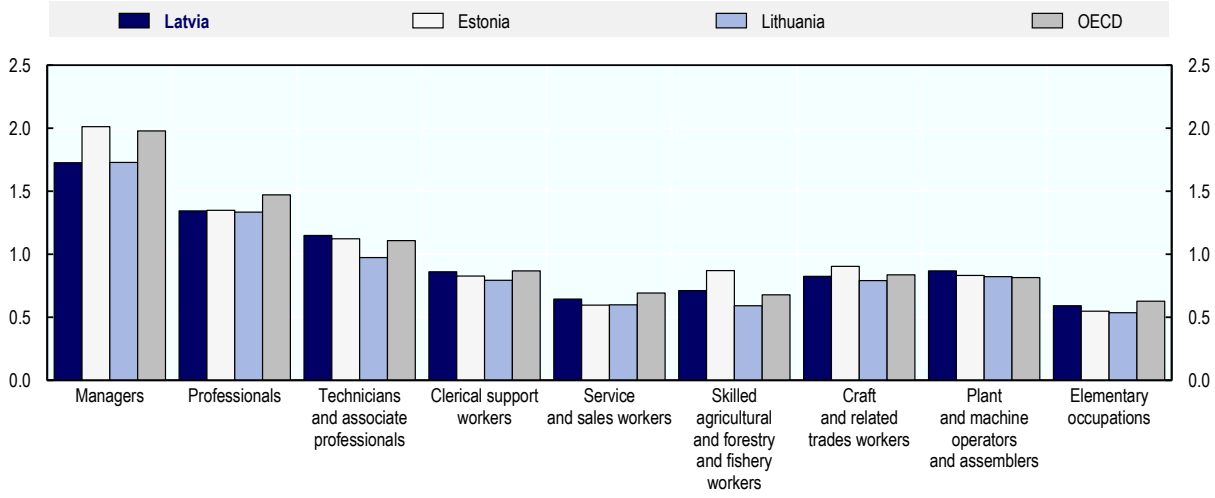
Despite skills shortages, inter-occupation earnings premia are low compared with the OECD average

The earnings premia associated with attaining higher levels of formal education remain low in Latvia compared with the OECD average, as discussed in Chapter 1. Workers with tertiary education earn 44% more than those with upper secondary education in Latvia, but the differential is 53% for the OECD on average.[4] Similarly, Latvian workers with less than upper secondary education earn 12% less than those with upper secondary education, but the equivalent difference is 19% across the OECD. Nevertheless, earnings premia are even lower in a number of other European countries than in Latvia. In Estonia, for example, workers with tertiary education earn just 24% more than those with upper secondary education, which is similar to the differential observed in Scandinavian countries.

Inter-occupation differences in earnings are also smaller in Latvia than in other OECD countries, especially in high-end occupations (Figure 3.1). The average hourly earnings of managers are almost double the average hourly earnings of all workers across the OECD, but in Latvia, the earnings premium for managers is 73%. Equally, professionals earn 47% more than average workers across the OECD as a whole, but the earnings premium for Latvian professionals is 34%. Again, however, inter-occupation earnings differences in Latvia are comparable to other countries in Europe: the earnings premium for professionals, for example, is remarkably similar across all three Baltic states. Interestingly, the size of the earnings penalty among service and sales workers is similar in Latvia to the rest of the OECD, despite the apparent skills shortages in these occupations.

Figure 3.1. Occupational earnings premia in the Baltic states and the OECD

Ratio of mean hourly earnings for workers in particular occupations to earnings for all workers, 2010



Source: World Indicators of Skills for Employment (WISE) *Database*, http://stats.oecd.org/Index.aspx?DataSetCode=WSDB.

StatLink https://doi.org/10.1787/888933961049

The low returns to tertiary education and smaller inter-occupation earnings premia compared with other OECD countries, may partly explain why skills shortages persist in Latvia. There may be insufficient incentive for individuals to invest in skills that are in

shortage. Nevertheless, the provision of education, training, and career guidance for young people – to which this chapter now turns – is also likely to affect skills shortages.

Relatively few Latvians attain Vocational Education and Training

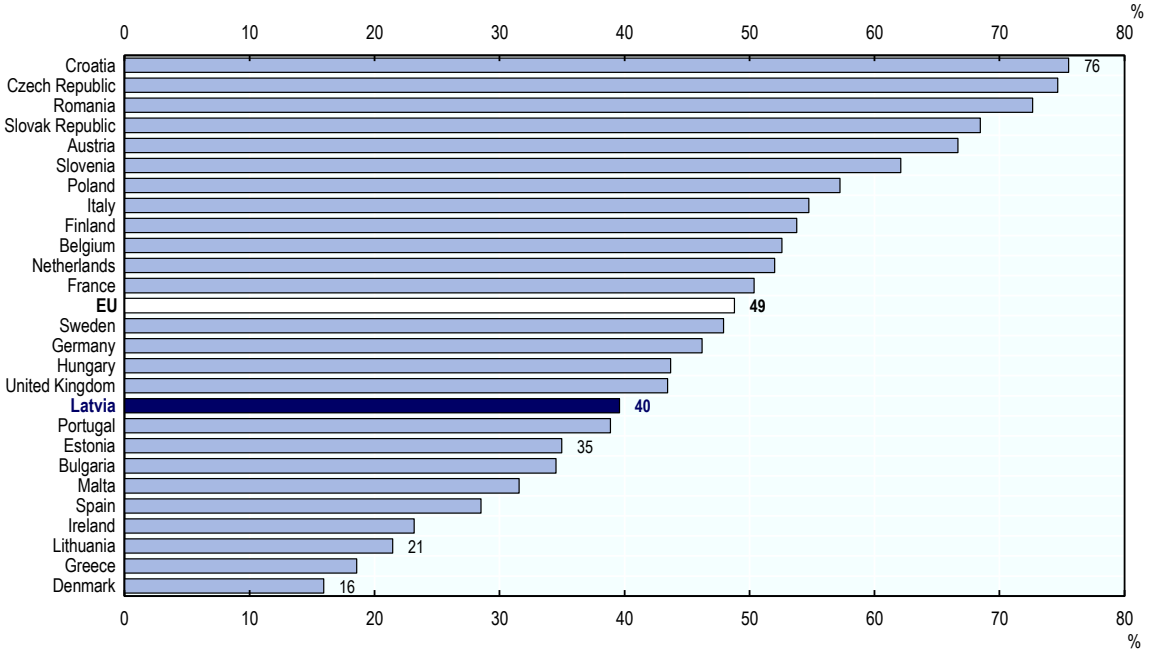
The proportion of young people attaining some form of upper secondary education in Latvia is comparable to its Baltic neighbours and is higher than the EU average.[5] In 2017, a little more than 87% of Latvians aged 20-24 had attained at least upper secondary education, compared to 83% for the EU as a whole. There has also been a substantial reduction in the number of young Latvians leaving full-time education early in recent years. Between 2007 and 2017, the proportion of 18-24 year-olds with at most lower secondary education, but who were no longer in education or training, fell from 16% to 9%: this constitutes the fourth largest improvement in the EU over that decade (Eurostat, 2015[3]).[6]

Nevertheless, while the proportion of young people with VET in Latvia is higher than in other Baltic States, it remains well below the EU average (Figure 3.2). Among those Latvians aged 20-24 who had attained upper secondary education but not tertiary education, just under 40% had focussed on vocational qualifications, according to the latest European Labour Force Survey.[7] For the EU as a whole, this proportion was 49%. Dropout rates also appear to be higher for vocational education than for other educational pathways. Statistics from the Ministry of Education and Science (MoES) show that the average non-completion rate of students in general upper secondary programmes was 1.8% in the 2012/2013 academic year but ranged between 13% and 16% for equivalent vocational programmes (MoES, 2014[4]).

One possible reason for this relatively low take-up in the recent past is that the reputation of VET compared with other educational pathways in Latvia has not historically been strong. A 2011 Eurobarometer survey administered across the EU found that only 63% of respondents (second-lowest value; EU average of 75%) in Latvia considered learning in vocational schools to be of high quality and just 60% (sixth-lowest value; EU average of 73%) perceived VET to have a "positive" image (European Commission, 2011[5]). Moreover, Latvians were amongst the most pessimistic about the notion that VET professions were highly demanded in the labour market (third-lowest value; 60% in Latvia compared to EU average of 73%) with relatively few believing that VET graduates had good career opportunities (fourth-lowest value; 57% in Latvia compared to EU average of 72%). The recent wave of reforms to the VET system in Latvia have sought to improve the quality of VET in the country, building its reputation, and encouraging young people to pursue vocational pathways through the education system, but – as discussed below – results have so far been mixed.

Figure 3.2. Type of educational attainment among individuals with upper-secondary but without tertiary education among EU countries

Percentage of individuals aged 20-24 with vocational education rather than general or other type of education, 2016



Note: The European Union includes the 28 member countries.
Source: European Labour Force Survey (Eurostat), http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=lfso_16workexp&lang=en.

StatLink https://doi.org/10.1787/888933961068

With the youth population in decline, the number of young people enrolled in tertiary education has fallen

The number of young people in Latvia has declined in recent years, leading to a corresponding drop in the number of young people enrolled in tertiary education. Between 2010 and the 2015, the total population of 20-24 year-olds in Latvia fell by 24.4%, from 165 000 to 125 000 (UN DESA, 2017[6]). Over the same period, the number of 20-24 year-olds enrolled in tertiary education in Latvia fell by 25.3%, from 59 000 to 44 000 (OECD, 2018[7]). Some young people are choosing to enrol in universities abroad, in part because this option has become easier following Latvia's accession to the EU. Between 2007 and 2011, the number of Latvians enrolled in tertiary education in other OECD countries almost doubled, reaching 6 650 students, nearly half of whom were based in the United Kingdom (OECD, 2016[8]).[8] The United Kingdom's exit from the EU may affect this trend or divert prospective Latvian students to other EU countries (see Box 1.1 in Chapter 1).

The decline in university enrolment has not been even, with the drop being especially sharp among students who are not enrolled in state-subsidised programmes. Access to these state-subsidised programmes is highly competitive and determined by exam scores, with subject- and institution-specific quotas being set by the MoES. Students in these state-subsidised programmes receive their tuition free of charge, although they still have to

compete for a limited number of government-funded monthly stipends, which are awarded to the students with the highest prior academic achievement. The fees for those individuals who do not participate in state-subsidised programmes vary substantially. In 2013/14, the yearly academic fees for bachelor's degree students ranged from EUR 882 to EUR 5 208, depending on the subject and the institution (MoES, 2014[9]; World Bank, 2014[10]).[9]

Notwithstanding the ongoing improvements discussed above, tertiary education may still need further realignment with labour demand, in order to encourage young people to enrol in universities in Latvia. The quotas for state-subsidised programmes have recently sought to bolster the number of graduates in STEM-related fields, leading to moderate increases in the proportion of graduates completing STEM degrees between 2004 and 2014 (Central Statistical Bureau of Latvia, 2015[11]). This also means that the decline in the number of students (described above) has been larger in non-STEM subjects. Nevertheless, continued reform may be needed if Latvia is to achieve its target of 27% of all graduates completing degrees in STEM-related fields by 2020. For one, pursuing STEM subjects remains relatively rare among women, a problem experienced by many OECD countries (OECD, 2016[12]). Additionally, private tertiary education providers remain focussed on social sciences, business, and law – skills that are currently less in shortage according to the *OECD Skills for Jobs Database* – rather than STEM-related fields. Tackling these issues may help ensure that tertiary education is valued by employers and, in turn, that young people are more willing to enrol in tertiary education institutions in Latvia.

Regardless of whether tertiary education itself is completed in Latvia or abroad, it appears that Latvians holding tertiary education have typically been more likely to emigrate. As Hazans (2013[13]) shows, in 2010/11 approximately two-thirds of Latvian students aged 18-65 – most of whom are likely to be in tertiary education – indicated that they intended to live and work abroad, although it should be borne in mind that these data come from shortly after the lowest point of the financial crisis. These intentions to move were also borne out by trends in emigration: around 24% of all emigrants who left Latvia since 2000 were either a student or trainee before departing (Hazans, 2015[14]).

Nevertheless, despite the decline in the number of young people enrolled in tertiary education and the draw of opportunities abroad, the *share* of the population holding tertiary education in Latvia has actually risen in recent years. In the decade to 2017, the proportion of Latvians aged 25-64 years old holding tertiary education increased by more than half, rising from 22% to 34% (OECD, 2018[7]). The analogous increase has been even larger for 30-34 year-olds, amongst whom the share holding tertiary education rose from 26% to 44% between 2007 and 2017, bringing Latvia above the EU average (Eurostat, 2018[15]). The rising proportion of individuals holding tertiary education has occurred in part because the decline in enrolment has been commensurate with the decline in the youth population. Young cohorts continue to add a disproportionately higher share of tertiary educated individuals to the population as a whole, especially given the low levels of enrolment in tertiary education prior to 2000: in 1995 the gross enrolment rate for tertiary education was just 23% compared to 81% in 2016 (World Bank, 2019[16]).[10] Additionally, while relatively few highly-educated Latvians indicated that they intended to return when the most recent migration intentions survey data were collected 2010/11 (see (Hazans, 2015[14])) migration patterns have started to change in the last decade. While still negative, 2017 saw the highest level of net migration in Latvia since the year 2000, suggesting that at least some Latvians – potentially with tertiary education – may be returning (CSB, 2019[17]).

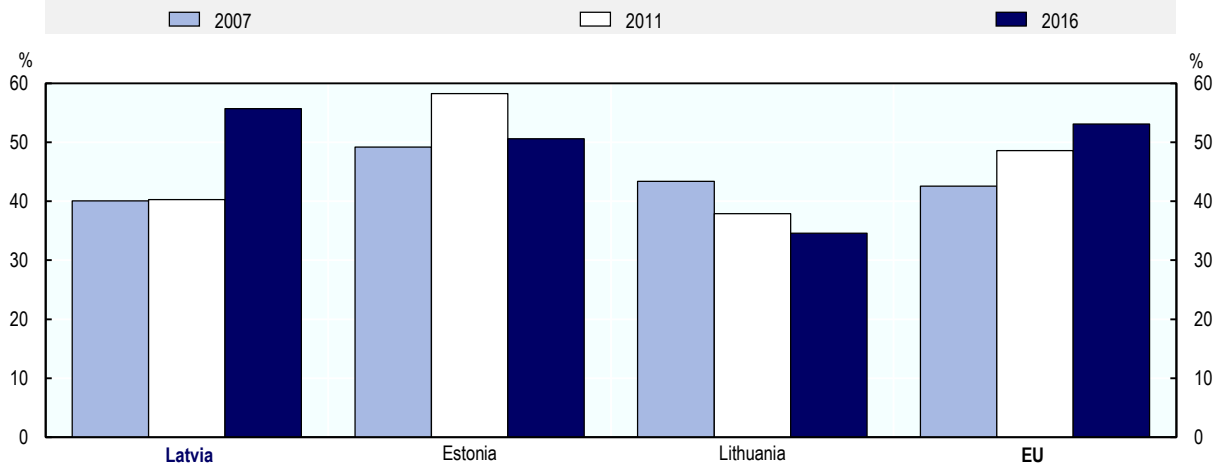
Learning on the job has historically been rare in Latvia, although its coverage has broadened recently

Opportunities for learning on the job have traditionally been limited in Latvia, fostering a weak culture of lifelong learning, but new evidence suggests that employers are now becoming more involved in building skills among their employees. In 2010, only 40% of Latvian enterprises provided any sort of Continuing Vocational Training (CVT), but virtually all Latvian enterprises did so by 2015 (Eurostat, 2015[18]; World Bank, 2015[19]). However, these statistics use a very broad definition of what counts as CVT, including participation in conferences and trade fairs for the purposes of learning. Latvia still lags behind European countries, if a strict definition of CVT – which includes only structured courses conducted in locations away from the active workplace – is adopted. Only 31% of Latvian enterprises provided CVT (under the stricter definition) in 2015, which is approximately half the EU average and significantly less than Estonia (64%) and Lithuania (44%).

The proportion of adults in some form of education has risen in Latvia, but this education has become shorter and less frequent. Between 2011 and 2016, the proportion of employed Latvians aged 25-64 who participated in some form of formal or non-formal education over the last 12 months increased from 40% to 56% (Figure 3.3). However, the time actually spent in adult education decreased substantially. Between 2011 and 2016, the estimated average time of instruction among employed adults who participated in formal or non-formal education fell from 148 hours to 92 hours for Latvia and from 103 hours to 94 hours for the EU as a whole (Eurostat, 2016[20]).[11] In addition, Latvian adults are far less likely than adults in other EU countries to have received education in the previous *four weeks*. In 2017, 7.5% of Latvians aged 25-64 had participated in formal or non-formal education in the previous four weeks, compared with 10.9% for the EU as a whole (Eurostat, 2017[21]). That said, while the rate of adult participation in education (in the last four weeks) remains low in Latvia, the proportion has in fact increased in recent years, up from 5.6% in 2014 (an increase of just over one-third).

Figure 3.3. Proportion of the workforce participating in education

Percentage of all employed individuals aged 25-64 participating in formal or non-formal education over the last 12 months, 2007, 2011, and 2016



Note: The European Union comprises the 28 member countries excluding Ireland.
Source: Adult Education Survey (Eurostat), http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=trng_aes_103&lang=en.

StatLink https://doi.org/10.1787/888933961087

Vocational Education and Training and tertiary education have been reformed to promote uptake

Since 2009, the government of Latvia has embarked on a menu of deep and wide-ranging reforms of the vocational education system, which seek to meet three key objectives (Cabinet of Ministers, 2009[22]). *First*, the reforms aim to promote the quality of vocational education in Latvia. *Second*, the reforms aim to align vocational education with the needs of the labour market. *Third*, the reforms aim to ensure resources are used efficiently, raising the attractiveness of vocational education to potential learners and to employers (MoES, 2015[23]).

One of the main components of these reforms has been to consolidate and restructure the network of institutions that provide VET in Latvia. This restructuring aims to: (1) improve access to vocational education; (2) ensure co-operation between key stakeholders, including education institutions and employers; and (3) promote efficient use of resources (Cabinet of Ministers, 2010[24]). Since 2009, larger vocational schools – those with more than 500 students outside of Riga and more than 800 students in Riga – have gradually been transformed into Vocational Education Competence Centres (VECCs), which act as regional hubs to develop closer links between vocational education and employers, to improve quality, and to provide pedagogical support for other vocational schools. To ensure VECCs boost the quality of VET, they must meet several specific criteria. Not only must VECCs meet certain standards in terms of students' results, but they must also ensure that they work with the latest technologies, provide career guidance, and create and publish educational and methodological materials for learners and educators online. VECCs are also tasked with providing part-time learning, which is vital for adults wishing to participate in education and training activities while remaining in employment. At the same time, VET schools with fewer than 300 students have been merged with VECCs or, more rarely, combined with general education schools. As a result of these reforms, the number of vocational education schools for which the MoES is responsible dropped from 59 to 21 between 2010 and 2018 (OECD, 2016[12]; MoES, 2019[25]). While consolidating the provision of VET in this way offers a clear strategy for improving efficiency and involving stakeholders, there is a risk that reducing the number of VET providers also reduces (physical) access. Certain steps have been taken to combat this issue, including supporting learners' mobility (discussed with reference to training for the unemployed in the section on vouchers) and building or renovating dormitories on site. Nevertheless, uptake of VET will only increase if the reputation and perception of the quality of VET provision also improves.

The VET curricula has also been reformed to ensure that vocational education is of high quality and is relevant to labour market needs in Latvia. Since 2011, special Sector Expert Councils (SECs) have been established to give key stakeholders a voice to shape the content of vocational education. The SECs include employer representatives (from industrial associations), government representatives (from the relevant ministries), and employee representatives (from the Free Trade Union Confederation). Latvia is also modularising vocational education, dividing programmes into discrete components (the "modules") that have specific learning outcomes, teaching methods, and indicators of achievement. By 2013, 56 VET programmes had been modularised and a further 68 are currently in the process of being modularised. Modularising VET programmes enables vocational education to adapt to changes in the nature of work brought about by technological advance and globalisation, giving students greater labour market flexibility (Pilz, 2012[26]). In line with the restructuring described in the previous paragraph, VECCs were given responsibility for approving newly-developed modules in the 2016/17 academic year

(CEDEFOP, 2018[27]). Finally, Latvia has developed a set of consistent qualification standards for VET, which increasingly align with the European Qualifications Framework (EQF) to help potential participants and employers understand the level and content of vocational training.

The latest evidence on whether perceptions of and enrolment in vocational education have improved in response to the reforms described above is mixed. A CEDEFOP survey from 2016 reveals that the results from the 2011 Eurobarometer have changed relatively little insofar as perceptions of VET in Latvia are less positive than for the EU as a whole (although making direct comparisons between these two surveys is difficult given differences in the sample and the questionnaire).[12] The 2016 CEDEFOP survey suggests that just 61% of Latvians have a positive image of VET compared with 68% for the EU as a whole, while 76% of Latvians agreed with the statement that "people in vocational education learn skills that are needed by employers [in our country]" compared with 86% for the EU as a whole (Daija, Krastina and Rutkovska, 2018[28]). At the same time, enrolment in vocational upper secondary education relative to general upper secondary education has risen very slightly in the last two years, climbing from 38.2% of all those in upper secondary education in 2016 to 38.9% in 2018 (CSB, 2019[29]). However, these changes are relatively small especially when placed in recent historical context: indeed, in 2013, 39.1% of upper secondary students were in vocational education (OECD, 2018[7]).

New arrangements for learning in the workplace have also sought to promote adults' participation in VET, which may partly explain some of the rise in the proportion of adults participating in on-the-job training discussed above. Following successful pilot projects in the 2013/14 and 2014/15 academic years, the vocational education law was amended in 2015 to define clear roles for learners, for SECs (described above), and for enterprises when providing learning for their employees (European Commission, 2015[30]). Learners now receive both theoretical and practical training at both a vocational school and at the company, with the latter comprising at least 25% of the training time. SECs help to promote and evaluate arrangements for learning in the workplace, ensuring co-operation between employers and education institutions. Given SECs' links to the formal education system, learning in the workplace now leads to nationally recognised qualifications. As of January 2017, enterprises are required to assign workers appropriate mentors, who must have a master of crafts certificate, vocational education, or at least three years of relevant work experience as well as certified teaching competence. Additionally, there are now tax exemptions for scholarships for learning at work, not exceeding EUR 280 per month, to further incentivise participants and enterprises (CEDEFOP, 2018[27]).

Nevertheless, the fact that the new arrangements for learning in the workplace (described above) operate largely in isolation from the existing apprenticeship system in Latvia may limit their effectiveness (OECD, 2016[12]). Although the existing apprenticeship system – organised through the Chamber of Crafts – has very few participants, it may be a source of expertise on learning on-the-job that is currently going untapped.[13] At the same time, those individuals working through the existing apprenticeship system (rather than the new arrangements for learning in the workplace) fall outside the formal education system. The qualifications that result from the existing apprenticeship system do not provide access to regulated professions nor the formal education system, and there are also no mechanisms in place for reintegrating those individuals who drop out (Daija, Kinta and Ramiņa, 2014[31]).

The tertiary education system has also been reformed to boost quality assurance and strengthen finances, complementing the reforms to VET described above. In July 2015, the

Academic Information Centre (AIC) become the institution responsible for quality assurance in higher education (including accreditation and licensing), operating in accordance with EU standards and regulations. Within AIC, a separate department known as the Quality Agency for Higher Education or Augstākās izglītības kvalitātes aģentūra (AIKA), which focusses *solely* on quality assurance, is currently aiming to align with the European Quality Assurance Register for Higher Education (EQAR) (ENQA, 2018[32]). Aligning with EQAR in this way would be a vital step for promoting the quality, visibility, and international recognition of Latvia's tertiary education system (OECD, 2016[12]). In 2015, Latvia also adopted a "three-pillar" funding model, designed to balance stability, performance, and innovation. The funding model was developed with support from the World Bank, involving also representatives from the higher education sector and other social partners. The three pillars of the funding model comprise: (1) base financing (institutional financing to ensure the functioning of education and research); (2) performance-based financing (financing that is allocated to reaching set study outcomes and research results); and (3) innovation financing (future development-oriented financing that promotes specialisation of institutions and profile development) (World Bank, 2017[33]).

Given how recent the reforms to the tertiary education system have been, it is unlikely that drastic changes in quality and hence uptake would already be observed. There is some suggestive evidence that the decline in absolute enrolment described above may be starting to stabilise. Between 2015 and 2016, the number of people of all ages enrolled in tertiary education fell by just 1.9%, the smallest year-on-year decline observed since consistent data collection began in 2005 (OECD, 2018[7]). Additionally, the *rate* of gross enrolment in tertiary education is now high in Latvia, having grown substantially over the previous two decades. Even in recent years there has been an uptick in the gross enrolment rate in tertiary education, rising from 67% to 81% between 2012 and 2016 (World Bank, 2019[16]). However, it remains to be seen whether these recent trends will persist and whether they can really be attributed to the reforms to the tertiary education system.

A specialised Training Commission also helps align education and training with future skills shortages

There are two main types of labour market forecast in Latvia, each with very different aims. First, the SEA has its own short-term forecasting model, which produces sector – and region-specific predictions about skills shortages, by combining: (1) macroeconomic data from Eurostat and the Ministry of Economics; (2) labour market data from the Labour Force Survey; and (3) employers surveys (European Commission, 2016[34]). Second, the Ministry of Economics publishes an annual report with medium- and long-term forecasts for broader measures of labour supply and demand. Labour market forecasting can be challenging in Latvia, for two main reasons. *First*, given Latvia's population, sample sizes for sector-specific data may be small, making it harder to produce sector-specific forecasts, especially over long time horizons. *Second*, Latvia is a very open economy, such that large, unpredictable sectoral shifts can occur in the face of external shocks. Despite these challenges, both the SEA's short-run forecasts and the Ministry of Economics' long-term forecasts provide crucial insights into future skills shortages in Latvia. Indeed, since 2016, both the SEA and the Ministry of Economics have been working to improve the quality of Latvia's labour market forecasts, under a 5-year European Social Fund project.

Since the two sets of forecasts are so useful for guiding training-relevant policies, Latvia has a specialised "Training Commission" (established in 2003), which seeks to integrate the SEA's short-term forecasts and the Ministry of Economics' long-term forecasts

(Zvīdriņa, 2015[35]; Bratti et al., 2018[36]). The fields of study for training for the unemployed – on which the next section focusses – are decided by meetings of the Training Commission, which take place at least once a year.[14] The Training Commission brings together representatives from key ministries – including the Ministry of Welfare, Ministry of Economics, and MoES – but also includes members from the SEA, local government associations, and employers' associations to ensure the voices of all key stakeholders are heard. Combining the short- and long-term forecasts is not an easy task, so meetings of the Training Commission adopt a specific structure to facilitate co-ordination (EACEA, 2018[37]). The Ministry of Economics first presents the long-term forecasts. The SEA then presents the implementation results of ongoing training measures as well as the results of the short-term forecasts. All members of the Training Commission then review the full list of fields of study to determine which should be retained, which should be suspended, and whether any types of training should be added.

Training is a tenable strategy for activating the unemployed in Latvia

The setting in Latvia means that providing training to unemployed individuals is a tenable strategy for helping them to connect with good jobs. Firstly, there are skills shortages in certain occupations and sectors in the Latvian economy. While providing training for the unemployed should not necessarily be seen as the main way to address these skills shortages at the macro level, the fact that skills shortages exist means that building skills among the unemployed may provide them with a tenable pathway back into work. While the recent and ongoing reforms to the VET and tertiary education systems support the job prospects of future cohorts, they may come too late for those who have already entered the labour force. Equally, the expanding coverage of on-the-job training only helps those who are actually in work.

Description and evaluation of Latvia's main training programmes for the unemployed

This section evaluates the effectiveness of selected training programmes for the unemployed, which fall under the menu of ALMP measures implemented in Latvia. The analysis focusses principally on formal vocational trainings (henceforth "formal trainings") and non-formal trainings, which typically last several weeks and build concrete and substantive skills. These are distinct from shorter "Measures to Improve Competitiveness" (MICs), which typically last one or two days and try to develop individuals' approach to engaging with the labour market (for example by improving CV writing or interview technique). The section begins by outlining the formal and non-formal training programmes that are evaluated and describing the detailed linked administrative data on which the evaluation draws. The section continues by explaining the challenge of evaluating training programmes that begin at different times throughout individuals' unemployment spells, putting forward an econometric approach to deal with this challenge. Finally, the section reports the main evaluation results, exploring the sub-groups for which trainings are most effective and testing the implications of combining trainings with other ALMP measures. Where possible, the analysis builds on the previous evaluation of training for the unemployed in Latvia undertaken by Hazans and Dmitrijeva (2013[38]) to better contextualise the estimated effects.

The evaluation focuses on substantive formal and non-formal trainings

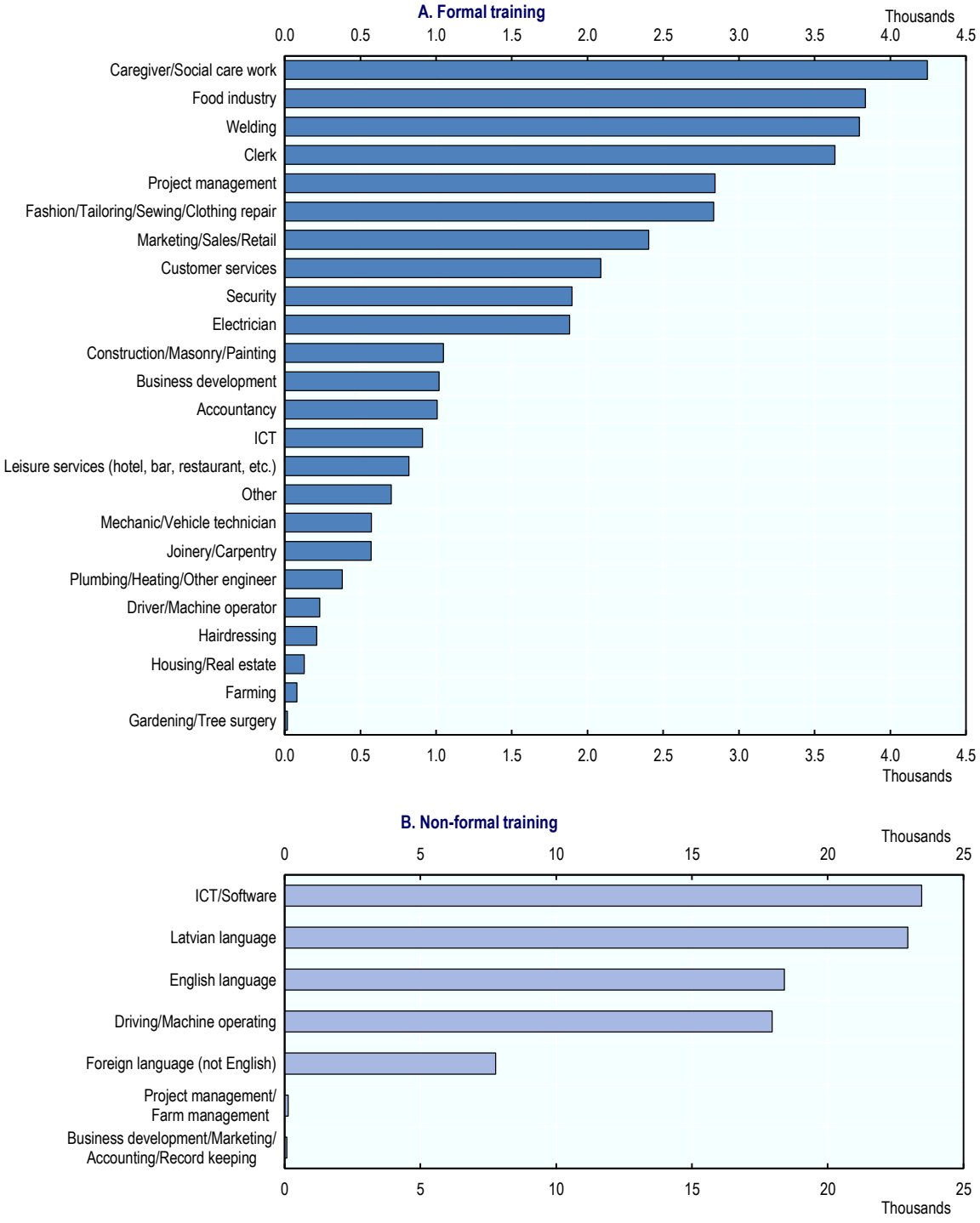
As discussed in Chapter 2, several ALMP measures involve some form of training or workshop. Alongside the formal and non-formal trainings on which this chapter focusses, in 2017, there were also approximately 80 000 participations in MICs.[15,16] These MICs seek to equip participants with the competencies required to engage successfully in the labour market. They often comprise very short courses, focussing on how to write CVs, how to succeed during interviews, and how to network effectively. There were also small numbers of trainings that cannot be classified as formal training nor non-formal training nor MICs. In 2017, there were approximately 600 participations in "workshops for young people" as part of the Youth Guarantee and 300 participations in "trainings at the employer".

This chapter mainly analyses formal and non-formal trainings for three main reasons:

- *First,* the content of formal and non-formal trainings tries to build concrete skills that are in demand in the Latvian labour market. Formal trainings build a specific new skill such as social care, project management, or welding, with participants working towards a professional qualification. Non-formal trainings, which do not necessarily result in a formal qualification, cover cross-cutting skills, such as languages and ICTs, which are in demand among employers. Figure 3.4 shows the number of formal and non-formal trainings or the unemployed that took place between January 2012 and October 2017, falling under different fields of study.
- *Second*, formal and non-formal trainings last longer and require more contact hours than MICs (see Figure 3.5). Formal trainings take between 22 and 202 days to complete, lasting 91 days on average. They require at least 160 hours of contact time and require approximately 500 hours of contact time on average. Non-formal trainings take between nine and 134 days to complete, lasting 42 days on average. They require at least 40 hours of contact time and require approximately 125 hours of contact time on average. MICs, by contrast, typically last around one day and involve just seven hours of contact time. Given that MICs are so short, it may be difficult to capture their effects in a quantitative evaluation of the type undertaken in this chapter.
- *Third*, the sample sizes of MICs and of other trainings are not amenable to reliable statistical analysis. Taking all individuals that received *any* ALMP measures from the SEA between January 2012 and October 2017, around three-quarters received a MIC at some point. In some sense, MICs – like regular caseworker meetings or career consultations – are part of the regular ongoing services provided by the SEA, rather than a discrete programme. This makes it difficult to make meaningful comparisons between individuals that did and did not receive MICs. At the other extreme, since participations in training at the employer and workshops for young people are relatively rare, the sample size is insufficient to evaluate their impacts rigorously.

Figure 3.4. Main types of formal and non-formal training

Number of participations, January 2012 to October 2017



Note: ICT: Information and communications technology. Data cover all participations between January 2012 and October 2017.

Source: Latvian State Employment Agency and OECD estimates.

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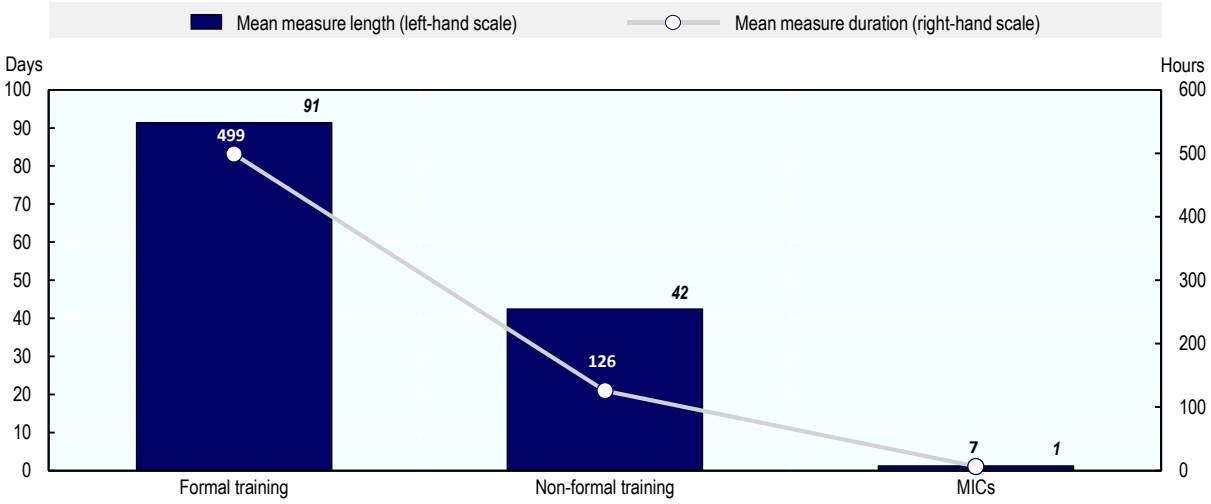
Figure 3.5. Length and duration of trainings and Measures to Improve Competitiveness

Mean length of measure in days, mean contact time in hours, January 2012 to October 2017



Note: MIC(s): Measure(s) to Improve Competitiveness.
Source: Latvian State Employment Agency and OECD estimates.

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As shown in Chapter 2, there was some year-to-year variation in the number of participations in formal and non-formal trainings between 2012 and 2017, yet there was a clear decline in the number of MICs. In 2012, there were almost 150 000 participations in MICs, but this dropped to just under 80 000 in 2017.

Currently, the SEA – with guidance from the Training Commission – is reforming the provision of MICs by bundling them in with non-formal trainings, which may reduce the number of MIC participations. This is to consolidate the programme of support provided to the registered unemployed and improve the quality of trainings and MICs. These new consolidated courses will focus on topics including basic communication skills, state language, and ICT skills, while supplementary e-learning courses on topics such as financial literacy and preparing for interviews may also be offered. While it is too early to tell the effects of these reforms, the SEA anticipates a resulting increase in both the quality of non-formal trainings and the number of individuals participating in such trainings.

Both formal and non-formal trainings are provided through a system of vouchers. The vouchers specify the field of study for which they are valid, and their face value reflects the length of the training to be provided. Further details of the voucher system and its implementation are discussed in in the penultimate section of this chapter.

Linked administrative data paint a detailed picture of individuals' participation in ALMPs and their labour market outcomes

An econometric evaluation of the effectiveness of training programmes requires rich data, which track people's outcomes after their participation in training and contain sufficient information about their personal and household characteristics and situation. The data on which this evaluation draws come from four main sources, outlined in Table 3.1. The data cover the period January 2012 to October 2017. Unique individual identifiers allow the

data to be combined, providing a rich understanding of individuals' participation in ALMPs (from the SEA), their background characteristics (from the population registry), and their labour market outcomes and social security outcomes (from the Social Insurance Agency as well as the Social Assistance Database, which comes municipalities).

Table 3.1. Data sources used in the evaluation

Data source	Information available	Periodicity	Sample
State Employment Agency (SEA)	Participation in ALMPs, interactions with SEA, and detailed background characteristics of registered unemployed.	Start and end dates of ALMPs recorded.	Registered unemployed.
Social Insurance Agency	Employment outcomes and receipts of various benefits, including unemployment benefit, disability benefit, state family benefit, sickness benefit, and pensions.	Monthly.	All working-age individuals.
Population Registry	Individual background characteristics, including gender, age, ethnicity, citizenship status, and marital status.	Monthly.	All working-age individuals.
Social Assistance Database (from municipalities)	Receipts of social assistance and Guaranteed Minimum Income.	Monthly.	All working-age individuals.

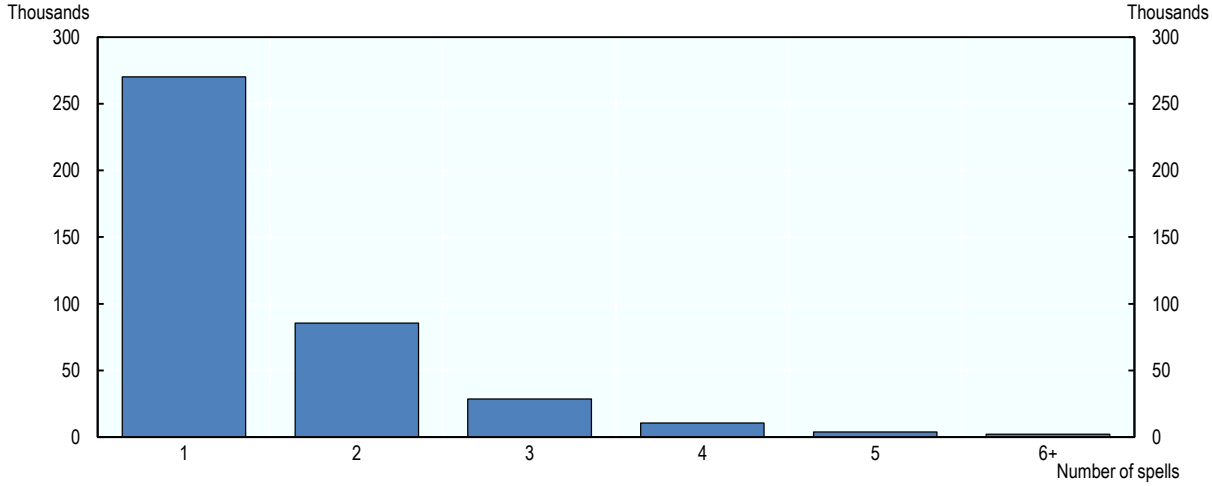
Note: ALMP: Active labour market policy.

Despite the richness of the data on which this evaluation draws, two key limitations should be borne in mind. *First*, while detailed employment outcomes are known for the observation period (January 2012-October 2017), full individual employment histories are not available.[17] This implies that (1) only partial employment histories can be used to control for differences between individuals when trying to estimate the effects of trainings and (2) it is not possible to know whether the first *recorded* unemployment spell (occurring between January 2012 and October 2017) corresponds to an individual's first *true* unemployment spell. *Second*, it is difficult to know the precise content of the formal and non-formal trainings. This is because the SEA's main role is to provide training participants with a voucher, aligned with a broad field of study. The precise content of each training is the responsibility of the educational institution that the voucher recipient chooses, and programme descriptions may be very long and detailed (especially for non-formal trainings). As such, the SEA does not collect information on the precise content of each specific training programme.

Looking to the data on employment outcomes from the Social Insurance Agency, it emerges that many individuals experienced more than one spell of registered unemployment between January 2012 and October 2017 (Figure 3.6).[18] Approximately one third of those individuals that became unemployed at least once between January 2012 and October 2017 experienced more than one spell of registered unemployment. The typical durations of first, second, third, and subsequent unemployment spells, are discussed in Box 3.1.

Figure 3.6. Number of unemployment spells experienced

Total number of individuals, January 2012 to October 2017



Note: Data refer to registered unemployment. Only spells starting after January 2012 are included. Unemployment spells that were ongoing in October 2017 are retained.
Source: Latvian Social Insurance Agency and OECD estimates.

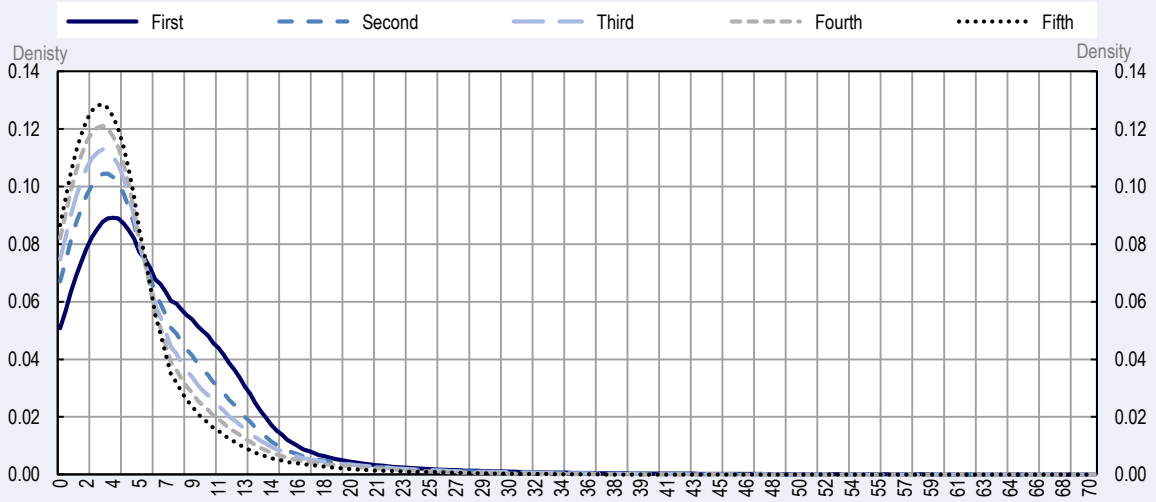
StatLink https://doi.org/10.1787/888933961144

Box 3.1. Patterns in terms of unemployment spell length

Unemployment spells lasted 6 months on average but, given the possibility that individuals experience multiple unemployment spells between January 2012 and October 2017, subsequent unemployment spells were found to be shorter than initial spells (see Figure 3.7). The first recorded unemployment spells lasted seven months on average, whereas the fifth recorded unemployment spells lasted four months on average. Approximately 10% of the first recorded unemployment spells lasted more than 12 months, whereas just 4% of the fifth recorded unemployment spells lasted that long. These patterns are consistent with the unemployment benefits system giving individuals additional incentive to exit unemployment quicker after the first spell. As discussed in Chapter 2, levels of unemployment benefit depend on how long an individual was in employment before their job ended: this period of accumulation is likely to be shorter for second, third, fourth (and so on) unemployment spells. Additionally, individuals need to have been in employment for at least 12 months out of the previous 16 months to qualify for *any* unemployment benefits (nine months out of the previous 12 months before December 2016). As such, individuals in their second, third, fourth (and so on) unemployment spells may potentially be ineligible for unemployment benefit receipts, providing a particularly strong incentive to find a way back into work.

Figure 3.7. Distribution of spell lengths by number of recorded unemployment spells

Duration of unemployment spell in months, January 2012 to October 2017



Note: Only spells starting after January 2012 and finishing before October 2017 are included.
Source: Latvian Social Insurance Agency and OECD estimates.

StatLink https://doi.org/10.1787/888933961182

Nevertheless, there are two important caveats on the finding that subsequent unemployment spells are shorter than initial ones. Firstly, the finding partly stems from censoring and sample selection. Individuals' second, third, fourth (and so on) unemployment spells are more likely to be right-censored than their first unemployment spells. Subsequent spells are more likely to continue past the end of the observation period (October 2017), especially if such spells are long, so that their length cannot be observed. Indeed, if the average spell lengths are recalculated focussing only those individuals that experienced five complete unemployment spells within the observation period, the average differences between the first spell and subsequent spells are far more modest (Annex Figure 3.A.1). Of course, this recalculation introduces a different type of sample selection, by simply excluding anyone who experienced less than five unemployment spells. Secondly, individuals' second, third, fourth (and so on) unemployment spells happen later by construction, meaning that they are more likely to coincide with the stronger period of the economic upturn (see Chapter 1). Again, differences between initial and subsequent spells are smaller, but not eliminated, if this "cohort" effect is isolated and extracted (Annex Figure 3.A.1).

This evaluation focusses primarily on those individuals that *entered* registered unemployment between January 2012 and October 2017: the analysis uses an "inflow" sample. It is important to know when the unemployment spell started so the analysis can correctly ascertain how long an individual had been unemployed before they received training and how long their unemployment spell actually lasted. As such, individuals that were unemployed in December 2011 and remained so in January 2012 will only be included in the analysis if they exit and then *re-enter* unemployment during the observation period.

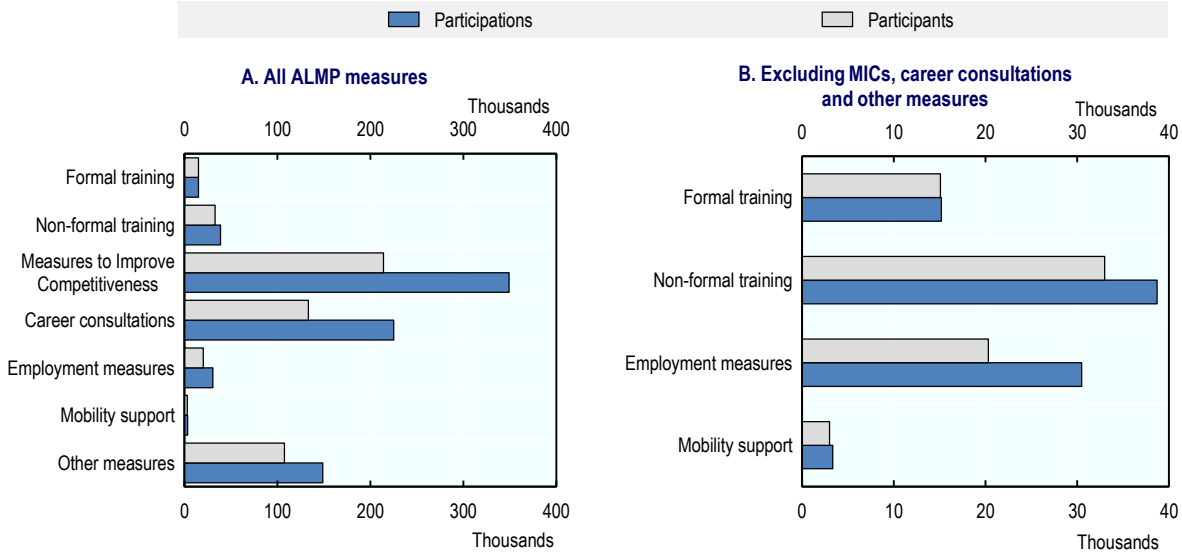
The analysis also focusses specifically on individuals' *first* recorded unemployment spells for two main reasons. *First*, the first recorded unemployment spells happen earlier in the observation period, making it easier to observe the long-term impacts of training on individuals' labour market outcomes. *Second*, as Box 3.1 shows, the first recorded unemployment spells typically last longer than other spells, making it easier to consider the outcomes of those who spend longer periods in unemployment before training starts.

Individuals often participate in multiple Active Labour Market Policy measures

Training clearly remains a sizeable component of Latvia's ALMP strategy, even after adjusting the data for the needs of this evaluation. After restricting the data to focus only on ALMP measures received during individuals' first recorded unemployment spells, approximately 15 000 individuals participated in at least one formal training and a further 33 000 participated in at least one non-formal training (Figure 3.8). These figures include trainings provided as part of the Youth Guarantee.[19] Participation in non-formal trainings was therefore wider than all employment measures – including public works and employment subsidies – taken together. However, as discussed in Chapter 2, participation in MICs far exceeded participation in any other category of ALMP measure in Latvia.

Figure 3.8. Participation in ALMP measures

Number of participations and participants during the first recorded unemployment spell, January 2012 to October 2017



Note: ALMP: Active labour market policy. MIC(s): Measure(s) to Improve Competitiveness. *Participations* count each time an individual participated in a particular type of ALMP measure, even if they do so more than once in their first recorded unemployment spell. *Participants* count each individual only once for each ALMP measure. *Employment measures* includes public works schemes and employment subsidies. *Other measures* comprises all other ALMP measures, including business support, other trainings (such as workshops for young people), and "Minnesota" services for addicted persons. Data are restricted to individuals' first recorded unemployment spell.

Source: Latvian State Employment Agency, Latvian Social Insurance Agency and OECD estimates.

StatLink https://doi.org/10.1787/888933961182

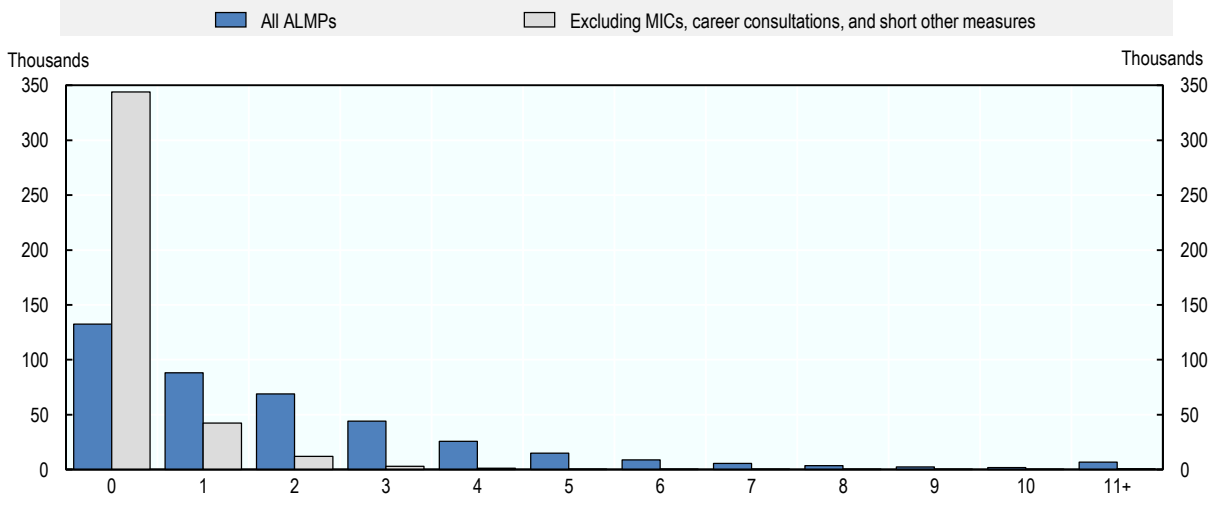
Many individuals participate in more than one ALMP measure within their first recorded unemployment spell (Figure 3.9). Even if MICs, career consultations, and "short other measures" (i.e. other measures that comprise only a short consultation or session) are excluded, 30% of those individuals that participated in any of the remaining substantive ALMP measures end up participating in more than one substantive ALMP measure. Of those individuals that participated in formal training in their first recorded unemployment spell, 47% had participated in more than one substantive ALMP measure. Similarly, of those individuals that had participated in non-formal training in their first recorded unemployment spell, 36% had participated in more than one substantive ALMP measure. Estimating the effects of training despite this overlap between different ALMP measures is one of the key challenges faced by this evaluation.

Participation in formal and non-formal trainings also overlapped substantially. Approximately one third of formal training participants also participated in non-formal training during their first recorded unemployment spell, while around 15% of non-formal training participants also participated in formal training.

Nevertheless, there are certain restrictions over the number of formal and non-formal trainings in which individuals can participate. Individuals can only participate in one formal training every two years. This explains why the number of participations and participants for formal training in individuals' first recorded unemployment spells are virtually identical in Figure 3.8. By contrast, individuals may be involved in non-formal training focussed on Latvian language up to three times per year, and any other type of non-formal training up to twice per year. This explains why the number of participations exceeds the number of participants for non-formal training in Figure 3.8.

Figure 3.9. Multiple participations in ALMP measures

Number of individuals participating by number of ALMP participations, January 2012 to October 2017



Note: ALMP: Active labour market policy. MIC(s): Measure(s) to Improve Competitiveness. *Short other measures* are those *other measures* that comprise only a short consultation or session. The short other measures category does not include more substantive measures like business support. Data are restricted to individuals' first recorded unemployment spell.
Source: Latvian State Employment Agency, Latvian Social Insurance Agency and OECD estimates.

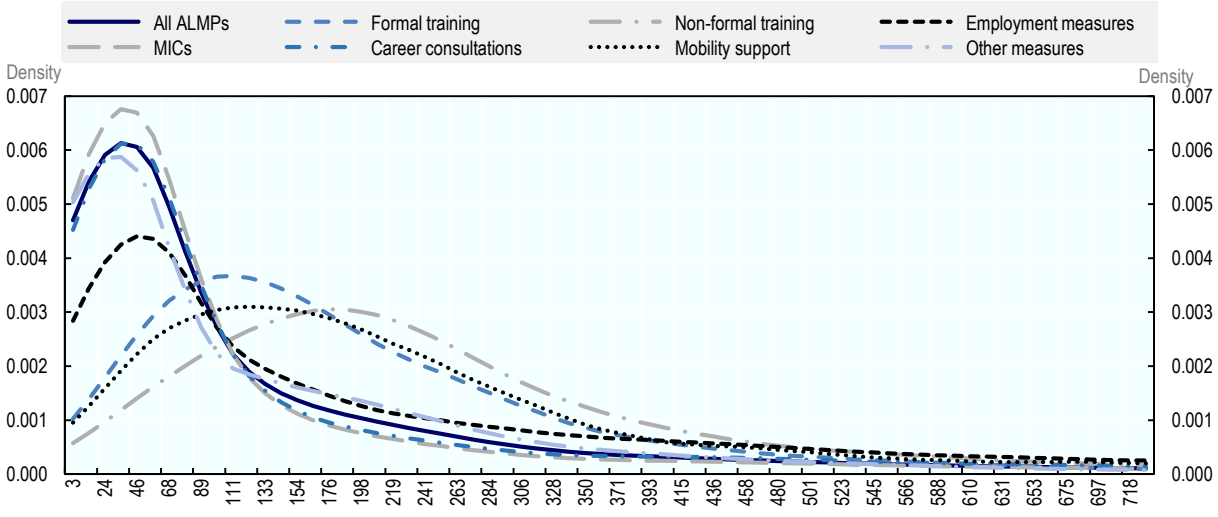
StatLink https://doi.org/10.1787/888933961201

The timing of ALMP measures – in terms of when they take place within individuals' unemployment spells – varies substantially (Figure 3.10). MICs and career consultations typically happen within two months of becoming unemployed: the median time taken to receive a MIC after registration was 46 days while for career consultations it was 58 days. Participation in employment measures also occurred *relatively* early on in individuals' unemployment spells (median of 124 days). This may reflect the fact that enrolment into public works schemes – which remain by far the largest component among the employment measures – happens on a predictable rotating basis, especially in rural areas where some work is seasonal. Measures to support regional mobility typically begin approximately 6 months into individuals' unemployment spells: such measures may be explicitly linked to training to help individuals reach training providers, or they may simply help the registered unemployed to reach the location of a new job.

Formal trainings tend to occur earlier in individuals' unemployment spells than non-formal trainings. At the median, 161 days elapsed between registering as unemployed and the start of formal training programmes, compared with 218 days for non-formal trainings. Indeed, non-formal trainings occur later in the unemployment spell than any other type of ALMP. At least part of the difference in the time between registration and the start of training that arises between formal and non-formal trainings is down to queueing. After the caseworker and SEA client have agreed on the need for training, individuals have to wait 110 days on average for non-formal trainings (at least for those focussed on foreign languages and ICTs) to start compared but around 60 days for formal training.[20] These waiting times comprise the time between assignment to a training measure and receipt of a training voucher, and the time between receipt of a training voucher and redemption of that voucher. The implications of these waiting times are discussed in more detail in the penultimate section of this chapter.

Figure 3.10. Variation in the start of ALMP measures

Number of days between registration as unemployed and start of ALMP measure by ALMP measure type, January 2012 to October 2017



Note: ALMP: Active labour market policy. MIC(s): Measure(s) to Improve Competitiveness. Observations above 730 days excluded from the chart. Data restricted to individuals' first recorded unemployment spell.
Source: Latvian State Employment Agency, Latvian Social Insurance Agency and OECD estimates.

StatLink https://doi.org/10.1787/888933961220

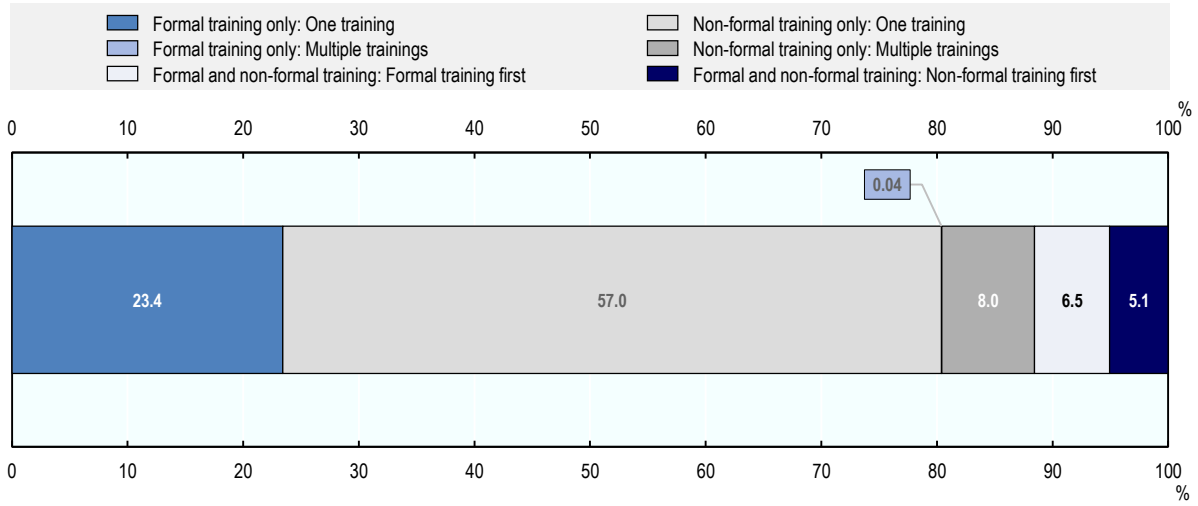
Given the variation in the timing of ALMP measures described above, unemployed individuals that participated in training in combination with some additional ALMP measure typically participated in the additional ALMP measure first. Approximately 93% of those individuals that received both a MIC and formal training began the MIC first while 89% of those that received both a career consultation and formal training began the career consultation first.[21] Additionally, 58% of those receiving both an employment measure and formal training began the employment measure first.

Nevertheless, for those individuals that received both support for regional mobility – discussed in more detail in Chapters 2 and 4 – and training, the two measures began simultaneously in 80% of cases. This reflects the fact that such mobility support was often explicitly received by individuals seeking to improve their access to training providers. Individuals were able to receive a reimbursement of EUR 100 per month to cover the costs of transport to training sites or accommodation at training sites, providing the suitable training site was more than 15 kilometres from their place of residence. However, receipt of such mobility support is not automatic: training participants must submit an application form along with supporting documentary evidence to the SEA within 10 working days of the start the training. As discussed in Chapter 4, mobility support is also available to those wishing to travel to take up new employment (regardless of whether or not training has been completed), although the minimum distance to required to qualify for such mobility support is 20 kilometres.

Among those unemployed individuals that received *both* formal and non-formal training, formal training was only slightly more likely than non-formal training to begin first (Figure 3.11). For approximately 56% of such individuals, formal training was sequenced before non-formal training. As such, the differences between formal and non-formal training – in terms of the average time between registration and training start – are not so stark for those individuals that receive both types of training. Individuals are also able to express a preference to their caseworkers over how formal and non-formal trainings are sequenced (if they are to be combined), although there are certain restrictions. For example, Latvian language training is prioritised for those individuals whose inability to speak the state language prevents them from integrating into the labour market.

Figure 3.11. Participation in multiple trainings

Proportion of individuals receiving any training in the first recorded unemployment spell, January 2012 to October 2017



Note: Sample of individuals that received some form of training in the first recorded unemployment spell.
Source: Latvian State Employment Agency, Latvian Social Insurance Agency and OECD estimates.

StatLink https://doi.org/10.1787/888933961239

Complex patterns of participation in training necessitate a pragmatic econometric approach

In order to rigorously assess the impact of training measures, it is necessary to try and compare the employment outcomes of training recipients with what would have happened, had they not received the training: the latter can never be observed so it is necessary to find some way of constructing this "counterfactual" from the data. Normally, researchers would do this by comparing the outcomes of those individuals that participated in training and those that did not. Such comparisons may be biased because certain types of individuals (e.g. more motivated individuals) are more likely to participate in training and have better employment outcomes for reasons besides their participation in the training. Conversely, certain individuals that face additional barriers to employment – and therefore have worse employment outcomes – may be more likely to be directed towards training by caseworkers. To address such sources of bias, researchers may try to control for observed differences (in gender, education, age, and so on) between training participants and non-participants. Such methods would then produce an estimate of the "treatment effect" by effectively comparing individuals that appear similar in terms of their observable characteristics.

In the context of this evaluation, making such comparisons (even with controls for observable characteristics) may provide biased estimates of the true effects of training, because individuals participate in trainings at very different times throughout their unemployment spells. Since it takes time for unemployed individuals to begin training programmes after registering with the SEA, it may not be valid to compare trained individuals with those who receive no training. Many of the untrained may not be treated simply by virtue of the fact they find a job quickly (and exit unemployment) without support from the SEA. This latter group of individuals may have better future employment

outcomes than training participants by construction: if they exit unemployment again quickly they have a good chance of keeping that job, and are much more likely to be employed in several years or months than if they had remained unemployed. Additionally, the SEA will certainly not profile them as someone needing training support, so time in unemployment will not be extended mechanically by becoming locked-in to a training course. At the same time, they may be systematically more motivated or more able than training participants, factors for which it may be difficult to adequately control with the available data.

One way to estimate the effects of training programmes that are assigned at different times throughout the unemployment spell is to focus on those individuals who have endured a set number of months in unemployment and compare the labour market outcomes of those who begin training in that month with who are still "waiting", either for support from an ALMP measure or some other way out of unemployment. The application of this "dynamic selection-on-observables" methodology – pioneered by Sianesi (2004[39]) and Fredriksson and Johansson (2008[40]) – which is used in this analysis is explained in more detail in Box 3.2. The advantage of this approach is that it ensures trained individuals are compared with those who spent at least as long in unemployment, reducing bias when trying to estimate the effects of training.

Box 3.2. Econometric approach – Dynamic selection-on-observables

When individuals begin ALMP measures at different times throughout their unemployment spells, selecting "dynamically" into such measures, the set of individuals who were *never* treated does not serve as a suitable comparison group for those who were treated. Individuals only become available for treatment if they stay in unemployment long enough. Conversely, one of the main reasons that some individuals do not get treated is because they are able to find jobs and exit unemployment quickly. This motivates an approach that does not simply compare the ever treated with the never treated, but rather compares those who begin treatment at a given point in their unemployment spell with those who are still waiting for treatment at that time. This is precisely the "dynamic selection-on-observables" method developed by Sianesi (2004[39]) and Fredriksson and Johansson (2008[40]).

Implementing the dynamic selection-on-observables approach requires estimating (then aggregating) separate treatment effects for each pre-treatment duration (m, the amount of time between registration and the start of treatment) and for each time horizon of interest (t, the amount of time elapsed since the start of the ALMP measure, when the employment and earnings are measured). The *potential* labour market outcomes (such as employment or earnings) for an individual (i) can be written Y_{imt}^{d}, where $d = 1$ under treatment and $d = 0$ otherwise. The average treatment effect on the treated ($D_{im} = 1$) for each m and t can then be written:

$$\gamma_{mt} = E\left[Y_{imt}^{1} \middle| D_{im} = 1\right] - E[Y_{imt}^{0} | D_{im} = 1]$$

To estimate this equation:

- The treatment group comprises those individuals who *begin* treatment in period m. This includes the small minority of individuals that subsequently drop out of training.

- The comparison group comprises those individuals who were still unemployed in period m but were either treated later than period m or never treated.

- Individuals who (1) received treatment or (2) became employed and therefore left unemployment *before* period m are dropped from the estimation of a particular treatment effect γ_{mt}.

Given this framework, the dynamic selection-on-observables approach can only be used to estimate the treatment effect of the *first* ALMP measure in which individuals participate. Everything that happens after starting participation in the first ALMP measure is effectively treated as part of individuals' outcomes, even if that entails not working due to further participations in ALMP measures.

While the γ_{mt}s are revealing by themselves, it is helpful to calculate an overall treatment effect γ_t that is specific only to the time horizon t for the outcomes of interest. The analysis in this chapter follows previous applications of the dynamic selection-on-observables approach, by taking a weighted average of all the γ_{mt}s, where the weights correspond to the fraction of the total treated at each pre-treatment duration m (Doerr et al., 2017[41]). For total number of individuals N and maximum pre-treatment duration M:

$$\gamma_t = \frac{\sum_{m=1}^{M}\sum_{i=1}^{N} D_{im} \times \gamma_{mt}}{\sum_{m=1}^{M}\sum_{i=1}^{N} D_{im}}$$

The γ_ts are the key treatment effects reported for employment chances and earnings in this chapter, looking at 6, 12, 18, 24, 30, and 36 months after the start of the training.

Certain restrictions have to be placed on the pre-treatment durations (the ms) to ensure there is sufficient sample for each γ_{mt} to be estimable. For the main results, the analysis focusses on pre-treatment durations of between 0 and 12 months. This covers 95% of all formal trainings and 93% of all non-formal trainings. Looking between 0 and 12 months ensures that there are enough observations, when the results are broken down into certain sub-groups.

While looking at specific pre-treatment durations partly addresses concerns about selection, which may bias the estimated effects of training, individual characteristics – which are themselves correlated with individuals' employment prospects – may still influence whether or not individuals begin treatment at a given m. The analysis in this chapter therefore estimates each γ_{mt} using Ordinary Least Squares (OLS), including control variables for gender, age, marital status, number of children, disability and social assistance recipient status at the start of the unemployment spell, education level, ethnicity, citizenship status, Latvian language ability, and information on when previous employment occurred (if known). The OLS regressions also include fixed effects for region, SEA branch, and the calendar month in which the individual registered as unemployed.

One particular source of bias, which needs to be addressed to generate reliable estimates of trainings' effects, arises from unemployed individuals' ability to *anticipate* their future employment prospects. If individuals suspect that they will receive a job offer in the future, even if they are unemployed now, they may have less incentive to participate in training or other ALMP measures. Seasonal workers in particular may have meaningful arrangements with employers, which allow them to predict when new work will come along. This motivates controlling for skill levels (through education level) and month of registration as well as using the information that is available on previous employment.

Training participants are also likely to anticipate the start of their training: they are typically informed that they will receive a training voucher well in advance of receiving it. As a consequence, they may lower their job search effort while they wait for training to start. This should be dealt with by making comparisons between those who do and do not start

training at a *given* month m. Even if the untrained have been exerting more search effort during their unemployment spell, such effort has not been successful up until month m. However, it may be that this extra search effort improves the job chances of the untrained *after* month m: search effort may, in some sense, be "cumulative", perhaps if job seekers can build up networks or connections with prospective employers. This may bias the estimates of the effects of training downwards, insofar as training participants-to-be may not have accumulated as much search effort as non-participants. This potential phenomenon should be borne in mind when interpreting the results.

The analysis uses OLS regression rather than matching techniques (such as propensity score matching) to condition on observable individual characteristics when estimating each γ_{mt} for three key reasons. *First*, matching techniques typically permit a simple comparison between treated and untreated individuals. However, for some of the analysis in this chapter, it is useful to estimate the effects for more than one type of treatment group (for example, when decomposing the treatment effect of training for those that did and did not also receive mobility support). Including more than one dummy variable for different treatment groups is straightforward when using OLS. *Second*, it is possible to include fixed effects (for example, for SEA branch) when estimating the treatment effects using a linear model like OLS, without encountering the Incidental Parameters Problem. This problem may affect the probit or logit estimates needed to construct a propensity score, for either matching or weighting (Neyman and Scott, 1948[42]; Lancaster, 2000[43]; Söderbom, 2009[44]). *Third*, estimating the effects using OLS substantially speeds up computation. Similar studies have also noted the remarkable similarity between the results emanating from OLS and other, more complex techniques such as Inverse Probability Weighting (Doerr et al., 2017[41]).

The standard errors are estimated using cluster bootstrapping with 250 repetitions, with the clusters at the level of the SEA branch. This accounts for the fact that the overall treatment effect for a given time horizon γ_t is a composite of the treatment effects estimated from multiple pre-treatment durations (the γ_ts). Calculating the standard errors in this way follows examples from the existing literature (Biewen et al., 2014[45]).

The analysis that follows will also report more descriptive comparisons of the employment outcomes of individuals that were and were not trained at some point during their first recorded unemployment spell, alongside the results of the dynamic selection-on-observables methodology. Firstly, hazard rates – the chances of transitioning out of unemployment into employment – at different times after registration as unemployed will be reported for trained and untrained individuals. Secondly, employment outcomes at set post-registration times will be reported for trained and untrained individuals, both with and without controls for observable characteristics. These analyses are more in line with the previous evaluation of training programmes in Latvia conducted by Hazans and Dmitrijeva (2013[38]), facilitating comparison with their results.

As well as accounting for trainings beginning at different times throughout individuals' unemployment spells, the dynamic selection-on-observables approach also offers a practical way to deal with individuals receiving multiple ALMP measures when estimating the effects of training. For individuals that receive multiple ALMP measures, the approach focusses on estimating the impacts of the *first* ALMP measure that they receive. All subsequent ALMP participations are effectively treated as part of individuals' employment outcomes: if an individual stays unemployed so that they can complete another training (or is trained again because they have remained unemployed), this is treated as information about outcomes rather than information about subsequent treatments.[22]

Since the dynamic selection-on-observables approach focusses on the first ALMP measure in which individuals participate, MICs, career consultations, and short other measures are not treated as substantive ALMP measures in the analysis. Treating MICs, career consultations, and short other measures as substantive ALMP measures would drastically reduce the sample of individuals for whom formal or non-formal training was the first ALMP measure received. In turn, this would make it more difficult to estimate the effects of formal and non-formal training reliably. Nevertheless, the effects of training may be estimated for those individuals who did and did not receive MICs: this enables the analysis to explore whether the effects of training are dependent on having previously received a MIC. For example, it may be that training will only affect employment chances if training recipients know how to sell their new skills – through improved CVs or good interview technique – in the labour market.

The dynamic selection-on-observables approach will also be adapted in three ways to investigate whether receiving other ALMP measures alters the estimated effects of formal and non-formal training:[23]

- *First*, the effects of training can be decomposed into the effect for those who received one formal or non-formal training *only* and the effect for those who received training and those who *subsequently* received some other substantive ALMP measures (such as another formal or non-formal training, or an employment measure). However, such results need to be interpreted with some caution because receiving subsequent substantive ALMP measures may also be correlated with future employment outcomes: in order to participate in additional ALMP measures individuals need to remain unemployed for longer by construction.
- *Second*, it is possible to look separately at the effects of training for those who *previously* received another ALMP measure. In particular, it is possible to check whether receiving an MIC before training starts boosts the effectiveness of that training.
- *Third,* the effects of trainings that begin *simultaneously* .alongside an additional ALMP measure can be separated from the effects of trainings that begin independently. This approach is used to assess the extent to which mobility support complements formal and non-formal trainings, as mobility support is often explicitly provided to help with travel to training sites.

The outcomes on which the main analysis in this chapter will focus are individuals' chances of employment and individuals' earnings.[24] These outcomes are considered at several different time horizons: 6, 12, 18, 24, 30, and 36 months after the start of the training. While chances of employment – captured by a variable that takes 1 if an individual is employed and 0 otherwise – can be assessed for each individual in the sample, the effects on earnings can only be observed for those who actually find work. This potential source of bias on the estimated effects of earnings should be borne in mind when interpreting the results. The chapter consequently places more emphasis on the employment effects than the earnings effects. Earnings are specified in logs as this improves the fit of the models, given the long right tail (positive skew) on the earnings distribution.

The results presented in this chapter complement a wide and growing literature evaluating the effects of training programmes on individuals' labour market outcomes, in many different contexts. This literature suggests that, while training measures' effects are positive (although small) on average, there is substantial variation in their impacts and many individual training programmes have no positive effects. The main strands of this literature are summarised in Box 3.3.

Box 3.3. Related literature on the effects of ALMP training measures

There is now a large and growing body of evidence on the effectiveness of training programmes and other ALMP measures from around the world. This has allowed economists to conduct "systematic reviews" and even statistical "meta-analyses" to synthesise the findings from multiple studies and start to form coherent messages about what works. While this literature is not restricted exclusively to the unemployed – unlike the ALMP measures considered in this chapter – the results provide a useful starting point for any new study into the effectiveness of training.

The literature suggests that training has a positive impact on individuals' labour market outcomes – including employment chances and earnings – on average, but there is wide variation in the estimated effect sizes, with some individual studies finding no statistically significant impact from training at all. In one recent meta-analysis, Card, Kluve, and Weber (forthcoming[46]) found that training had positive and growing effects on labour market outcomes when combining the results from more than 200 studies. However, only around 35% of the training-relevant studies found that training had positive effects in the short-term (within a year), 54% found that training had positive effects in the medium term (one to two years), and 67% found that training had positive effects in the long term (two or more years). The authors highlight that the increasing effectiveness of training measures over time is consistent with there being lock-in effects, whereby individuals lower their search intensity while training is taking place, reducing the impact on labour market outcomes in the short-term (Calmfors, 1994[47]). Similarly, the meta-analysis undertaken by Vooren, Haelermans, Groot, and Maassen van den Brink (2018[48]) finds that training has positive impacts on employment likelihood at 6, 12, 24, and 36 months after programme start in terms of the point estimates. Yet the average effect size is not always statistically significant partly because the estimated treatment effects vary so much between the studies included.

Notwithstanding this variation in its effectiveness, training measures appear to have outperformed more direct employment measures such as employment subsidies and public works programmes. This difference holds across different meta-analyses and across different time horizons (Vooren et al., 2018[48]; Card, Kluve and Weber, forthcoming[46]). Nevertheless, this does not imply training is necessarily the *best* ALMP measure. Firstly, Kluve et al. (2016[49]) show that programmes promoting entrepreneurship generally outperform training, at least for young people, although sample selection should be borne in mind here: such programmes are likely to try and seek out individuals that display some entrepreneurial ability or motivation. Secondly, integrating multiple types of programmes appears to boost ALMPs' chances of success (Kluve et al., 2016[49]). This way, ALMPs can respond more directly to individuals' needs, which may change throughout their interactions with policy makers.

Although the treatment effects of training programmes appear to be positive on average, it is less clear that such programmes pass simple cost-benefit analyses (Blattman and Raltson, 2015[50]). In principle, it is useful to set off the overall gains in terms of employment or earnings against the operating costs of the program, the costs of the education or training itself, forgone earnings, and any out-of-pocket expenses the training participant incurs to attend (such as transport or childcare). There may also be further hard-to-measure costs, such as the leisure time that participants forego to attend a training and the possibility that some existing workers are actually displaced by trained individuals, in light of their new skills (Heckman, LaLonde and Smith, 1999[51]). This chapter focuses primarily on the individual-level benefits accruing from Latvia's training programmes for the unemployed. Yet, decisions about future directions for ALMP in Latvia cannot be taken without consideration of costs.

Training participants differ from non-participants along key observable characteristics

There may still be systematic differences between trained and untrained individuals, even when making comparisons among individuals that have endured a set number of months in unemployment. If these differences are captured by characteristics that are observed in the data, then it is possible to control for them in the analysis, to reduce the chances that the estimates of the effects of training are biased. Fortunately, the data contain detailed information on individual characteristics, on individuals' labour market engagement, and on individuals' interactions with and receipts of assistance from different arms of the government in Latvia (including the SEA, the Social Insurance Agency, and any social assistance coming from the municipalities). The full set of sample characteristics for individuals that do and do not receive training is shown in Annex Table 3.B.1.

In terms of individual characteristics, women, those who have completed some form of upper secondary education, married individuals, and those with children are more likely to participate in both formal and non-formal training than the population of unemployed people at large, although the patterns in terms of ethnicity, citizenship, and location are less clear-cut. Ethnic Latvians, Latvian citizens, and those educated in Latvian are more likely to participate in formal training but less likely to participate in non-formal training than other unemployed individuals. Around 31% of those participating in formal training first (and only participating in one training) were not ethnic Latvians, whereas just over half of those participating in non-formal training first (and only participating in one training) were not ethnic Latvians. This may reflect the fact that many non-formal trainings (around one quarter) focus on teaching the Latvian language, which may be less relevant for ethnic Latvians, Latvian citizens, and those educated in Latvian. In any case, non-formal training recipients – at least those for whom non-formal training is their only substantive ALMP measure – come disproportionately from urban areas, including Riga.

In terms of previous labour market engagement, individuals for whom formal or non-formal training was the first substantive ALMP measure in which they participated are more likely to have been employed directly before their registering as unemployed. This implies that trained individuals may be more connected to the labour market than other unemployed individuals. Nevertheless, this information should be treated with some caution, because the data do not allow every individual's full employment histories to be recovered.

Since the proportion of people who are classified as disabled and who receive social assistance is relatively low, it is difficult to ascertain whether recipients of benefits (besides unemployment benefit) have a higher chance of receiving training. However, the proportion of people who received social assistance and who were classified as disabled as they entered unemployment is significantly higher among those individuals that participated in training *after* receiving another substantive ALMP measure.

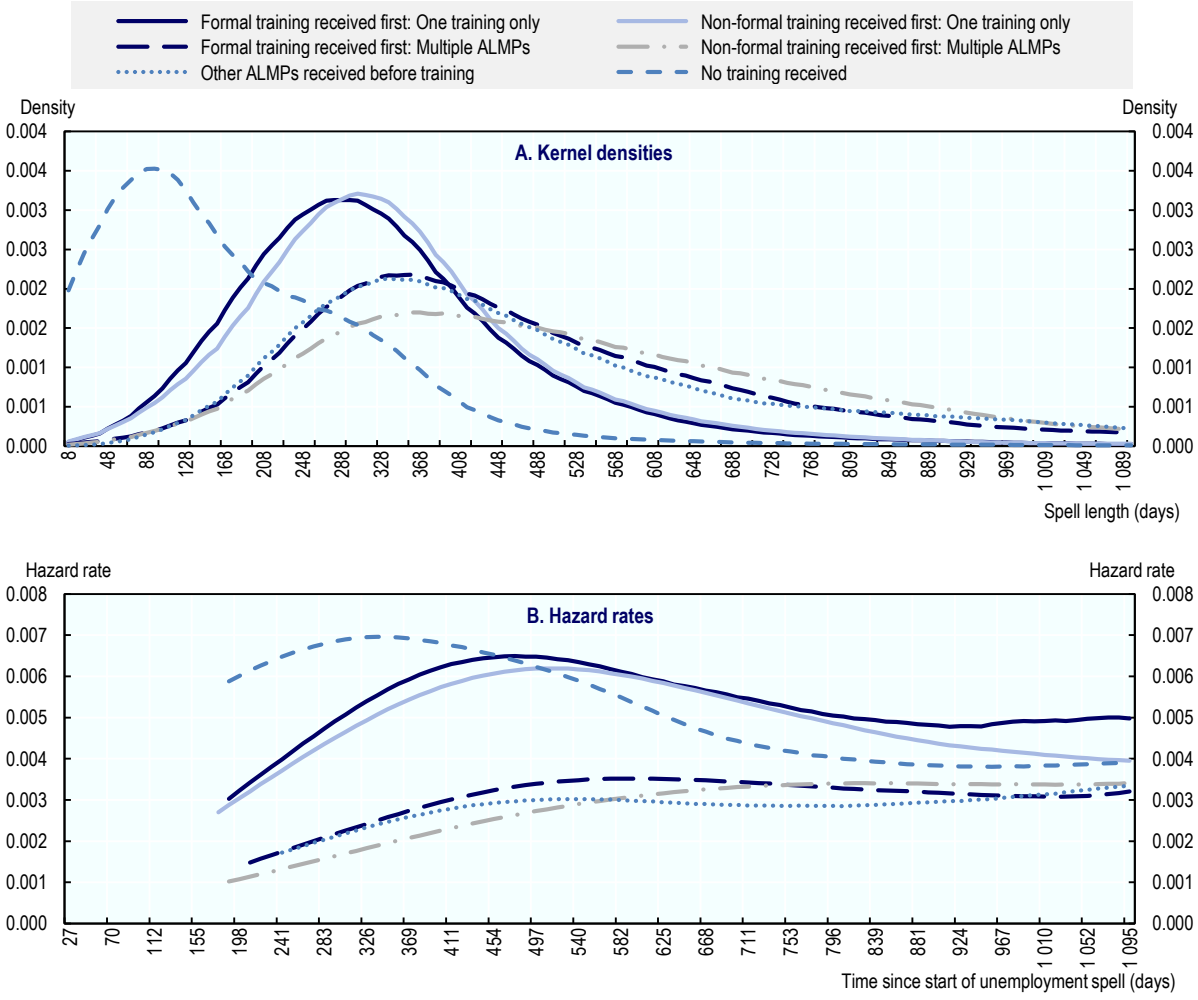
Simply comparing the ever trained with the never trained portrays training programmes in a negative light

Directly comparing training participants with *all* non-participants shows that it typically takes trained individuals longer to return to employment, on average (Figure 3.12). For those individuals that received just one formal or non-formal training, average unemployment spells lasted 340 and 355 days respectively. By contrast, among those individuals who did not participate in trainings – but including those that potentially

participated in other substantive ALMPs such as employment measures – average unemployment spells lasted around half that time (177 days). Similarly, it takes well over a year (465 days) into individuals' unemployment spells before the hazard rate – the likelihood that an individual will exit unemployment to employment at a given moment – or trained individuals reach the same level as the hazard rate for those individuals not participating in training.[25] These results underline the logic discussed in the sub-section outlining the econometric approach: it takes individuals a certain amount of time during their unemployment spell to begin training courses and they then become locked-in (they reduce their job search effort) when participation in training actually starts. This makes it difficult to estimate the true effects of training by simply comparing participants and non-participants.

Figure 3.12. Spell length and hazard rates among trained and untrained individuals

Density functions for spell length (Panel A) and hazard rates through the unemployment spell (Panel B), January 2012 to October 2017



Note: ALMP: Active labour market policy. Observations above 1 095 days excluded from the kernel density chart. Data restricted to individuals' first recorded unemployment spell.
Source: Latvian State Employment Agency, Latvian Social Insurance Agency and OECD estimates.

StatLink https://doi.org/10.1787/888933961258

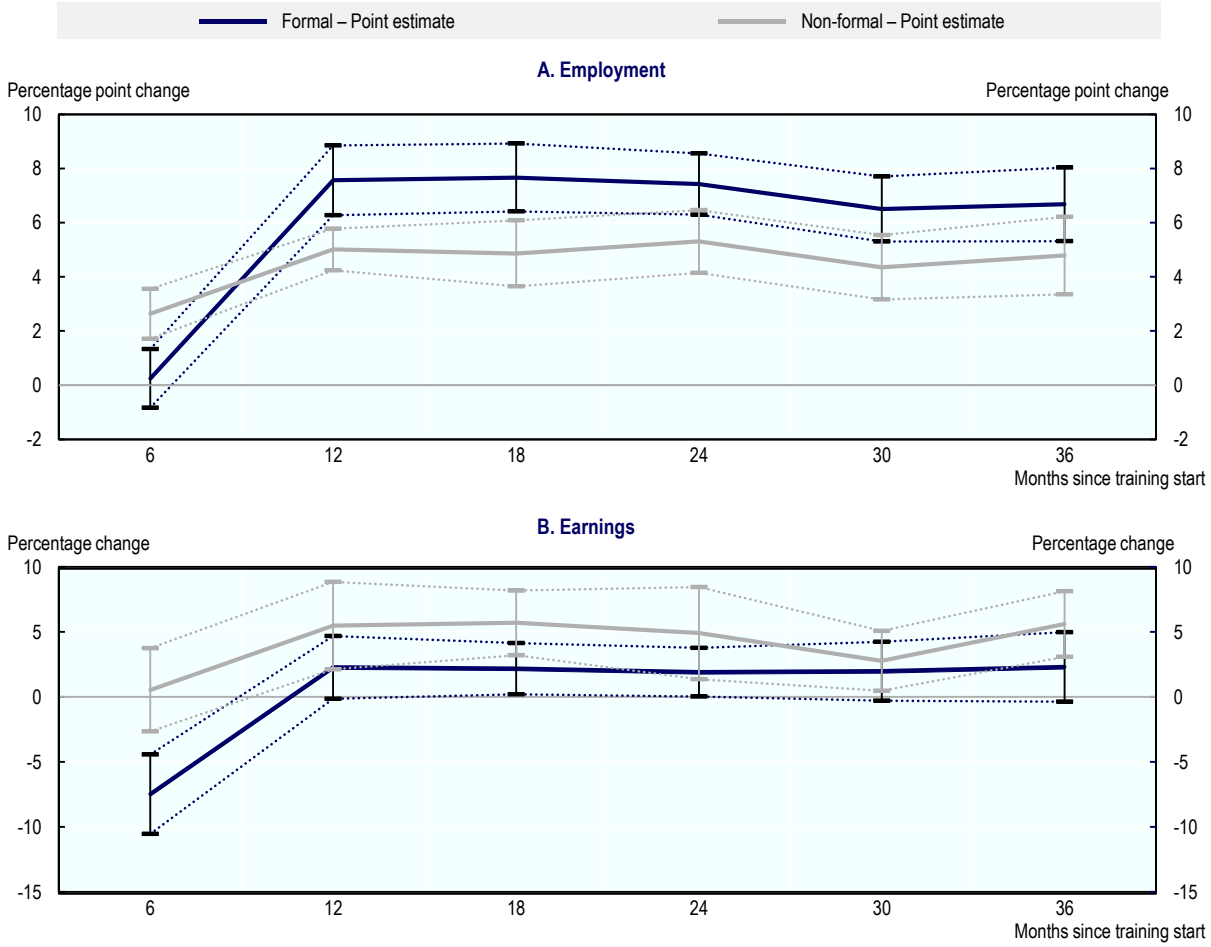
Controlling for observable characteristics does not alter the conclusion that untrained individuals find jobs faster than trained individuals on average, if the fact that individuals select into training at different times throughout their unemployment spell is not explicitly taken into account. To test this, individuals' employment statuses at 6, 12, 18, 24, 30, and 36 months after the start of their unemployment spell are regressed on their participation in training as well as controls for individual characteristics, previous employment status, disability status and receipt of social assistance, as well as region, SEA branch, and month of registration fixed effects.[26] These regressions suggest that, even at the 36-month mark, individuals that received formal training have only just managed to catch up to untrained individuals in terms of their likelihood of being employed, whilst those individuals that received non-formal training remain less likely than untrained individuals to be in employment (Annex Table 3.B.2). The results for earnings at 6, 12, 18, 24, 30, and 36 months after registration paint a similarly negative picture of the effects of training programmes.

Using appropriate econometric techniques, both formal and non-formal trainings have long-lasting positive impacts on employment

The dynamic selection-on-observables approach suggests that formal trainings generate positive and statistically significant effects on individuals' chances of being in employment relatively quickly. As Figure 3.13 shows, 12 months after the start of formal training, individuals who began training (the intervention group) were almost 7.6 percentage points more likely to be in employment than those who were still "waiting" for a substantive ALMP measure or another way out of unemployment (the comparison group, see Box 3.2 for more details of the econometric approach). The effects remained positive for several years: 36 months after the start of the training, individuals who began training were still 6.7 percentage points more likely to be employed than individuals who were still waiting. Nevertheless, the positive effects of formal training did not appear immediately, as the employment and earnings results at the six-month mark demonstrate. This is consistent with the fact that formal trainings typically take several months to complete. Individuals' capacity to search for new jobs may be curtailed while they are participating in training and even if job offers do arrive, they may prefer to make sure they complete the training and become accredited.

Figure 3.13. Estimated effects of trainings on employment and earnings

Percentage point change in employment chances (Panel A) and percentage change in earnings for those who found a job (Panel B), January 2012 to October 2017



Note: The confidence intervals are shown at the 5% level and represented by the whiskers delimiting the dotted lines on the charts.
Source: Latvian State Employment Agency, Latvian Social Insurance Agency and OECD estimates.

StatLink https://doi.org/10.1787/888933961277

The employment effects of non-formal training were smaller than for formal training, but the effects emerged quicker and still persisted several years after the start of the training. Individuals' chances of employment increased by 2.6 percentage points just 6 months after the start of non-formal training (compared to those still waiting for a substantive ALMP measure or another way out of unemployment), with these impacts rising to 5.0 percentage points after 12 months and 4.8 percentage points after 36 months (see Figure 3.13). All these effects are statistically significant at the 5% level. The differences between the employment effects of formal and non-formal training were also statistically significant at the 5% level across all the time horizons: such differences were not purely down to random chance.[27] The finding that the effects of non-formal trainings on employment appeared more quickly, but were not as sizeable as the analogous effects of formal training, echoes the previous results of Hazans and Dmitrijeva (2013[38]). Part of the difference between the

effects of formal and non-formal training may be down to differences in their target groups rather than differences in their effectiveness per se. For example, as Annex Table 3.B.1 shows, formal training recipients are more likely to be female, ethnically Latvian, and living in rural areas than non-formal training recipients.

The effects on earnings appeared to be stronger, emerge more quickly, and last longer for non-formal trainings than for formal trainings. At 18 months after the start of training, non-formal training produced an increase in monthly earnings of 5.8%, while formal training produced an increase in monthly earnings of just 2.2%. After 12 months, there were no statistically significant effects from formal training, while non-formal training's effects were already starting to emerge. Additionally, 36 months after training began, the effects of non-formal training remained similar to what they were at the 12-month mark, whereas the effects of formal training were no longer statistically significant. The difference in the point estimates between formal and non-formal training were statistically significant at the 5% level at the 6-, 18-, and 36-month marks. This evidence somewhat contradicts Hazans and Dmitrijeva's (2013[38]) previous results, as their study suggests that the earnings effects are weaker – and even negative – for non-formal training, whilst being positive for formal training. Nevertheless, it is important to recognise the impact that sample selection has on these estimates, as it is only individuals that find jobs for whom earnings data are available. Indeed, the relatively strong effects of formal training on employment chances may actually bring additional individuals with low earnings potential into the sample of employed people who otherwise would not have been observed. This may dampen the estimated effects of formal training on earnings.

The impact of training differs for particular sub-groups of unemployed people

In order to understand the overall effects of training more fully, it is helpful to examine how the results differ for particular sub-groups of the population. In this vein, this sub-section decomposes the overall effects of formal and non-formal training according to: (1) gender; (2) age; (3) rural versus urban; (4) high- versus low-skilled; and (5) receipts of social assistance. This sub-section focusses primarily on differences in the point estimates between different sub-groups. However, we also formally test whether any of the differences observed in the point estimates are statistically significant by running a "fully interacted" model, in which a dummy variable for the relevant sub-group is added into each regression and that dummy variable is interacted with all of the control variables in that regression.[28] The relevant charts are reserved for Annex 3.A. The links between the sub-group results in this sub-section and the existing literature are discussed in Box 3.4.

The point estimates alone suggest that women appear to benefit more than men from formal training – at least over a long time horizon – but men benefit more than women from non-formal training, although these differences are only marginally statistically significant (Annex Figure 3.A.3). At 30 months after the start of formal training, the point estimates for the effects on women's and men's employment chances were 7.2 percentage points and 4.8 percentage points respectively, although this difference was not statistically significant at the 5% level (p-value=0.1150). At 18 months after the start of non-formal training, women who began training experienced a 4.0 percentage point increase in the likelihood of employment, compared with a 5.7 percentage point increase for men. Again, however, the difference between these point estimates for women and men were not statistically significant at the 5% level (p-value=0.1480). Nevertheless, while these differences are only marginally statistically significant, the story emerging from the point estimates resonates with the evidence in Annex Table 3.B.1 that women's participation is disproportionately

high in formal training, but not non-formal training. Women participate more in the trainings that have a higher relative effect on their employment chances.

Workers aged more than 30 years old experienced stronger positive effects from formal training on employment than younger workers, on average (Annex Figure 3.A.4). At the 18-month mark, the differences between the effects of formal training on workers aged more than 30 years old and younger workers were not statistically significant at the 5% level, but the differences were statistically significant over longer time horizons. At 24 months after the start of formal training, workers aged more than 30 years old who began formal training experienced an 8.7 percentage point increase in their chances of being in employment, while younger workers experienced an increase of just 4.8 percentage points, the difference between these two point estimates was statistically significant at the 5% level (p=0.0004). In contrast, the point estimates for the effects of non-formal training on employment chances were only slightly larger for workers aged more than 30 years old (18 or more months after the start of training), and the differences between these pairs of point estimates were not statistically significant at the 5% level. For earnings, workers aged more than 30 years old appeared to get more of a boost from formal training while younger workers benefited more from non-formal training, although these results – even looking solely at the point estimates – are not clear-cut. The relative success of formal trainings for those aged more than 30 years old – at least in terms of employment chances – may arise because formal trainings explicitly seek to build specific skills among those workers whose skills are being demanded less and less by employers. This may be more important for those who completed formal education a long time ago, prior to any of the reforms to VET and tertiary education discussed above. Additionally, young people are increasingly being channelled towards different types of training outside the auspices of the SEA, including longer programmes lasting up to one and a half years organised by the MoES. In the more recent data, this may change the composition of young people that remain available to actually participate in the formal and non-formal trainings for the unemployed on which this chapter focusses.

Rural dwellers seemed to benefit more than urban dwellers in terms of: (1) the employment effects of both formal and non-formal trainings (although these differences were not statistically significant) and (2) the earnings effects of non-formal training (Annex Figure 3.A.5). Looking at the point estimates alone, formal training increased the chances of employment for rural and urban dwellers by 7.2 and 7.8 percentage points respectively 12 months after training starts, but by the 36-month mark, formal training increased employment chances by 5.0 percentage points in urban areas and 7.4 percentage points in rural areas. Similar patterns emerged for non-formal trainings. The earnings effects of non-formal trainings were also larger in rural areas than in urban areas. At 18 months after the start of training, rural dwellers who found a job experienced a 7.8% increase in earnings, while urban dwellers who found a job experienced a 4.5% increase in earnings. The difference between these two point estimates was significant at the 5% level (p-value=0.0470).

Low-skilled individuals (those with up to lower secondary education) benefited more from formal trainings, especially in terms of earnings, than high-skilled individuals (Annex Figure 3.A.6). At 18 months after the start of formal training, low-skilled individuals that found work experienced a 4.6% increase in their monthly earnings while high-skilled individuals experienced virtually no increase. The difference between these two point estimates was significant at the 5% level (p=0.0462). It should be emphasised that, while there were no clear earnings effects for high-skilled individuals from formal training, they did benefit in terms of their employment chances: the emerging story that virtually all

sub-groups have something to gain from training for the unemployed remains intact. The differences in the point estimates between low- and high-skilled individuals in terms of formal and non-formal trainings' employment effects are largest between 12 and 24 months after the start of the training. After the 24-month mark, however, the gap between low- and high-skilled workers in terms of trainings' employment effects largely closes.

The employment effects of formal training were (eventually) stronger on recipients of social assistance, but this is not the case for non-formal trainings, and these estimates are somewhat constrained by sample size (Annex Figure 3.A.7). Rather than splitting the sample into those individuals that were and were not receiving social assistance at the *start* of their unemployment spell, the sample is instead split into those individuals that did and did not receive social assistance at *any* point during their unemployment spell. Splitting the sample in this way ensures there is a sufficient number of social assistance recipients for the analysis. However, some caution should be exercised when interpreting these results: individuals' chances of receiving social assistance during their unemployment spell may depend on how long that unemployment spell lasts, which is precisely what the provision of training is trying to affect. While the effects of formal trainings on employment chances do not seem to depend on individuals' social assistance status at the 18-month mark, 36 months after the start of training social assistance recipients experienced a 10.3 percentage point increase in the likelihood of being employed compared with a 5.4 percentage point increase for non-recipients. The difference between these two point estimates was significant at the 5% level ($p=0.0038$). This suggests that individuals from poorer households stand to gain the most from learning new, specific skills. However, the positive employment effects arising from non-formal training appear, if anything, to be slightly stronger among those that did *not* receive social assistance.

Understanding how training specifically affects the long-term unemployed would be a useful complement to this analysis, but assessing trainings' relative effects on the long-term unemployed is difficult for two key reasons. Firstly, and most fundamentally, unemployed individuals' transition to employment is the most important *outcome* variable on which the analysis focusses. It is not possible to simply separate out those individuals who reached more than 12 months in unemployment: the time spent in unemployment is something that training is explicitly seeking to change. One possibility would be to look at individuals that spent a certain amount of time in unemployment *before* participating in training. That is, the analysis could focus on those individuals who could be classified as long(er)-term unemployed before training began. This, however, leads to the second challenge associated with assessing the long-term unemployed: sample size. Relatively few individuals have to wait more than 12 months into their unemployment spell to begin participation in a substantive ALMP measure, especially for non-formal training. Therefore, this chapter focusses on sub-groups that can be identified at the moment an individual registers with the SEA (as above). The propensity of these particular sub-groups to end up in long-term unemployment is then discussed in more detail in Chapter 5.

Notwithstanding the differences in the treatment effects described above, formal and non-formal trainings appear to have at least some positive and statistically significant impact on the employment chances of the majority of the sub-groups covered. This potentially demonstrates the adaptability of Latvia's ALMP training measures. Thus, while there may be gains from targeting training programmes according to their estimated impact in order to maximise the benefit to society, such programmes appear to improve the employment and earnings outcomes of many different types of unemployed people. This gives the SEA a certain amount of choice over its targeting approach.

Box 3.4. Heterogeneous effects of training in the existing literature

Linking the sub-group analysis presented in this chapter with sub-group analysis in the existing literature faces two main challenges. *First*, most existing meta-analyses and systematic reviews consider how *programme*-level treatment effects differ, rather than considering whether treatment effects differ for certain sub-groups within in a given programme. For example, rather than comparing women and men treated by mixed-gender programmes, such meta-analyses and systematic reviews compare mixed-gender programmes, with all-women and all-men programmes. *Second*, the sub-groups on which previous meta-analyses – and individual studies – have focussed do not necessarily match the sub-groups on which this chapter focusses. For example, it is rare for studies to break down the results according to social assistance receipts, as in this chapter.

Despite these challenges, some comparisons between the sub-group results in this chapter and the existing literature are possible: participant gender has been a special focus of many previous studies. There is some limited evidence suggesting that training may be more effective for women than men, but much of the existing literature finds any gender differences to be small and not statistically significant. At the programme level, the updated analysis by Card et al. (forthcoming[46]), has found that female-only training (and other ALMP) programmes outperform male-only and mixed programmes, but this finding is not replicated in similar studies by Kluve et al. (2016[49]) and Vooren et al. (2018[48]). Similarly, looking at differential effects by gender *within* a collection of mixed-gender training programmes in developing countries, McKenzie (2017[52]) finds no clear evidence that women benefit more than men. Nevertheless, previous work on training in Latvia has found similar results to this chapter. In particular, Hazans and Dmitrijeva (2013[38]) show that women experience stronger employment effects from formal training, but men experience stronger employment effects from non-formal training.

Turning to other sub-groups, the evidence on whether younger or older workers benefit more from ALMP measures is somewhat mixed. In a very recent study, Vooren et al. (2018[48]) find that the maximum age of programme participants has no impact on ALMP measures' effectiveness, just as is observed for non-formal training in this chapter, drawing on a range of studies from a range of OECD and non-OECD countries both within and outside of Europe. However, previous evidence from Kluve (2010[53]) – which focusses solely on studies conducted in Europe – finds that ALMP measures targeting young people are less likely to be effective. Interestingly, Card et al. (forthcoming[46]) demonstrate that, if anything, *mixed*-age ALMP measures outperform those targeting *either* young people *or* older people.

While this chapter does not speak directly to the question of training's effectiveness for the long-term unemployed, Card et al. (forthcoming[46]) find that the impacts are larger for those programmes that explicitly target those in long-term unemployment. While Card et al.'s estimates are at the programme level rather than the individual level, tentatively, their findings suggest that tailoring the content of the training for long-term unemployed individuals (even after assignment to a training programme) may boost impact.

The effects of training are sensitive to how training is combined with other ALMP measures

The analysis now explores three different ways of assessing the sensitivity of training's effects to being combined with other ALMP measures, building on the descriptive statistics

presented above. *First*, the analysis decomposes the estimated effects of training into the effects for those who participated in training *only* and those who went on to participate in other substantive ALMP measures, including employment measures and additional formal or non-formal trainings. *Second*, the analysis considers how combining training with mobility support alters the impact on individuals' chances of employment and earnings. Thirdly, the analysis investigates how providing MICs alongside training – either before or after training begins – influences training's effects. The relevant charts are shown in Annex 3.A.

Trained individuals that go on to participate in other substantive ALMP measures fare worse than both those who participate in just one formal or non-formal training and, for some time after the start of training, those who do not begin training at all (see Annex Figure 3.A.8). These results are, however, unsurprising, insofar as it is primarily those individuals that remain in unemployment after their first training, who are most likely to participate in additional substantive ALMP measures. Subsequently, such individuals may become locked-in to these additional substantive ALMP measures. As such, these individuals are likely to have worse employment outcomes after the start of training by construction. Indeed, this is exactly the same issue that motivated the use of the dynamic selection-on-observables approach to evaluate the *first* formal or non-formal training that individuals undertook in the main analysis in the previous two sub-sections.

Receiving mobility support appears to boost the employment effects and earnings effects of both formal and non-formal trainings (see Annex Figure 3.A.9). This finding arises by separating those individuals who began receiving training and mobility support *simultaneously* from all other training participants.[29] Those who began receiving mobility support after their formal or non-formal training started are not classified as joint training and mobility participants for this analysis: in these instances, it is less likely that the mobility support is being explicitly provided to support training itself, instead supporting subsequent efforts to find work. The differences between those trained individuals that did and did not receive mobility support are clearest several years after the start of training. For both formal and non-formal training, the point estimates at the 36-month mark are higher for those who received mobility support alongside training, although the point estimates for the with-mobility support group are not statistically significant at the 5% level. The differences between those receiving their training with and without mobility support are stronger and clearer in terms of earnings. One particularly striking result is that, 18 months after training start, those individuals who began receiving non-formal training and mobility support (and who were in work) experienced a 23.1% boost in monthly earnings, compared with a 5.5% boost for those who started non-formal training only. The difference between these two point estimates is significant at the 5% level (p-value=0.0213). However, the same caveats regarding sample selection on the earnings results should again be borne in mind.

Separating the results for mobility support recipients in this way suggests that ALMP measures may have complementary effects on unemployed individuals' labour market outcomes. Some individuals living in remote and rural areas may need mobility support to reach training providers. More fundamentally, providing mobility support may improve the match between the training provider and the trainee: this is one of the key aims associated with providing training through a voucher system. Nevertheless, one key caveat should be borne in mind when interpreting the results. Since individuals have to apply for mobility support and looking for training providers further afield requires a certain level of effort, those who end up receiving mobility support may be more motivated than those who do

not. This may inflate the apparent boost to training's employment and earnings effects offered by mobility support.

Receiving MICs before training starts may increase the employment and earnings effects of both formal and non-formal training (Annex Figure 3.A.10). Since MICs are so widespread, it is possible to separate the effects of training for those who *only* received MICs before their formal or non-formal training, those who received some MICs after their formal or non-formal training, and those who received no MICs at all. As expected, individuals receiving MICs after training fared worse than those who received no MICs at all. Again, this is because it is only those individuals that remain in unemployment longer who become eligible for additional ALMP measures after training (even if those additional ALMP measures are short, like MICs). However, receiving MICs *before* training begins appeared to boost slightly the impact on employment and earnings. For example, 18 months after the start of formal training, those individuals who began training but had previously received no MICs experienced a 10.8 percentage point increase in employment chances, while those individuals who began training and had received one or more MICs beforehand (but no MICs after) experienced an 11.9 percentage point increase in employment chances. However, these differences in employment effects from formal training are not statistically significant at the 5% level over any time horizon. Looking again at the 18-month mark, those individuals who began formal training but had previously received no MICs experienced virtually no change in earnings, while those individuals who began training and received one or more MICs beforehand (but no MICs after) experienced a 4.0% increase in earnings. While this pair of point estimates from the 18-month time horizon are not statistically significantly different from one another at the 5% level, there was a statistically significant difference between the point estimates at the 30-month mark. The analogous differences for non-formal trainings were if anything slightly clearer. For employment, there were statistically significant differences between the point estimates (at the 5% level) at the 24- and 30-month time horizons. For earnings, the differences between the point estimates were statistically significant (although only at the 10% level) at the 6- and 18-month time horizons. The potential boost that MICs offer to the effectiveness of training must be borne in mind for the ongoing reforms to MICs. If MICs are reduced in number and bundled into non-formal trainings too much, formal training participants may not receive MICs and hence may miss out on their potential benefits.

Implementation of training programmes in Latvia

This section considers how training programmes for the unemployed in Latvia are implemented, and what that means for their effectiveness. The section focuses in particular on the implications of providing training through vouchers, as has been the case in Latvia since 2011. The section begins by broadly defining what voucher systems look like and then outlining some of their key theoretical advantages. The section then focuses more directly on Latvia, moving to discuss some of the risks associated with providing training through vouchers and, in turn, what the government may do to mitigate them.

Training is provided through a voucher system in Latvia

Voucher systems can be applied to many different components of policy makers' involvement in training provision. The definition of what constitutes a "voucher" may be fairly broad, although typically they have the following properties: (1) vouchers are rendered in a written, digital, or other format *aside* from cash, (2) vouchers entitle the recipient to a subsidy or discount, therefore carrying a money-equivalent price,

(3) vouchers are redeemable for a good or service that holds a price in the market (Tomini, Groot and Maassen van den Brink, 2016[54]). As such, vouchers can be dispersed for several steps of training provision, including the assessment of individuals' needs, the training itself, and placement in a job after the training. An extreme application of voucher systems would disperse vouchers for all of these steps. At the other end of the spectrum, for structures like the military, governments typically provide all steps of the training themselves, including recruitment, eligibility determination, assessment, assignment to a specific training programme, provision of the training itself, and subsequent placement (Barnow, 2009[55]).

In Latvia, vouchers are provided only for the provision of training itself. Other steps, such as assessment of the unemployed individuals' needs, are undertaken directly by SEA caseworkers. The vouchers consist of a physical document, which is received at the branch offices of the SEA. The voucher itself contains various information about the conditions under which it can be redeemed and cancelled, directly informing the recipient of their responsibilities.

Vouchers may give training participants more choice and improve provision

One of the main motivations for providing training through vouchers is that doing so gives participants more choice over the specific types of training that they do and the institutions that provide that training. In addition to "more choice" being a valuable end in itself, giving voucher recipients choice may also improve the match between their needs and the training that is actually provided (Hidalgo, Oosterbeek and Webbink, 2014[56]). Aligning trainings to participants' preferences is especially important in contexts where training is primarily provided on the job. Firms may be unwilling to provide training on "general" skills to individuals (which may be used outside the firm), focussing instead on "specific" skills that can only be applied within the firm, regardless of what is best for the individual or for society at large (Becker, 1975[57]).[30] However, even for unemployed individuals that have no direct pre-existing association with a firm – as is the case for the formal and non-formal trainings in Latvia on which this chapter focusses – vouchers may still improve the alignment between individuals' needs and the training provided.

Voucher systems may also improve the quality and performance of training providers. Cross-country evidence suggests that giving providers incentives improves ALMP participants' outcomes. For example, Kluve et al. (2016[49]) show that having some kind of incentive system for providers moderately improves the performance of ALMP measures, although their systematic review focusses primarily on young people and covers all ALMP measures rather than just training. Voucher systems incentivise vendors to provide high quality training, as doing so enables them to attract voucher recipients and increase their profits. If the quality or relevance of the training provided is low, voucher recipients can "vote with their feet" and find preferable alternatives. Nevertheless, there may be practical limits to the extent of competition between providers, which are discussed in more detail in the following sub-sections.

An additional benefit of vouchers is that they potentially simplify the process of providing training for the public employment service and for the government at large. This comes by transferring a certain amount of responsibility for many of the steps described above – including assessment, enrolment, and provision of the training itself – to voucher recipients and/or to private providers. Indeed, even if training is already provided privately, a voucher system allows the government to incentivise providers without directly contracting out training to service providers. Such direct contracting could potentially

involve complex tender processes and regulation of prime providers or sub-contractors, as has been the case in the "quasi-market" created to implement ALMPs in the United Kingdom (OECD, 2014[58]). Nevertheless, as the following sub-sections demonstrate, governments still have an important role to play in ensuring that voucher systems, once set up, operate effectively.

In Latvia, *transparency* was another substantial motivation for allocating training through vouchers. Before the introduction of the voucher system in 2011, Latvia experienced several notable examples of training providers procuring contracts that lasted a very long time, which were difficult to revise or even terminate in response to performance. Consequently, the quality of the training from some providers deteriorated throughout the duration of the contract. By placing responsibility for selecting training providers in the hands of voucher recipients, the voucher system sought to make the mechanism for allocating training more lucid.

Voucher recipients require information

The success of voucher systems hinges on governments cultivating the right conditions for their success, and providing information to voucher recipients is one especially important way in which the government can help. The main information that voucher recipients require is on the relative success of different providers in building skills and placing training participants in good jobs. Without such information, there is no mechanism for voucher recipients to find providers that are a suitable match, nor will the market promote high-quality providers at the expense of low-quality ones. Typically, governments can supply voucher recipients with descriptive monitoring data on training providers. However, supplying rigorous evaluation results at the provider level is not normally possible. Additionally, voucher recipients may also benefit from information about current and forecast labour demand – and hence wages – at the occupation level. This allows them to set career goals that increase their chances of gaining employment and maximising their earnings.

In Latvia, the SEA collects and disburses relatively detailed monitoring information for each training provider. After completing a training programme, participants fill in a special evaluation sheet, which allows them to describe their experience and report their employment status 6 months after the training finishes. This information is then made available online and at local SEA branch offices and new voucher recipients are directed towards these information sources. Short-term labour market forecasts are also made available to prospective training participants to help inform their choices. However, providing information alone may not be sufficient for supporting effective choice. Reading, absorbing, and interpreting such vast quantities of information may be difficult, especially for individuals with low motivation and who may not have a good understanding of their own potential. As such, caseworker guidance may be needed to further support voucher recipients, especially those from disadvantaged groups, as discussed in more detail below.

Such is the importance of information for ensuring that voucher systems operate effectively, governments may even ask voucher recipients to demonstrate a certain level of knowledge regarding their decision before any training actually takes place (Kaplan et al., 2015[59]). However, no such testing of voucher recipients' knowledge is implemented in Latvia.

In Latvia, the SEA also plays a role in ensuring voucher recipients do not encounter misleading information on training providers. In this vein, aggressive marketing techniques

by training providers are banned, to voucher recipients make effective and well-informed choices.

Partly restricting voucher recipients' options may better align their motives with those of the government

Aligning the incentives of voucher recipients with the motives of the government also presents a key challenge for establishing an effective voucher system.[31] For one, voucher recipients may be more inclined to pursue trainings that carry higher "consumption" value rather than investing in their human capital per se: they may select trainings that they perceive to be more enjoyable (Barnow, 2009[55]). It may also be that the time horizons of the government and of voucher recipients are misaligned. Governments may prefer voucher recipients to choose trainings that enable them to return to work (ceasing benefit payments) and reintegrate into the labour market quickly. The voucher recipients themselves, however, may instead prefer to focus on boosting their potential earnings power, even if this takes time. Indeed, evidence from the German system suggests that – while differences are difficult to detect – any benefits in terms of voucher recipients' employment and earnings outcomes relative to those trained through mandatory assignment, often take several years to emerge (Strittmatter, 2016[60]).

To ensure that the choices made by voucher recipients align with government incentives, the Latvian SEA restricts the way that training vouchers can be used in two main ways. *First*, the Training Commission – under the auspices of the Ministry of Welfare – meets at least once each year to decide the fields of study for which vouchers are redeemable. This ensures that vouchers are tilted towards occupations in which growth in labour demand is forecast to outstrip growth in labour supply, to ensure that there are sufficient high-paying vacancies. *Second*, the SEA restricts, or at least guides, the set of educational institutions at which vouchers can be redeemed. Only pre-approved training providers known as SEA "partners" are listed on the SEA website. These SEA partners are either approved by the SEA themselves – through a rigorous registration, accreditation, and licensing process – or by another more relevant organisation. For example, the Road Traffic Safety Directorate or Ceļu satiksmes drošības direkcija (CSDD) accredits and licenses driving schools. The SEA also coordinates with the State Education Quality Service or Izglītības kvalitātes valsts dienest (IKVD), the body that is responsible for assuring the quality of education, when approving SEA partners. As discussed above, the SEA is currently making the criteria for becoming an SEA partner even stricter. In principle, voucher recipients are able to choose an accredited educational institution independently if desired, but SEA partners are likely to be easier to find and enrol in.

Nevertheless, evidence from other countries suggests that creating and maintaining approved lists of training providers may be difficult in practice. Public employment service workers in the United States – where voucher systems have long been used to provide training – report that establishing such lists is burdensome, especially in terms of the intense data collection required to monitor training provider quality (Barnow and King, 2005[61]). Indeed, the SEA devotes substantial resources to collecting relevant data, monitoring training providers, and publishing information about training providers online. The SEA not only explicitly publishes the requirements for becoming an SEA partner on its website, but also disseminates the results of a specific quality performance system that tracks training providers in terms of participants' subsequent employment outcomes. Moreover, one particular challenge in Latvia has been finding ways to deal with training providers that ostensibly meet all the criteria but where the training outcomes or participant perceptions are not positive.

Disadvantaged groups may need help exercising effective choice

Not all voucher recipients will be able to exercise choice effectively, meaning that voucher systems can amplify existing inequalities among individuals receiving ALMP measures. Redeeming vouchers relies on recipients being sufficiently motivated to find themselves a suitable provider, enrol, and then stay in the training, potentially without much guidance or supervision from the public employment service. Some individuals may be more able to deal with these "hassle factors" than others (Babcock et al., 2012[62]). Indeed, this is often cited as a potential reason for the widespread observation – coming from many contexts in both Europe and in the United States – that low-skilled workers are less likely to redeem their vouchers than high-skilled workers (Barnow, 2009[55]; Kruppe, 2009[63]). Additionally, disadvantaged workers, including those from low-income households, may be more susceptible to form unrealistic expectations about their prospects in the labour market, using their vouchers to pursue trainings that are inappropriate and overly ambitious (Dickinson and West, 1983[64]). As Bruttel (2005[65]) notes, based on the experience in Germany, higher-skilled individuals are better able to "articulate" their training needs to caseworkers and are thus matched to more appropriate training, even under a system where the public employment service assigns people mandatorily to training. However, these inequalities may be exacerbated when yet more responsibility is given to potential training participants, as is the case in a voucher system.

Since not all vouchers are redeemed in Latvia, one potential way to detect inequalities among voucher recipients is to verify whether certain individual characteristics influence the likelihood of voucher redemption. Approximately 77% of the vouchers received were used to start training, leaving the redemption rate in the Latvian system comparable to Germany but somewhat lower than the United States (Huber, Lechner and Strittmatter, 2015[66]; Strittmatter, 2016[60]). Some instances of non-redemption may arise from hard constraints on finding suitable training in remote and rural municipalities, as discussed in the following sub-section: training programmes will not start if registration for such programmes is too low and people in such areas may not be mobile enough to reach suitable training sites. Other instances of non-redemption may arise from individual expectations and levels of motivation, which may be correlated with observed characteristics such as age, gender, and educational level. In principle, the SEA can sanction those who fail to redeem their vouchers: if a client twice fails to realise their voucher with no good justification, their assignment to training may be cancelled. In practice, however, it appears that sanctions for non-redemption are rarely applied, although there are no specific administrative data on this issue. In principle, non-redemption may also arise if certain individuals are able to find a job while waiting for training to start, although given that vouchers are only valid for two weeks on average, this phenomenon is not likely to be prevalent.

Regressing voucher redemption on a range of individual characteristics, language abilities and age have the largest effects on the likelihood that voucher recipients actually redeem their vouchers, but many individual characteristics have only very small effects (Table 3.2 and Annex Table 3.B.3). Individuals with at least basic Latvian language skills are 7 percentage points more likely to redeem their vouchers, even when controlling for gender, age, education and a host of other individual characteristics. Additionally, being one year older increases the likelihood of redemption by between 0.1 and 0.2 percentage points on average, which is a small effect in itself but adds up over individuals' life cycles. Indeed, those aged more than 55 years old are 7 percentage points more likely to redeem their vouchers than those aged 15-24 years old. Nevertheless, there may be other factors, besides their being less able to make effective choices, which influence rates of voucher

redemption among young people. In particular, young people may be channelled towards different types of training, either within the framework of the voucher system or outside the voucher system (including longer programmes lasting up to one and a half years organised by the MoES).

Table 3.2. Regressions of voucher redemption on individual characteristics

	(1)	(2)	(3)	(4)	(5)
Male? (1=Y; 0=N)	0.0087**	0.0085**	0.0083**	0.0080**	0.0049
	(0.0037)	(0.0037)	(0.0038)	(0.0038)	(0.0037)
Married? (1=Y; 0=N)	0.0078**	0.0076**	0.0071**	0.0071**	0.0064*
	(0.0031)	(0.0031)	(0.0034)	(0.0034)	(0.0035)
Has children? (1=Y; 0=N)	0.0060**	0.0062**	0.0066**	0.0067**	0.0031
	(0.0028)	(0.0029)	(0.0029)	(0.0029)	(0.0042)
Age (years)	0.0016***	0.0017***	0.0017***	0.0017***	0.0012***
	(0.0004)	(0.0004)	(0.0004)	(0.0004)	(0.0002)
High-skilled? (1=Y; 0=N)	0.0108*	0.0108*	0.0103*	0.0104*	0.0087**
	(0.0058)	(0.0057)	(0.0052)	(0.0053)	(0.0041)
Latvian language at least basic? (1=Y; 0=N)	0.0653***	0.0646***	0.0643***	0.0644***	0.0693***
	(0.0190)	(0.0190)	(0.0188)	(0.0188)	(0.0205)
Received social assistance in January 2012? (1=Y; 0=N)			-0.0087	-0.0087	-0.0078
			(0.0113)	(0.0113)	(0.0106)
Disabled in January 2012? (1='Y; 0=N)			-0.0026	-0.0026	-0.0029
			(0.0050)	(0.0050)	(0.0049)
Time for which voucher is valid (days)				0.0238***	0.0232***
				(0.0033)	(0.0029)
Time for which voucher is valid squared				-0.0006***	-0.0006***
				(0.0001)	(0.0001)
Voucher for non-formal training? (1=Y; 0=N)					0.0362***
					(0.0131)
Youth Guarantee vouche?r (1=Y; 0=N)					-0.0193
					(0.0193)
Region fixed effects and urban dummy	No	Yes	Yes	Yes	Yes
N	51 925	51 925	51 925	51 925	51 925
R-squared	0.0605	0.0607	0.0607	0.0609	0.0626

Note: Data from 19 November 2015 to 31 October 2017 only. *High-skilled* refers to those individuals with more than lower secondary education.

Standard errors in parentheses.

Standard errors clustered at the level of the SEA branch office.

Dependent variable: Was voucher redeemed? (1=Y; 0=N).

SEA branch fixed effects in all specifications.

* p<0.10; ** p<0.05; *** p<0.01.

Source: Latvian State Employment Agency (SEA), Latvian Social Insurance Agency and OECD estimates.

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On the other hand, many other individual characteristics appear to have little effect on the chances of voucher redemption. Even though the difference is statistically significant at the 5% level, low-skilled individuals (those with up to lower secondary education) are just 1 percentage point less likely to redeem their vouchers than high-skilled individuals. There are similarly small effects for gender, marital status, and having children.

In general, caseworkers in voucher systems face a difficult balance between supporting clients in using their vouchers and not overly interfering such that they effectively make

choices on clients' behalf. Getting this balance right is particularly important for potentially disadvantaged groups. On the one hand, caseworkers are likely to have a good understanding of clients' needs given their regular interactions with clients and their experience of assigning clients to different ALMP measures. For example, in the Workforce Investment Act effected in the United States, policy makers explicitly experimented with the extent to which caseworkers could guide the choices of voucher recipients, by limiting voucher redemption to high-demand occupations, by screening vendors for quality in advance, and by ensuring decisions about how vouchers were used were taken jointly by caseworkers and voucher recipients. Extra guidance increased voucher recipients' future earnings, although voucher recipients themselves appeared to prefer having fewer constraints on their choices (McConnell et al., 2006[67]). On the other hand, it may be difficult to reap the full benefits of having a voucher system – in terms of choice and competition – if caseworkers are too heavy-handed in their support, taking the assumption that voucher recipients know their needs best. In Germany, for example, caseworkers are not allowed to guide voucher recipients' choices over training programmes, and can only restrict the set of options available by specifying educational goals, which are recorded on a (often ambiguous) handwritten note (Strittmatter, 2016[60]).

Providing training through vouchers rather than mandatory assignment also alters the decisions that caseworkers need to take at the assignment stage, so governments may need to adjust the guidelines given to *caseworkers* themselves. Caseworkers may assign vouchers in several ways, including: (1) trying to give vouchers to those who will experience the largest effects on their employment outcomes; (2) trying to give vouchers to those most in need or those who would fare least well if they did not receive a voucher; or (3) trying to give vouchers to those with the best post-training outcomes (sometimes known as "cream-skimming") (Poeschel, 2014[68]). Switching from a system of mandatory assignment to a voucher system may change caseworkers' approach, because they know that dispersal of certain types of vouchers to certain groups may lead to non-redemption or to potentially prolonged periods where individuals try to match with a suitable training course.

In Latvia, there are regular meetings between the SEA and voucher recipients, which may support effective choice especially among the potentially disadvantaged groups – those who may struggle to redeem their vouchers – identified above. The caseworker and the registered unemployed person agree an Individual Action Plan (IAP), which sets out potential pathways back to work. The agreement of the IAP, in itself, may give caseworkers some influence over the types of training that voucher recipients choose. Registered unemployed individuals and caseworkers are also obliged to meet every two months. This level of interaction between voucher recipients and the SEA helps ensure the former can make choices effectively.

As in other European countries, there are some limits over the extent to which caseworkers can influence vouchers recipients choices in Latvia, but caseworkers still have several key avenues for guiding those choices. While caseworkers cannot recommend specific training programmes at specific training providers, they are able to recommend particular occupations or types of training programmes from the full list of programmes for which a voucher is eligible. Caseworkers may also recommend additional services, including career consultations, to voucher recipients. This provides another latent channel through which caseworkers can guide voucher recipients' choices. Nevertheless, throughout these interactions, caseworkers are expected to focus on supplying clients with objective information – including information about salaries and vacancies in different professions as well as information about training programmes – rather than simply their own subjective assessments of what trainings to choose.

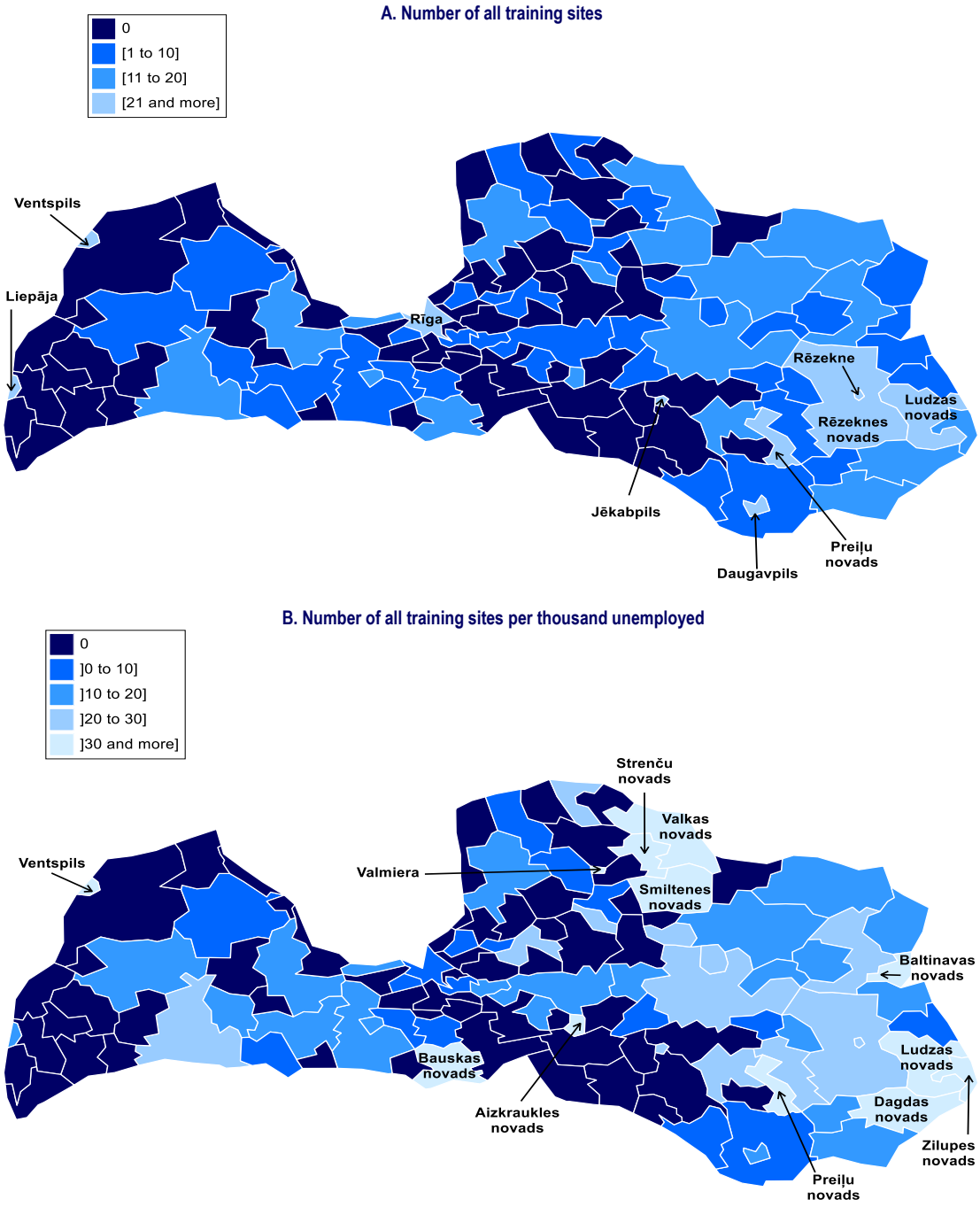
Some remote and rural areas may require support to promote competition

The geographical spread of training providers in Latvia is uneven, meaning that voucher recipients in some municipalities may struggle to find training options locally. All other things equal, this may hamper competition and, in turn, any potential improvements in training quality that could be brought about by having a voucher system. Voucher recipients would find it harder to "vote with their feet" if training quality were low or the curricula were not well aligned with their needs. As discussed in detail below, the SEA is currently aiming to consolidate and reduce the number of training providers to ensure training is of high quality and to limit potential lock-in effects. This makes Latvia's ongoing efforts to support regional mobility all the more important for promoting competition among training providers, especially in certain remote and rural areas.

Official data on training providers, which contain the full addresses of so-called SEA partners, may illustrate where there are geographical gaps in training provision. In principle, both formal and non-formal training voucher recipients can choose to go to accredited training providers, which are not SEA partners, but given that the SEA partners are advertised explicitly on the SEA website and in SEA branch offices, they are likely to be easier to find and access than other training providers. Thus, the data on SEA partners presented here serves as a useful proxy for the extent of training provision in each municipality. In Figure 3.14, Panel A shows the absolute number of sites at which SEA partners (providing either formal or non-formal training or both) were located in each municipality. Panel B then adjusts these figures by dividing the number of SEA partner sites by the number of unemployed people registered with the SEA (in October 2017) in that municipality. These figures are recreated, separating out those SEA partners providing only formal and only non-formal training in Annex Figure 3.A.11 and Annex Figure 3.A.12.

Three key messages emerge from the SEA's data on its training partners. Firstly, there are large clusters of municipalities where there are no SEA partners at all, especially in the Kurzeme and Zemgale regions. Secondly, while cities tend to contain the largest absolute number of SEA partners, this is not the case when the figures are adjusted according to the number of unemployed people who are resident there. The municipality (or "republican city") of Riga, for example, contains 38 SEA partners, the highest of any municipality in Latvia. However, Riga contains just 9.6 SEA partners per 1 000 registered unemployed people, ranking it 49th out of the 119 municipalities in Latvia. Finally, there are relatively high numbers of SEA partners per municipality – both with and without the adjustment for the number of unemployed people – in eastern Latvia. Thus, while some municipalities in Kurzeme and Zemgale appear to have fewer proximate training providers, it is not universally the case that remote and rural areas totally lack training providers. However, the sheer size of some of the municipalities in the Latgale region should be taken into account: even if voucher recipients do not have to cross municipality boundaries to reach a SEA partner, they may still have to travel some way (and certainly more than the 15 kilometres required to be eligible for mobility support).

Figure 3.14. Number of all accredited training sites (SEA partner sites) by municipality in Latvia



Note: SEA partners are the pre-approved training providers listed on the SEA website. This map is for illustrative purposes and is without prejudice to the status of or sovereignty over any territory covered by this map.

Source: Latvian State Employment Agency (SEA), Latvian Social Insurance Agency and OECD estimates.

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The SEA is in the process of consolidating and reducing the number of providers of training for the unemployed, focussing training provision in locations with high levels of economic activity. This in line with the broader reforms to the VET system described above. As such, simply expanding the number of training providers does not appear to be a tenable strategy for promoting choice and competition.

The consolidation of training provision for the unemployed is driven not only by a desire to improve quality, but also to limit potential lock-in effects that may arise. Part of this consolidation effort involves making the selection criteria for becoming and remaining an SEA partner stricter, which has direct positive effects on training provider quality. For example, as of 2017/2018, providers must hold formal accreditation from the SEA (or some other relevant institution) for 6 years in order to become a SEA partner. SEA partners must also meet more stringent criteria in terms of (for example) teacher qualifications and access for disabled people: if training providers fail to meet these criteria, they risk having their status as a SEA partner suspended for up to a year. At the same time, training classes have often proved difficult to fill in certain remote and rural areas, which lengthens the time that voucher recipients have to wait before training can begin and in turn increases potential lock-in effects. Reducing the number of SEA partners means that classes should fill up quicker, alleviating this problem.

With the number of SEA partners declining, other strategies – such as the existing programme of mobility support – are likely to be especially important in municipalities where, even now, there are relatively few training providers. As the analysis demonstrates, voucher recipients in remote and rural areas in the Kurzeme and Zemgale regions are likely to be particularly dependent on mobility support if they are to exercise effective choice.

Regressing voucher redemption on location characteristics, it emerges that redemption is *less* likely in urban areas and in Riga in particular, and is most likely in the Latgale region (Table 3.3).[32] This paints a nuanced picture of the link between local training options and voucher redemption. Amongst the regions outside Riga and Pieriga, Latgale has both the highest redemption rate *and* the highest concentration of SEA partner training sites. This is consistent with the intuitive notion that having better access to training options – the effects of mobility support notwithstanding – supports voucher redemption. However, the fact that redemption is lowest in urban areas (and especially Riga) runs counter to this notion. One possible explanation is that voucher recipients are more likely to receive job offers while their vouchers are valid in urban areas than in rural areas. This would allow them to exit unemployment without needing training and without needing to redeem their voucher. Nevertheless, vouchers are typically only valid for 14 days: it is not clear that this is long enough for the higher possibility of job offers in urban areas to have a substantive effect on redemption rates.

Table 3.3. Regressions of voucher redemption on location characteristics

	(1)	(2)	(3)
Urban? (1=Y; 0=N)	-0.0802**	-0.0320**	
	(0.0307)	(0.0156)	
Pieriga? (1=Y; 0=N)		0.0355	0.0633***
		(0.0274)	(0.0203)
Vidzeme? (1=Y; 0=N)		0.1141***	0.1425***
		(0.0223)	(0.0187)
Zemgale (1=Y; 0=N)		0.1071***	0.1280***
		(0.0338)	(0.0325)
Kurzeme (1=Y; 0=N)		0.1481***	0.1636***
		(0.0150)	(0.0165)
Latgale (1= Y; 0=N)		0.1857***	0.2042***
		(0.0191)	(0.0182)
N	51 925	51 925	51 925
R-squared	0.0152	0.0427	0.0418

Note: Data from 19 November 2015 to 31 October 2017 only.
Standard errors in parentheses.
Dependent variable: Was voucher redeemed? (1=Y; 0=N).
Standard errors clustered at the level of the SEA branch office.
All regressions contain full set of individual and voucher characteristics.
Base category for regions is Riga.
* p<0.10; ** p<0.05; *** p<0.01.
Source: Latvian State Employment Agency (SEA), Latvian Social Insurance Agency data and OECD estimates.

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Voucher systems may compound lock-in effects

In some situations, providing training through vouchers may prolong the time that individuals spend locked-in to unemployment, even if they do not go on to redeem their voucher. Voucher systems may lead to additional lock-in time over and above systems involving mandatory assignment to training because voucher recipients require (and be afforded) time to find a training course that is suitable for them. In some systems, receipt of a voucher may also insulate recipients from loss of benefits or other sanctions and also from assignment to other onerous programmes to which caseworkers could designate them under a system of mandatory assignment (Strittmatter, 2016[60]). Relatedly, suggestive evidence from the reform of the German training system indicates that mandatory course assignment outperforms voucher systems during the first two years after the start of training (in terms of trainees' employment and earnings outcomes), but after that voucher systems produce larger positive effects on labour market outcomes (Rinne, Uhlendorff and Zhao, 2013[69]). This emphasises a crucial point regarding lock-in effects: prolonging an individuals' spell in unemployment may be justified if doing so ultimately improves their productivity (which the positive earnings results in the main analysis above suggest is the case in Latvia). Indeed, there may be a trade-off between getting unemployed people back into work quickly and building their skills for the long run. If providing training through vouchers improves the match and the quality of the training – even if it takes longer for the unemployed individual to receive this training – the additional lock-in effects may be worth it. Nevertheless, evidence from the same German reforms also suggests that individuals who receive a training voucher but do *not* go on to redeem it experience statistically significant negative effects on their employment chances – reaching a drop of around

5 percentage points – for up to three years after voucher receipt (Huber, Lechner and Strittmatter, 2015[66]). As such, the possibility of non-redemption spreads lock-in effects to an even larger pool of individuals than simply those who are trained.

In Latvia, additional lock-in effects from having a voucher system may potentially be sizable, but are difficult to pin down. This makes it tricky to assess whether the clear gains in employment chances and earnings that accrue to training recipients outweigh any lock-in effects that arise: the effects estimated in the main analysis use the *start of training* as the reference point from which future outcomes at 6, 12, 18, 24, 30 and 36 months are considered. The time for which vouchers are technically valid – as per the administrative data – is in fact remarkably short. Since, for both formal and non-formal training vouchers, there are just 14 days between the issue date and the expiry date on average, redemption and the start of training itself normally takes place within two weeks of issue and must take place within one month.[33] However, voucher recipients are assigned to the training voucher programme – at which point the broad field of study on which they will focus is decided – in advance of actually receiving the voucher. During this time they are expected to search for suitable training providers and training programmes, potentially at the expense of searching for a job. However, whether they fully believe the voucher will arrive after this queuing period, such that they should reduce job search effort, cannot be easily observed. It is also unclear whether voucher recipients know how long they will be queuing for a voucher in advance of the waiting period. For some types of vouchers, the queuing time between assignment to the training voucher programme and actual receipt of the voucher can be lengthy. For non-formal training vouchers (focussing on those for foreign languages and ICTs), the average time between assignment to the training and voucher receipt is 96 days on average. For formal training vouchers, the average time between assignment to the training and voucher receipt is 46 days on average. This system potentially creates an unusual set of lock-in effects in Latvia, which arise not only while the individual holds a voucher, but also in the period before receiving the training voucher, when their status is slightly unclear.

Three strategies are already underway or under consideration in Latvia, which may help to limit the extent of any lock-in effects that arise from training for the unemployed (notwithstanding the current set up of Latvia's voucher system). *First*, the consolidation of training providers discussed above may help to solve the issue of long waiting times. With fewer training providers, filling – and hence starting – classes should take less time. *Second*, previous reforms have allowed training participants to begin employment *before* the end of their training (if the employer-to-be agrees). This increases training participants' incentives to continue job search, even when training is still ongoing. In principle, this may also mean that voucher recipients could continue their job search before training even begins (for example, when looking for a suitable training provider), although it may be harder to convince potential employers that new skills will be acquired before the training has even started. *Third*, the possibility of varying the specific times of day at which training occurs is currently being considered in order to make job search easier. If training is concentrated in the early morning or in the evening, then meeting employers and attending interviews on the same day may be plausible. However, this requires not only that training participants receive a manageable level of homework, but also that they are sufficiently motivated to juggle concurrent training and job search.

Conclusion

This chapter has evaluated how effective providing training to unemployed people has been in helping them find good jobs. The chapter shows that both formal and non-formal training have had positive effects on unemployed individuals' labour market outcomes in Latvia. These effects differ according to individuals' characteristics and depending on how trainings are combined with other ALMP measures, although virtually all sub-groups experience at least some boost to their employment chances from training. The chapter has also discussed the potential benefits of providing training to unemployed individuals through vouchers, but also some of the risks. Latvia faces three particular challenges in providing training through vouchers: (1) certain groups redeem vouchers less than others, (2) training providers are distributed unevenly across Latvia's municipalities underlining the need to support regional mobility, and (3) the current voucher system may prolong the time for which individuals are locked-in to unemployment. These three challenges present possible areas for future policy work.

Notes

[1] The distinction between formal and non-formal training is discussed in detail at the start of the main analysis section. In short, formal trainings build a specific new skill such as social care, project management, or welding, among participants leading to a professional qualification, whereas non-formal trainings do not necessarily result in a professional qualification, and tend to build cross-cutting skills such as languages and ICTs. Formal trainings typically last longer and require more hours of contact time than non-formal training.

[2] The nature of "Measures to Improve Competitiveness" is discussed in detail in at the start of the main analysis section. These measures typically comprise very short courses and workshops, that help participants engage with the labour market, including support for writing CVs, succeeding at interviews, and networking effectively.

[3] By some metrics, job quality is slightly lower in Latvia than in the OECD at large: rates of "labour market insecurity" and "job strain" were at 30.3% and 9.6% in Latvia respectively in 2015, compared to OECD averages of 27.6% and 5.7%. "Labour market insecurity" is defined in terms of the expected earnings loss associated with unemployment. This is calculated based on the *OECD Unemployment Duration database*, the *OECD Benefit Recipients database*, the *OECD Labour Market Programmes database*, and the *OECD Taxes and Benefits database*. "Job strain" is defined in terms of jobs where workers face more job demands than the number of resources they have at their disposal. This is calculated based on the European Working Conditions Survey and the International Social Survey Programme, and includes factors including long working hours, physical health risk factors, work autonomy and learning opportunities, and social support at work.

[4] The fact that the proportion of the population who have attained tertiary education is now relatively high in Latvia should be borne in mind when interpreting these earnings premia. Earnings premia for tertiary education in Latvia may be lower than the OECD average because – while there are certain fields of study that are in shortage – overall, tertiary educated individuals are in high supply.

[5] More than 30 percent of individuals aged 20-24 in Denmark, Luxembourg, and Spain have less than upper secondary education, according to the 2017 European Labour Force Survey (Eurostat).

[6] The overall statistics mask significant gender differences in educational attainment in Latvia. Amongst 20-24 year-olds, Latvian men are more than twice as likely as Latvian women to have left school without upper secondary education. For the same age group across the EU, men are just 1.4 times more likely than women to lack upper secondary education.

[7] The main field of study at VET secondary schools in Latvia appears to be engineering, manufacturing, and construction. In 2013, 39.2% of students focussed on engineering, manufacturing, and construction (CEDEFOP, 2015[72]). The next most common fields of study were services (25.0%), social sciences, business, and law (13.7%), and humanities and arts (including design programmes, 10.2%).

[8] These estimates exclude Erasmus exchange students from Latvia, of whom there were 2 100 in the 2011/2012 academic year.

[9] Government-subsidised student loans are available for all Latvian residents pursuing tertiary education, assuming they are able to meet co-signatory loan requirements. Other loans are also available from Latvia's commercial banks (OECD, 2016[12]).

[10] The gross enrolment rate is the ratio of total enrolment (regardless of age) to the population of the age group that officially corresponds to the given level of education. For tertiary education, this corresponds to the 5-year age group starting from the official secondary school graduation age.

[11] These results exclude Ireland.

[12] There is some discussion in the media suggesting that employers' perceptions of individuals attaining VET may be improving (see, for example, https://nra.lv/latvija/izglitiba-karjera/243139-profesionala-izglitiba-darba-tirgu-kotejas-augstu.htm), but nationally-representative data proving this phenomenon do not yet exist.

[13] In 2012, just 72 apprentices received diplomas through the Chamber of Crafts (CEDEFOP, 2014[73]).

[14] A separate commission is responsible for determining the fields of study for training for the employed.

[15] The term "participations" is used instead of "participants" because, individuals were able to participate in more than one type of ALMP measure each year.

[16] MICs thus fall under the "Labour market services" category presented in Chapter 2.

[17] In particular, employment histories are missing for those individuals that had an employment spell *after* their first recorded unemployment spell, but who were not employed (perhaps due to being out of the labour force entirely) before their first recorded unemployment spell.

[18] In the Latvia Social Insurance Agency data, those individuals who are classified as registered unemployed can technically also be employed. This may arise, for example, when registered unemployed individuals participate in certain ALMP measures, such as public works schemes and employment subsidies. However, the definition of "unemployed" used in this analysis only includes those individuals that are registered unemployed and are not working.

[19] It was not possible to separate out formal and non-formal trainings provided as part of the Youth Guarantee easily in the administrative data from the SEA.

[20] The analogous waiting times for other types of non-formal training are shorter. For example, for car driver training, the waiting time is 91 days on average, while for regular Latvian language training, the waiting time is 83 days on average.

[21] Not all training participants receive MICs or career consultations. Around 20% of formal training participants did not receive a MIC while 31% of formal training participants did not receive a career consultation.

[22] The approach taken by this chapter therefore differs from Hazans and Dmitrijeva (2013[38]). In their study, individuals receiving more than one formal or non-formal training, or receiving any other substantive ALMP measures (such as employment measures) are excluded from the sample for the main estimations.

[23] For a more formal discussion of ways to evaluate *sequences* of ALMP measures, see Lechner (2009[71]) and Huber, Lechner, and Strittmater (2015[66]).

[24] Employment could, in principle, be in a subsidised job, although the proportion of such jobs in the overall sample is small.

[25] Annex Figure 3.A.2 aims to estimate the hazard rates in the same way as in Hazans and Dmitrijeva (2013[38]) on the updated State Employment Agency and Social Insurance Agency data. To replicate the sample used by Hazans and Dmitrijeva, it is necessary to remove all individuals that took part in more than one formal or non-formal training as well as dropping any individuals that participated in other substantive ALMP measures, including employment measures and mobility support. In contrast to Hazans and Dmitrijeva, the hazard rate remains higher for those individuals that did not participate in training for at least two years after registration.

[26] These results are robust to reapplying the sample restrictions suggested by Hazans and Dmitrijeva (2013[38]) and dropping those individuals that received more than one formal or non-formal training as well as those that received other substantive ALMP measures (including employment measures and mobility support).

[27] The formal tests were carried out by taking the difference between the point estimates for formal training and for non-formal training, and then bootstrapping this statistic with 250 repetitions (clustering at the SEA branch level) to calculate the standard error.

[28] This approach follows Biewen et al. (2014[45]), adapting the methodology presented in Box 3.2. Each regression from each month endured in unemployment (m) is augmented with a full set of interaction terms as well as a dummy variable for the relevant sub-group. The coefficient on the interaction between the sub-group dummy and the treatment dummy is taken from each regression (from each m) and then a weighted average over all m is calculated. The weights – which capture the proportion of all treated individuals entering the treatment at m – are taken from the full sample, where both sub-groups are combined. For example, rather than having separate sets of weights for women and men, the weights are taken from a sample that contains both women and men. This means that the difference between the treatment effects for the two sub-groups estimated when splitting the sample is not the same as the difference estimated using the fully interacted model.

[29] Those individuals that began participating in training and receiving mobility support simultaneously were included as training participants in the main analysis.

[30] Stevens (1994[70]) suggests a more nuanced view, where there may be "transferable" skills, rather than the simple dichotomy between "general" and "specific" skills. Transferable skills are valuable to more than one firm, but they are traded in a labour market that is not perfectively competitive, so that workers with transferable skills are paid less than their marginal product. Since training in transferable skills therefore raises productivity more than it raises wages, both worker and firm may benefit. However, training in transferable skills still results in a positive externality, given that *other* firms may benefit. This leads to underinvestment in transferable skills, in the absence of government intervention.

[31] For training provided to employed individuals, there is potentially an additional misalignment between the motivations of worker and firm. For example, in the Netherlands, Hidalgo, Oosterbeek, and Webbink (2014[56]) show employers react less positively to courses provided through vouchers (rather than by the firm itself) while the families and partners of voucher recipients react more positively.

[32] The null hypothesis that the coefficients on the Kurzeme dummy variable and the Latgale dummy variable are the same can be rejected at the 10% level in Columns (2) and (3).

[33] Vouchers are typically valid for much longer in other countries. In Germany, similar training vouchers are valid for up to three months.

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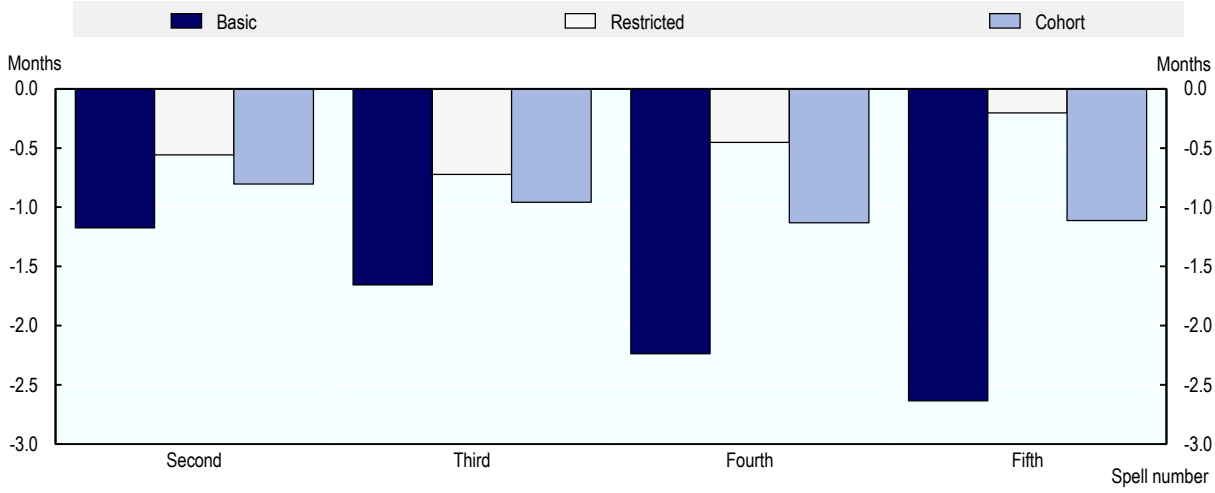
Annex 3.A. Additional figures

Annex Figure 3.A.1. Breakdown of average lengths for second, third, fourth and fifth unemployment spells

Average number of months relative to first spell, January 2012 to October 2017

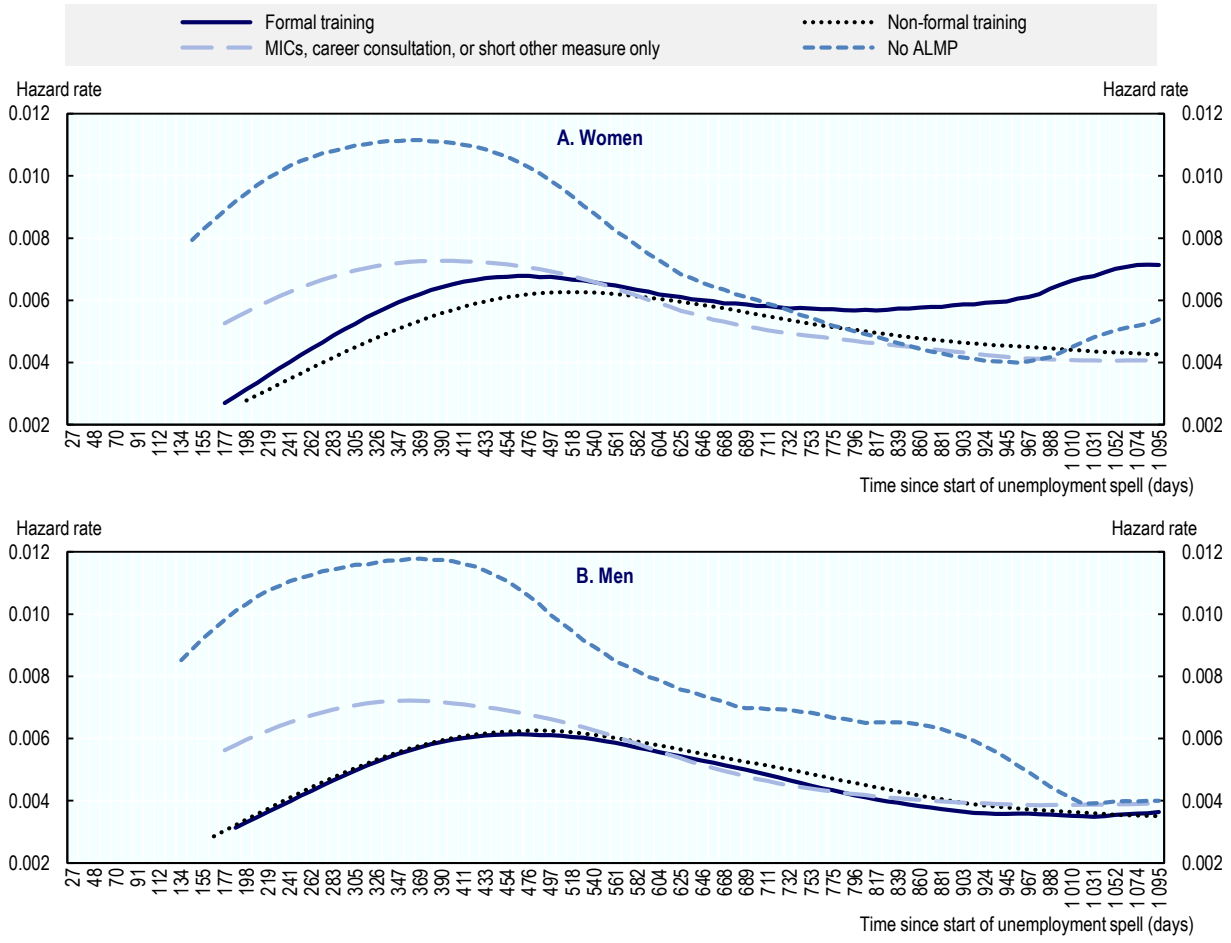


Note: Figures based on regression of spell length on spell number. *Basic* model computes the average differences without any sample restrictions and without accounting for cohort effects. *Restricted* model focusses only on those individuals who had at least five complete unemployment spells between January 2012 and October 2017. *Cohort* model isolates and extracts the cohort effects from the basic model, but includes month-of-spell-start fixed effects in the regression.
Source: Latvian State Employment Agency, Latvian Social Insurance Agency data and OECD estimates.

StatLink https://doi.org/10.1787/888933961353

Annex Figure 3.A.2. Hazard rates of trained and untrained women and men

Hazard rates by training status, January 2012 to October 2017

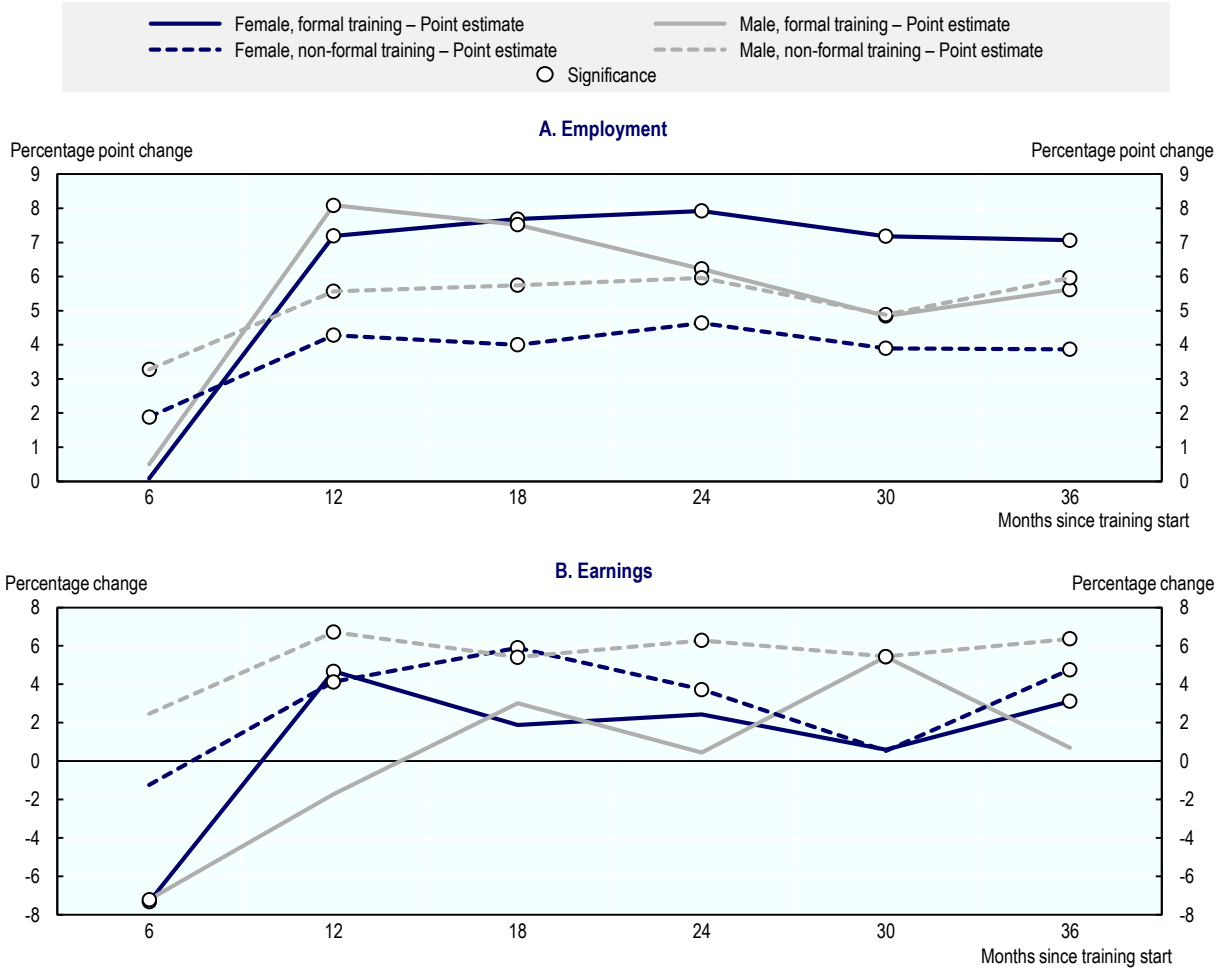


Note: ALMP: Active labour market policy. MIC(s): Measure(s) to Improve Competitiveness. Sample restrictions taken from Hazans and Dmitrijeva (2013[38]), *An Evaluation of Active Labor Market Programs (ALMPs) and Related Social Benefit Programs,* Contribution to World Bank study "Latvia - Who is Unemployed, Inactive, or Needy?". Individuals receiving more than one formal or non-formal training as well as those receiving other substantive ALMP measures (including employment measures and mobility support) are dropped.
Source: Latvian State Employment Agency, Latvian Social Insurance Agency and OECD estimates.

StatLink https://doi.org/10.1787/888933961372

Annex Figure 3.A.3. Estimated effects of training on employment and earnings by gender

Percentage point change in employment chances (Panel A) and percentage change in earnings for those who found a job (Panel B), January 2012 to October 2017

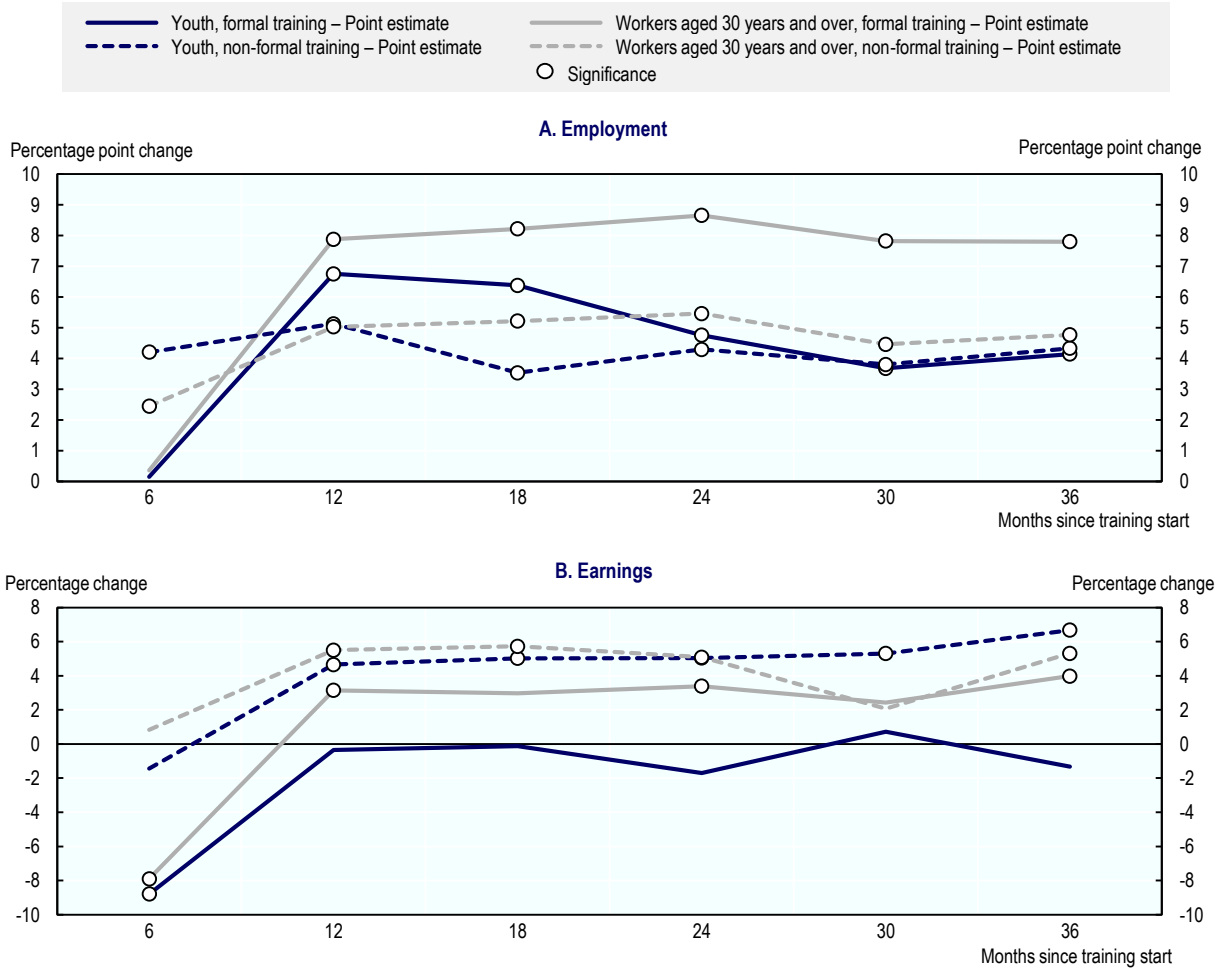


Note: Circle markers indicate statistical significance at the 5% level.
Source: Latvian State Employment Agency, Latvian Social Insurance Agency and OECD estimates.

StatLink https://doi.org/10.1787/888933961391

Annex Figure 3.A.4. Estimated effects of training on employment and earnings by age

Percentage point change in employment chances (Panel A) and percentage change in earnings for those who found a job (Panel B), January 2012 to October 2017

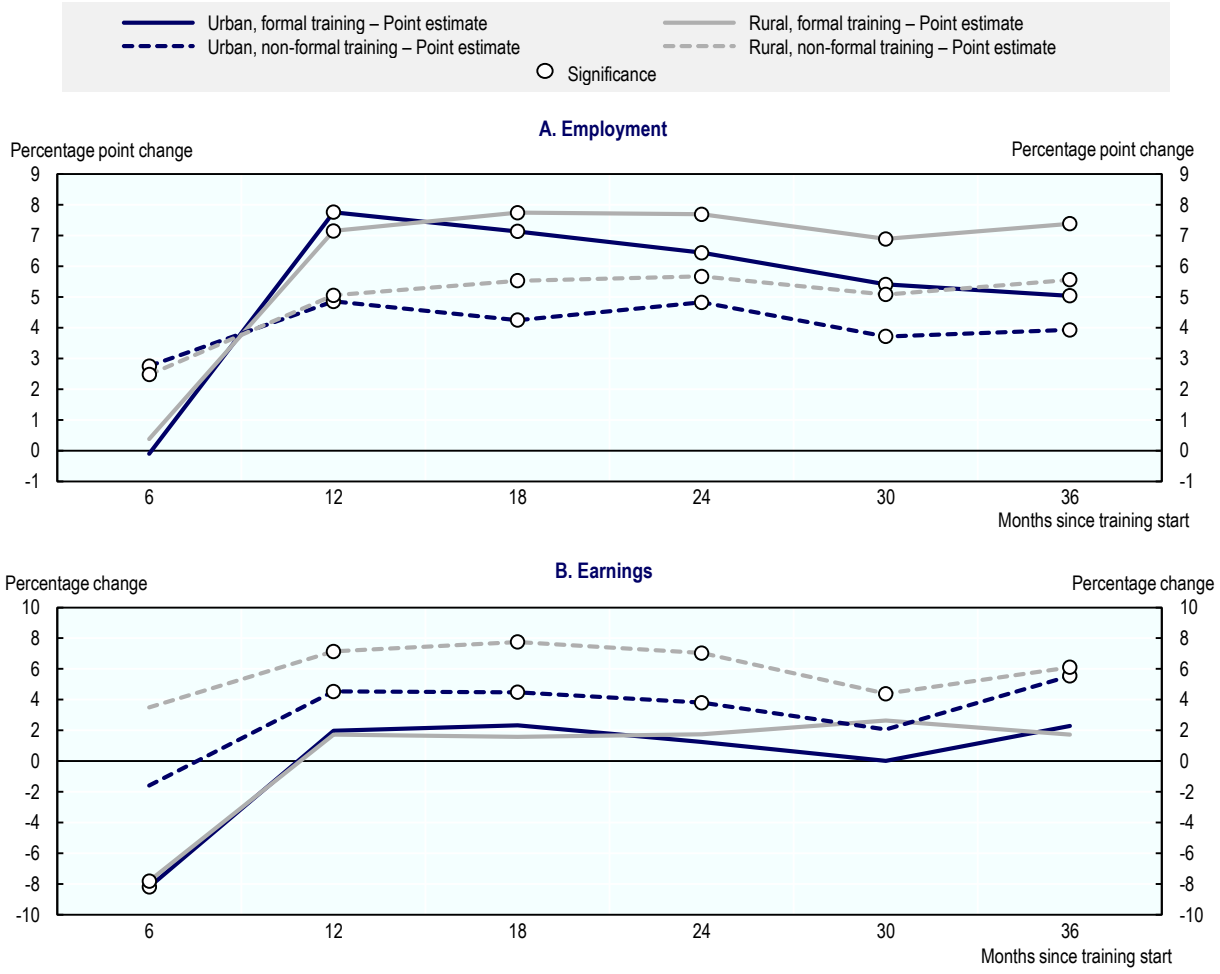


Note: Circle markers indicate statistical significance at the 5% level. *Youth* refers to 15-29 year-olds.
Source: Latvian State Employment Agency, Latvian Social Insurance Agency and OECD estimates.

StatLink https://doi.org/10.1787/888933961410

Annex Figure 3.A.5. Estimated effects of training on employment and earnings by urbanicity

Percentage point change in employment chances (Panel A) and percentage change in earnings for those who found a job (Panel B), January 2012 to October 2017

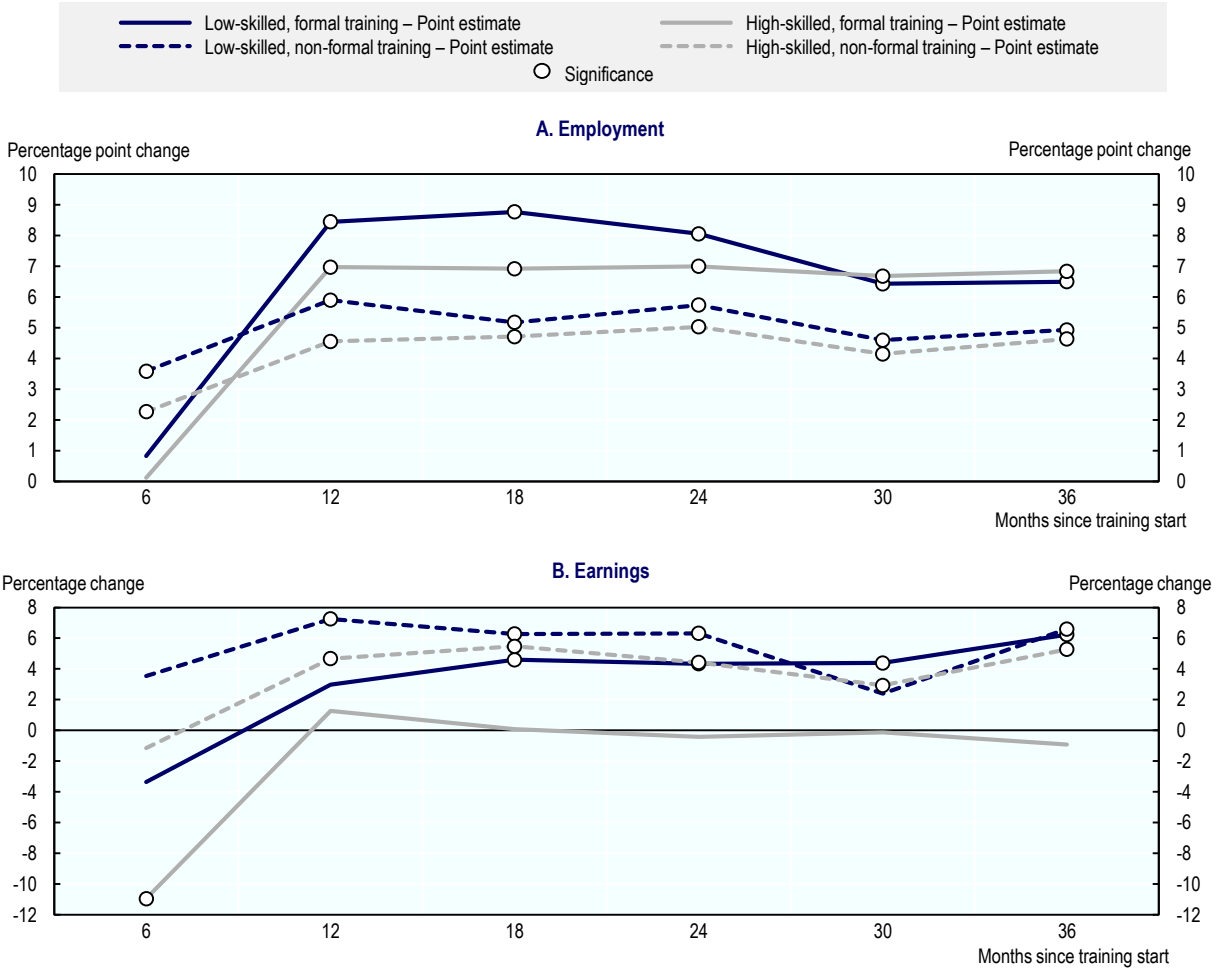


Note: Circle markers indicate statistical significance at the 5% level.
Source: Latvian State Employment Agency, Latvian Social Insurance Agency data and OECD estimates.

StatLink https://doi.org/10.1787/888933961429

Annex Figure 3.A.6. Estimated effects of training on employment and earnings by skill level

Percentage point change in employment chances (Panel A) and percentage change in earnings for those who found a job (Panel B), January 2012 to October 2017

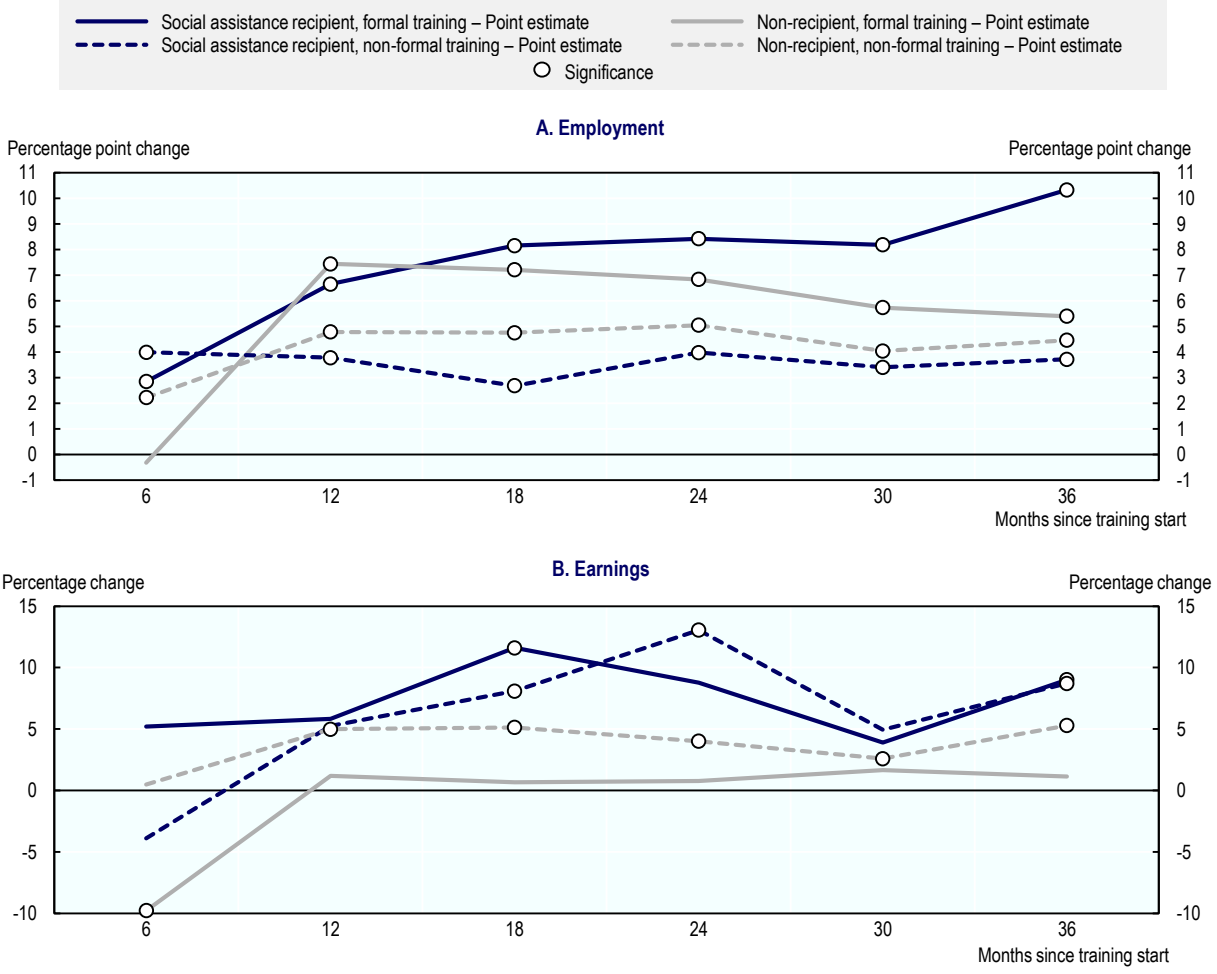


Note: Circle markers indicate statistical significance at the 5% level. *Low-skilled* workers are those with up to lower secondary education.
Source: Latvian State Employment Agency, Latvian Social Insurance Agency and OECD estimates.

StatLink https://doi.org/10.1787/888933961448

Annex Figure 3.A.7. Estimated effects of training on employment and earnings by social assistance receipts

Percentage point change in employment chances (Panel A) and percentage change in earnings for those who found a job (Panel B), January 2012 to October 2017

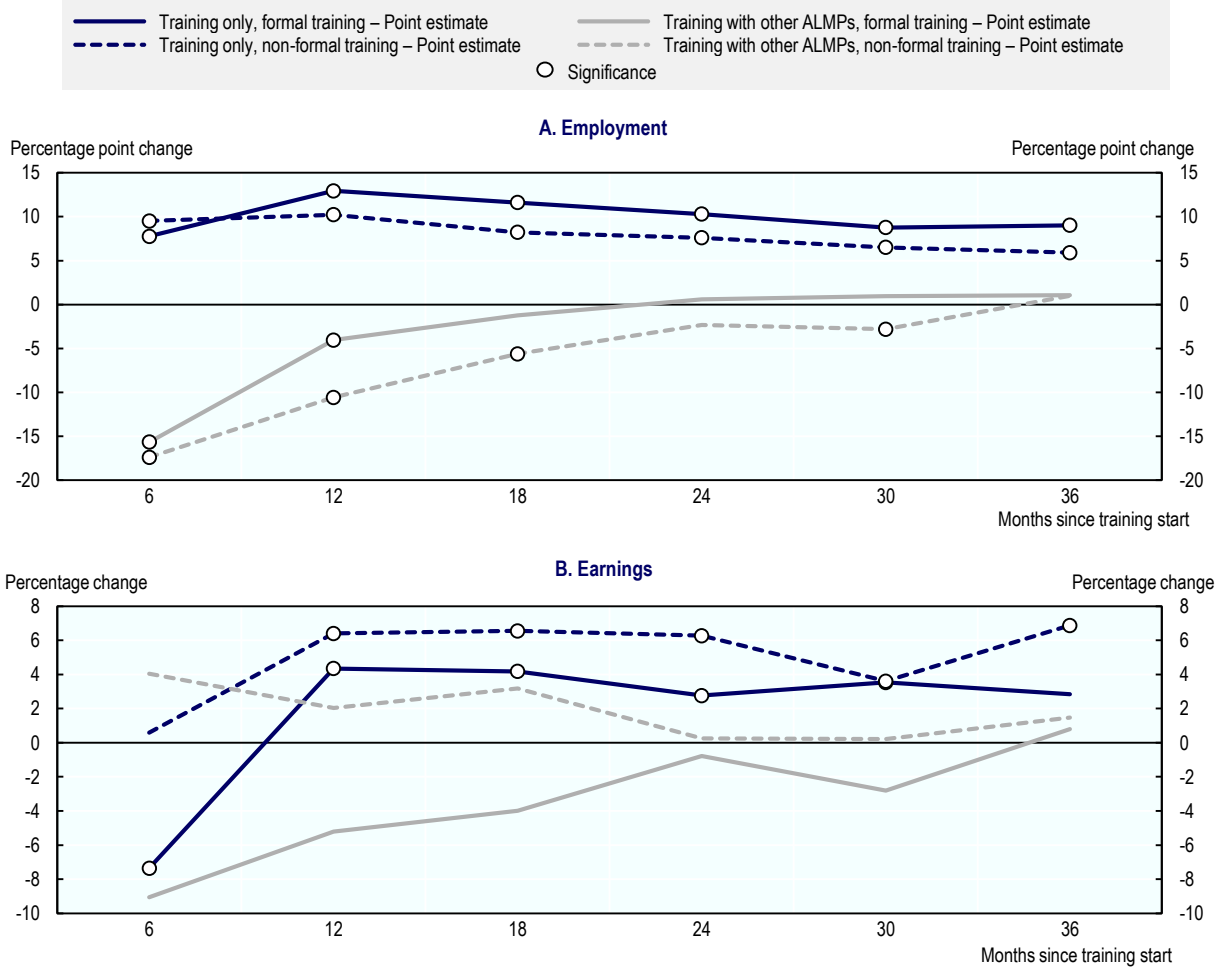


Note: Circle markers indicate statistical significance at the 5% level.
Source: Latvian State Employment Agency, Latvian Social Insurance Agency and OECD estimates.

StatLink https://doi.org/10.1787/888933961467

Annex Figure 3.A.8. Estimated effects of training on employment and earnings depending on participation in other substantive ALMPs

Percentage point change in employment chances (Panel A) and percentage change in earnings for those who found a job (Panel B), January 2012 to October 2017

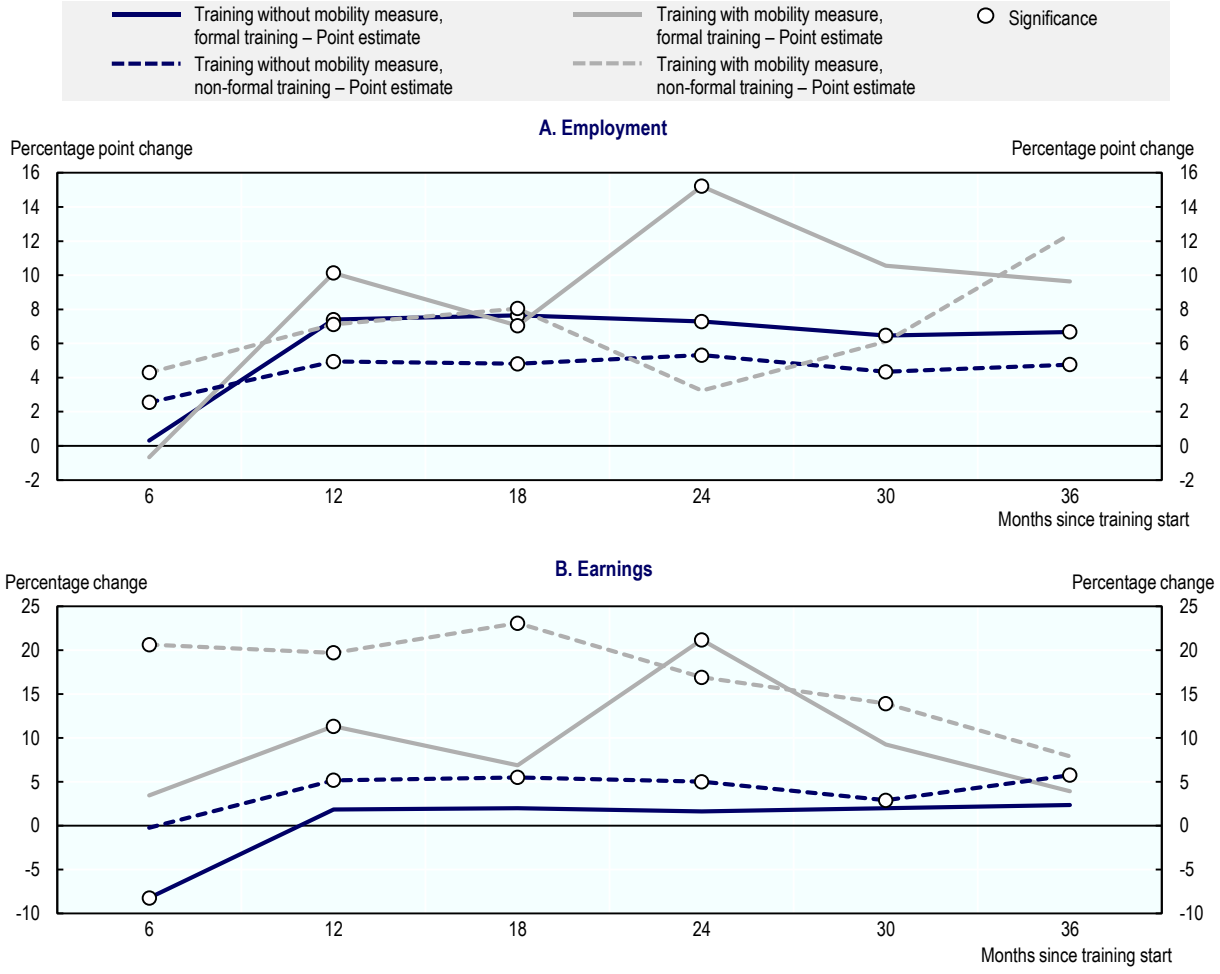


Note: ALMP: Active labour market policy. Circle markers indicate statistical significance at the 5% level.
Source: Latvian State Employment Agency, Latvian Social Insurance Agency and OECD estimates.

StatLink https://doi.org/10.1787/888933961486

Annex Figure 3.A.9. Estimated effects of training on employment and earnings depending on participation in mobility support

Percentage point change in employment chances (Panel A) and percentage change in earnings for those who found a job (Panel B), January 2012 to October 2017

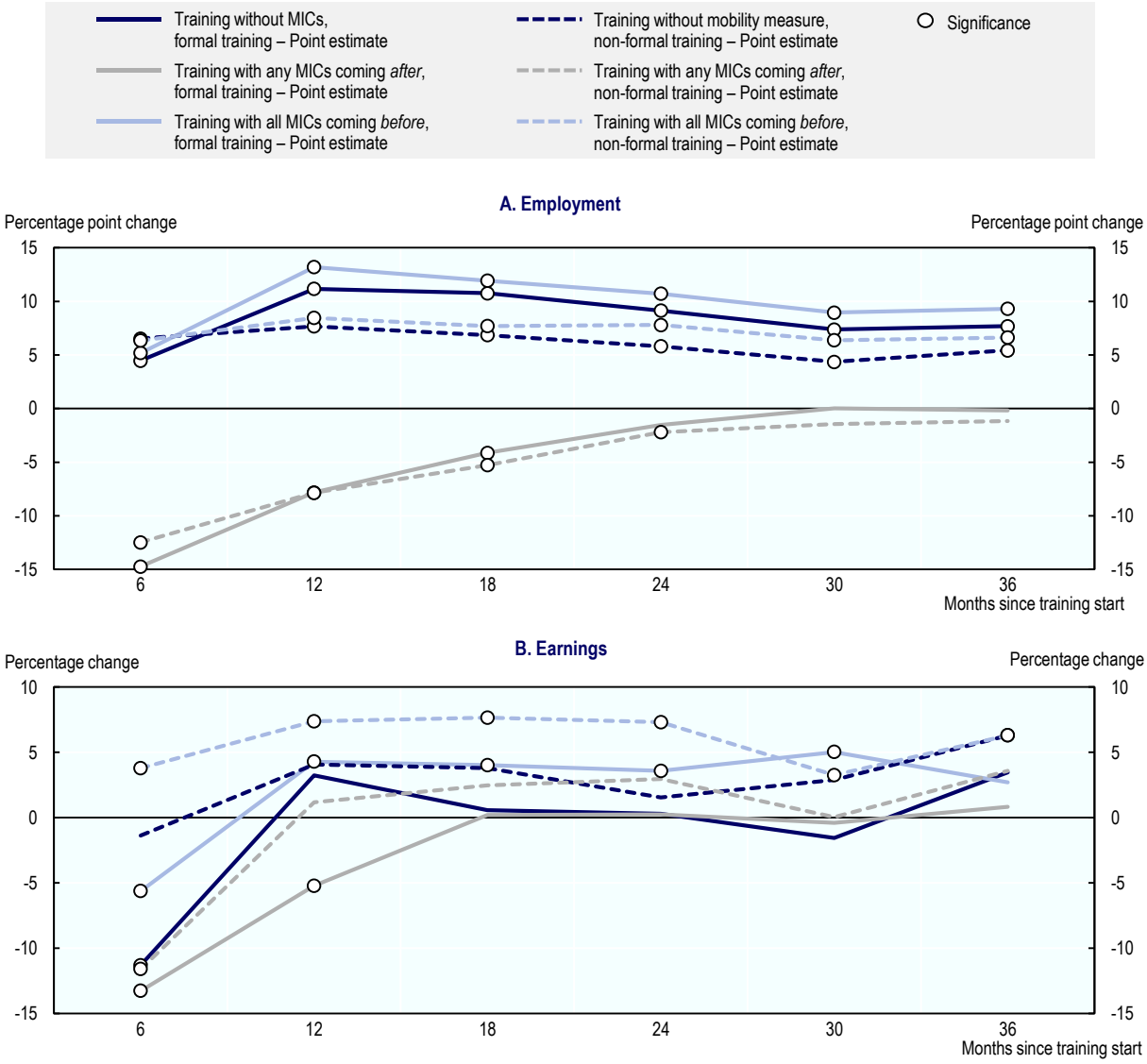


Note: Those classed as participating in mobility support alongside training are only those who began mobility support and training on the same day. Circle markers indicate statistical significance at the 5% level.
Source: Latvian State Employment Agency, Latvian Social Insurance Agency and OECD estimates.

StatLink https://doi.org/10.1787/888933961505

Annex Figure 3.A.10. Estimated effects of training on employment and earnings depending on participation in Measures to Improve Competitiveness

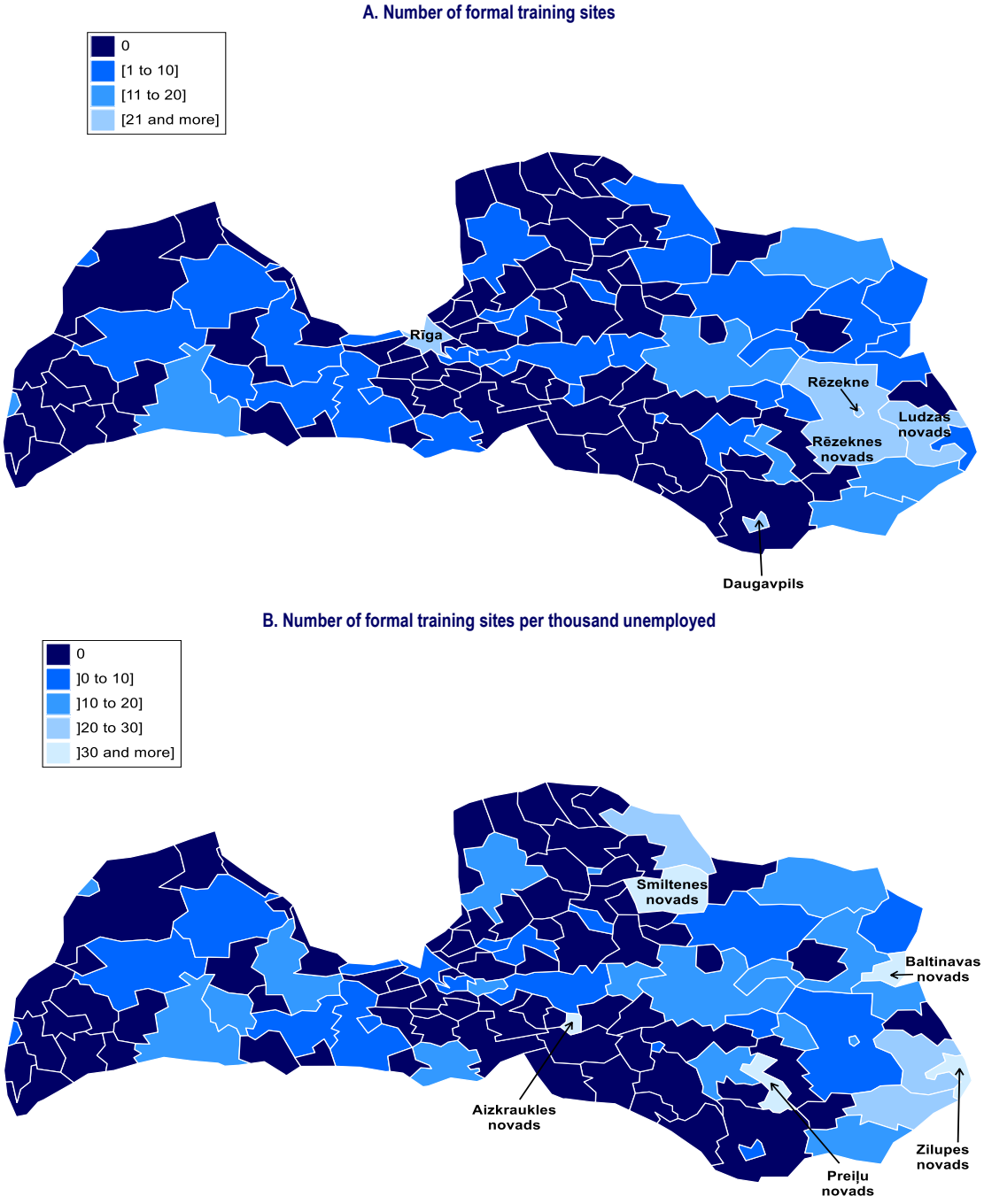
Percentage point change in employment chances (Panel A) and percentage change in earnings for those who found a job (Panel B), January 2012 to October 2017



Note: MIC(s): Measure(s) to Improve Competitiveness. Circle markers indicate statistical significance at the 5% level.
Source: Latvian State Employment Agency, Latvian Social Insurance Agency and OECD estimates.

StatLink https://doi.org/10.1787/888933961524

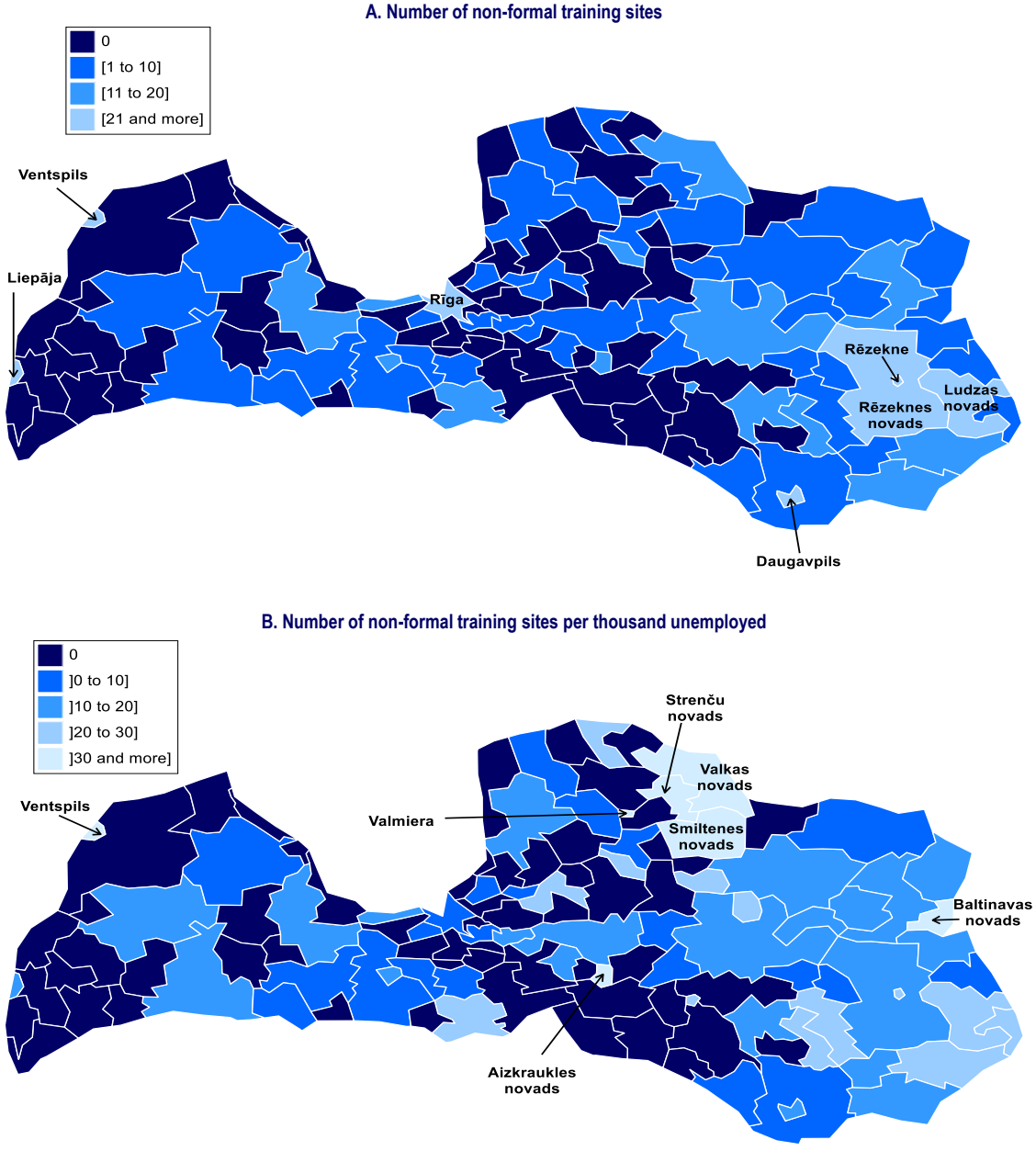
Annex Figure 3.A.11. Number of accredited formal training sites (SEA partner sites) by municipality in Latvia



Note: SEA partners are the pre-approved training providers listed on the SEA website. This map is for illustrative purposes and is without prejudice to the status of or sovereignty over any territory covered by this map.
Source: Latvian State Employment Agency (SEA), Latvian Social Insurance Agency and OECD estimates.

StatLink https://doi.org/10.1787/888933961543

Annex Figure 3.A.12. Number of accredited non-formal training sites (SEA partner sites) by municipality in Latvia



Note: SEA partners are the pre-approved training providers listed on the SEA website. This map is for illustrative purposes and is without prejudice to the status of or sovereignty over any territory covered by this map.

Source: Latvian State Employment Agency (SEA), Latvian Social Insurance Agency and OECD estimates.

StatLink https://doi.org/10.1787/888933961562

Annex 3.B. Additional tables

Annex Table 3.B.1. Sample characteristics of treated and untreated individuals

	Formal training received first: One training only	Non-formal training received first: One training only	Formal training received first: Multiple ALMPs	Non-formal training received first: Multiple ALMPs	Other ALMPs received before training	No training received
Female	**65.43**	**56.39**	**69.48**	**54.71**	**64.88**	**51.75**
Age						
15-24	13.99	7.10	12.19	8.22	39.84	24.02
25-34	31.54	24.95	25.20	22.07	14.04	24.99
35-44	22.60	24.76	22.87	25.56	13.39	18.65
45-54	21.80	26.79	27.70	29.01	20.28	18.71
55+	10.07	16.40	12.04	15.13	12.44	13.63
Education						
Not known	0.16	0.09	0.23	0.10	0.30	10.99
Basic	15.26	12.28	12.56	12.51	21.42	17.54
Secondary	28.60	23.11	27.57	21.99	31.09	22.37
Vocational	5.18	5.67	4.80	6.13	6.20	5.50
Professional secondary	29.58	32.56	30.89	34.28	27.21	25.90
Professional higher	9.89	13.62	11.36	13.03	7.08	7.78
Higher	11.33	12.67	12.58	11.97	6.70	9.92
Ethnicity						
Latvian	68.59	46.46	68.04	50.68	58.11	61.53
Slavic	27.12	46.86	28.54	43.81	37.33	32.97
Other	4.29	6.68	3.42	5.51	4.57	5.50
Non-Latvian citizenship	**7.02**	**22.28**	**7.05**	**18.01**	**11.87**	**13.87**
Language						
Not known	0.11	0.04	0.03	0.08	0.00	0.97
None	1.92	7.67	1.88	4.44	5.63	7.18
Basic	5.74	15.47	6.08	12.82	11.38	8.34
Intermediate	13.69	21.27	13.58	21.76	16.55	13.44
Higher	6.02	8.13	8.04	9.25	5.14	4.62
Educated in Latvian	72.52	47.41	70.39	51.64	61.30	65.45
Married	**39.56**	**46.91**	**41.25**	**46.93**	**28.50**	**34.75**
Has children (aged less than 18 years)	**45.28**	**40.04**	**40.05**	**39.08**	**29.83**	**34.93**
Month of registration						
January	7.94	8.20	8.30	8.03	8.14	8.37
February	9.21	9.30	9.37	9.43	9.67	10.17
March	7.50	8.60	8.02	7.57	7.95	8.28
April	7.69	7.83	7.55	7.78	6.70	9.97
May	7.38	8.12	7.99	7.27	7.46	10.34
June	7.82	7.96	8.33	7.95	8.83	8.22
July	7.89	7.65	8.75	8.16	9.40	8.11
August	8.28	7.93	7.81	8.27	10.35	7.56

	Formal training received first: One training only	Non-formal training received first: One training only	Formal training received first: Multiple ALMPs	Non-formal training received first: Multiple ALMPs	Other ALMPs received before training	No training received
September	9.28	9.00	8.83	8.92	9.74	8.02
October	9.26	8.88	8.64	8.08	7.80	7.48
November	8.79	7.96	8.07	8.30	7.34	6.87
December	8.96	8.56	8.36	10.24	6.62	6.60
Urban	**43.03**	**59.96**	**34.13**	**44.47**	**43.92**	**46.79**
Regions						
Riga City	19.32	34.18	12.49	17.11	16.61	27.38
Pieriga	13.32	12.69	14.63	13.85	8.08	17.28
Vidzeme	12.05	7.84	11.68	9.89	11.89	10.94
Zemgale	14.94	9.91	13.04	11.55	12.27	13.55
Kurzeme	16.90	13.89	15.44	17.00	13.90	15.04
Latgale	23.47	21.48	32.71	30.59	37.26	15.81
Time since previous employment						
3 months or less	72.79	80.26	71.83	73.53	48.67	66.41
4-12 months	4.38	3.46	4.23	4.05	6.58	5.69
13-24 months	1.59	1.26	1.67	1.96	3.01	2.06
More than 24 months	2.20	2.08	3.26	3.33	2.05	2.78
Never worked/Unknown	19.03	12.94	19.01	17.14	39.69	23.06
Receiving social assistance at unemployment spell start	**3.48**	**2.95**	**3.52**	**3.37**	**6.62**	**3.65**
Disabled at unemployment spell start	**7.42**	**8.40**	**12.04**	**12.66**	**16.10**	**6.28**

Source: Latvian State Employment Agency, Latvian Social Insurance Agency data and OECD estimates.

StatLink https://doi.org/10.1787/888933961581

Annex Table 3.B.2. Regressions of employment status on training participation

	Formal						Non-formal					
	6 months	12 months	18 months	24 months	30 months	36 months	6 months	12 months	18 months	24 months	30 months	36 months
Formal training	-0.2160***	-0.1306***	-0.0593***	-0.0187**	-0.0121**	0.0069						
	(0.0064)	(0.0057)	(0.0072)	(0.0070)	(0.0060)	(0.0065)						
Non-formal training							-0.2449***	-0.1692***	-0.1031***	-0.0540***	-0.0476***	-0.0283***
							(0.0116)	(0.0105)	(0.0062)	(0.0072)	(0.0042)	(0.0051)
Individual controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	383 299	357 500	326 883	293 770	263 275	227 696	383 299	357 500	326 883	293 770	263 275	227 696
R-squared	0.1038	0.1230	0.1415	0.1287	0.1333	0.1214	0.1161	0.1289	0.1441	0.1295	0.1340	0.1216

Note: Standard errors in parentheses.
Dependent variable: employment at set number of months after registration.
Standard errors clustered at the level of the SEA branch office.
Individual controls include age, age squared, education level, marital status, number of children under 6 and 18 years, disability status, ethnicity, citizenship, time since last employment, level of Latvian language skill and receipt of social assistance.
Fixed effects for month of unemployment registration, region and SEA branch office are included.
* p<0.10; ** p<0.05; *** p<0.01.

Source: Latvian State Employment Agency (SEA), Latvian Social Insurance Agency and OECD estimates.

StatLink https://doi.org/10.1787/888933961600

Annex Table 3.B.3. Sample characteristics of voucher recipients by redemption status

	Voucher not used	Voucher used
All	22.68	77.32
Gender		
Women	23.10	76.90
Men	22.05	77.95
Age		
15-24	26.35	73.65
25-34	24.06	75.94
35-44	21.61	78.39
45-54	19.84	80.16
55+	19.79	80.21
Education		
Not known	26.90	73.10
Basic	22.06	77.94
Secondary	22.92	77.08
Vocational	19.21	80.79
Professional secondary	20.39	79.61
Professional higher	23.86	76.14
Higher	27.12	72.88
Ethnicity		
Latvian	21.92	78.08
Slavic	23.52	76.48
Other	24.18	75.82
Citizenship		
Latvian	22.03	77.97
Non-Latvian	26.42	73.58
Language		
Not known	14.89	85.11
None	29.30	70.70
Basic	21.26	78.74
Intermediate	22.89	77.11
Higher	22.03	77.97
Educated in Latvian	22.36	77.64
Marital status		
Unmarried	23.61	76.39
Married	21.21	78.79
Children		
No children	23.06	76.94
Has children	22.08	77.92
Urbanicity		
Urban	26.58	73.42
Rural	18.86	81.14
Regions		
Riga City	34.19	65.81
Pieriga	28.16	71.84
Vidzeme	20.34	79.66
Zemgale	22.03	77.97
Kurzeme	18.10	81.90
Latgale	13.89	86.11
Social assistance (January 2012)		
Non-recipient	22.72	77.28
Recipient	22.11	77.89

	Voucher not used	Voucher used
Disability status (January 2012)		
Not disabled	22.85	77.15
Disabled	19.80	80.20
Training voucher type		
Formal	23.93	76.07
Non-formal	22.13	77.87
Youth Guarantee		
Not Youth Guarantee	21.72	78.28
Youth Guarantee	26.37	73.63

Source: Latvian State Employment Agency, Latvian Social Insurance Agency data and OECD estimates.

StatLink https://doi.org/10.1787/888933961619

Chapter 4. Encouraging mobility and entrepreneurship in Latvia's regions

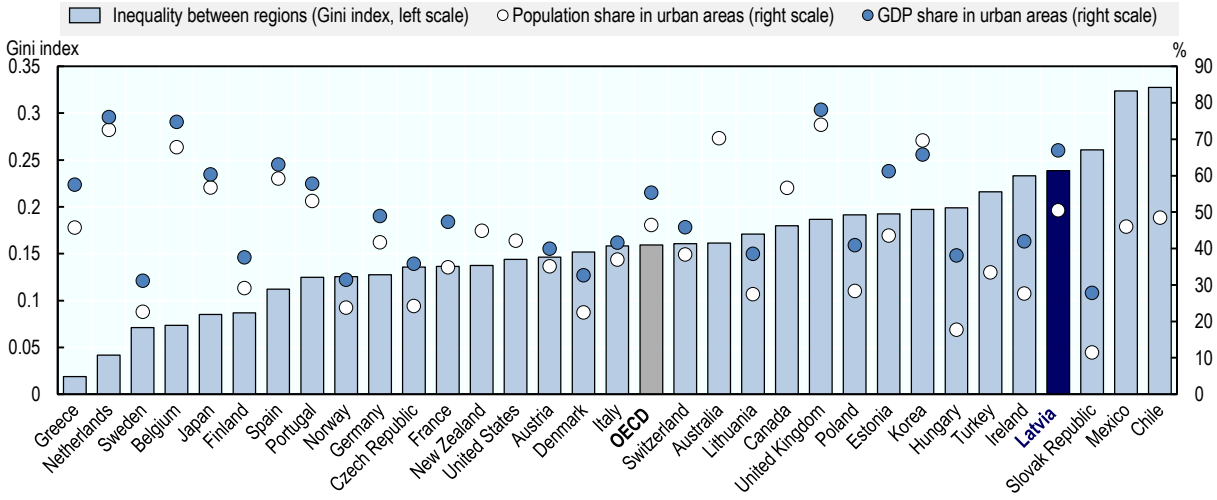
Active labour market policy in Latvia faces particular challenges in some regions outside the metropolitan area of Riga. This chapter documents differences between Latvia's regional labour markets before focusing on two aspects: the regional mobility of unemployed persons and the role of entrepreneurship in reducing regional unemployment. In this context, the chapter assesses ALMP programmes that foster mobility between regions and start-ups from unemployment.

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.

Regional labour market differences

Several indicators confirm that the divide between regions in Latvia is one of the strongest of all OECD countries (Figure 2.1): only three OECD countries exhibit higher interregional inequality than Latvia, according to a Gini index from 2013. Similarly, only three OECD countries generate a greater share of their GDP in urban areas than Latvia does. Albeit less extreme, the share of the population living in urban areas is also relatively high in Latvia. Latvia's values on all three indicators exceed those for Estonia and Lithuania. Against this background, analyses of the Latvian labour market should take the regional dimension into account.

Figure 4.1. Indicators for the urban-rural divide in OECD countries, 2013/2014



Note: Data refer to 2014 for the population share and to 2013 for the other two indicators. The OECD average refers to those countries for which the respective indicator is available.
Source: OECD (2016[1]), *OECD Regions at a Glance 2016,* https://doi.org/10.1787/reg_glance-2016-en.

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The divide between regions is primarily driven by a strong concentration of population and economic activity in Riga, the country's capital, as well as the immediately surrounding area called Pieriga. Riga's 640 000 inhabitants make it the largest city in the Baltic states and account for more than one-third of Latvia's entire population. This metropolis is situated near the geographical centre of the country, roughly where three more rural regions meet: Kurzeme in the west, Vidzeme in the north-east and Zemgale in the south. By contrast, the region of Latgale is situated more remotely in the east of the country, along Latvia's borders with Belarus and the Russian Federation. Daugavpils in Latgale is Latvia's second largest city, counting 83 000 inhabitants. Following settlements at the time of the Soviet Union, Latvia has a strong minority of ethnic Russians, living primarily in Latgale and Riga (Box 4.1).

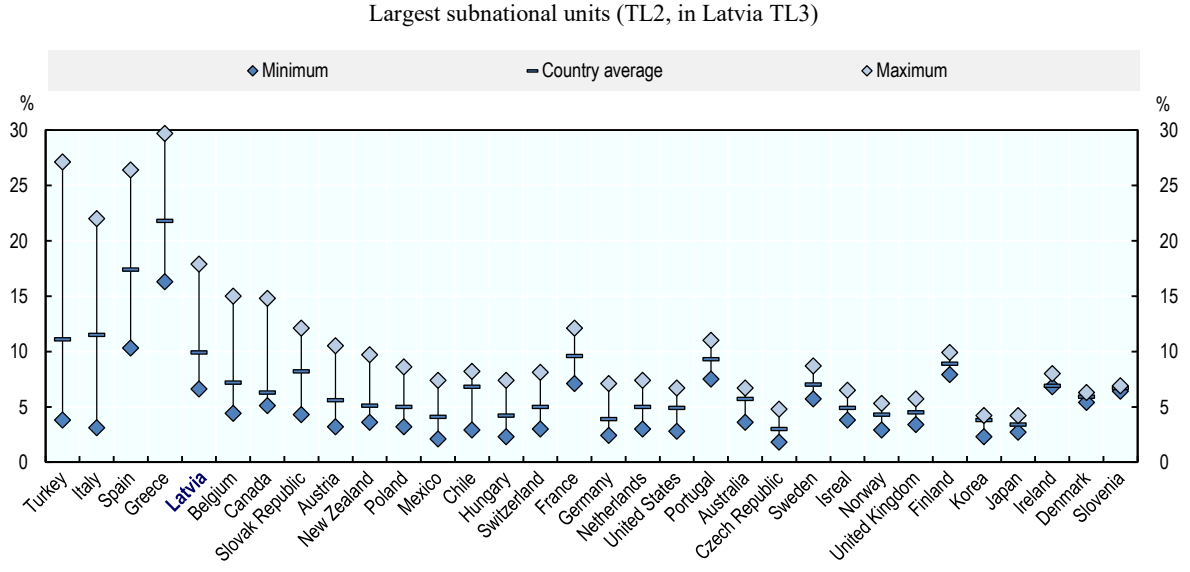
In OECD regional statistics, Riga and Pieriga are classified as predominantly urban regions. Vidzeme and Zemgale are classified as predominantly rural, while Kurzeme and Latgale are considered intermediate. For example, this grouping largely aligns with regional population density in 2018, measured as population per square kilometre: with 12 persons per square kilometre, Vidzeme has the lowest population density among Latvian regions,

followed by Kurzeme (18), Latgale (18) and Zemgale (22). However, population density is considerably higher in Pieriga (36) and Riga stands out as a dense urban area (2 100 persons per square kilometre), according to Latvia's Central Statistical Bureau.

Different labour market conditions in regions imply different needs for ALMP

Latvia's regions also differ markedly in terms of labour market conditions. Figure 1.19 in Chapter 1 shows that unemployment rates, youth unemployment rates and shares of long-term unemployed all varied substantially across regions in 2016. The greatest difference in regional unemployment rates – reaching 11 percentage points – occurred between Pieriga with an unemployment rate of 6.6% and Latgale with a rate of 17.9%. According to Figure 4.2, this range appears large in comparison with ranges observed between the largest subnational units in other OECD countries: greater ranges are only observed in Turkey (23 percentage points), Italy (19), Spain (16) and Greece (13). However, the largest subnational units in Latvia comprise significantly less population than in most other OECD countries, so that these units may not be directly comparable. In OECD statistics on regions, all of Latvia is considered comparable to large regions (TL2 level) in most OECD countries; the same applies to Estonia and Luxembourg (see Table A.1 in OECD (2018[2]) for details). Since smaller regions allow for greater variation in unemployment rates, the range between Latvia's regions (T3 level) will seem relatively smaller when compared to regions of this size in other OECD countries.

Figure 4.2. Regional differences in unemployment rates, 2017 or latest available year



Note: Data cover persons of working age (15-64). Data for Latvia refer to national data for 2016 based on registered unemployed. Data refer to 2016 for Chile, Israel, Korea, Mexico, the Netherlands and the United States and to 2015 for Japan. Countries are shown in descending order of difference between highest and lowest unemployment rates.
Source: Central Statistical Bureau of Latvia, www.csb.gov.lv/en (Latvia) and OECD (2018[2]), *OECD Regions and Cities at a Glance 2018*, Figure 2.10, http://dx.doi.org/10.1787/888933817162 (all other countries).

StatLink https://doi.org/10.1787/888933961657

Data from Latvia's Central Statistics Bureau on registered vacancies highlight that labour market conditions were much more favourable in Riga in 2016 than in other regions. The

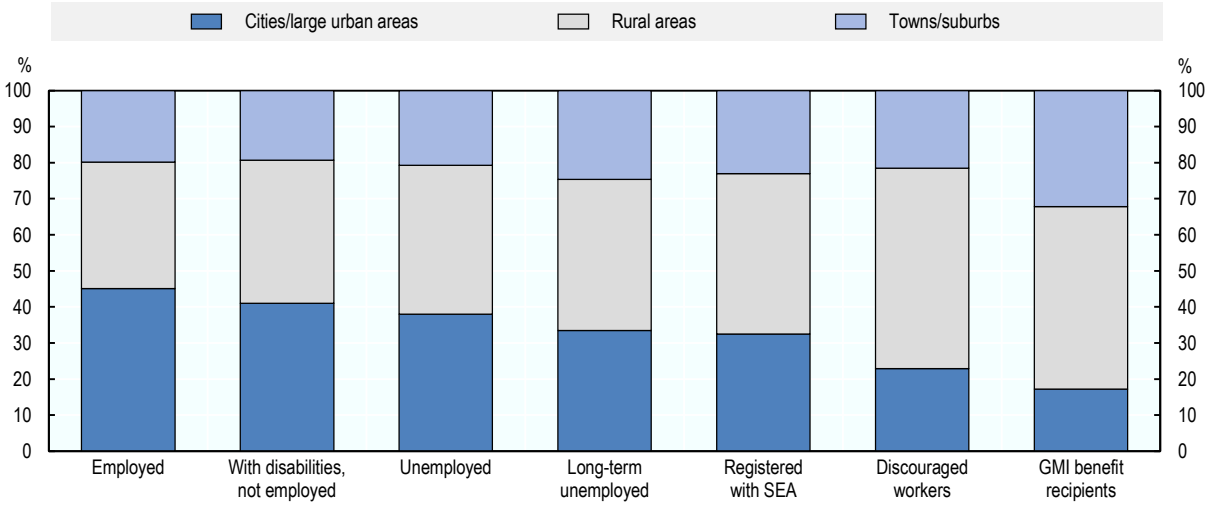
vacancy rate (vacancies as a share of total employment) at the end of the fourth quarter of 2016 reached 2%, well above the national average (1.6%) and the second highest vacancy rate, observed in Pieriga (1.5%). The other regions exhibited a vacancy rate around 1%, except for 0.7% in Latgale. Riga stands out most in terms of labour market tightness, i.e. the ratio between registered vacancies (measured as yearly average of levels at the end of the quarter) and registered unemployed persons (annual figure for ages 15-64). In 2016, labour market tightness approached 0.4 in Riga, so that the number of vacancies corresponded to almost 40% of the number of unemployed persons. This level of tightness was more than twice as high as in Pieriga (0.17) and the value for all of Latvia (0.15). By contrast, labour market tightness in Vidzeme, Kurzeme and Zemgale was around 0.06, while it was particularly low in Latgale (0.03). These values for labour market tightness underline that labour market conditions differ more strongly between Riga and Latgale than unemployment rates would suggest: not only is the unemployment rate substantially lower in Riga than in Latgale, but also the vacancy rate is higher.

As Riga is a dense urban area, this suggests that the degree of urbanisation may be a key driver of differences between Latvia's regional labour markets. Figure 4.3 shows how a number of relevant groups for labour market policy are distributed over cities, towns and rural areas. Compared to the distribution of employed persons, disproportionately many unemployed persons, GMI benefit recipients and discouraged workers live in rural areas: while 39% of all employed persons lived in rural areas in 2016, this applied to 45% of registered unemployed persons, 51% of GMI benefit recipients and 56% of discouraged workers. Towns and suburbs accounted for 20% of employment but 25% of long-term unemployment and almost one-third of GMI benefit recipients. Cities and large urban areas, by contrast, accounted for 45% of employment but only 32% of registered unemployed and 17% of GMI benefit recipients.

Latvia's State Employment Agency (SEA) delivers labour market policy through 26 branches and 18 smaller offices across all regions (as of November 2018). This regional presence raises the possibility to adapt labour market policy to the regional or local situation. While the SEA centrally defines overarching objectives for its services, such as increasing the coverage of a particular group, regional figures on unemployment and the size of specific groups serves as indicators against which the success of particular branches can be measured. Based on reviews of several public employment services, the European Commission (2013[3]) identified principles for combining centralised decision-making with adaptation to the local context. Firstly, some degree of autonomy for local offices can raise their level of engagement and make services more targeted to local challenges. Secondly, centralised decisions ensure that targets are ambitious and limit the time spent on the target-setting process. While local offices therefore do not necessarily need to influence this progress, setting different local targets can account for different local situations. Thirdly, specific local challenges may be addressed through a small number of additional targets for certain local offices.

Figure 4.3. Relevant groups for labour market policy by degree of urbanisation in Latvia

Share of working-age population (15-64), 2016



Note: GMI: Guaranteed Minimum Income. SEA: State Employment Agency. In rural areas, more than half the population live in rural grid cells. In towns/suburbs, less than half the population live in rural grid cells and less than half live in high-density clusters. In cities/large urban areas, at least half the population live in high-density clusters. The group "registered with SEA" includes both unemployed and long-term unemployed persons.
Source: Latvian Labour Force Survey (CSB), www.csb.gov.lv/en/statistics/statistics-by-theme/social-conditions/unemployment/tables/metadata-employment-and-unemployment.

StatLink https://doi.org/10.1787/888933961676

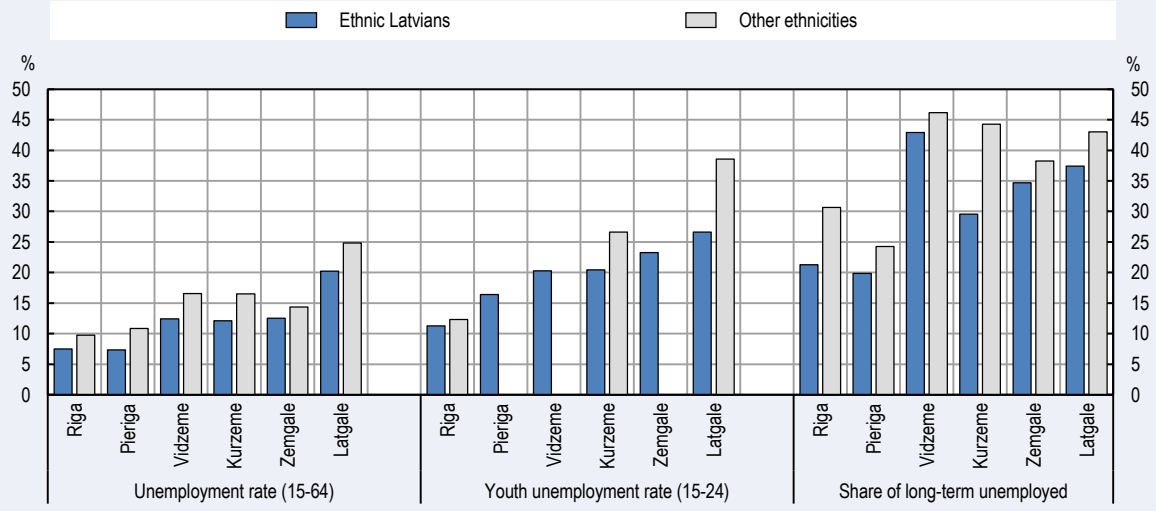
Box 4.1. Unemployment, ethnicity and language

A considerable share of Latvia's population is considered to have a non-Latvian ethnicity. According to figures for 2018 from Latvia's Central Statistical Bureau, ethnic Russians make up one-quarter of the total population and Belarussians, Poles and Ukrainians account for 2-3% each. The ethnic minorities concentrate in certain regions: based on the same figures, ethnic Russians account for 37% of the population in both Riga and Latgale, while their share is below 20% in all other regions. Belarussians and Poles are also most frequent in Latgale, where they account for 5% and 7%, respectively.

According to Latvia's 2011 Census, the number of Russian speakers in Latvia is larger than the number of ethnic Russians, and Russian speakers similarly concentrate in Riga and Latgale (see Box 1.1 and Figure 1.8 in OECD, (2016[4])). With both Latvian and Russian being widely spoken languages in Latvia, lack of proficiency in either of these languages has been identified as an important barrier to employment (see Hazans (2010[5]), for example). This barrier mostly affects Russian speakers because Latvian is the majority language. However, Lindemann (2014[6]) emphasises for the similar case of Estonia that job prospects of Russian speakers are less affected in regions where Russian is also widely spoken. Results obtained by Toomet (2011[7]) suggest that ethnic Russian men in Latvia and Estonia hardly earn a wage premium from proficiency in Latvian and Estonian, respectively.

While recent data on unemployment by language are not available, Figure 4.4 shows that unemployment rates and the share of long-term unemployed in 2016 were higher for non-Latvian ethnicities than for ethnic Latvians in all regions. At the same time, differences remained limited, with some notable exceptions in Riga and Latgale – the two regions in whose high numbers of Russian speakers make the language barrier especially likely to arise. First, the share of long-term unemployed in Riga is considerably higher for non-Latvian ethnicities than for ethnic Latvians (31% compared with 21%). Second, the youth unemployment rate of non-Latvian ethnicities in Latgale is considerably higher than that of ethnic Latvians (39% compared with 27%). Although it is likely that knowledge of the Latvian language is better among youth, Zvaigzne, Saulāja and Čerpinska (2015[8]) argue that the language barrier also contributes to youth unemployment in Latgale, alongside mismatch between the quality of local jobs and the job quality sought by youth.

Figure 4.4. Regional unemployment of Latvians and non-Latvians, 2014-2016



Note: Information on ethnicity is self-declared. The share of long-term unemployed refers to the percentage of unemployed who are unemployed 12 months and over. Youth unemployment rates of non-Latvians in Pieriga, Vidzeme and Zemgale cannot be reliably identified due to sample sizes.
Source: Latvian Labour Force Survey (CSB), www.csb.gov.lv/en/statistics/statistics-by-theme/social-conditions/unemployment/tables/metadata-employment-and-unemployment.

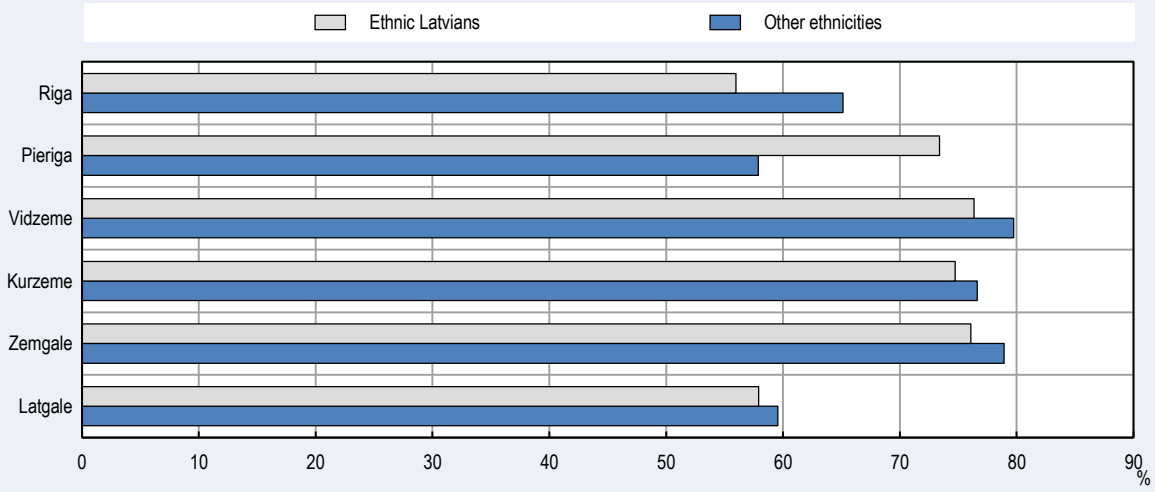
StatLink https://doi.org/10.1787/888933961695

The language barrier is not the only plausible explanation for differences in unemployment rates between ethnicities. To some extent, higher unemployment rates for non-Latvian ethnicities might reflect the legacy of the economic crisis 2008/2009: the crisis reduced employment of non-Latvians more strongly than employment of Latvians (Hazans (2010[5]), Masso and Krillo (2011[9])). However, Figure 4.5 suggests that, by 2014-2016, these effects did not drive the observed differences in unemployment rates anymore. According to Figure 1.8 in Chapter 1, the following sectors were heavily affected by the economic crisis: agriculture, construction, manufacturing, public administration or defence as well as trade, food and accommodation. In most Latvian regions including Latgale, the shares of unemployed persons who had previously worked in these sectors did not differ much between Latvians and non-Latvians in 2014-2016. The difference was significant only in Riga, where this share was 9 percentage points higher for non-Latvians, as well as

in Pieriga, where it was 16 percentage points lower for non-Latvians. When applied to the earlier period 2012-2014, the same analysis confirms notably for Latgale that a substantially higher share of unemployed non-Latvians (66%) than of unemployed Latvians (53%) had been working in heavily affected sectors.

Figure 4.5. Unemployed Latvians and non-Latvians by previous sector of activity, 2014-2016

Share of unemployed with prior work experience who had worked in heavily affected sectors



Note: Data cover persons of working age (15-64). Heavily affected sectors include agriculture, construction, manufacturing, trade/food/accommodation and public administration/defence. Mildly affected sectors include all other sectors. Sectors are categorised according to NACE Rev. 2 at one-digit level. Manufacturing includes mining, energy and water (letters B-E).
Source: Latvian Labour Force Survey (CSB), www.csb.gov.lv/en/statistics/statistics-by-theme/social-conditions/unemployment/tables/metadata-employment-and-unemployment.

StatLink https://doi.org/10.1787/888933961714

Ethnic Russians in both Riga and Latgale probably also had comparatively strong trade links with the nearby Russian Federation. While Latvia maintained its fixed exchange rate to the euro during the crisis, the Russian currency lost value, so that goods and services from Latvia would become less competitive in the Russian Federation. This asymmetric loss of competitiveness might thus have reduced employment more among ethnic Russians. For Latgale, there is the additional factor that the distance to Riga is larger than from other Latvian regions, which likely limits access to a range of employment opportunities and thereby contributes to unemployment (Rogers, 1997[10]).

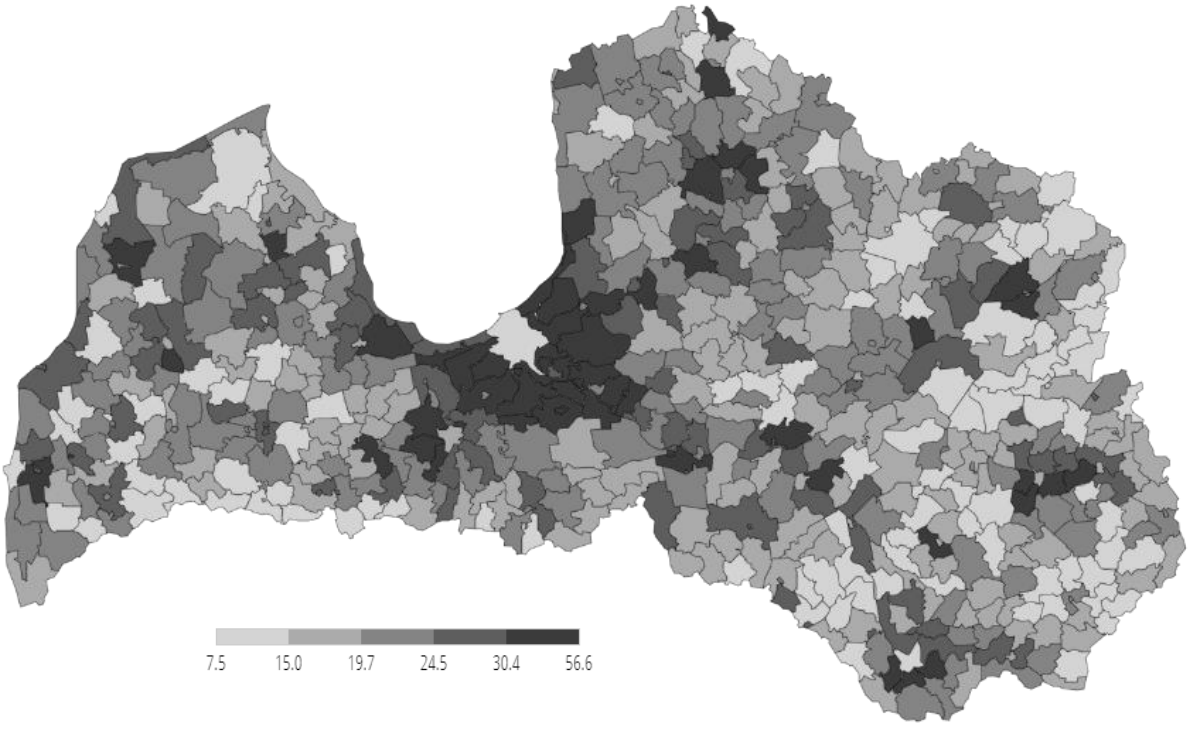
Mobility of the unemployed between Latvian regions

The substantial differences between regional labour market conditions in Latvia create incentives for mobility. According to Hazans (2003[11]), net migration flows between Latvian regions are directed to regions with higher wages and higher population density, and the probability of moving to another region is greater for highly educated and younger persons. Based on qualitative evidence from rural areas of Latvia, Bell et al. (2009[12]) conclude that employment opportunities but also the availability of services determine the likelihood that residents stay. The observed long-run trends in migration flows between

Latvian regions highlight the attractiveness of urban and suburban areas, especially the surroundings of Riga but also those of regional centres (Figure 4.6). Central Riga is an exception, which will be discussed below.

Figure 4.6. Internal migration trends in Latvia, 2000-2018

Share of the population in 2018 who moved to a parish/town between 2000-2018 (percentage)



Note: Territorial units represent parishes (*novada pagasti*) and towns (*novada pilsētas*). This map is for illustrative purposes and is without prejudice to the status of or sovereignty over any territory covered by this map.
Source: Central Statistical Bureau of Latvia, https://migracija.csb.gov.lv/?id=B1e0JusADQ.

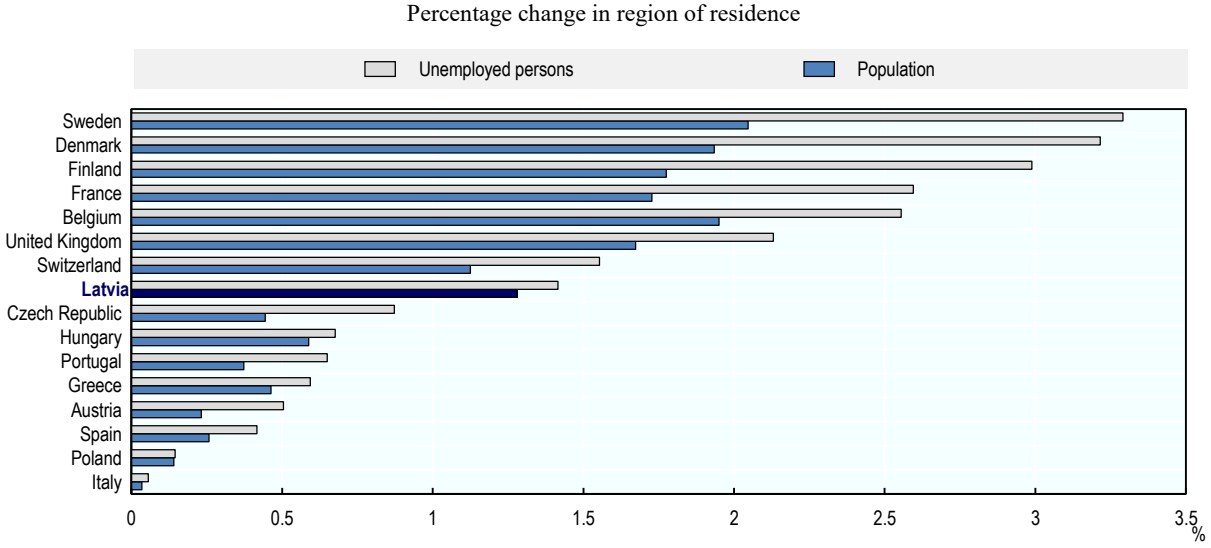
StatLink https://doi.org/10.1787/888933961733

In addition to moves between regions, some analyses have considered commuting in Latvia. A study by Hazans (2004[13]) finds commuting patterns in Latvia are mainly directed to Riga, while residents of Riga or other major cities hardly commute. Results further indicate that highly educated persons and those aged 20-34 are especially likely to commute to work, and that regional unemployment mattered less for commuting than the distance to Riga. Paci et al. (2007[14]) confirm the results for the highly educated and for residents of Riga, but also find that high local unemployment rates are associated with a lower probability for residents to commute. However, low probability of commuting from high-unemployment regions might be explained by a greater distance to Riga, a variable that is omitted in this analysis of commuting. Plausible results were obtained for local levels of GDP per capita: Latvians seem to commute from regions with low GDP per capita to regions with high GDP per capita, and rarely in the reverse direction.

Several studies found that regional mobility was low in Central and Eastern European countries during the post-1990 transition years (see for example Boeri and Scarpetta

(1996[15]), Burda and Profit (1996[16])). Within this group of countries, however, Latvia exhibited a relatively high regional mobility, according to Hazans (2003[11]). Figure 4.7 offers new estimates of regional mobility rates in a number of European OECD countries. These estimates suggest that regional mobility in Latvia reaches an intermediate level: 1.3% of the population of working age (15-64) lived in a different region than one year before the survey. This level is well above the estimated regional mobility in Poland (0.1%), the Czech Republic (0.4%) and Hungary (0.6%), but well below that in Finland (1.8%), Denmark (1.9%) and Sweden (2%). With few exceptions, the regional mobility of unemployed persons (i.e. recorded as unemployed one year before the survey) seems to exceed average mobility substantially. The estimate for unemployed persons in Latvia (1.4%) again falls into the middle of the range, while the mobility of unemployed persons in Finland, Denmark and Sweden appears at least twice as high (between 3.0% and 3.3%).

Figure 4.7. Estimated regional mobility rates for unemployed persons in selected European OECD countries, 2013-2016



Note: Data cover persons of working age (15-64). Changes in region of residence refer to regions at NUTS2 level except for Latvia (NUTS3 level), and a change is identified as current region being different from the region 12 months prior to the survey. Only moves within the same country are considered, and persons who return from abroad are not included. Figures for unemployed refer to those whose main status 12 months prior to the survey was unemployed (registered unemployed in the case of Latvia). The exact figure for Italy is not statistically reliable.
Source: OECD analysis using linked administrative data from BURVIS (SEA), the State Social Insurance Agency (SSIA), the Social Assistance Database (SOPA) and the Population Register (OCMA) for Latvia and the European Labour Force Survey (Eurostat), http://ec.europa.eu/eurostat/web/lfs/overview.

StatLink https://doi.org/10.1787/888933961752

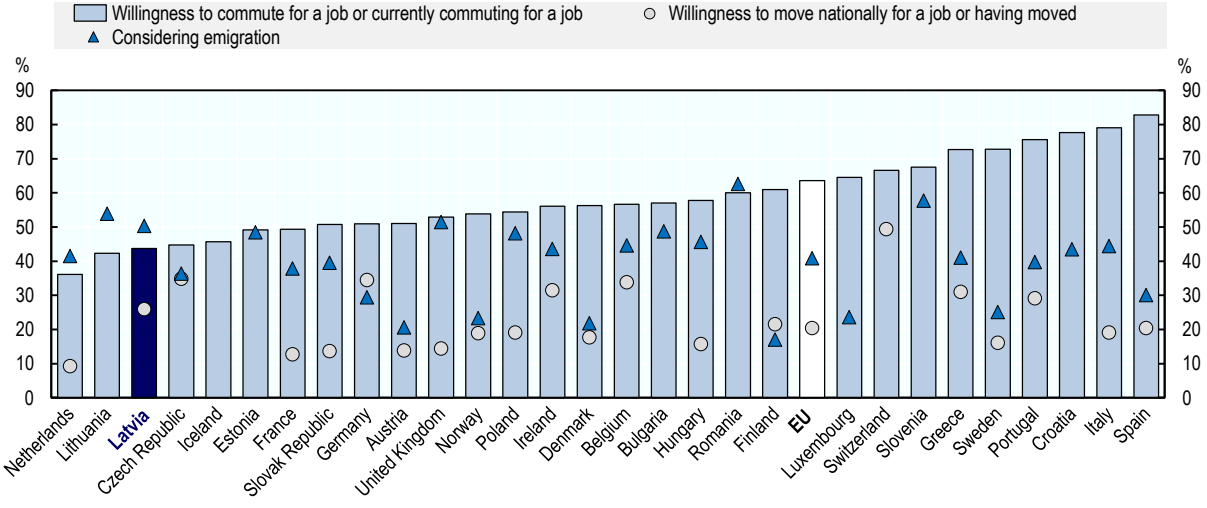
Two caveats arise with the estimate of regional mobility in Latvia shown in Figure 4.7. Firstly, it refers to mobility between regions at the NUTS3 level, a smaller unit than the NUTS2 level available for the other countries. Given Latvia's comparatively small population, all of Latvia is considered as a single region at NUTS2 level. By consequence, a part of the mobility between Latvia's regions would be counted as mobility within the same region in other countries. If, however, the comparison in Figure 4.7 could be made at NUTS3 level throughout, larger countries would exhibit high mobility rates partly because

they include a large number of regions at NUTS3 level, which allows for many combinations of regions and thereby creates greater scope for regional migration within the same country. Secondly, the estimate for the mobility of unemployed persons in Latvia covers only registered unemployed persons. Since unemployed persons in the other countries in Figure 4.7 mostly exhibit substantially higher mobility than the average, it appears likely that the corresponding estimate for Latvia would be higher than the estimate covering only registered unemployed persons, which remains close to the average.

Young unemployed exhibit a low willingness to commute but a rather high willingness to move within Latvia

The mobility of young people can play an important role for overall mobility between regions (for example, Hunt (2006[17])). For the age group 15-34, survey data are available on the willingness to move or commute for a job (Figure 4.8). In Latvia, 44% of unemployed persons in this age group indicate their willingness to commute for a job, which is one of the lowest values among European countries. Lower values occur only in the Netherlands (36%) and Lithuania (42%), while around 80% are willing to commute in Spain, Italy and Croatia and the EU average approaches two-thirds.

Figure 4.8. Willingness of unemployed persons aged 15-34 to be mobile for a job, European countries, 2016 or latest available year



Note: The series for commuting and moving nationally refer to survey responses in 2016. Missing responses are not counted towards the base of the percentages. Due to sample sizes, the series on emigration is based on survey responses from 2009 to 2015. Considering emigration means answering "yes" to: "Ideally, if you had the opportunity, would you like to move permanently to another country?" Answers recorded as "Do not know" or "Refused" are counted towards the base of the percentage, while missing responses are not.
Source: Gallup World Poll data for 2009-2015, www.oecd.org/std/43017172.pdf; European Labour Force Survey (Eurostat) ad-hoc module 2016 on young people on the labour market, http://ec.europa.eu/eurostat/statistics-explained/index.php/EU_labour_force_survey_-_ad_hoc_modules.

StatLink https://doi.org/10.1787/888933961771

By contrast, the willingness of young unemployed persons in Latvia to move within the country for a job is higher than in most other countries for which this information is available (Figure 4.8). More than one-quarter (26%) of those surveyed in Latvia are willing to move, compared with an EU average value of 20%. Significantly higher values are only observed in Greece (31%), Ireland (32%), Belgium (34%), Germany (35%) and

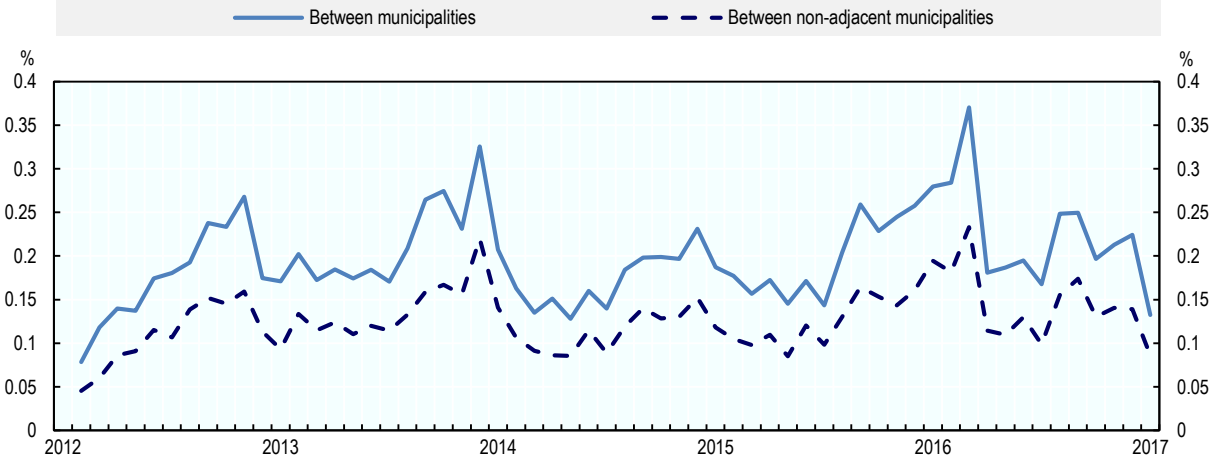
Switzerland (49%). The rather high willingness of young unemployed in Latvia to move implies that policies can draw on this willingness and effectively facilitate their regional mobility, e.g. by reducing barriers to mobility.

The share of young unemployed persons who consider emigrating abroad is especially high in Latvia, reaching one-half compared with an EU average of 41%. Emigration intentions appear significantly more widespread only in Lithuania (54%), Slovenia (58%) and Romania (63%). Figure 4.8 further indicates that regional migration and emigration to another country are not clear substitutes for young unemployed persons: across European countries, willingness to move nationally is essentially uncorrelated with intentions to emigrate.

Based on administrative data, Figure 4.9 shows moves of registered unemployed persons that can be associated with taking up employment. Over time, these moves are subject to considerable seasonal variation. When moves between all municipalities are considered, the average monthly mobility rate over the entire period February 2012 to January 2017 is 0.20%, corresponding to an average of 143 moves per month. The highest mobility rate in this period occurred in March 2016 when the mobility rate reached 0.37%, or almost 300 moves. Another series in Figure 4.9 includes only those moves that take place between municipalities that are not adjacent to each other. In this context, a number of municipalities in close proximity are considered adjacent although they do not share a border (see Annex Table 4.A.1). With an average monthly mobility rate over the entire period of 0.13% (on average 92 moves per month), moves between non-adjacent municipalities are considerably less frequent, but appear to follow roughly the same variation over time as moves between all municipalities.

Figure 4.9. Rates of employment-related mobility among registered unemployed, 2012-2017

Monthly moves associated with transitions from registered unemployment to employment



Note: Data cover persons of working age (15-64). Moves are defined as employment-related if de-registration from unemployment due to finding employment is observed up to two months before or up to five months after the move. Figures include transitions into self-employment.
Source: OECD analysis using linked administrative data from BURVIS (SEA), the State Social Insurance Agency (SSIA), the Social Assistance Database (SOPA) and the Population Register (OCMA).

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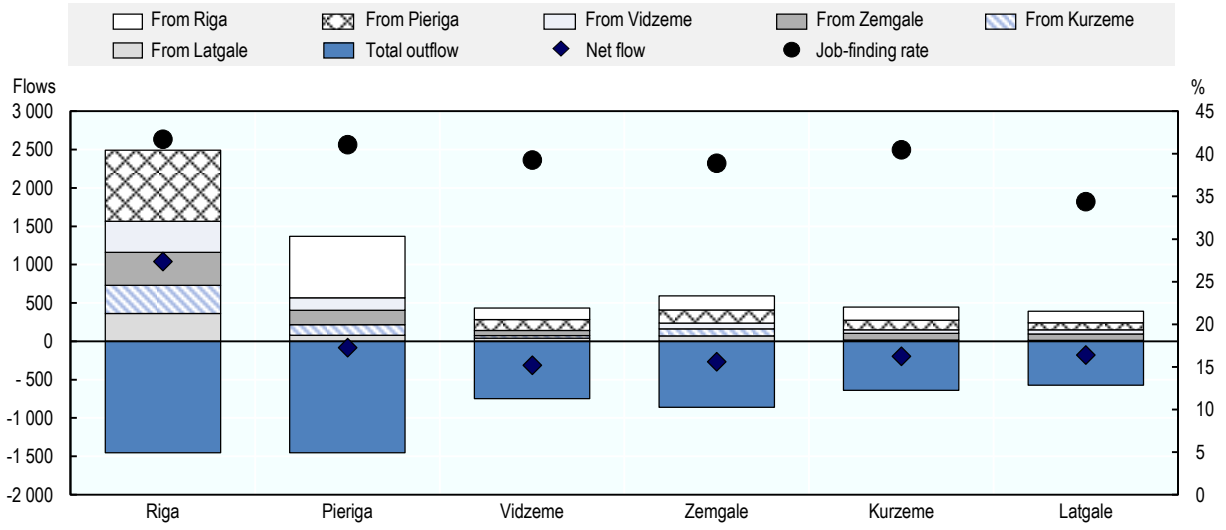
Figure 4.10 depicts flows between regions that result from moves of registered unemployed persons associated with taking up employment. Over the period January 2012 to January 2017, 2 500 registered unemployed persons moved to Riga to take up employment. Most of them had previously resided in Pieriga (930), while around 400 came from each of the other regions. With a total outflow of close to 1 500 registered unemployed persons, Riga attracted a net inflow of more than 1 000 persons. Pieriga saw a high inflow of persons from Riga (800) but less than 200 from any other region. As total inflows to Pieriga roughly balanced total outflows, the net flow was close to zero in this case. Vidzeme, Zemgale, Kurzeme and Latgale all exhibited net outflows of about 200-300 persons. Their main inflows originated from Riga (150-200 persons) and Pieriga (90-170 persons). The inflows from Latgale were almost always the lowest inflows received from any region. In addition to the lowest total outflow, Latgale also exhibited the lowest total inflow.

Figure 4.10. Employment-related mobility of registered unemployed between regions, 2012-2017

Regional inflows (positive values) and outflows (negative values) associated with transitions from registered unemployment to employment (left-hand scale) and regional job-finding rates (right-hand scale)



Note: Data cover persons of working age (15-64). Moves are defined as employment-related if de-registration from unemployment due to finding employment is observed up to two months before or up to five months after the move. Figures include transitions into self-employment. Job-finding rates are defined as the number of exists from unemployment to employment divided by the stock of unemployment.
Source: OECD analysis using linked administrative data from BURVIS (SEA), the State Social Insurance Agency (SSIA), the *Social Assistance Database* (SOPA) and the *Population Register* (OCMA).

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Figure 4.10 further shows that a region's total inflows appear linked to its job-finding rate, defined as the number of exists from unemployment to employment divided by total unemployment. The highest job-finding rates over the period January 2012 to January 2017 are observed in Riga and Pieriga (42% and 41%, respectively). The same two regions also received the largest total inflows. By contrast, Latgale exhibited a job-finding rate of 34% over this period and received the lowest total inflow. The case of Kurzeme, however, deviates from this pattern: despite a higher job-finding rate than in Zemgale (40% compared with 39%), Kurzeme received a significantly lower total inflow.

Mobility requirements for unemployed persons can better reflect their situation

The SEA expects registered unemployed to take up suitable job offers and can otherwise de-register the unemployed person, which stops unemployment benefits and access to other SEA services. The distance between the workplace and the residence of the unemployed person is one of the criteria for suitability. A job will be deemed suitable if the unemployed person can travel there on public transport within one hour (when unemployed for up to three months) or one and a half hours (when unemployed for more than three months). In addition, the residence of the unemployed persons should not be more than two kilometres from the public transport connection, and likewise for the workplace. In addition, the costs of travelling to work should not exceed one-fifth of the gross wage offered. However, it is unclear to what extent these requirements are enforced: as shown in Chapter 2, hardly any sanctions were applied in 2016 because a suitable job offer was turned down.

In practice, the individual ability to take up a distant job offer likely depends on the family situation of the unemployed person and also on access to a car rather than public transport alone. According to the Mobility Survey of Latvia's Population in 2017, 46% of all journeys on working days that are shorter than 300 km are undertaken by car. One-third are made walking and another 4% by bicycle. Transport modes that make up public transport – buses, trams and trains – only account for 16% of chosen transport modes on working days. Many unemployed persons might be able to commute to a distant workplace within a reasonable time by using their car instead of public transport, which is necessarily limited in rural areas. Therefore, access to a car could be made an important criterion in the decision whether or not a distant job offer is suitable.

With respect to family situation, stricter mobility requirements could apply to unemployed persons who are single or whose partner does not hold a local job. Especially in the case of young persons, someone without family commitments at the place of residence can be expected to move anywhere in Latvia in order to take up employment, given that financial support for such moves is available from the SEA (see below). This may be an effective policy lever to avoid some cases of long-term unemployment, while the resulting distances would mostly remain limited. In this context, caseworkers play the key role for identifying an unemployed person's individual barriers to mobility and for highlighting the potential benefits of mobility.

Hofmann (2015[18]) investigates the effect of tighter mobility requirements for unemployed persons without family commitments in Germany: from January 2003, these unemployed persons were required to move in order to take up a distant job unless there is reason to expect that a suitable job opportunity arises in the current region of residence. Hofmann (2015[18]) estimates a substantial positive effect of this change on the employment of women without children from high-unemployment regions (an increase of close to 5 percentage points). The additional employment was generated both in other regions and in the current region of residence, likely reflecting that stricter mobility requirements raised the pressure on them to find employment more generally. This indicates that stricter mobility requirements might not push all unemployed persons concerned out of their current region and may also promote taking up local employment.

High housing costs act as a brake on mobility

House prices underwent a severe correction between 2008 and 2010 (Figure 4.11). While sale prices of (new and existing) residential property had grown by 36% in 2007, they fell by as much in 2009. Since 2011, however, these sale prices have again tended to rise significantly, and growth rates accelerated to 8%-9% in 2016/2017. An index for real house

prices has likewise exhibited a rising trend since 2012. Rent levels have risen more strongly than real house prices over the years 2010-2015 but stagnated after 2015. Overall, housing costs in Latvia have recently tended to rise significantly but have remained far below levels reached during the boom. While the link between home ownership and mobility is pointed out in OECD (2017[19]), this section examines to what extent unemployed persons have been affected by rent increases in each region, and discusses the likely consequences for their mobility.

Figure 4.11. Indicators for housing costs in Latvia, 2007-2017

Indices for prices and rents (left-hand scale) and annual price change (right-hand scale)

Note: Residential property prices refer to both new and existing dwellings. Series for real house prices and rents are seasonally adjusted.
Source: *OECD Analytical house prices indicators and Residential Property Price Indices Dataset*, https://stats.oecd.org/Index.aspx?DataSetCode=HOUSE_PRICES.

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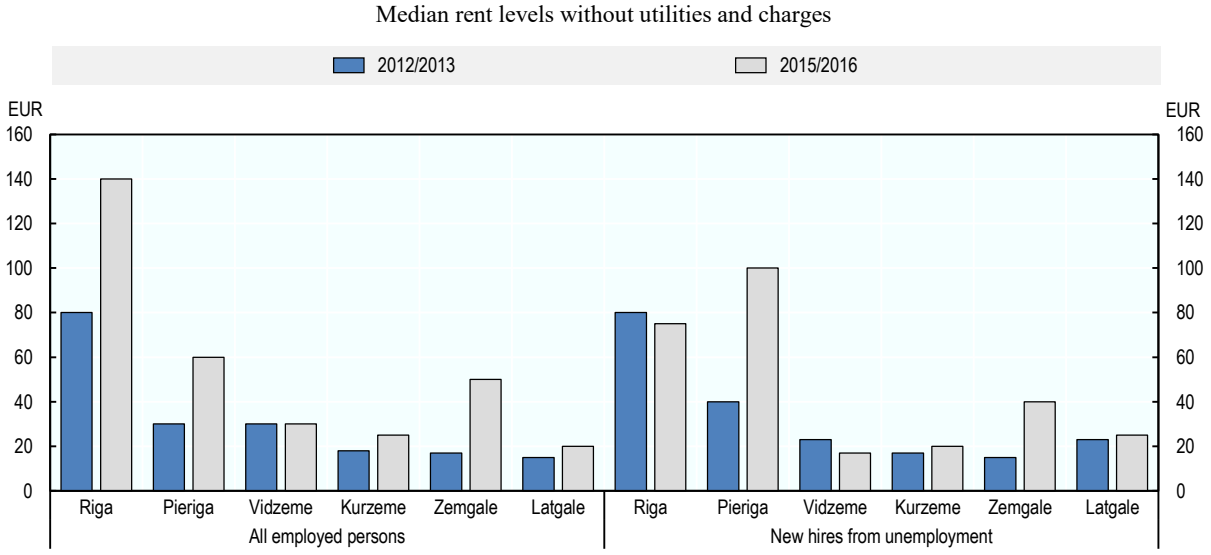
As indicated in Figure 4.6, the centre of Riga attracts relatively little internal migration, in contrasts to areas surrounding the centre and the city or Riga. This likely reflects the strong rise of housing costs especially in the centre of Riga. The monthly median rent paid by an employed person residing in Riga has risen from EUR 80 in 2012/2013 to EUR 140 in 2015/2016 (Figure 4.12). Strong increases in median rent levels also occurred in Pieriga (EUR 30 to EUR 60) and Zemgale (EUR 17 to EUR 50). New hires from unemployment seem to avoid the high rents in Riga, paying about as much in 2012/2013 (EUR 80) as in 2015/2016 (EUR 75). The newly hired former unemployed persons typically pay lower monthly rents than employed persons in total, with the notable exception of Pieriga. New hires from unemployment in Pieriga appear to be bear much of the overall increase in rent levels there, paying a median monthly rent of EUR 100 in 2015/2016 from EUR 40 in 2012/2013. This aligns with the finding in Figure 4.6 that Pieriga has received high internal migration flows. In Kurzeme and Latgale, by contrast, monthly rents have remained low overall.

Several reasons could explain why median rents for new hires were somewhat higher in Pieriga than in Riga in 2015/2016. As a result of the housing boom, Pieriga offers a large part of relatively new accommodation, while renovation of existing dwellings was more

important in Riga. Due to its proximity to Riga and extensive transport infrastructure, residents of Pieriga still have access to Riga and its labour market. At the same time, population density is much lower in Pieriga than in Riga, so that living in Pieriga might often be perceived more attractive in terms of quality of life.

Figure 4.12. Monthly rents paid by employed persons in Latvia's regions, 2012/13 and 2015/16



Note: Rent levels refer to total rents paid (without utilities and charges), not indexed to surface or size of the dwelling. Data cover employed persons of working age (15-64). New hires from unemployment are identified as currently employed persons whose main status one year before the survey was unemployed.
Source: OECD analysis based on the Latvian Labour Force Survey (CSB), www.csb.gov.lv/en/statistics/statistics-by-theme/social-conditions/unemployment/tables/metadata-employment-and-unemployment.

StatLink https://doi.org/10.1787/888933961847

A further issue is that of housing quality as measured by size and modern amenities, for example. OECD (2017[19]) emphasised that, in 2014, 36% of low-income households (the lowest quintile in the household income distribution) and 34% of middle-income households (the third quintile) lived in accommodation considered to be overcrowded. These values are among the highest among OECD countries, and similar or higher values were only observed in Poland and Hungary. According to a 2018 study by the Latvian Ministry of Economics, total monthly rents of EUR 450 to EUR 530 are charged to new tenants for apartments of 50 square metres that conform with modern standards (thus around EUR 10 per square metre, including utilities and charges). For four-fifths of households, the study concludes, more than 30% of disposable household income would have to be spent on housing in order to afford such an apartment.

The high monthly rents especially in Riga and Pieriga but also in Zemgale might discourage some regional mobility in Latvia. A proportion of job vacancies offer wages that would attract jobseekers from other regions were it not for the difficulties to pay local rents out of this wage. By consequence, these jobs vacancies are more likely to be filled by those who already have affordable accommodation near the workplace, and some vacancies will remain unfilled (see Chapter 1). OECD (2017[19]) argues that the lack of affordable housing,

alongside weak public transport, limits the extent to which Riga's economic strength can emanate into surrounding regions and benefit Latvia more widely.

The link between housing costs and regional mobility has been documented for a number of OECD countries. For the case of Italy, (Cannari, Nucci and Sestito (2010[20]) find that increasing housing costs in norther Italy have offset the impact of high incomes and good employment prospects on South-North migration within Italy. In the United States, internal migrants appear less likely to move to areas with high housing costs, after accounting for other factors (Plantinga et al., 2013[21]). A lack of housing supply may be linked to limited regional migration towards urban areas in the Netherlands (Vermeulen and van Ommeren, 2009[22]). Housing cost differentials were also found to affect regional mobility in Finland (Hämäläinen and Böckerman, 2004[23]) and the United Kingdom (Rabe and Taylor, 2012[24]).

Evaluation of the programme for regional mobility

In order to promote the regional mobility of registered unemployed persons within Latvia, the SEA operates an ALMP programme that offers support with taking up job offers (including subsidised employment) or with attending training measures at rather distant locations. Until 2018, jobs and training measures have been considered distant if they are located at least 20 kilometres from the residence of unemployed person. This threshold was reduced to 15 kilometres in 2018, which is just above the average distance travelled on workdays in order to commute to work (13.6 kilometres), according to the Mobility Survey of Latvia's Population.

Unemployed persons who are offered a job or training at a distant location are eligible for support under the programme for regional mobility, provided they have been unemployed for at least two months. Up to EUR 150 (EUR 100 until the end of 2018) per month may be reimbursed under the programme for cost of transport or cost of accommodation at the new workplace or the training site. The reimbursement is limited to the first four months of the new job but can cover the entire duration of a training measure. Moves within the region of Riga are currently not eligible, and a second participation in this programme is normally only possible 36 months after the first one.

The programme was introduced in 2013, and the total number of participants approached 9 200 by the end of 2017. For 3 000 of these participants, the programme was provided under the Youth Guarantee. Details on participants can be derived from the BURVIS Database of the SEA. The available sample from this database covers the period from January 2012 to October 2017, in which close to 9 000 participants are observed. Specifically for this Review, observations from the BURVIS Database were linked with the corresponding information from Latvia's State Social Insurance Data, the Social Assistance Database (SOPA) that covers data collected by municipalities, and the Population Register.

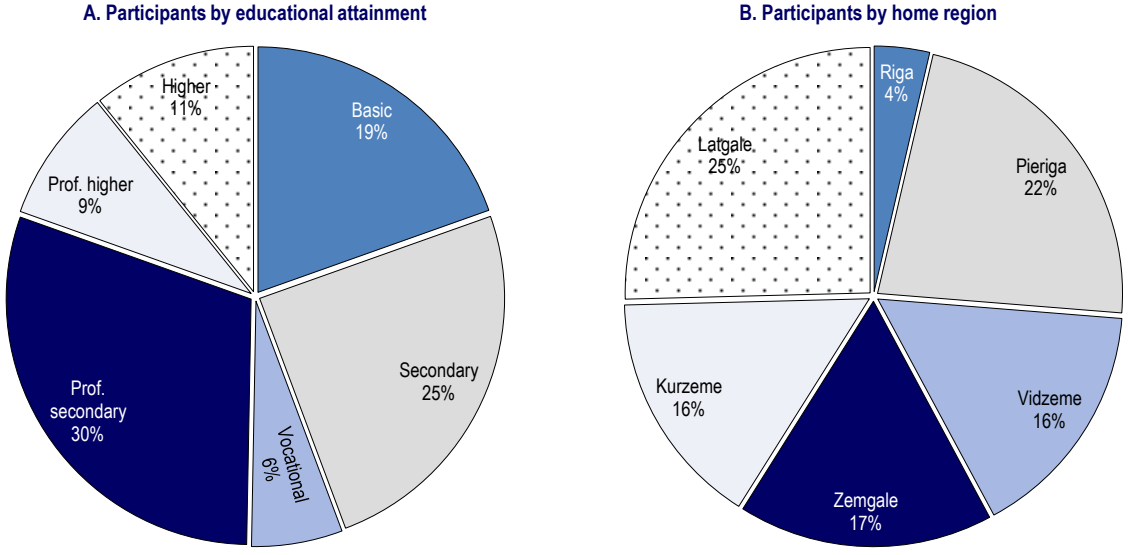
Participants are typically younger than 35, unmarried and not highly educated

The set of linked administrative data offers a wealth of information on participants in the programme for regional mobility. Women make up half of all participants, and almost 60% are under 35 years old. Younger age groups tend to be larger: participants aged 15-24 make up the largest age group (accounting for 37%) followed by ages 25-34 (22%), ages 35-44 (21%) and ages 45-54 (18%), while less than 3% of participants were aged 55-60. Two-thirds were not married, so that relatively young persons, often without family

commitments, are predominant among participants in this programme. Close to 6% of participants have disabilities, and 15% are long-term unemployed (more than one year) at the start of the programme.

One-fifth of participants have a higher or a professional higher level of education and another fifth has only a basic level of education (Figure 4.13, Panel A). One-quarter of participants come from Latgale, followed by Pieriga (Figure 4.13, Panel B). Only few participants (4%) come from Riga, which partly reflects the exclusion of moves within the Riga region from the programme but likely also reflects that residents of Riga relatively rarely move elsewhere for employment. Moves from other regions to Riga were excluded until March 2018. The available information on reimbursements (covering 6 000 participants) suggests that almost all reimbursements (98%) were for transport costs and only 2% for cost of accommodation.

Figure 4.13. Participants in the programme for regional mobility, 2012-2017



Note: Data refer to education levels and regions of residence at the beginning of the unemployment spell. All participants in the programme(s) for regional mobility are included.
Source: OECD analysis using linked administrative data from *BURVIS* (SEA), the State Social Insurance Agency (SSIA), the *Social Assistance Database* (SOPA) and the *Population Register* (OCMA).

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Eligibility rules can be used to identify the impact of the programme

This section briefly presents the methods used in the impact evaluation of the programme for regional mobility, while the next section will present the results of these analyses. As mobility related to training is included in the evaluation of training (see Chapter 3), the impact evaluation here focuses on mobility to take up employment. Then the programme has a positive impact if it raises mobility to take up employment. However, in contrast to most impact evaluations, it is not possible here to define programme participants as treatment group and compare them to some control group that did not participate. After all, a concrete offer of a distant job (or participation in distant training) is a precondition for participation in the programme for regional mobility. Therefore, mobility to take up employment will necessarily be higher among participants than among non-participants.

Due to this inherent self-selection of participants, a broader perspective is needed that abstracts from the group of participants. The approach proposed here draws on the programme's eligibility rules: it defines eligible persons as treatment group and ineligible persons as control group. Then the mobility to take up employment is compared over time, before and after the introduction of the programme or the relevant change in eligibility rules: did this mobility increase in the treatment group after this point in time? To ensure that any increase does not simply reflect an overall trend over time towards greater mobility, the mobility of the treatment group is always compared to the mobility of the control group, which should be unaffected because it is not eligible for the programme.

The programme's impact is therefore identified as the change over time in mobility to take up employment that is observed in the treatment group but not in the control group. As general mobility trends should apply about equally to both groups, they should cancel out in such a comparison. This approach, known as difference-in-difference (DID), is widely considered especially robust (Athey and Imbens, 2006[25]). Box 4.2 presents the details of how this approach is implemented in this Chapter.

Box 4.2. Effects from Latvia's programme for regional mobility: estimation methods

The estimation is set up using a linear probability model. At the level of individuals indexed by i, the model equation to be estimated relates the outcome variable, the individual's mobility behaviour M_i, to various explanatory variables:

$$M_i = \beta_0 + \beta_1 T_i + \beta_2 A_i + \beta_3 [T_i * A_i] + X_i' \beta_4 + \gamma_i + \delta_t + \varepsilon_i$$

where T_i indicates whether or not individual i is in the treatment group, A_i indicates whether the observation comes from the period after the programme introduction or the rule change, and $[T_i * A_i]$ is the interaction of these two variables. Next, X_i' is a vector of observed characteristics of individual i, γ_i is a fixed effect of the home region and δ_t is a year fixed effect. These fixed effects capture some macroeconomic and institutional influences associated with regions or with developments over time. Further indicators for calendar months are included to account for seasonal variation. Finally, ε_i allows for random disturbances in the empirical relation.

The coefficients $\beta_0 \ldots \beta_4$ have to be estimated, where β_0 accounts for a constant part of M_i. In this model, $\beta_1 T_i$ captures the difference between treatment and control group, while $\beta_2 A_i$ captures the difference in mobility before and after the programme introduction or rule change. Then β_3 is the parameter of interest because it will be significantly different from zero if individuals in the treatment group become more mobile after the programme introduction or the rule change, in a way that is not captured by $\beta_1 T_i$ nor by $\beta_2 A_i$ and not explained by the other explanatory variables either.

The outcome variable M_i is an indicator that equals one if individual i is observed to be mobile to take up employment, and equals zero otherwise. Therefore, the model does not estimate the impact on the number of moves – a measure that changes with the number of unemployed persons, for example – but on the individual probability of being mobile to take up employment. The estimated coefficients $\beta_0 \ldots \beta_4$ can be interpreted as the increase in the probability (between zero and 100%) due to a one-unit increase in the respective explanatory variable.

The programme has succeeded in raising mobility

The estimation uses the linked administrative data arranged in terms of individual histories between January 2012 and January 2017, so that one observation corresponds to one month in the history of an individual. The outcome variable M_i is therefore the probability that mobility to take up employment occurs in a particular month. This probability is very low, and the estimated effects will accordingly be very low in absolute terms (but may be substantial when compared to the average probability). However, given large numbers of observations, effects can still be identified reliably. Data on months after January 2017 are not used because most of the mobility in this period does not seem to be recorded in the available data, for unknown reasons. Months in which the individual's labour force status is recorded as retired are excluded from the analysis. Since none of the participants in the programme for regional mobility is older than 60, months in which individuals are older than 60 are also excluded.

The analyses define mobility to take up employment as follows. Mobility is measured at the level of municipalities: an individual is considered mobile in a given month if the municipality where the individual resides is different from the previous month. Such a move is counted as mobility to take up employment if the individual was not employed at any time up to six months before the move and up to two months after the move but becomes employed up to three months before the move and up to three months after move. Therefore, the definition allows the month of the move to differ from the month in which employment is taken up. In practice, those taking up employment might first live in temporary accommodation and move only several months later, or they might move some time ahead of the beginning of employment. Since moves are identified through changes in registered addresses, delays in registration also need to be allowed for.

The analyses attempt to distinguish between moves over a short distance and moves over a longer distance. In addition to a first measure that includes moves between any two municipalities to take up employment, a second measure disregards moves between municipalities that share a border. The remaining moves between municipalities that are not adjacent to each other are more likely to reach a distance of 20 kilometres or more, as required by the eligibility rules of the programme for regional mobility. Some municipalities that do not share a borer are, however, sufficiently close to each other to count as adjacent, and Annex Table 4.A.1 in Annex 4.A lists these cases.

The linear probability model is implemented in three versions, reflecting three ways to exploit the introduction of the programme or rule change for the impact evaluation (Table 4.1). Key results for these three model versions are presented in Table 4.2, notably the estimate for the parameter of interest (β_3). Model 1 compares mobility to take up employment before and after the introduction of the programme in March 2013. The treatment group comprises all registered unemployment, as only persons registered with the SEA are eligible for participation in the programme. The control group are persons not in employment but also not registered unemployed. The broad definition of the control group, rather than considering only non-registered unemployed, avoids the problem that changes in the participation margin between unemployment and inactivity affect the estimation results.

Table 4.1. Econometric approaches in the evaluation of the programme for regional mobility

	Considering effects on:	Considering effects from:	Treatment group	Control group
Model 1	Mobility to take up employment	Introduction of the programme for regional mobility in March 2013	Registered unemployed persons	Other persons not in employment
Model 2	Mobility to take up employment	Introduction of the programme for regional mobility under the Youth Guarantee in August 2014	Registered unemployed persons aged 15-29 (eligible under the Youth Guarantee)	Registered unemployed persons aged 30 or above (not eligible under the Youth Guarantee)
Model 3	Mobility to take up employment in the public sector	Inclusion of public sector employers in the programme for regional mobility from March 2016	Registered unemployed persons	Other persons not in employment

Note: Observations on unemployed persons older than 60 years are excluded from all analyses.
Source: OECD secretariat.

The results from the estimation of model 1 suggest that the introduction of the programme for regional mobility has had a positive impact on mobility to take up employment (Table 4.2, Part A). It appears to have raised the probability that such a move occurs in a particular months by 0.032 percentage points, and the probability that such a move occurs between non-adjacent municipalities by 0.023 percentage points. To place the very low magnitude of these effects into perspective, Part A of Table 4.2 also reports the (unconditional) average probabilities of such moves occurring in a particular month before the programme was introduced. This probability reached 0.031% for all moves and 0.019 percentage points for moves between non-adjacent municipalities. Against these average probabilities, the effects from the introduction of the programme appear considerable, but are by definition limited to the treatment group. After accounting for other factors, those in the treatment group of model 1 (registered unemployed persons) exhibit a probability of 0.062%: registered unemployed are especially likely to be mobile to take up employment. The effect of the programme introduction may be interpreted as raising their mobility by one-half.

Model 2 compares mobility to take up employment before and after the introduction of the programme for regional mobility under the Youth Guarantee in August 2014. Programmes operated in Latvia under the Youth Guarantee are only available to registered unemployed aged 15-29. While persons in this age group had access to the programme for regional mobility introduced in the preceding year, the introduction of this programme under the Youth Guarantee might produce additional effects in the age group 15-29. For example, the objective of the Youth Guarantee to offer young unemployed persons employment, education or training within four months introduces a certain time pressure. In model 2, registered unemployed aged 15-29 are therefore the treatment group, and older registered unemployed serve as control group.

While the average probabilities are essentially the same in model 2 as in model 1, the estimated impact is considerably lower, but nevertheless significant. Introducing the programme for regional mobility also under the Youth Guarantee appears to have raised the mobility to take up employment by 0.008 percentage points in the group of registered unemployed aged 15-29, and by 0.006 percentage points when only moves between non-adjacent municipalities are considered (Table 4.2, Part A). The weaker effects may be weaker because persons in this age group are already more mobile than older age groups, which might make it more difficult to raise it further. In addition, the programme for

regional mobility had already existed for more than one year outside of the Youth Guarantee.

Table 4.2. Estimation results for the impact of the programme for regional mobility on mobility to take up employment, 2012-2017

Probabilities in percentage points

Dependent variable	Probability before: model 1	Probability before: model 2	Probability before: model 3	Effect in model 1	Effect in model 2	Effect in model 3
A. Full sample of newly unemployed persons						
Moves between any two municipalities	0.031	0.031	0.003	0.032	0.008	0.002
Moves between non-adjacent municipalities	0.019	0.020	0.002	0.023	0.006	0.001
B. Subsample of social assistance recipients						
Moves between any two municipalities	0.042	0.036	0.003	0.011	0.008	
Moves between non-adjacent municipalities	0.025	0.022	0.002	0.009	0.006	0.002
C. Subsample of persons with disabilities						
Moves between any two municipalities	0.019	0.024	0.002	0.012	0.012	-0.003
Moves between non-adjacent municipalities	0.012	0.015	0.002	0.011		
D. Subsample of Latgale residents						
Moves between any two municipalities	0.028	0.030	0.004	0.026		
Moves between non-adjacent municipalities	0.018	0.018	0.003	0.020		

Note: Only results that are statistically significant at the 5% significance level are reported. In model 3, only mobility to take up employment with public-sector employers is considered. Analysis B includes all persons who received social assistance at some point in the observed history between January 2012 and January 2017. Analysis C includes all persons recorded as having disabilities at some point in this observed history, and analysis D includes all those who resided in Latgale at the beginning of their observed history.
Source: OECD analysis using linked administrative data from *BURVIS* (SEA), the State Social Insurance Agency (SSIA), the *Social Assistance Database* (SOPA) and the *Population Register* (OCMA).

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Finally, model 3 compares mobility to take up employment before and after a change in eligibility rules in March 2016, when jobs offered by public-sector employers become eligible for support from the programme for regional mobility. In this model, outcome variable M_i only captures mobility to take up employment with public-sector employers. Since such moves only make up a fraction of mobility to take up employment, effects estimated from model 3 may be especially small and more difficult to identify than in the case of model 1 or 2. As in model 1, the treatment group consists of registered unemployed persons and the control group consists of other persons not in employment.

The estimated effects for model 3 are still positive but small compared with the effects estimated for models 1 and 2 (Table 4.2, Part A). However, the effects for model 3 appear substantial when compared with the average probabilities for mobility to take up employment in the public sector in a particular month, which was only 0.003% before March 2016, and 0.002% for such moves between non-adjacent municipalities. In the treatment group (registered unemployed), the probabilities were 0.08% and 0.06%, respectively, so that the effect of the rule change appears to have raised the mobility to take up employment by about one-third.

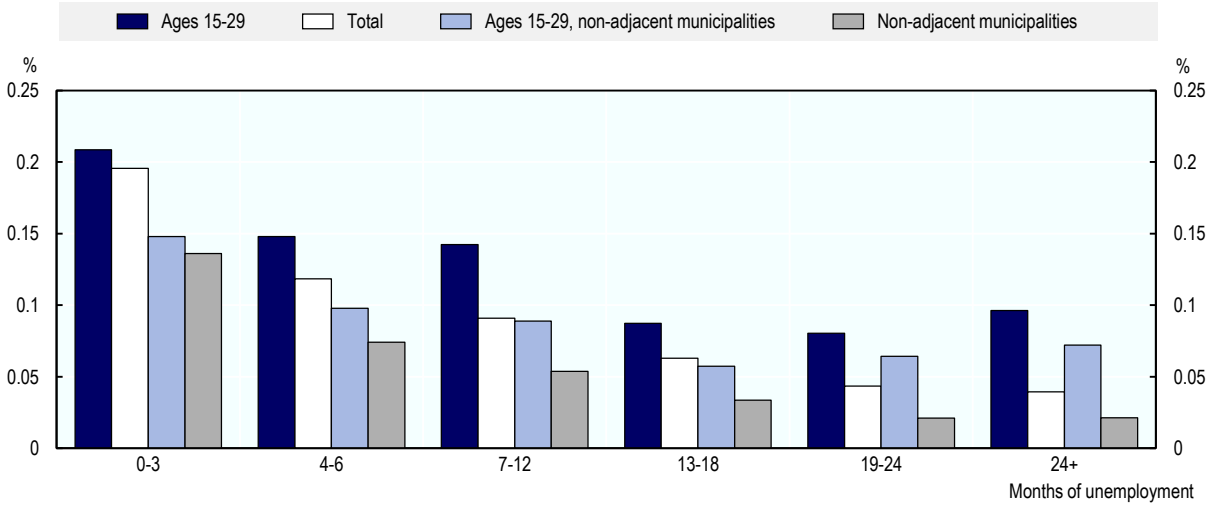
The estimation of all models includes a range of individual characteristics, most of which are consistently found to matter for mobility to take up employment. Age is negatively

correlated with the mobility to take up employment. Being female is slightly positively correlated, while being a Latvian citizen has a somewhat stronger positive correlation (which might proxy unobserved factors such as language proficiency in Latvian). Receiving unemployment benefits or social assistance correlates positively (except for receiving social assistance in model 2). Disabilities correlate negatively with mobility to take up employment. Several variables account for family situation: total household size, the number of children aged under 7, the number of children aged 7-18, and whether a child was born in the preceding year. While household size and recent childbirth correlate negatively, the number of children under 18 correlates positively. This last finding might be linked to age: families with younger parents (who are more likely to have young children) may be more mobile than families with older parents. Finally, having any other region than Riga as home region is positively correlated. Overall, the findings appear plausible and the fact that they are statistically significant supports the empirical validity of the three models.

Education and unemployment duration are further potentially relevant explanatory variables. However, information on educational attainment is only collected for registered unemployed, and unemployment duration is only observed for registered unemployed. Therefore, these two explanatory variables can only be included in model 2 which uses registered unemployed in both the treatment and the control group. When unemployment duration in months and indicators for education levels are included in the estimation of model 2, the effect remains significant at a slightly lower magnitude than before (0.006 percentage points and 0.005 percentage points for moves between non-adjacent municipalities). Compared with a basic education level, every higher level of educational attainment correlates positively with mobility to take up employment. Unemployment duration in months also correlates positively in this case, which might result from the strong focus of activities under the Youth Guarantee on the first four months of registered unemployment – within this time, mobility might be more in the later months. For registered unemployed persons overall, graphical evidence clearly suggests a negative duration dependence of mobility (Figure 4.14).

Especially high mobility rates during the first three months of unemployment raise the question whether a shift to shorter unemployment durations over time drives the estimated effects of the programme when unemployment duration is not included. To investigate this, model 1 is estimated again including only unemployed persons in the first three months of unemployment in the treatment group (without a change to the control group). The estimated effects of the programme are still positive and significant, albeit lower than for all unemployment durations (0.021 percentage points and 0.015 percentage points when only moves between non-adjacent municipalities are considered).

Figure 4.14. Monthly rates of mobility to take up employment by unemployment duration, 2012-2017



Note: Only registered unemployed up to the age of 60 are included. Categories refer to unemployment duration in months.
Source: OECD analysis using linked administrative data from *BURVIS* (SEA), the State Social Insurance Agency (SSIA), the *Social Assistance Database* (SOPA) and the *Population Register* (OCMA).

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A positive impact is found for recipients of social assistance but not necessarily for persons with disabilities

The estimation of the three models can be repeated for specific groups only, in order to examine how estimated effects differ. The groups considered here are recipients of social assistance, persons with disabilities, and residents of Latgale (Table 4.2, Parts B-D). Raising the regional mobility might be especially important for improving the labour market prospects of these three groups because they may often face very limited suitable job opportunities close to their current residence (which applies to recipients of social assistance insofar as it signals sustained problems with integrating the local labour market). In each case, the sample is restricted to certain individuals (while maintaining their entire observed employment history). The estimation for recipients of social assistance includes all observed individuals who received social assistance at some point between 2012 and 2017. The estimation for persons with disabilities includes the individuals who were at some point recorded as having disabilities, and the estimation for Latgale includes individuals who reside in Latgale at the beginning of their observed employment history.

Results for the estimated effect of the programme for regional mobility on recipients of social assistance suggest that their mobility to take up employment in a particular month has increased by about 0.010 percentage points, according to model 1, and by around 0.007 percentage points according to model 2 (Table 4.2, Part B). When model 3 is estimated for this group, only the effect on moves between non-adjacent municipalities is statistically significant but reaches the same magnitude as in Part A of Table 4.2. For persons with disabilities, statistically significant results based on model 1 and model 2 indicate that their mobility increased by 0.012 percentage points due to the programme for regional mobility (Table 4.2, Part C). By contrast, one estimation based on model 3 indicates a negative effect on their mobility to take up employment in the public sector.

Together, these results could mean that the programme for regional mobility primarily facilitates the mobility of persons with disabilities to take up suitable employment in the private sector, which allows them to rely less on jobs in the public sector. For Latgale residents, only estimates from model 1 are statistically significant (Table 4.2, Part D). These estimates are close to those obtained in Part A of Table 4.2, which suggests that the introduction of the regional mobility programme in 2013 raised the mobility of registered unemployed persons in Latgale as strongly as on average across Latvia.

The last finding provides a first indication that the estimation results are robust although regional factors are not fully accounted for – such as differences in geographical distance, transport links, and preferred language. To some extent, these differences have been captured by including fixed effects for regions in the estimation. In addition, one can allow for clustered standard errors at the level of regions. This modified estimation indicates that at four sets of results are robust to shortcomings from missing regional variables: the positive effects found for all unemployed persons under model 1 as well as under model 2, the positive results for residents of Latgale under model 1, and the negative result for persons with disabilities found under model 3.

The literature offers a few impact evaluations of comparable programmes. Westerlund (1998[26]) assesses the "starting assistance grant" in Sweden, which was initially introduced mainly to increase mobility. The empirical results suggest that an increase in the level of this grant has not increased regional mobility. Caliendo, Künn and Mahlstedt (2017[27]) evaluate the effect of "relocation assistance" in Germany that subsidises moving costs of unemployed persons. After accounting for self-selection into the programme, they find that participants earned substantially higher wages and enjoyed greater employment stability than a comparison group. However, they do not offer conclusive evidence on the programme's effect on regional mobility. In Caliendo, Künn and Mahlstedt (2017[28]), they find that mobility support leads unemployed persons to search for jobs across a larger area, which raises their prospects of finding employment.

Le Gallo, L'Horty and Petit (2017[29]) examine the effect of subsidised driving lessons for youth in France on their mobility and labour market outcomes. According to the results, the affected youth are initially less mobile during the training phase before a positive effect on their mobility and job search efforts eventually materialises. Finally, it is worth noting that many other ALMP measures might, as a by-product, reduce regional mobility through lock-in effects: participants in these programmes might stay longer in a region with poor employment prospects than they would have in the absence of ALMP measures in these regions. Hämäläinen (2002[30]) uses data from Finland to show that this effect arises in times when unemployment in potential destination regions is low, so that moving there would have been promising.

Support for mobility can be scaled up in a targeted way

Given that the programme for regional mobility has positive effects on the mobility of unemployed persons to take up a job, it is worthwhile exploring how it can be scaled up. At the same time, the programme should be cost-effective and not support mobility that would also have taken place in the absence of the programme. The BURVIS Database of the SEA includes information on the minimum salaries associated with jobs taken up by programme participants. Where this information is available in the period 2012-2017, 22% of the jobs taken up by programme participants paid at least a monthly salary of EUR 280-299. About one-third paid at least EUR 300-349, 27% at least EUR 350-399, and 6% at

least EUR 400-499. Only 7% of jobs paid at least EUR 500-599, and only 5% at least EUR 600. Thus far, the programme therefore appears well targeted.

Under the current rules of the programme, financial support is limited to EUR 400, a substantial amount for many unemployed persons in Latvia. Where couples or entire families would have to move, however, this limit appears too low to cover the up-front costs that such moves often entail. In this context, it may be possible to offer unemployed persons higher amounts as repayable loans from a service provider. The SEA could act as intermediate and substantially reduce the risk of such loans, notably through its knowledge of the expected salary of the new job. As it is unlikely that such loans are taken out by those who can afford to move without further support, unnecessary costs would be avoided.

By another rule of the programme, unemployed persons become eligible for support only after an unemployment duration of two months. As shown in Figure 4.14 above, job-related mobility is especially likely to take place in the first three months of unemployment. Unemployed persons whose mobility depends on financial support then either decline job offers during the first two months or postpone the new job until two months have passed, which needlessly prolongs unemployment and benefit payments from the SEA. Therefore, it would be preferable to abolish this rule and find other ways to limit mobility support to those who would otherwise not move. For example, eligibility for the programme could instead be linked to certain profiling outcomes, so that unemployed persons with very good job prospects are not eligible.

The potential of entrepreneurship for unemployed persons in Latvia's regions

Policy makers can also address unemployment across Latvia's regions by fostering entrepreneurship and start-ups, in order to generate sustained employment growth within the regions themselves. Unemployed persons can benefit in two ways, by finding jobs in newly created firms or by becoming entrepreneurs themselves. Based on evidence from Germany, Fackler et al. (2018[31]) find that start-ups are more likely to hire disadvantaged jobseekers. If these results generalise, promoting entrepreneurship in regions may be an effective way to reduce regional unemployment at the same time.

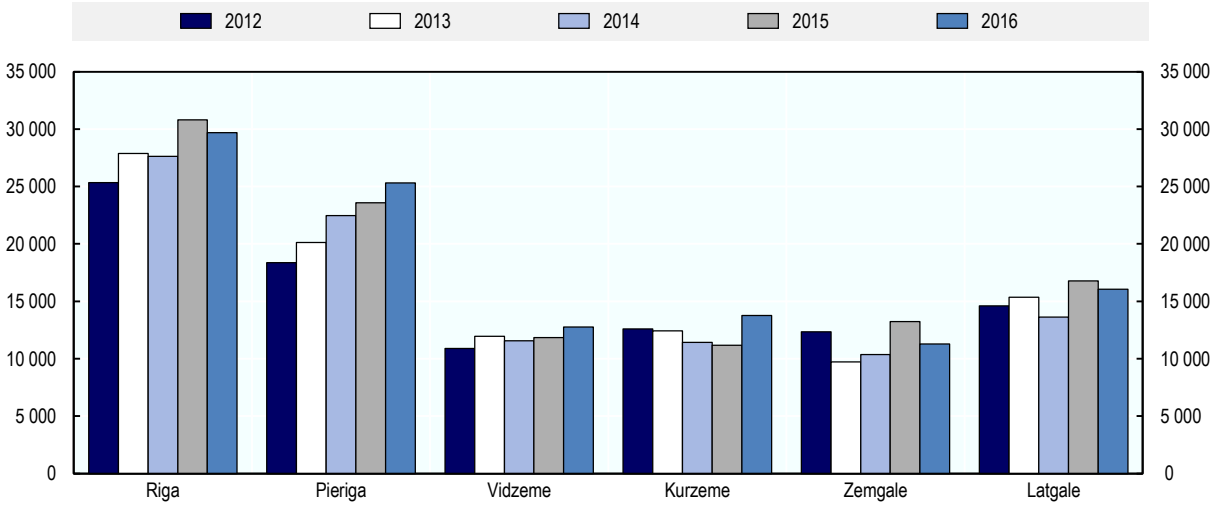
Numbers of self-employed persons have been on the rise in most of Latvia's regions over recent years (Figure 4.15). Especially in Pieriga, they have risen steadily between 2012 and 2016, rising by almost 40% over this period. Strong growth was also observed in Riga and Vidzeme, where numbers increased by 17% in both cases. Growth rates in Kurzeme and Latgale approached 10%, while the number of self-employed persons in Zemgale was fluctuating. The increasing tendency still arises when these figures are related to the total active population.

The overall impression from the figures on self-employment is corroborated by figures on firms. The net creation rate of firms – the difference between newly created firms and firms being closed – is comparatively high Latvia and reaches about 5% (Figure 4.16). This does not only hold for urban areas (6%) but also for intermediate and predominantly rural areas. Among OECD countries for which this information is available, higher net creation rates are only observed in Estonia and Hungary. Especially high shares of Latvia's population declare in surveys that they expect to create a business within three years: one-quarter of the population aged 15-64 and 40% of those aged 18-30, close to twice the EU average in both cases (OECD/European Union, 2017[32]). To an unknown extent, however, the creation of firms in Latvia also reflects a preferential tax regime for so-called micro enterprises. This can include the redefinition of activities as a micro enterprise in order to

qualify for lower tax rates. In the context of widespread concerns about such abuse, micro enterprises will be limited to a few sectors from 2019.

Figure 4.15. Self-employed persons in Latvia's regions, 2012-2016

Working-age population, 15-64



Note: Self-employed persons include farmers working on their own farm.
Source: Latvian Labour Force Survey (CSB), https://www.csb.gov.lv/en/statistics/statistics-by-theme/social-conditions/unemployment/tables/metadata-employment-and-unemployment.

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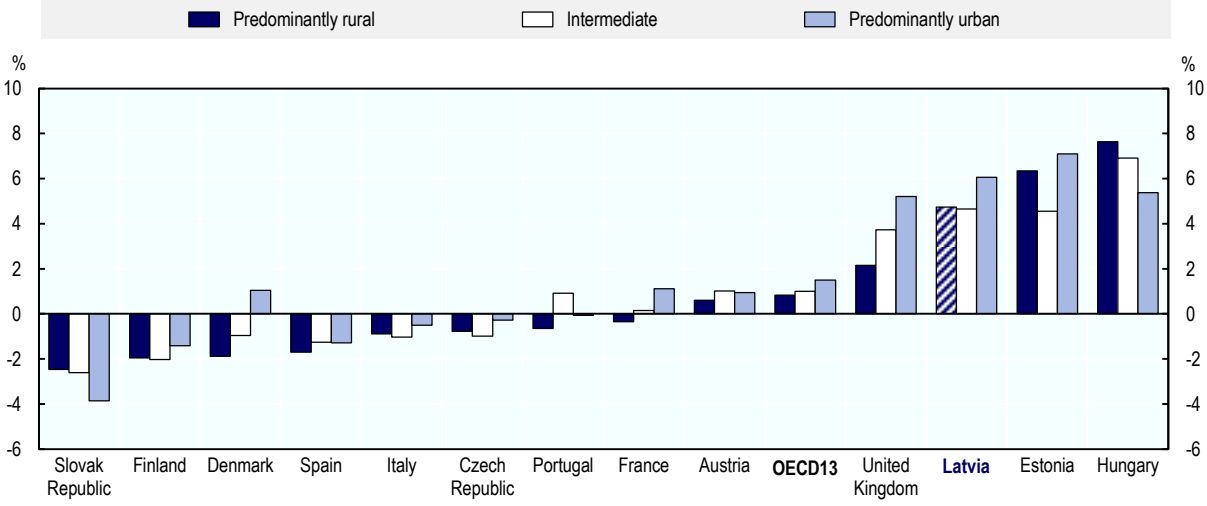
Figure 4.16. Entrepreneurship in selected OECD countries by type of region, 2015

Net creation rate of firms



Note: Countries are ordered by the net creation rate of firms in predominantly rural regions. OECD13 is the unweighted average of the 13 countries in the chart.
Source: OECD (2018[2]), *OECD Regions and Cities at a Glance 2018*, Figure 1.26 https://dx.doi.org/10.1787/reg_cit_glance-2018-en.

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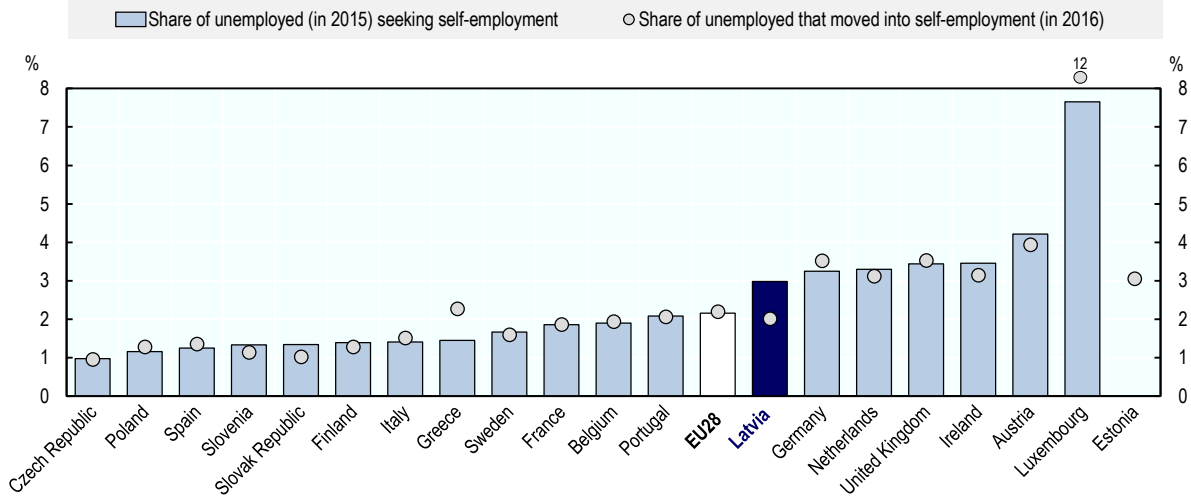
Since the digital economy offers many of the opportunities for entrepreneurship with a high growth potential, entrepreneurship in Latvia's regions can benefit strongly from access to digital infrastructure. Broadband coverage promises to be a key piece of infrastructure that allows rural regions to catch up with cities. According to the OECD Broadband Portal, the high-performing fibre connections make up an especially large share (63%) of broadband connections in Latvia. Among OECD countries, higher shares only occur in Japan (75%) and Korea (74%). As Latvian authorities increasingly offer e-services, the possibility to register new companies online was introduced in 2018 (OECD, 2018[33]). Using firm-level evidence, Revoltella et al. (2019[34]) find that also regional infrastructure and institutions are an important factor for innovation in firms.

An untapped potential of entrepreneurs exists among the unemployed in Latvia

Survey data from 2015 suggests that 3% of all unemployed persons in Latvia would like to become self-employed (Figure 4.17). This value was above the average for EU countries, and substantially higher values were only observed in Austria (4.2%) and Luxembourg (7.7%). However, only 2% of unemployed persons in Latvia moved into self-employment in 2016. The discrepancy between the share that seeks self-employment and the share that moves into self-employment was larger in Latvia than other European OECD countries for which this information was available (except in Luxembourg and Greece, albeit with a reversed order of shares). This highlights an untapped potential of entrepreneurs among unemployed persons in Latvia: if it could be mobilised, the share of unemployed who move into self-employment would increase by one-half.

Figure 4.17. Transition from unemployment to self-employment, European OECD countries, 2015/2016

Percentages of unemployed persons (aged 15-64)



Note: Figures include unemployed who are not registered with the respective public employment service.
Source: OECD/EU (2017[35]), *The Missing Entrepreneurs 2017: Policies for Inclusive Entrepreneurship*, Figure 5.5 https://doi.org/10.1787/9789264283602-en, based on the European Labour Force Survey (Eurostat), http://ec.europa.eu/eurostat/web/lfs/overview.

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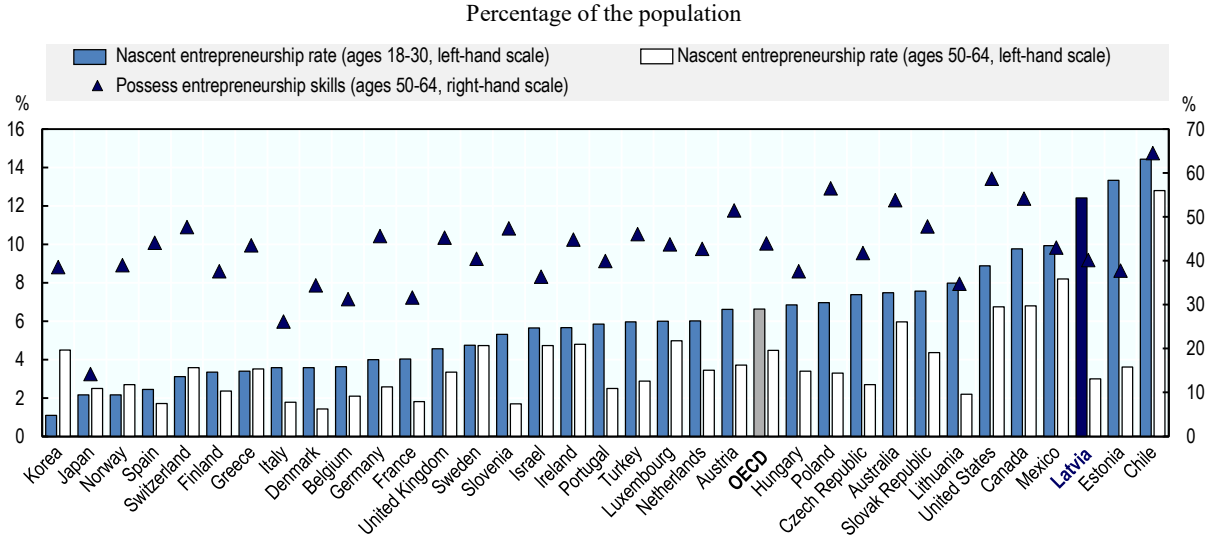
For all EU countries combined, some further evidence is available by gender and age (OECD, 2017[35]), while sample sizes do not allow a breakdown of this information by country. The share seeking self-employment was larger among unemployed men in EU countries (2.6%) than among unemployed women (1.7%). It was also higher for unemployed aged 50-64 (2.4%) than for unemployed aged 15-24 (1.1%). The last finding provides a first hint that self-employment could be especially welcome as a tool to reduce unemployment among older workers.

Some existing evidence also suggests that entrepreneurship courses might be a policy lever for mobilising the potential for entrepreneurship. In the age group 18-30, Latvia's nascent entrepreneurship rate – the share of the population involved in creating a new business – is one of the highest among OECD countries (Figure 4.18). In 2012-2016, it exceeded 12% and was only behind the rates in Estonia (13%) and Chile (14%). This aligns with a comparatively high share of this age group who believes to have the necessary know-how: in Latvia, almost half of those in the age group 18-30 indicated in a survey that they have the knowledge and skills to start a business (see Figure 3.13 in OECD (2017[35])). This share was only higher in Chile, Turkey and Poland.

Figure 4.18. Entrepreneurship and needs for entrepreneurship skills of youth and older workers, 2012-2016



Note: The nascent entrepreneurship rate is defined as the share of the population that is actively involved in setting up a business they will own or co-own; this business has paid salaries, wages or any other payments to the owners for up to three months. The series for possessing entrepreneurship skills indicates the share answering yes to "Do you have the knowledge and skills to start a business?"
Source: OECD/EU (2017[35]), *The Missing Entrepreneurs 2017: Policies for Inclusive Entrepreneurship*, Figures 3.5, 4.5 and 4.13 https://doi.org/10.1787/9789264283602-en based on the European Labour Force Survey (Eurostat), http://ec.europa.eu/eurostat/web/lfs/overview.

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By contrast, Latvia's nascent entrepreneurship rate in the age group 50-64 falls into the lower half, relative to other OECD countries (Figure 4.18). At 3% in 2012-2016, it was far lower than in the age group 18-30, and the gap of 9 percentage points was the highest among OECD countries except for Estonia (10 percentage points). A part of the gap could be explained by less familiarity with entrepreneurship among older workers: in the age

group 50-64, only 40% believed to have the knowledge and skills to start a business, which again falls into the lower half when compared to other OECD countries (Figure 4.18). This indicates that courses in entrepreneurship could help mobilise potential entrepreneurs especially among older workers. According to a recent survey in Poland, participants in entrepreneurship courses were most interested in starting a first entrepreneurial project within these courses, visiting companies and internships, alongside writing business plans and developing ongoing projects (OECD, 2017[36]).

Assessment of start-up subsidies for the unemployed

Against this background, the programme for entrepreneurship and self-employment operated by the SEA (and also offered under the Youth Guarantee) can play an important role for reducing unemployment in Latvia, across regions. The programme assists selected participants with the formulation of business plans and, at a first stage, provides feedback on these business plans in up to 20 consultation sessions for each participant. When submitted to a commission of business professionals, about one-quarter of business plans are approved. To implement approved business plans at the second stage, grants of up to EUR 3 000 can be awarded, as well as monthly stipends at the level of the minimum wage for up to six months.

However, the size of the programme is small compared to many other ALMP programmes in Latvia: according to annual figures from the SEA, about 1 450 participants have reached the second stage during the period 2012-2017, alongside 4 300 participants who only reached the first stage. The annual number of participants at the second stage has fluctuated over this period between 170 and 320. But it has been estimated that between 2 000 and 3 000 unemployed persons could be interested in participating in this programme each year (OECD/European Union, 2017[32]).

The small size of the programme might partly result from high eligibility requirements. To qualify, a registered unemployed person needs to have some experience with business administration, a formal educational qualification at vocational level or higher either in the field of the proposed activity or in business administration, or any formal qualification at vocational level or higher combined with some further training in business administration. The business professionals who offer consultation sessions and select business plans for grants are chosen by the SEA through public procurement (OECD/European Union, 2015[37]).

Completion of the programme is associated with increased employment rates

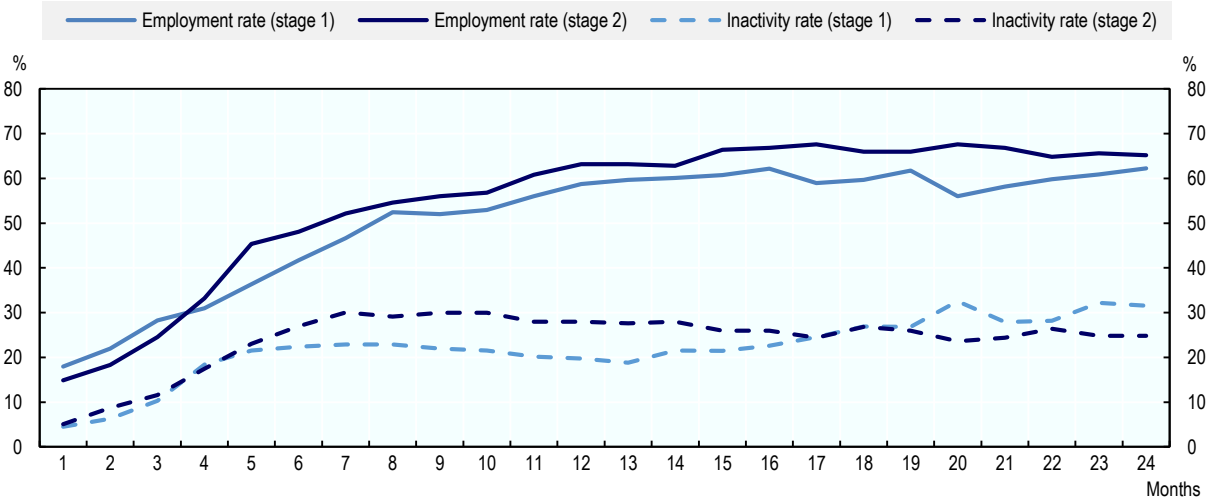
Figure 4.19 presents employment and inactivity rates of programme participants, distinguishing between those who reached stage 1 and those who reached stage 2. Over the 24 months after the end of participation in the programme, employment rates of participants in stage 2 are initially below employment rates of participants in stage 1. However, employment rates of participants in stage 2 rise faster, overtake employment rates of participants in stage 1 after three months and then remain at levels that are sometimes substantially higher than the employment rates of participants in stage 1. After one year, employment rates of participants in stage 2 have reached 65%-70%, compared with around 60% for participants in stage 1.

Substantial shares of participants (mostly 20%-30%) also move to inactivity after the programme, rather than employment or staying unemployed. The evolution of participants' inactivity rates broadly mirrors the evolution of employment rates: participants in stage 2

initially have a higher inactivity rate than participants in stage 1, but this eventually reverses after about 18 months. Because the selection of participants into stage 2 should primarily reflect the quality of their business plan rather than their own employability, Figure 4.19 suggests that participation in stage 2 increases the probability of subsequent employment, likely through higher self-employment. However, the evidence in Figure 4.19 is only indicative and cannot be given a causal interpretation because it notably does not account for differences in characteristics of participants.

Figure 4.19. Employment outcomes of participants in the programme for entrepreneurship and self-employment, 2012-2017

Employment and inactivity rates over 24 months after participation ended, by programme stage reached



Note: Employment includes both self-employment and dependent employment. Employment rates are the number of employed former participants over the total number of former participants, and analogously for inactivity rates. Inactivity includes retirement, maternity, non-employment due to disabilities and other non-employment except unemployment.
Source: OECD analysis using linked administrative data from *BURVIS* (SEA), the State Social Insurance Agency (SSIA), the *Social Assistance Database* (SOPA) and the *Population Register* (OCMA).

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Long-term unemployed and persons with disabilities have good chances of being granted start-up subsidies

Given the apparently positive effect of participation in stage 2, it is important which participants are selected for the second stage. At both stages, three-quarters of participants are women, according to the BURVIS Database of the SEA. Participants at the first and at the second stage exhibit a similar distribution over regions, with Pieriga and Latgale being most frequent. Second-stage participants are not systematically younger than first-stage participants – more than 40% of second-stage participants are aged 35-44, compared to 33% of first-stage participants. Distributions by education are very similar, with majorities in both groups possessing a higher education level. While 31% of participants at the first stage are long-term unemployed, this share rises to 44% at the second stage. The programme for entrepreneurship and self-employment therefore appears to reach long-term unemployed persons especially well.

A better understanding of how the characteristics of participants are linked to reaching the second stage of the programme can help optimise its design, identify hurdles and target potential participants accordingly. Table 4.3 presents the results of a regression analysis that links reaching the second stage to a range of individual characteristics. Compared with long-term unemployed (the reference category), persons with an unemployment duration of up to 6 months or 6-12 months are only about half as likely to reach the second stage. Persons aged 15-24 are 1.3 times as likely to reach it as persons aged 35-44 (the reference category), but persons in other age groups are about half as likely to reach it as those aged 35-44. One of the strongest correlations is observed for persons with disabilities, who are more than twice as likely to reach the second stage as persons without disabilities. This suggests that the programme for entrepreneurship and self-employment is especially inclusive for persons with disabilities.

Registered unemployed persons who possess a secondary level of education are less than half as likely as those with other education levels to reach the second stage of the programme (Table 4.3). Compared with residents of Riga (the reference category), residents of Pieriga, Vidzeme, Latgale and Zemgale are all more than twice as likely to reach the second stage. This indicates that the programme especially mobilises potential entrepreneurs outside of Riga and Kurzeme. Finally, it is worth noting which individual characteristics appear uncorrelated with reaching the second stage (and are therefore not reported in Table 4.3). In particular, having children or not possessing Latvian citizenship seem irrelevant for reaching the second stage.

Table 4.3. Observable determinants of reaching the second stage of the programme for entrepreneurship and self-employment, 2012-2017

Logit analysis using observations on participants at first or second stage

	Compared to:	Odds ratio (rounded)
Age between 15 and 24	Age between 35 and 44	1.3
Age between 25 and 34	Age between 35 and 44	0.6
Age between 45 and 54	Age between 35 and 44	0.5
Age between 55 and 60	Age between 35 and 44	0.4
Female	Male	1.2
Married	Not married	0.7
With disabilities	Without disabilities	2.2
Receiving unemployment benefit	Not receiving it	1.4
Receiving social assistance	Not receiving it	0.1
Secondary education	Other education levels	0.4
Unemployed up to 6 months	Unemployed for 12+ months	0.4
Unemployed for 6-12 months	Unemployed for 12+ months	0.6
Resident in Pieriga	Resident in Riga	2.1
Resident in Vidzeme	Resident in Riga	2.5
Resident in Zemgale	Resident in Riga	2.1
Resident in Latgale	Resident in Riga	2.1

Note: Only results that are statistically significant at the 5% significance level are reported. Other education levels include professional secondary, vocational, professional higher and higher education.
Source: OECD analysis using linked administrative data from *BURVIS* (SEA), the State Social Insurance Agency (SSIA), the *Social Assistance Database* (SOPA) and the *Population Register* (OCMA).

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In OECD/European Union (2015[37]), Latvia's programme for entrepreneurship and self-employment is assessed in some detail. Out of 377 persons who received an initial grant for their start-up or self-employment in the period 2008-2014, 71% were still in this business two years later. This survival rate is found to be comparable to survival rates observed in similar programmes in other European countries. The SEA evaluated about 6% of the businesses implemented by the programme cohorts from 2012 to 2014 as very successful, just over half performed in line with expectations, 17% were underperforming and 9% were considered a failure. The costs of the programme approached EUR 300 000 in 2014, which translates into per capita costs of about EUR 1 500 for every participant at the second stage.

The assessment by OECD/European Union (2015[37]) concludes that the programme for entrepreneurship and self-employment functions well overall, mainly due to two factors. Firstly, providing help with designing business plans in combination with financial support and secondly, the selection criteria for participants that led to a participant pool with a high incidence of relevant business experience. At the same time, the small size of the programme is highlighted. The programme procedure in two stages is considered to make the use of the funds for the programme more effective because financial support at the second stage is based on promising results at the first stage. In order to further improve the programme, OECD/European Union (2015[37]) suggests targeting older unemployed persons who can draw on long years of work experience.

Start-up subsidies create rare opportunities in regions with poor job prospects

A small literature has examined similar programmes promoting start-ups or self-employment for unemployed persons in other OECD countries. Criteria used in this context include whether participants are still in (some form of) employment after the programme has ended, their income, and for how long start-ups survive. The existing evaluations have typically found positive effects, as measured by these criteria after accounting for other factors (see for example Wolff and Nivorozhkin (2012[38]), Caliendo et al. (2016[39]). As such programmes might be suspected to generate exits from unemployment into short-lived self-employment, it is important that further evaluations also find positive long-term effects, especially for disadvantaged groups among the unemployed (Caliendo and Künn (2011[40]), Wolff et al. (2016[41])). These positive effects manifest among unemployed persons although the experience of losing a job appears to decrease a person's willingness to take risks (Hetschko and Preuss, 2015[42]).

Caliendo and Künn (2014[43]) investigate how the effectiveness of ALMP programmes for self-employment or start-ups differs across regions. They found that these programmes can be especially effective where job prospects are relatively poor. This was not driven primarily by the outcomes of the programme participants – which appeared slightly better in regions with favourable economic conditions – but by the especially weak outcomes of non-participants in regions with poor job prospects. These results confirm similar findings that start-up subsidies can reliably create employment options where few others are available. Given studies that emphasise the role of entrepreneurship for lagging regions (e.g. Stephens et al. (2013[44])), programmes that promote entrepreneurship can contribute to both the short-term objective of reducing unemployment and the long-term objective of regional development.

In conclusion, the labour market situation can differ strongly between Latvia's regions and presents particular challenges for ALMP in regions that are relatively far from Riga. While the regional mobility of unemployed persons in Latvia does not seem low in international

comparison, rapidly rising costs of housing in several regions likely discourage some mobility and young unemployed persons exhibit a comparatively low willingness to commute. Against this background, the programme for regional mobility appears to have raised the mobility of registered unemployed persons to take up employment. This notably includes the mobility of social assistance recipients while the evidence is mixed for persons with disabilities and residents of Latgale. Self-employment has risen in Latvia over recent years and significantly more firms are created than closed, also outside urban areas. Latvia's infrastructure offers possibilities for start-ups in the digital economy across regions. Unemployed persons are themselves a potential reservoir of entrepreneurs, but significantly fewer move into self-employment than indicate a wish to do so. In this context, the well-designed programme for entrepreneurship and self-employment could help mobilise the potential among unemployed persons at a larger scale. Its procedures also offer good chances of obtaining a start-up grant to participants with disabilities, the long-term unemployed and residents of regions outside Riga.

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Annex 4.A. Additional table

Annex Table 4.A.1. List of Latvian municipalities considered as indirectly adjacent

Novads	Code	Indirectly adjacent novads	Code	Novads	Code	Indirectly adjacent novads	Code
Aizputes novads	640600	Alsungas novads	624200	Preiļu novads	760202	Krustpils novads	566900
Alsungas novads	624200	Aizputes novads	640600	Priekules novads	641600	Skrundas novads	621200
Amatas novads	424701	Priekuļu novads	427300	Priekuļu novads	427300	Amatas novads	424701
Babītes novads	804900	Engures novads	905100	Pārgaujas novads	427500	Siguldas novads	801601
Baldones novads	800600	Ikšķiles novads	740600	Pāvilostas novads	641401	Liepāja	170000
Baldones novads	800600	Salaspils novads	801200	Raunas novads	427700	Beverīnas novads	964700
Beverīnas novads	964700	Valkas novads	940200	Riebiņu novads	766300	Vārkavas novads	769101
Beverīnas novads	964700	Raunas novads	427700	Riga	10000	Ādažu novads	804400
Carnikavas novads	805200	Sējas novads	809200	Riga	10000	Ropažu novads	808400
Cesvaines novads	700800	Jaunpiebalgas novads	425700	Ropažu novads	808400	Ādažu novads	804400
Ciblas novads	684901	Zilupes novads	681801	Ropažu novads	808400	Riga	10000
Engures novads	905100	Talsu novads	880200	Rugāju novads	387500	Madonas novads	700200
Engures novads	905100	Babītes novads	804900	Rugāju novads	387500	Rēzeknes novads	780200
Garkalnes novads	806000	Salaspils novads	801200	Rēzekne	210000	Ludzas novads	680200
Garkalnes novads	806000	Sējas novads	809200	Rēzeknes novads	780200	Rugāju novads	387500
Iecavas novads	406400	Jelgavas novads	540200	Rēzeknes novads	780200	Lubānas novads	701400
Iecavas novads	406400	Ķekavas novads	800800	Rūjienas novads	961600	Valkas novads	940200
Ikšķiles novads	740600	Stopiņu novads	809600	Salaspils novads	801200	Olaines novads	801000
Ikšķiles novads	740600	Baldones novads	800600	Salaspils novads	801200	Baldones novads	800600
Ilūkstes novads	440801	Līvānu novads	761201	Salaspils novads	801200	Garkalnes novads	806000
Jaunjelgavas novads	321000	Lielvārdes novads	741401	Siguldas novads	801601	Pārgaujas novads	427500
Jaunpiebalgas novads	425700	Cesvaines novads	700800	Skrundas novads	621200	Priekules novads	641600
Jelgava	90000	Olaines novads	801000	Stopiņu novads	809600	Ķekavas novads	800800
Jelgavas novads	540200	Jūrmala	130000	Stopiņu novads	809600	Ikšķiles novads	740600
Jelgavas novads	540200	Iecavas novads	406400	Sējas novads	809200	Carnikavas novads	805200
Jēkabpils novads	560200	Vārkavas novads	769101	Sējas novads	809200	Garkalnes novads	806000
Jūrmala	130000	Jelgavas novads	540200	Talsu novads	880200	Engures novads	905100
Jūrmala	130000	Mārupes novads	807600	Valkas novads	940200	Beverīnas novads	964700
Krustpils novads	566900	Preiļu novads	760202	Valkas novads	940200	Rūjienas novads	961600
Kārsavas novads	681000	Ludzas novads	680200	Vecumnieku novads	409500	Ķekavas novads	800800
Lielvārdes novads	741401	Jaunjelgavas novads	321000	Vecumnieku novads	409500	Lielvārdes novads	741401
Liepāja	170000	Pāvilostas novads	641401	Vārkavas novads	769101	Jēkabpils novads	560200
Lubānas novads	701400	Rēzeknes novads	780200	Vārkavas novads	769101	Riebiņu novads	766300
Ludzas novads	680200	Kārsavas novads	681000	Zilupes novads	681801	Ciblas novads	684901
Ludzas novads	680200	Rēzekne	210000	Ādažu novads	804400	Riga	10000
Līvānu novads	761201	Ilūkstes novads	440801	Ādažu novads	804400	Ropažu novads	808400
Madonas novads	700200	Rugāju novads	387500	Ķekavas novads	800800	Vecumnieku novads	409500
Mārupes novads	807600	Jūrmala	130000	Ķekavas novads	800800	Iecavas novads	406400
Mārupes novads	807600	Ķekavas novads	800800	Ķekavas novads	800800	Ogres novads	740202
Ogres novads	740202	Ķekavas novads	800800	Ķekavas novads	800800	Stopiņu novads	809600
Olaines novads	801000	Jelgava	90000	Ķekavas novads	800800	Mārupes novads	807600
Olaines novads	801000	Salaspils novads	801200				

Source: OECD Secretariat analysis.

Chapter 5. Activating Latvia's most vulnerable groups

This Chapter analyses the labour market situation of Latvia's most vulnerable groups, mainly the long-term unemployed, young and old unemployed persons and persons with disabilities. First, it presents recent trends in unemployment, disability and Guaranteed Minimum Income benefit recipiency and examines the extent to which certain population groups are dependent on these benefits. Second, it conducts an in-depth assessment of Latvia's employment subsidy programmes that focus on the most vulnerable groups. Finally, the Chapter discusses Latvia's Public Works Programme that was extensively used during the economic crisis as an income support measure combined with activation support.

Introduction

This chapter focuses on the policy challenges for the activation of the most vulnerable groups of job seekers in Latvia, notably the long-term unemployed, youth, old unemployed persons and persons with disabilities. First, it analyses trends in unemployment, disability and social assistance (GMI) benefit recipiency and highlights changes in recent years and since the economic crisis. Second, the Chapter analyses benefit dependency and draws the profile of persons who rely continuously or in a repetitive manner on benefits. Third, the Chapter focuses on the programme of subsidised employment offered by Latvia's State Employment Agency (SEA, Latvia's Public Employment Service or PES). It conducts a descriptive analysis of the programme and its participants and an econometric evaluation of the impact of the programme on the labour market outcomes of participants. Fourth, a brief description of the Public Works Programme (PWP) is presented, highlighting its role as a measure against poverty (combined with activation) used during the economic crisis.

Latvia's most vulnerable groups and factors shaping their situation

Latvia's PES recognises the status of two groups of persons as eligible for support: unemployed persons and persons seeking employment. Both groups are registered with the SEA and look actively for work. Meanwhile persons seeking employment have to comply with less strict requirements and are entitled only to some Active Labour Market policies (ALMPs). Unemployment benefit receipt differentiates the two groups as well. This Chapter looks at the different people receiving support from Latvia's social protection system. A detailed description of the system and the eligibility conditions for the different benefits are provided in Chapter 2 of this Review.

Characteristics of LTU versus other unemployed persons

Table 5.1 presents the characteristics of all unemployed persons, by the length of their unemployment spell. The analysis focuses on unemployment spells that start and end within the observation period between January 2012 and October 2017. This is to resolve the problem with censored spells (those that start or end outside the observation period) which would distort the distribution of persons across spell length.

Persons who are unemployed for short periods of time differ in many ways from those who have been unemployed for longer periods (12-24 months, or more than 24 months). Women represent a higher share of persons who are unemployed for 6 months and more, and for short spells of 0-2 months men represent 47% of all the unemployed. Persons aged 45 years and above are over-represented among the long-term unemployed (46% of those unemployed for one to two years and 50% among those who have been unemployed for two years or more). In contrast, young persons are more represented in groups with short unemployment spells. Persons aged 15-24 represent one third of all the persons who have unemployed for up to three months and 28% of those with unemployment spells of 3-6 months. Likewise, unemployed persons aged 25-34 represent close to one quarter of all the unemployed with short unemployment spells (spells of 0-3 and 3-6 months). Persons of Slavic origin represent 38% of persons who have been unemployed for more than one year, whereas they represent 31-32% of those with shorter unemployment spells.

In terms of educational attainment, there are no major differences across the unemployed grouped by the duration of their unemployment spell. Persons with professional vocational education represent 31% of all unemployed persons with long unemployment spells (24 months or more), while they represent 24% of those with short spells of less than

6 months. In contrast, persons with higher education are more represented among unemployed persons with long unemployment spell durations than among those who have been unemployed for less than 6 months. Highly educated unemployed persons may be more likely to be eligible for unemployment benefits and the size of the benefit they are entitled for may be higher than for the unemployed with a lower education level. As a result, the former would afford to wait before accepting a job, whereas the latter may not be able to wait and return to employment as soon as any job opportunity arises.

The breakdown by region confirms the large regional differences that exist in Latvia as highlighted in Chapter 2 and discussed in detail in Chapter 4. Persons living in the Latgale region represent 29% of persons who have been unemployed for at least two years, whereas they represent just 15% of unemployment spells of up to one year. Persons with disabilities account for 12% of unemployed persons with unemployment spells of 1-2 years and 14% of those who have been unemployed for more than two years, while they represent only 4-5% of those with short unemployment spells of up to 6 months.

Benefit dependency is likely to be low, except for disability benefits

Latvia is characterised by a relatively low coverage of the various benefits offered to the population in need (a discussion on this can be found in OECD (2016[1])). Figure 5.1 presents the latest trends in the numbers of benefit recipients as a share of the population aged 15 and above for the following benefits: social assistance which includes GMI (Guaranteed Minimum Income) and housing benefits (these two components are also shown separately in Figure 5.1), disability benefits and unemployment benefits. Overall, the low coverage of the different benefits coupled with the short average time spent on benefits (as described in more detail later in this section) may hint to relatively low benefit dependency in Latvia.

The only exception to this general observation concerns the disability benefit. The stock of disability benefit recipients has gradually increased and the probability of leaving the disability benefit is low. This trend is related to population ageing and the adverse impact of the economic crisis on the health status of the Latvian population, especially that of older cohorts (The World Bank, 2015[2]). Moreover, public awareness of rights and benefits for occupational patients has improved and as a result, more persons with occupational diseases register officially than in the past, particularly since the beginning of the economic crisis (State Labour Inspection, 2018[3]; State Labour Inspection, 2015[4]; State Labour Inspection, 2010[5]).

In contrast, the reliance on social assistance benefits has been declining since the economic crisis when it played a key role in supporting the groups in need. In 2017, social assistance was received at any one month by no more than 2.3% of the population aged 15 and above, where GMI in cash or in kind was paid to only 0.5-0.7% of residents included in the data of the Office of Citizenship and Migration Affairs (OCMA) (Figure 5.1). Fluctuations in the coverage of housing benefits are explained by the cyclical nature of the according payments and reflect the number of persons for whom the local governments made any payments related to rent or house subsidy during the according month, not the actual number of entitled persons[1].

Table 5.1. Personal characteristics of unemployed persons with non-censored spells, by duration of unemployment spell

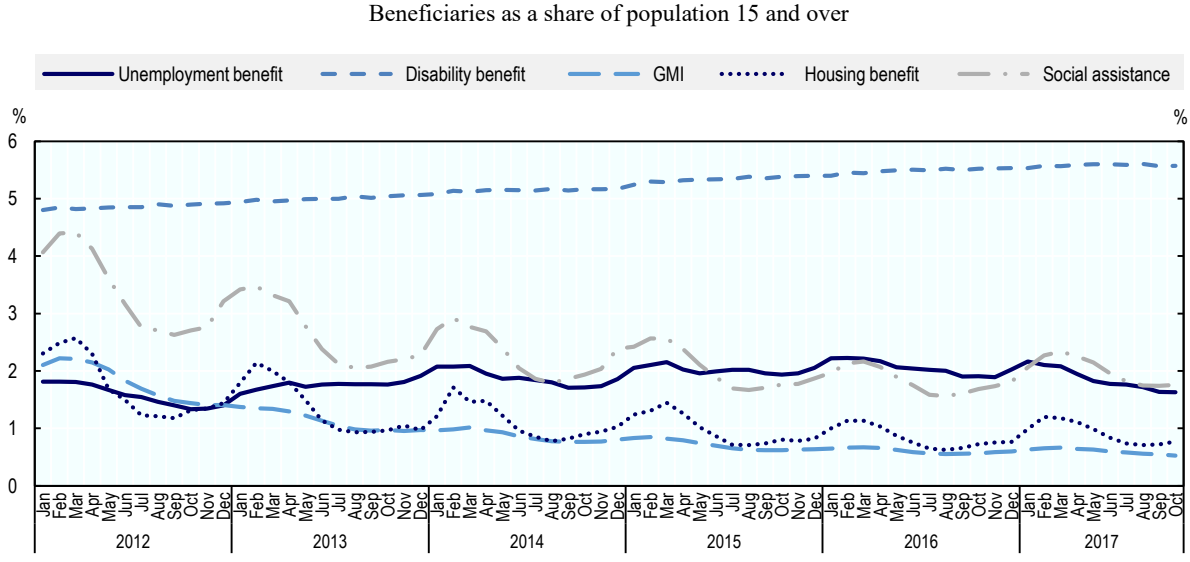
		0-2 months	3-5 months	6-11 months	12-23 months	24 months and over
Female		**46.81**	**50.78**	**57.41**	**60.66**	**56.44**
Age	15-24	33.96	28.21	12.44	10.31	8.3
	25-34	25.27	25.59	26.43	21.48	20.53
	35-44	16.94	18.02	21.46	22.17	20.7
	45-54	15.36	16.96	22.09	26.84	27.12
	55 and over	8.48	11.22	17.59	19.21	23.36
Education	Not known	16.42	14.87	3.39	0.43	0.88
	Basic	18.65	17.02	15.46	17.67	16.02
	Secondary	21.14	21.37	24.33	24.53	24.36
	Vocational	5.2	5.34	5.65	6.66	5.65
	Professional secondary	23.75	24.33	28.91	31.43	30.83
	Professional higher	6.37	7.33	10.1	9.86	10.51
	Higher	8.46	9.74	12.16	9.42	11.74
Ethnicity	Latvian	63.89	62.44	58.28	55.72	56.41
	Slavic	30.74	31.99	36.39	38.09	37.69
	Other	5.38	5.57	5.33	6.19	5.9
	Non-Latvian citizenship	12.18	13.2	16.11	16.86	15.59
Language	Not known	2.41	0.69	0.14	0.06	0.73
	None	7.01	6.95	6.36	7.01	8.22
	Basic	7.45	8.5	8.98	10.71	10.88
	Intermediate	12	12.99	15.58	16.62	15.14
	Higher	3.95	4.39	5.64	6.47	5.83
	Educated in Latvian	67.18	66.48	63.3	59.14	59.2
Married		**39.56**	**46.91**	**41.25**	**46.93**	**28.5**
Has children (aged less than 18 years)		**31.5**	**33.52**	**40.46**	**40.55**	**34.77**
Urban		**46.24**	**48.11**	**49.67**	**43.52**	**43.96**
Regions	Riga City	25.95	27.88	30.44	22.12	23.85
	Pieriga	17.41	17.14	17.7	13.96	12.95
	Vidzeme	11.34	10.8	10	11.44	10.62
	Zemgale	14.25	13.72	13.21	11.86	10.31
	Kurzeme	16.34	15.61	13.6	15.36	12.89
	Latgale	14.71	14.84	15.06	25.25	29.38
Time since previous employment	3 months or less	58.88	62.98	79.71	67.28	70.46
	4-12 months	8.03	5.31	3.22	4.53	4.37
	13-24 months	2.65	1.82	1.19	2.06	2.65
	More than 24 months	3.02	2.63	1.68	2.83	5.67
	Never worked/Unknown	27.42	27.26	14.2	23.29	16.86
Receiving social assistance at unemployment spell start		**3.4**	**3.86**	**3.1**	**5.4**	**4.02**
Disabilities at unemployment spell start		**4.39**	**4.9**	**7.22**	**11.85**	**13.81**
N		**138 997**	**84 375**	**116 739**	**32 479**	**31 639**

Note: This table is compiled with information from unemployment spells that start and end within the observation period between January 2012 and October 2017, i.e. all the censored spells (spells that start before the first observation month and end after the last one) are excluded from the analysis. This is a necessary restriction in order to capture the true duration of unemployment spells.
Source: Latvian State Employment Agency, Latvian Social Insurance Agency, Latvian Office of Citizenship and Migration Affairs, Latvia's Municipal Information System Database and OECD estimates.

StatLink https://doi.org/10.1787/888933962037

The disability benefits considered in this section comprise various types of state disability related benefits, such as disability pension, state social security disability allowance, benefits for persons with disabilities in need of care etc. However, transport compensation for persons with disabilities with mobility limitations is not included because the available administrative data report payments made by the SSIA every six months, but do not allow indicating the number of entitled persons precisely.

Figure 5.1. Benefit beneficiaries, by type of benefit, 2012-2017



Note: GMI: Guaranteed Minimum Income. The figure covers the period January 2012 to October 2017 and reports the stock of benefit recipients. The data on disability-related benefits are available for persons aged 18 and over only, and therefore, the reflected indicator is slightly underestimated as recipients aged 15-17 are not accounted for. Social assistance benefits comprise GMI paid in cash or in kind as well as rent and housing subsidies (shown together with the housing benefit and also shown separately in this figure). The disability benefits accounted for in this graph, and further in this section, comprise various types of state disability-related benefits, including disability pension, state social security disability allowance, benefit for a person with disabilities in need of care etc., but do not include transport compensation for persons with mobility limitations since the administrative data contain information on according payments made by SSIA once in six months, but do not allow us indicating precisely the number of entitled persons.
Source: Latvian Social Insurance Agency, Latvia's Municipal Information System Database and OECD estimates.

StatLink https://doi.org/10.1787/888933962056

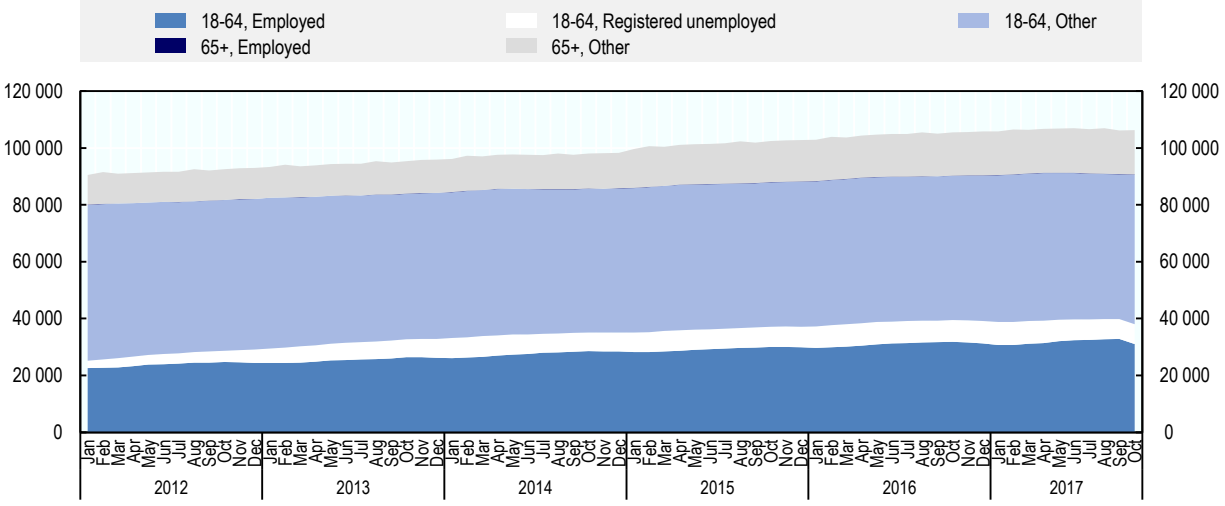
The number of disability benefit recipients (aged 18 and over) increased by 17%, from 90 500 in January 2012 to 106 200 in October 2017 (Figure 5.2). This trend is driven by a number of factors, including relatively high exposure to various risk factors and rather poor attitude to occupational safety and health (OSH) in Latvia, that characterises both employers and workers. For example, about a half of all enterprises in Latvia admit not conducting a risk assessment of thework environment; all employers in Latvia tend to minimise their business costs by e.g. reducing their investments related to occupational safety and health (Employers' Confederation of Latvia, 2013[6]). Overall, the Latvian society is relatively poorly informed on issues related to work environment and risk assessment: in 2013, only 36.5 % of adult respondents surveyed answered that they are well informed on these issues; others either admitted that they knew nothing or had only heard

something about this (Employers' Confederation of Latvia, 2013[6]). As a consequence, almost half (46.5%) of the working-age population (15-64) has work-related health problems resulting in severe limitations in daily activities (self-reported data). This share is twice that of the EU average (22.3%) (Eurostat, 2013[7]).

Another factor is related to relatively poor doctor visit culture (especially among males) in Latvia and heavily delayed medical examinations. According to the estimations by the Riga Stradins University, the average spell between the very first symptom of an occupational disease and the medical conclusion reaches ten years (Employers' Confederation of Latvia, 2013[6]). This situation is compounded by relatively limited access to health care services which is related to a number of reasons, such as the relatively long waiting lists and the inability to afford health care observed among the less well-off population groups (Karanikolos et al., 2016[8]). During the crisis, groups with a prolonged disease history often opted for applying for disability benefits only after losing their jobs and exhausting their unemployment benefit entitlement (The World Bank, 2015[2]). Over the period from 2008 to 2011, the number of disability benefit recipients aged 18 and over increased on average by nearly 3 700 persons or by 6.5% on an annual basis. Over 2012-16, the average annual increase of beneficiaries was still high at about 3 000 persons or 3.2%, whereas in 2017, a slowdown was observed (Figure 5.2). Overall, since the beginning of 2012 the number of persons receiving monthly disability benefits increased by 17%.

Inflows into disability benefits have steadily increased between 2012 and 2017 (Annex Figure 5.A.2). Inflows by persons after retirement (65 and over) are driving this increase, while those by persons of working age (18-64) are either stable or somewhat declining (during 2017).

Figure 5.2. Disability benefit recipients by age group and labour force status



Note: The figure covers the population aged 18 and over. Disability benefits comprise various types of state disability related benefits, including disability pension, state social security disability allowance, benefits for persons with disabilities in need of care etc. It should be noted that disability benefit recipients covers only part of persons with disabilities of retirement age. Persons who had disability before retirement and who after reaching retirement became recipients of old-age pension (with continuous disability) are not included.
Source: Latvian Social Insurance Agency and OECD estimates.

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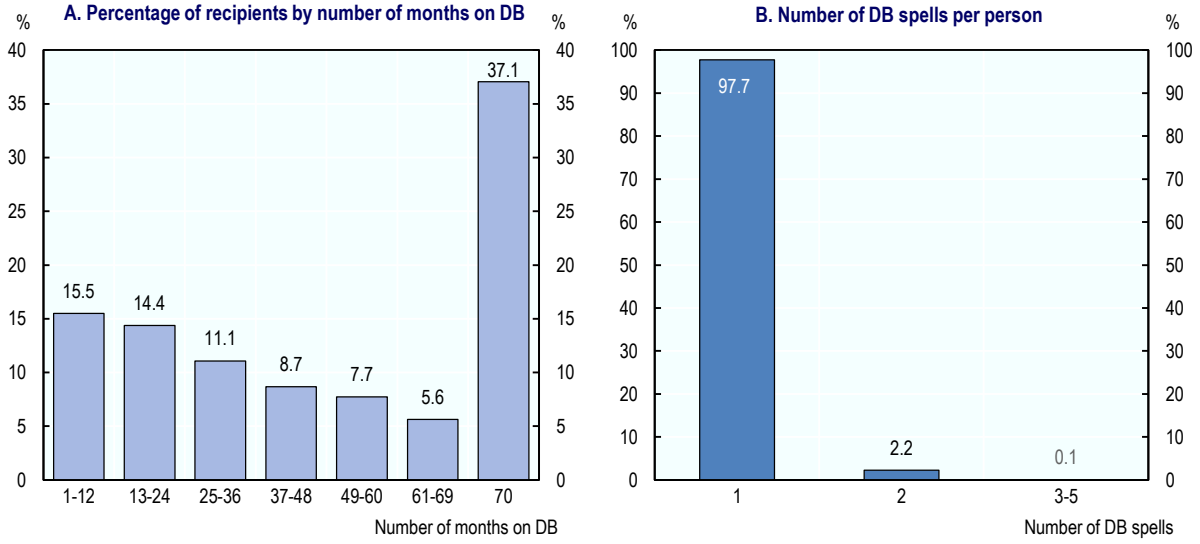
In 2017, 85% of adult disability benefit recipients were persons of working age[2] (Figure 5.2). Similarly to the situation in the pre-crisis and crisis period (The World Bank, 2015[2]), disability is associated with relatively low labour force participation. In 2017, only 34-36% of working age persons with disabilities were employed and another 8-9% were registered as unemployed. Nonetheless, a positive development is observed during the period covered in Figure 5.2. The share of employed persons among those with disabilities has increased.

Disability benefit recipiency tends to have a long-term dimension. Almost all disability beneficiaries had only one spell during the period from January 2012 to October 2017 (Figure 5.3) and that spell was relatively long. Only 16% of all beneficiaries had short disability benefit spells of up to 12 months. However, the actual share of such spells is even lower since a large number of the observed spells are left or right censored.

Figure 5.3. Disability benefit (DB) recipients by months spent on benefit and number of benefit spells per individual



Note: The figure covers the population aged 18 and over due to data limitations that do not allow including persons between 15 and 18 years old. The period covered is January 2012 to October 2017. Disability benefits comprise various types of state disability related benefits, including disability pension, state social security disability allowance, benefits for persons with disabilities in need of care etc. Close to 91% of all disability benefit spells are censored. The number of months on disability benefit as well as the number of spells are calculated using all spells, including censored ones. In case of 1-2 months short interruptions, spells were merged.
Source: Latvian Social Insurance Agency and OECD estimates.

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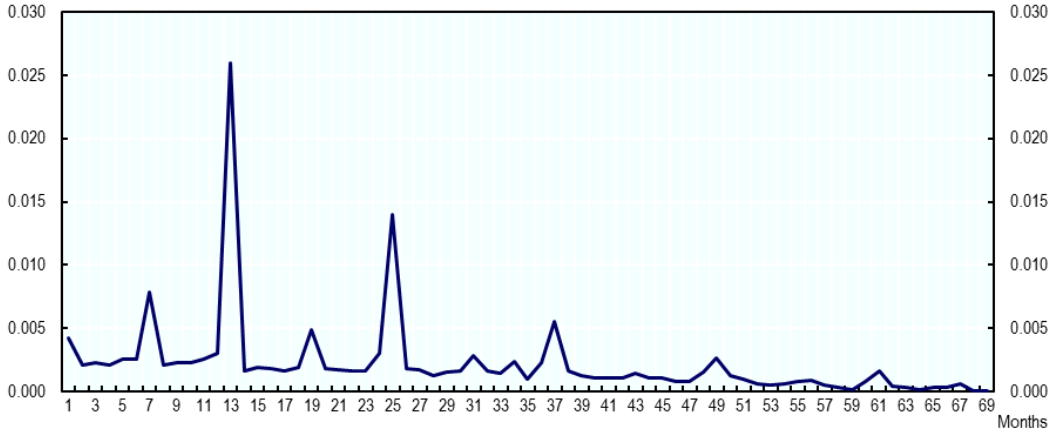
These trends reflect a low probability of leaving the disability benefit as shown in Figure 5.4. Given that official disability status is usually related to illnesses and chronic conditions, the probability of leaving the disability benefit is very low at any point of the spell, and shows a typical declining pattern over time and as the disability benefit spell becomes longer (Figure 5.4). Spikes in the probability of exit are observed every 6 and 12 months, when the eligibility for disability benefit grant is usually reconsidered.[3] The highest probability of exit (2.6%) is observed at the end of a full year of benefit receipt, while the probability of exit is reduced to half as soon as the first year has passed.

Figure 5.4. Probability of leaving the disability benefit



Note: The figure covers the population aged 18 and over due to data limitations that do not allow including persons between 15 and 18 years old. The period covered is January 2012 to October 2017. Disability benefits comprise various types of state disability related benefits, including disability pension, state social security disability allowance, benefits for persons with disabilities in need of care etc. Close to 91% of all disability benefit spells are censored. The number of months on disability benefit as well as the number of spells are calculated using all spells, including censored ones. In case of 1-2 months short interruptions, spells are merged into one spell.
Source: Latvian Social Insurance Agency and OECD estimates.

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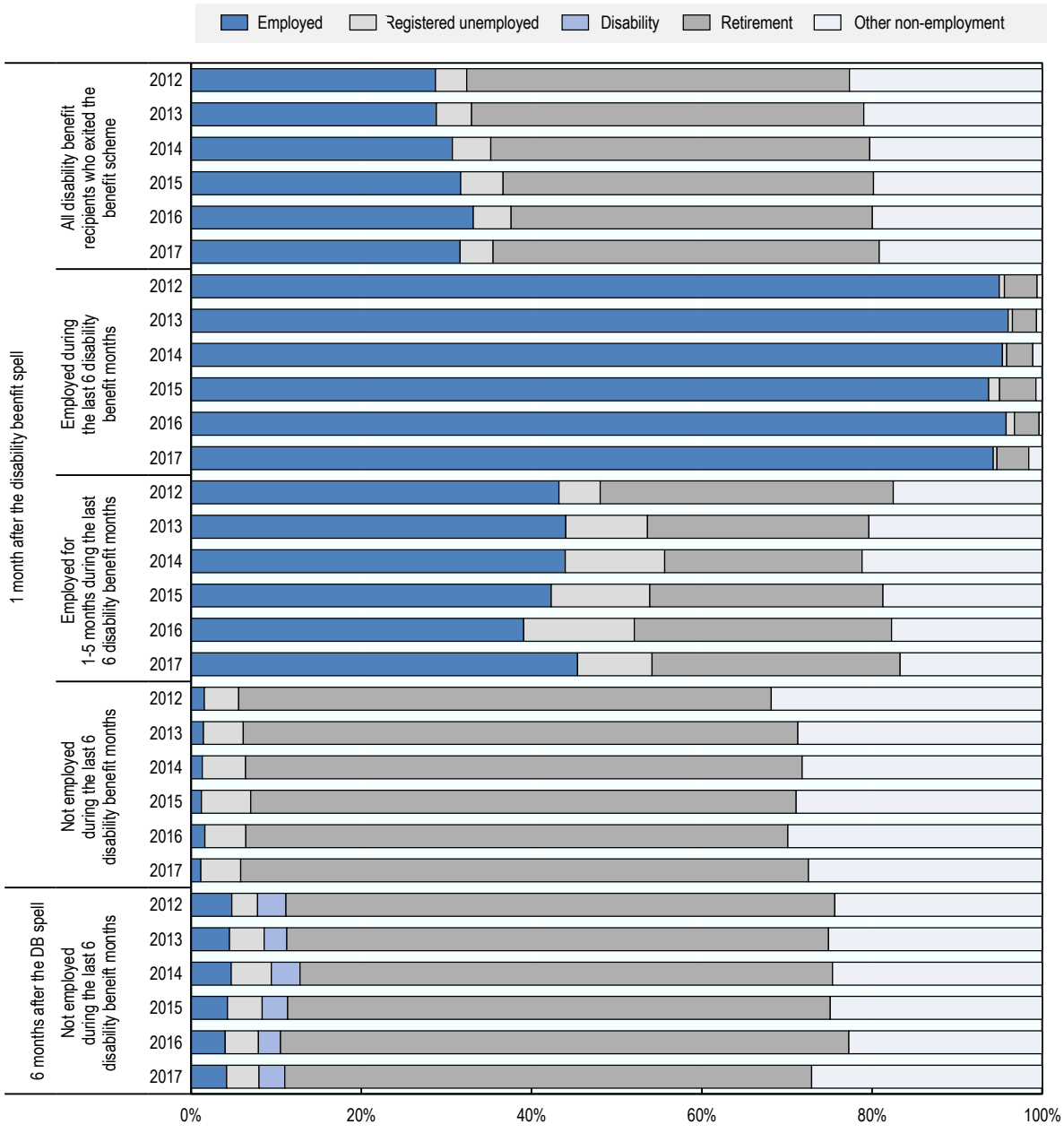
The main reason for leaving the disability benefit scheme is because of a transition to the old age state pension (Figure 5.5). Although about one third of all 18-64 year old beneficiaries were employed one month after the end of their disability benefit spell, those were mainly persons who remained active in the labour market during their official disability period, possibly because they had less severe health conditions.

Non-employment during the disability benefit spell is a strong predictor of non-employment after leaving the disability benefit. Less than 2% of all persons who were not employed during the last six months of their disability benefit spell transited into employment right after exiting the benefit (the following month). The respective share six months after leaving the disability benefit is only moderately higher. About two thirds of the persons who were not employed during (at least) the last half year of their disability benefit spell were pre-pension age persons with disabilities who made the transition to state pension right after or soon after they exited the disability benefit scheme.

For the younger groups of disability beneficiaries, exit from the scheme is not strongly associated with employment. This is explained by a number of factors. First, withdrawal from the labour market during the disability period has a substantial negative impact on further employability. Second, persistent health deteriorations often become a serious barrier both for employability and willingness to look for a job. In Latvia, severe and moderate limitations in activities are found to have a strong negative effect on the willingness to work among men and women aged 50 and above as well as on the employability of those willing to work (The World Bank, 2015[2]). Furthermore, both age and health discrimination may play a role.

Figure 5.5. Labour force status of former disability beneficiaries, 2012-2017

Outcomes at one and six months after the end of the disability benefit (DB) spell



Note: The figure covers disability benefit recipients aged 15-64, who exited the benefit scheme during January 2012 and October 2017. Disability benefits comprise various types of state disability related benefits, including disability pension, state social security disability allowance, benefits for persons with disabilities in need of care etc. Close to 91% of all disability benefit spells are censored. The number of months on disability benefit as well as the number of spells are calculated using all spells, including censored ones. In case of 1-2 months short interruptions, spells were merged. The year refers to the month following the last month of the benefit spell (or the sixth month after the last month of the benefit spell in the lower part of the figure).
Source: Latvian Social Insurance Agency and OECD estimates.

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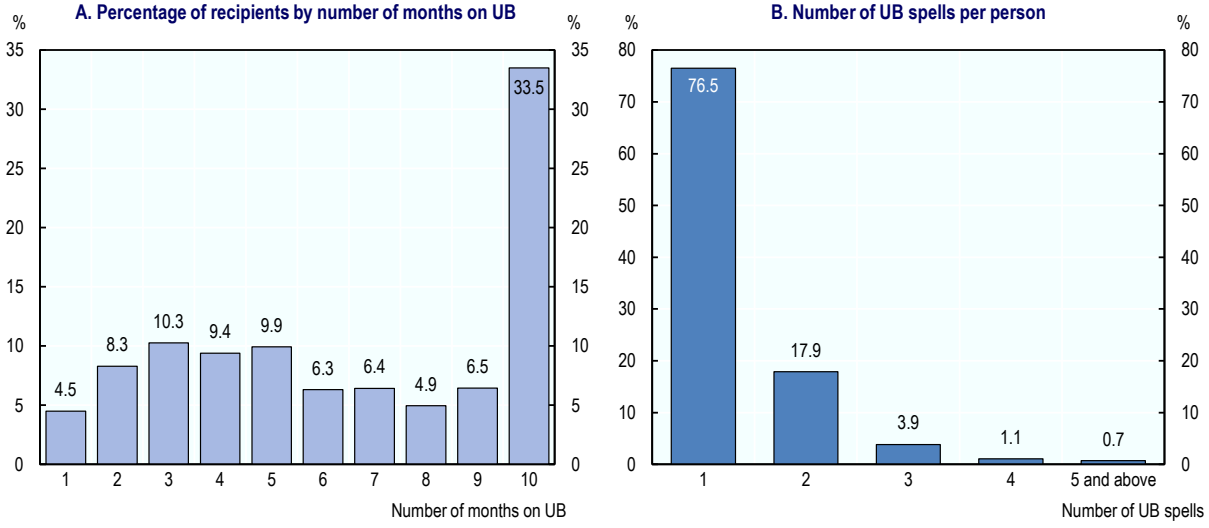
Unemployment benefits cannot lead to benefit dependency

As described in Chapter 2 of this Review, unemployment benefits in Latvia are provided for a maximum of nine months and gradually decline after the first three months, providing incentives to the unemployed to look actively for work shortly after falling into unemployment. This early phasing out of unemployment benefits also create the incentives for the unemployed to participate in ALMPs which offer a stipend that complements their unemployment benefit while raising their chances of finding work. These could include for instance training programmes and special work experience programmes for youth and the regional mobility support provided during the participation in the ALMPs (training programmes are discussed in Chapter 3 of this Review, whereas the regional mobility programme is discussed in Chapter 4).

Because of these features, reliance on unemployment benefits can only be of temporary nature. During the period from 2012 to 2017, slightly more than one third (34%) of all unemployment benefit recipients received the unemployment benefit for the entire length of their entitlement (Figure 5.6, Panel A). Although the probability of an early exit from the unemployment benefit scheme is rather low (Annex Figure 5.A.1), in total about a half of recipients exited the benefit (and the status of registered unemployed) within six months. This possibly reflects the reduction of the monthly payment to 50% of the granted amount after the sixth month. The vast majority (77%) of unemployment benefit recipients had only one unemployment benefit spell (Figure 5.6, Panel B). During the incomplete six-year period analysed in Figure 5.6, only a quarter of all beneficiaries had two or more unemployment benefit spells.

Figure 5.6. Unemployment benefit (UB) recipients by months spent on benefit and number of benefit spells per person



Note: The sample includes beneficiaries of unemployment benefits aged 15-64, from January 2012 to October 2017. About 20% of all unemployment benefit spells were censored. The number of months on benefit was calculated after removing all censored spells, whereas the number of spells was calculated using all spells, including censored ones. In case of short interruptions, spells were not merged. While the information on the dates and therefore the exact length of unemployment benefit spells is not available, the number of months on Panel A reflects the number of months when a person received the unemployment benefit. Therefore, spells which seem to last ten months correspond to unemployment benefits for which payments were made by the SSIA in ten different months but they truly correspond to nine-month unemployment benefit spells.
Source: Latvian Social Insurance Agency and OECD estimates.

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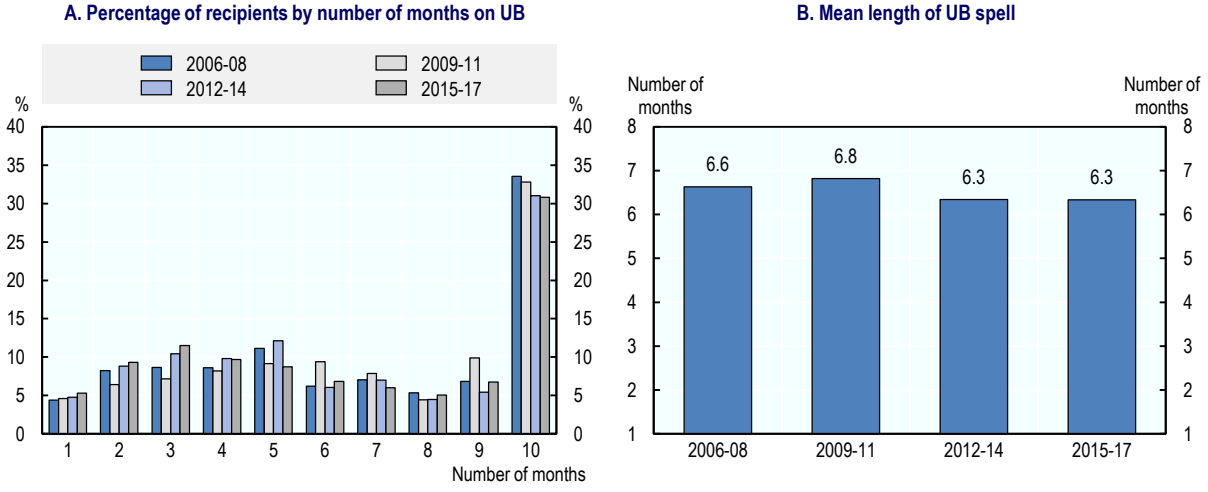
Figure 5.7 reproduces the analysis in Figure 5.6 for the four triennial periods covered by the available data. In the period between 2015 and 2017 the share of beneficiaries who had only short unemployment benefit spells (up to three months) was higher than that during the pre-crisis period (2006-08), and the share of beneficiaries who remained on unemployment benefits for the full nine-month period was slightly lower than in 2006-08.

However, as shown in Figure 5.7 (Panel B), the average length of the unemployment benefit spell has been relatively stable and has decreased only slightly since the economic crisis (from 6.8 months in 2009-11 to 6.3 months in 2015-17). The rigidity of this indicator is explained, to a large extent, by changes in the normative acts and a set of measures put in place in response to the crisis. On the one hand, these measures expanded coverage of unemployment benefits during the economic recession by lowering the minimum insurance contribution period necessary for unemployment benefit entitlement.[4] On the other hand, these measures aimed at restricting spending via reduced monthly benefit payments for the groups of unemployed with contribution history of less than 20 years.[5]

Figure 5.7. Unemployment benefit (UB) recipients by months spent on benefit and mean length of benefit spell, 2006-2017



Note: The sample includes beneficiaries of unemployment benefits aged 15-64, from January 2012 to October 2017. The number of months on benefit was calculated after removing all censored spells. In case of short interruptions, spells were not merged. While the information on the dates and therefore the exact length of unemployment benefit spells is not available, the number of months on Panel A reflects the number of months when a person received the unemployment benefits. Therefore, spells which seem to last ten months correspond to unemployment benefits for which payments were made by the SSIA in ten different months, but they truly correspond to nine-month unemployment benefit spells. Calculations for the period 2015-2017 are based on periods of 34 months given that year 2017 in the available data is incomplete (January-October).
Source: Latvian Social Insurance Agency and OECD estimates.

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Dependency on GMI benefits seems limited

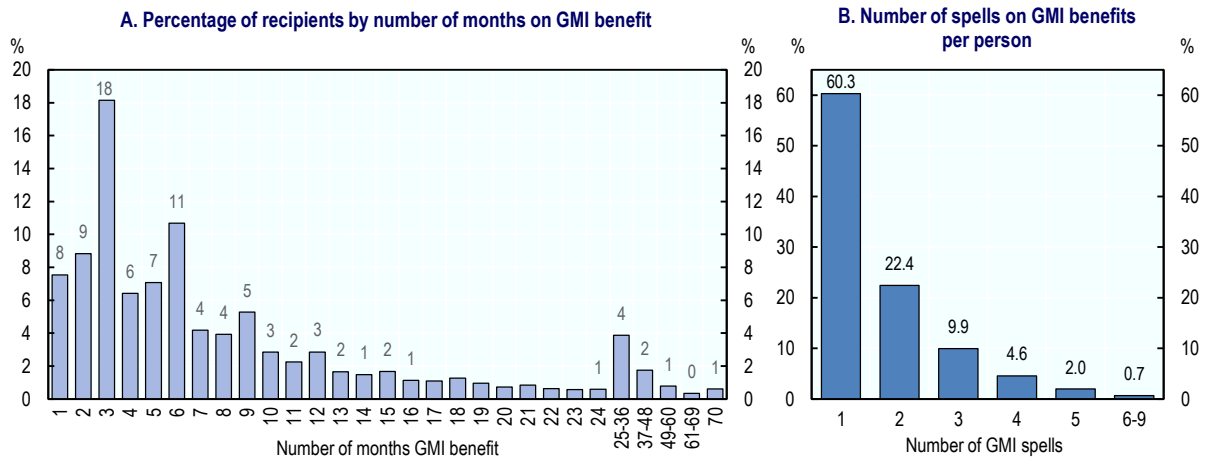
GMI beneficiaries are required to register with the SEA and sign an agreement (a "cooperation plan") with the municipal social services that are responsible for the management and delivery of social benefits. The benefit is granted for three to six months for persons registered with the SEA but only for one month for those who have not registered. In those cases, the benefit can only be extended if the person acquires the status of registered unemployed in the meantime. The social situation of GMI beneficiaries and their families is reassessed every three months to determine continuation of the benefit or its suspension. Benefit receipt is suspended if a person fails to respect either the individual job search plan agreed with the SEA (and loses its status as registered unemployed) or the cooperation plan signed with the municipal services.

GMI can be received by people who satisfy the means-tested eligibility threshold (EUR 49,80 per month per household member in 2013-17). This implies that in a large household, it is possible to establish GMI eligibility even if there is one employed member. The remaining household members have to be registered with SEA, with exceptions for several groups defined by the Law on Social Services and Social Assistance.[6] GMI and unemployment benefits can be received simultaneously only if the unemployment benefit is relatively low so that the average income per household member is below the threshold. This is more likely to be true in the last three months of the unemployment benefit spell when the unemployment benefit is reduced to half the size during the first six months of unemployment benefit receipt.

The number of GMI beneficiaries is small and declining. In 2017, the percentage of people receiving GMI benefits reached just 0.5% of the population aged 15 and more, four times smaller than that in 2012 (Figure 5.1). According to estimates by Gotcheva and Sinnott (2013[9]), even during the economic recession, reliance on the GMI was relatively low with no more than 4% of the population receiving GMI benefits during the crisis.

The duration of GMI spells and the number of GMI spells during the period from January 2012 to October 2017 are presented in Figure 5.8. They are calculated using all spells, including censored ones which represent about 37% of all benefit spells. In case of short interruptions of one or two months, spells were merged and considered as one spell. The average time spent on the GMI is relatively short. The spikes that are shown every three months (at three, six, nine, etc. months) indicate the reassessment of GMI eligibility every three months. From 2012 to 2017, one third of GMI recipients received the benefit for up to three months and another 25% for up to six months. The majority of beneficiaries have had only one GMI spell during this period.

Figure 5.8. GMI benefit recipients by months spent on GMI and number of GMI spells per recipient, 2012-2017



Note: GMI: Guaranteed Minimum Income. The sample includes GMI beneficiaries aged 15-64 years old, from January 2012 to October 2017. The number of months on GMI as well as the number of spells was calculated using all spells, including censored ones which represent about 37% of all benefit spells. In case of 1-2 months short interruptions spells were merged and considered as one spell.
Source: Latvia's Municipal Information System Database and OECD estimates.

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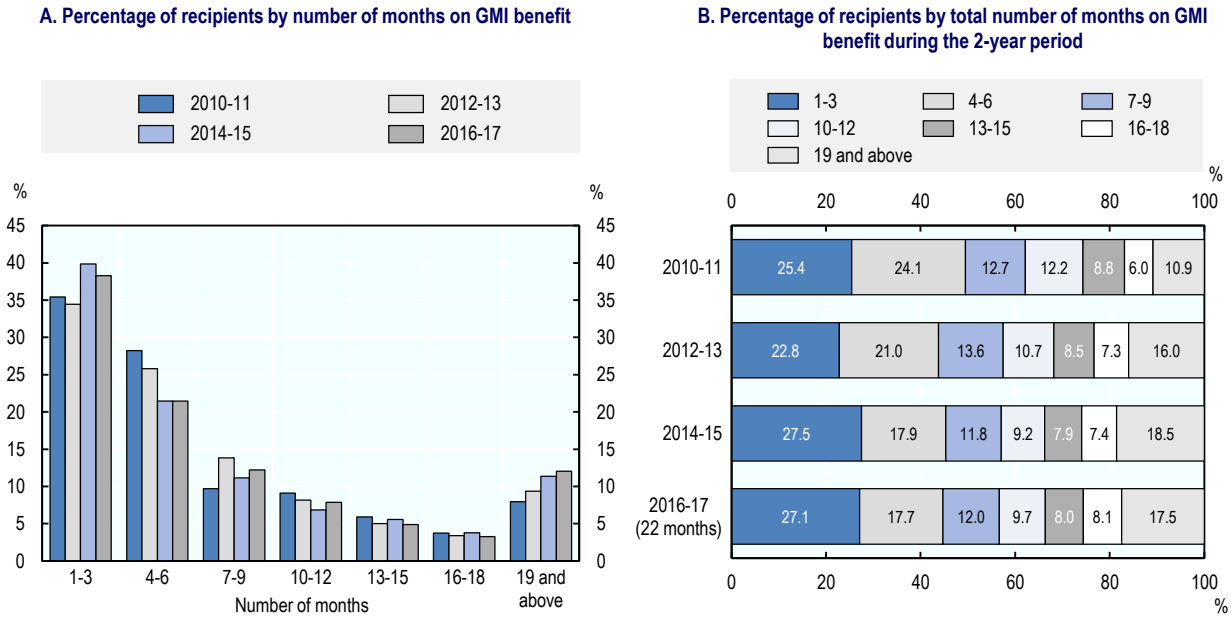
More beneficiaries use GMI as either a short-term support measure or as longer term support

Figure 5.9 presents the duration of GMI benefit receipt for the four two-year periods covered by the data: 2010-11, 2012-13, 2014-15 and 2016-17. During the 2010-11 period, only a quarter of GMI recipients received the benefit for more than one year, whereas this share increased to one third in the last two periods (2014-15 and 2016-17). The distribution of GMI recipients by the time spent on the GMI benefit has indeed changed over time. On the one hand, the share of persons who used GMI as a very short-term support measure (for no more than three months) has increased in comparison with the economic recession (2010-11). On the other hand, the share of GMI beneficiaries who received the benefit for 19 months or longer has become relatively more important in the recent years.

Figure 5.9. Distribution of GMI benefit recipients by months spent on benefit, 2010-2017



Note: The figures comprise recipients of Guaranteed Minimum Income (GMI) benefits, aged 15-64 from January 2010 to October 2017. The number of months on GMI was calculated using all spells, including censored ones which represent about 37% of all benefit spells. In case of 1-2 months short interruptions spells were merged and considered as one spell.
Source: Latvia's Municipal Information System Database and OECD estimates.

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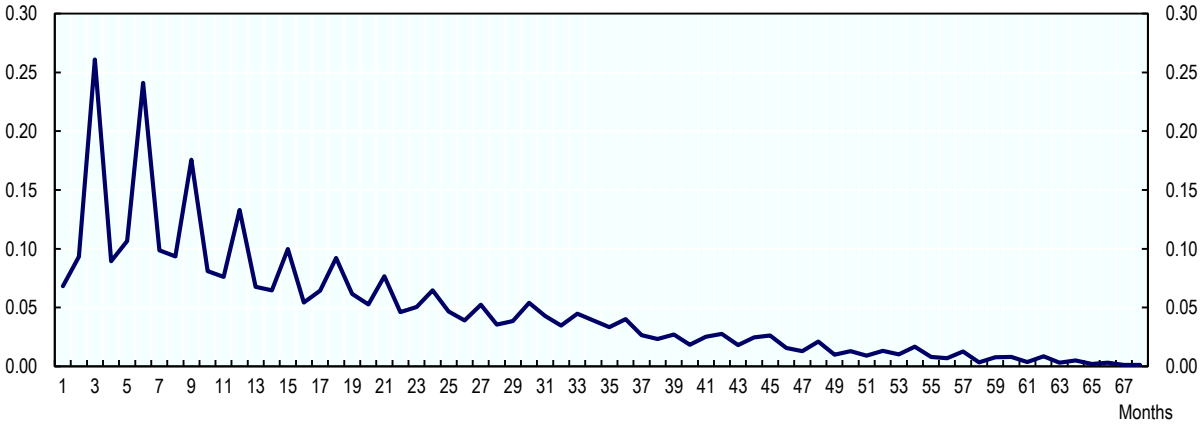
Although the number of GMI recipients has decreased, the share of GMI beneficiaries who rely on the benefit for an extended period of time has grown. The probability of leaving the GMI declines with the time spent on it and after 18 months (without interruptions exceeding two months) the probability of exiting the scheme is particularly low and does not reach 8% at any point (Figure 5.10). The spikes observed in Figure 5.10 are explained by the reassessment of eligibility implemented by the social services every three months.

The increasing share of persons who receive the GMI for long periods highlights the need to analyse their characteristics and understand the barriers that make them dependent on social assistance with the aim to identify the policies that would help bring them closer to the labour market.

First, a comparison between GMI beneficiaries and non-beneficiaries (Annex Figure 5.A.3) shows that GMI beneficiaries are on average older than non-beneficiaries. Close to half of all GMI beneficiaries are 50 years old or above, while the respective share is only 29% among non-beneficiaries. Men are relatively more likely than women to receive GMI. Persons with disabilities represent 17% of all GMI beneficiaries, whereas their share among GMI recipients is only 6%. Old age and disability status are also correlated with reliance on the GMI benefit for longer periods (Figure 5.11). Longer GMI receipt is also more prevalent than shorter GMI spells among single-person households and urban areas.

Figure 5.10. Likelihood of exiting GMI benefits

Rate of exit from benefit by duration of benefit spell in months



Note: Guaranteed Minimum Income (GMI) beneficiaries aged 15-64 are included in this analysis and covers the period from January 2012 to October 2017.
Source: Latvia's Municipal Information System Database and OECD estimates.

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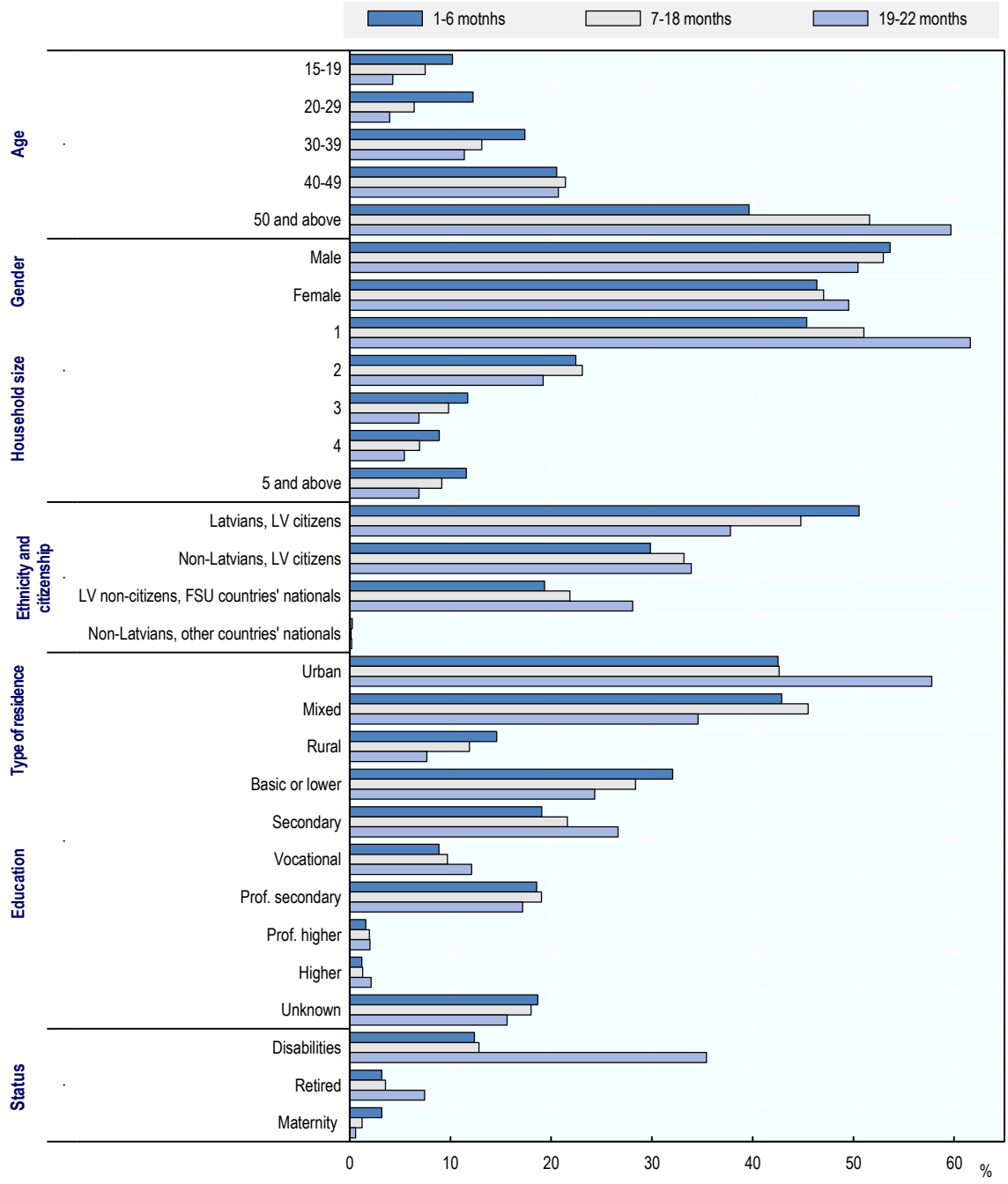
Old age and disability status have become more important in explaining receipt of GMI benefits for longer periods (24 months or more[7]) (Figure 5.12). In 2016-17, 61% of those who spent the entire period on the benefit were 50 and above, which is 23 percentage points higher than in 2012-13. Job prospects for younger groups are better, while older age discouraged unemployed persons are typically more difficult to activate (Ferré, Immervoll and Sinnott, 2013[10]; The World Bank, 2015[2]). Raising employment rates for the pre-retirement age population requires special efforts, especially after long inactivity periods.

Close to 45% of all persons who spent close to two years on the GMI benefit scheme in 2016-17 had the official disability status. This share is more than double their share in 2013-14, and close to four times higher than the share of persons who stayed on GMI benefits for up to six months in 2016-17 (Figure 5.11). Although the disability benefit exceeds the income threshold used to determine GMI benefit eligibility, according to the SOPA data, about half of all GMI beneficiaries lived in two or more person households, therefore per capita income was below the defined threshold.

Men and persons living alone relatively more often than before are found among those who spend longer time on the GMI benefit (Figure 5.12). Ethnic minorities are more often dependent on GMI than ethnic Latvians: more than 2/3 of all beneficiaries who stayed on the scheme for the entire biennial period (2016-17) were non-Latvians, of whom nearly a half had no Latvian citizenship.

Figure 5.11. Socio-economic characteristics of GMI benefit recipients by duration of benefit spell, 2016-2017



Note: This figure includes all 15-64 year old recipients of Guaranteed Minimum Income (GMI) benefits, from January 2016 to October 2017. The number of months on the GMI benefit is calculated using all spells, including censored ones. In the case of 1-2 month short interruptions, spells were merged. Education is based on the SEA data and supplemented using SOPA data. Household size is derived from the SOPA data. Age and other personal characteristics indicated on this figure refer to January 2016.
Source: Latvian State Employment Agency, Latvian Office of Citizenship and Migration Affairs, Latvia's Municipal Information System Database and OECD estimates.

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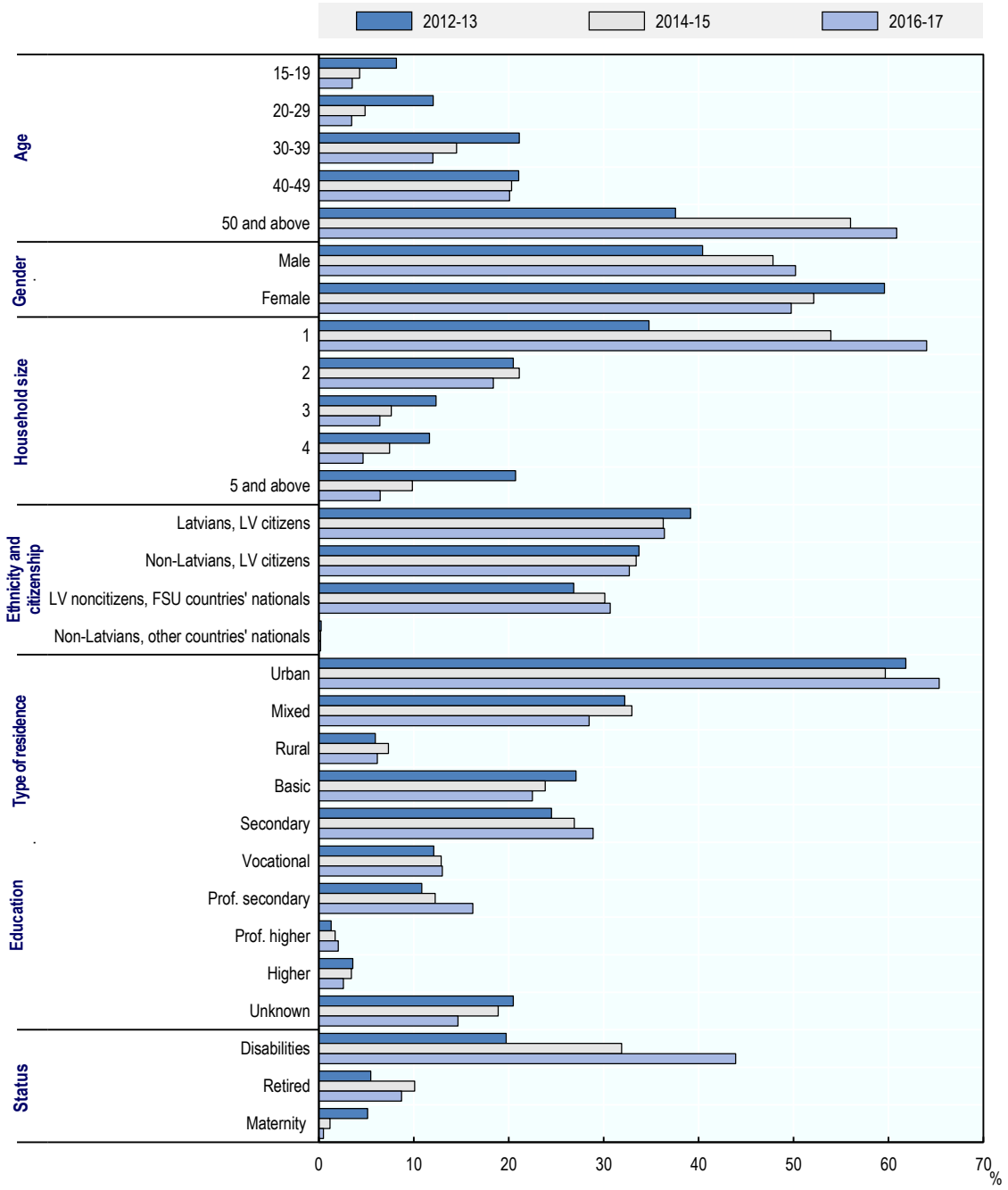
Figure 5.12. Socio-economic characteristics of GMI benefit recipients who stayed on the benefit during the full biennial period



Note: This figure includes all 15-64 year old recipients of Guaranteed Minimum Income (GMI) benefits, from January 2012 to October 2017. For 2016-2017, the total number of months spent on the benefit is limited to 22 months. The number of months on the GMI benefit is calculated using all spells, including censored ones. In the case of 1-2 month short interruptions, spells were merged. Education is based on the SEA data and supplemented using SOPA data. Household size is derived from the SOPA data. Age and other personal characteristics indicated on this figure refer to January of the first year of the two-year period.
Source: Latvian State Employment Agency, Latvian Office of Citizenship and Migration Affairs, Latvia's Municipal Information System Database and OECD estimates.

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People transition between benefits and labour market statuses

This section presents labour market transitions taking place between January 2016 and January 2017. The possible statuses retained for this analysis (presented in Table 5.2) are selected on the basis of their frequency and relevance for the analysis in this Chapter. More specifically, the analysis considers a combination between labour market statuses (employment, unemployed and out of the labour force), benefits (disability benefits, GMI, unemployment benefits) and employment-related activation measures (employment subsidies and public works programmes).

The majority of employed persons are still in employment one year later, but some changes are taking place in terms of the benefits they receive while in employment. For instance, 29% of employed persons receiving GMI and disability benefits transition into full disability benefit one year later, whereas close to half of employed GMI beneficiaries are off the benefit one year later. The vast majority of recipients of disability benefits who are in employment remain in employment one year later (81%), and an additional 4% are employed without relying on a disability benefit.

A positive result is found for unemployed persons who participate in the employment subsidy programme (the programme is discussed in detail in the next section). More than one quarter of the registered unemployed who are in subsidised employment and do not receive any benefits, are employed without support one year later. An additional quarter of them are still on subsidised jobs one year later, mainly groups that are entitled to a subsidy for up to two years.

These descriptive results are less positive for disability beneficiaries. Close to one third of disability benefit recipients who are registered with the SEA as unemployed continue to receive the benefit one year later, but are out of the labour force. Disability benefit recipients who are out of the labour force are the least likely to change status than any other group. Only 5% of them return to employment (with disability benefits) and another 5% are out of the labour force without access to disability benefits one year later. For disability beneficiaries who are registered with the SEA, the most common transition is to GMI benefits while maintaining their status as registered unemployed.

GMI beneficiaries are the most likely to change status than most other groups considered in Table 5.2, highlighting the temporary nature of this benefit as already discussed in the previous section. Among GMI beneficiaries who are registered with the SEA and also receive unemployment benefits, one third are employed one year later and no longer receive the GMI.

Table 5.2. Transitions between the labour market, benefits and employment-related activation measures

		Employed				Out of the labour force				Registered unemployed								
2016 \ 2017		DB	GMI	GMI and DB	No benefits	DB	GMI	GMI and DB	No benefits	ES with benefits	ES, no benefits	PWP and benefits	UB	DB	GMI	GMI and DB and/or UB	GMI and UB	No benefits
Employed	DB	80.56	0.00	0.02	4.30	6.28	0.00	0.05	1.00	0.12	0.00	0.00	5.80	0.29	1.53	0.00	0.00	0.04
	GMI	0.50	16.38	0.50	46.40	0.25	3.72	0.50	13.4	0.00	0.00	0.25	0.25	3.97	0.00	5.71	2.98	5.21
	GMI & DB	28.57	2.86	21.43	4.29	14.29	1.43	12.86	0.00	0.00	0.00	0.00	14.29	0.00	0.00	0.00	0.00	0.00
	No benefits	0.47	0.01	0.00	87.97	0.08	0.01	0.00	6.08	0.00	0.01	0.00	0.14	4.30	0.03	0.02	0.01	0.87
Out of the labour force	DB	4.77	0.00	0.01	0.31	86.91	0.04	0.69	5.00	0.26	0.00	0.06	0.24	0.01	1.63	0.01	0.00	0.06
	GMI	0.03	1.09	0.00	5.72	2.46	50.05	1.69	32.27	0.00	0.08	0.24	0.13	0.82	0.05	3.01	0.19	2.09
	GMI & DB	2.21	0.05	0.75	0.30	18.37	1.81	71.49	2.01	0.00	0.00	0.00	1.61	0.00	0.75	0.35	.000	0.30
	No benefits	0.04	0.01	0.00	10.03	0.45	0.18	0.01	87.39	0.00	0.06	0.04	0.01	0.34	0.03	0.14	0.00	1.26
Registered unemployed	ES with benefits	11.74	0.00	0.00	0.62	8.65	0.00	0.00	1.61	32.14	0.99	0.25	36.84	0.87	6.30	0.00	0.00	0.00
	ES, no benefits	0.36	0.12	0.00	26.84	0.24	0.00	0.00	16.75	0.59	27.32	0.00	0.59	21.14	0.12	0.59	0.12	5.23
	PWP & benefits	0.86	0.26	0.00	6.87	2.97	1.39	0.20	15.60	0.53	0.73	9.25	0.79	0.26	10.51	17.45	0.00	32.32
	UB	0.35	0.04	0.00	52.15	0.50	0.12	0.01	29.79	0.01	0.38	0.24	0.09	6.49	0.32	0.56	0.01	8.95
	DB	12.81	0.02	0.06	0.58	31.19	0.04	0.88	3.40	3.88	0.04	3.02	2.69	0.06	40.66	0.15	0.00	0.05
	GMI	0.20	0.96	0.00	7.71	2.95	2.78	1.33	17.27	0.10	0.20	5.90	1.35	0.25	1.67	41.79	0.07	15.48
	GMI & DB and/or UB	28.58	0.00	0.14	2.44	31.67	0.22	2.86	5.76	1.35	0.00	0.76	5.53	0.25	19.6	0.17	0.00	0.67
	GMI & UB	0.00	1.18	0.59	34.32	0.00	5.92	0.00	17.16	0.00	0.00	1.78	1.18	3.55	0.00	18.93	0.59	14.79
	No benefits	0.26	0.09	0.00	28.75	1.06	0.24	0.05	33.06	0.03	0.99	1.82	0.47	2.82	1.02	3.04	0.01	26.26

Note: GMI: Guaranteed Minimum Income, DB: Disability benefit, UB: unemployment, PWP: public works programme, ES: employment subsidy. The transitions are calculated as changes in the persons' status between January 2016 and January 2017.
Source: Latvian State Employment Agency, Latvian Office of Citizenship and Migration Affairs, Latvia's Municipal Information System Database and OECD estimates.

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Programmes for subsidised employment

Latvia has a well-developed system which offers support for employment in the private sector (employment incentives) to the most disadvantaged unemployed groups. These consist of the following groups: persons with disabilities, persons who have been unemployed for at least 12 months, persons aged 55 or above, persons who have at least one dependent and persons who have obtained a status of refugee or alternative status. The programmes in place in Latvia are in line with the European Council recommendations on establishing a Youth Guarantee (European Union, 2013[11]) and the long-term unemployed (European Union, 2016[12]) which call for well-targeted employment subsidies for these groups of the unemployed. The programmes offered under the Guarantee programme were offered in a similar form prior to the introduction of the Youth Guarantee and are expected to continue after the end of 2018.

Latvia's tight targeting of these measures to the most vulnerable groups is in line with the evidence on the effectiveness of subsidy programmes. Most existing papers find the largest effects of wage subsidies on the most vulnerable groups of unemployed (Card, Kluve and Weber, 2018[13]). These programmes provide support to groups for which other less costly and radical solutions are unlikely to work. In addition, Latvia offers a number of services and measures that aim to help disadvantaged persons prepare themselves for the labour market through counselling, specialised training (discussed in Chapter 3) and concrete support.

Activities offered to the long-term unemployed have been intensified over time and additional activities were introduced in 2016 including individual and group consultations, health checks, determination of professional suitability, motivation programme, social mentoring, and therapies for dependent persons.

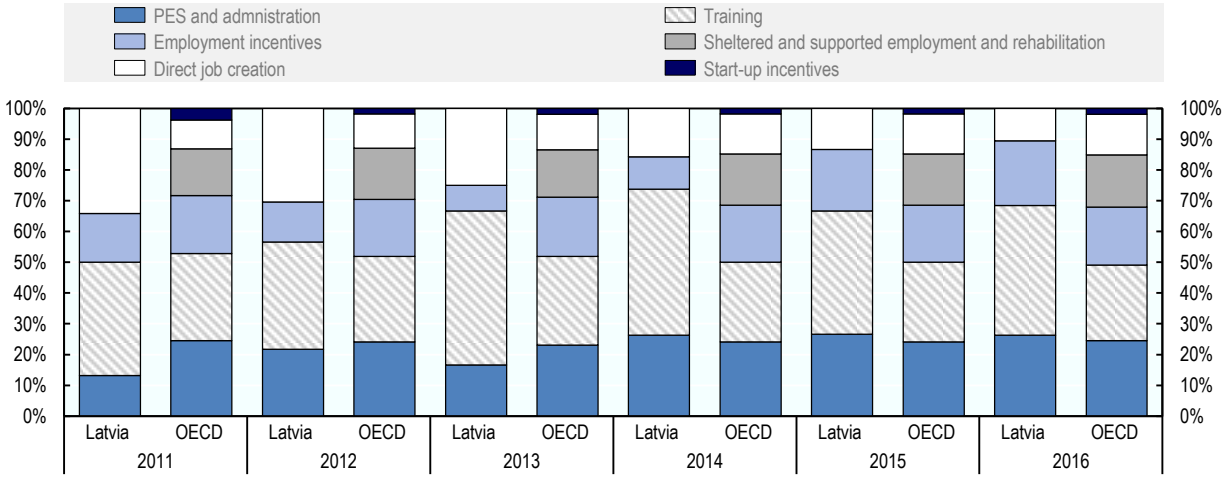
Two main trends can be observed in Table 2.1 in Chapter 2 of this Review, which presents the number of participants in all the different categories of ALMPs in Latvia. First, temporary public works were scaled up during the crisis but were subsequently reduced during the recovery period, and second, there was a sizeable increase in participation of young persons in activation measures, related to the introduction of the Youth Guarantee.

Participants in subsidised employment programmes represented 3.3% of all participants in ALMPs in 2017, excluding participants in general support measures and the public works programme. This is similar to their share in 2012, but less than half the share in 2015 (8%) and well below the share in 2016 (5.6%). In contrast, participants in temporary public works represented 13% of all ALMP participants in 2017 (excluding participants in general support measures), down from 52% in 2012, when this scheme was used intensively to provide support against poverty to households heavily hit by the economic crisis and enable them to stay close to the labour market (income support combined with activation).

Spending on employment incentives represented about one fifth of all spending on ALMPs in Latvia in 2016, slightly above the OECD average share of 19% (Figure 5.13). The notable increase in 2015 reflects the new European Social Funds made available for the Youth Guarantee. Spending on employment subsidies as a share of GDP was fairly low in 2016, about 0.04%, versus 0.1% in OECD countries on average. Spending on direct job creation has gradually declined from 34% of all ALMP expenditures in 2011 to 10% in 2016.

Figure 5.13. Spending on employment incentives has grown over time in Latvia

Composition of spending on activation measures in Latvia and the OECD, 2011-2016



Note: OECD is an unweighted average and excludes Iceland and Lithuania for all years; the United Kingdom for years 2012-2016; and France, Greece, Italy and Spain in 2016.
Source: *OECD/Eurostat Labour Market Programme Database*, http://dx.doi.org/10.1787/data-00312-en.

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This chapter focuses on the two main employment subsidy programmes: i) the programme of subsidised employment for vulnerable groups (*Pasākumi noteiktām personu grupām*) which targets persons with disabilities, individuals older than 55 years and the long-term unemployed; and ii) the programme of subsidised workplace for young unemployed (*Subsidētā darba vieta jauniešiem*), offered under the Youth Guarantee between 2014 and 2018 (Table 5.4). The exact eligibility conditions for these two programmes are presented in Table 5.3. In addition to this programme, young unemployed persons have access to a number of programmes offering them employment opportunities in the private sector, but the conditions (level and duration) of the monthly support provided under those schemes are less generous than the main employment subsidy programme for youth. Therefore, their impact is not examined in this chapter.

Employment subsidies are available for vulnerable groups and youth

The programme for vulnerable groups is a wage subsidy paid to employers, which can cover up to 50% of the total wage cost. It cannot exceed the minimum wage set by the government (EUR 430 from 1st January 2018). For persons with disabilities, the subsidy is higher and may be up to 1.5 times the minimum wage, except when it concerns persons employed in low-skilled jobs for which the maximum wage subsidy cannot exceed the minimum wage. The amount of the subsidy is fixed and does not depend on the degree of disability and the disability group the person belongs to.

The subsidy is granted for up to 12 months for persons who have been unemployed for at least one year, those who are 55 years old or older and refugees (see Table 5.3 for a list of the eligibility conditions and programme characteristics). It is granted for up to two years for persons who have been unemployed for at least two years and those who have been unemployed for 12 months and have either at least one dependent member or are older than 55 years. For persons with disabilities, the subsidy is also granted for up to two years. An

eligible person can only participate in the programme *again* after one year has passed following the end of their previous participation.

This programme aims to integrate a total of 5 177 disadvantaged unemployed persons into the labour market in the period from February 2015 to December 2022. The programme is running with support from the European Union (European Support Fund for EUR 30 million) and some contribution from the state budget (EUR 3.7 million) as well as private funding (EUR 14 million) paid in the form of wages by employers.

The SEA allocates the number of places on the employment subsidy programme – and the corresponding resources – to each local office, according to a number of criteria. These include the number of unemployed who are registered in the specific local office in the target groups over a 12-month period (notably persons who have been unemployed for at least 12 months, those who have been unemployed for at least 24 months, and unemployed persons aged 55 or more). For unemployed persons with disabilities, the number of subsidised jobs at each SEA local office is calculated taking into account the number of registered unemployed with disabilities in the local office and the number of subsidised jobs from the previous year that are ongoing. The demand from the local office is also taken into account. From 2019, staff workload and the number of registered vacancies in the office are also being taken into account in the calculation of the number of subsidies allocated per local office.

This funding mechanism enables the SEA to achieve an effective allocation of resources based on the needs of the clients of the specific local office while minimising the burden on local offices related to budget planning. Prior to the introduction of this mechanism, the number of subsidised jobs granted to local offices was based on the degree of cooperation between the local offices and employers in the area, which created many imbalances and was not successful in serving the needs of the unemployed. Moreover, there is some degree of flexibility in the system that allows heads of local offices to request additional subsidised jobs to be assigned based on unexpected changes in the local labour market. The SEA central office examines these requests and may decide in favour of the allocation of additional funds for this programme in a specific local office in need.

Once the number of subsidies and corresponding budget has been assigned to the local office, a call for applications is issued by the local SEA offices targeting employers who would be interested to participate in the programme. All types of enterprises, except medical institutions and education establishments, as well as self-employed persons, societies (with the exception of political parties) or foundations and agricultural services cooperatives are eligible to benefit from support under this programme. The employers submit their demand and accompanying documents[1] to the local SEA office, confirming their compliance with tax and other duties. A Committee set up at the local SEA office reviews all applications and selects the employers who will participate in the programme. At a second stage, the SEA and the potential employer jointly select among the eligible unemployed persons based on skill requirements for the position.

Table 5.3. Employment subsidies eligibility rules and programme features

	Eligibility	Subsidy level	Maximum subsidy level	Maximum duration of subsidy payment
Programme for vulnerable groups	Unemployed for at least 12 months or aged 55 and over or refugee or alternative status	50% of total wage cost	Minimum wage	12 months
	Unemployed for at least 12 months & (aged 55 and over or have at least one dependent)		Minimum wage	24 months
	Unemployed for at least 24 months		Minimum wage	24 months
	Persons with disabilities		Minimum wage (low-skilled jobs) or 1.5 x Minimum wage	24 months
Programme for Youth	Aged 20-29 & (unemployed for 6 months or has not obtained a general education or professional qualification or has completed a full-time education programme not later than two years ago and has not yet obtained his first permanent employment or has refugee or alternative status)		For youth with disabilities : Minimum wage (low-skilled jobs) or 1.5 x Minimum wage For all other youth: Minimum wage	6 months

Subsidies are provided only for new jobs that have been vacant for a minimum of four months. Moreover, the selected beneficiary should not have been an employee of the specific employer during the past year. These requirements are monitored and enforced by the SEA and the restrictions imposed are in line with similar restrictions in other OECD countries which aim at minimising the possible displacement effects and deadweight losses of employment subsidies. If the employer is found to breach one of the requirements attached to the contract, the employment subsidy is terminated and the employer is excluded from participation in this measure for two years.

Employers are required to assign a qualified supervisor (who is paid a wage supplement) for every unemployed person hired through the employment subsidy programme. The supervisor is in charge of supporting the employee and helping them acquire the skills required for their job. Supervisors can be responsible for no more than two unemployed persons. The degree of involvement of the supervisor depends on the complexity of the work and the profile of the employee, with youth and persons with disabilities usually receiving more in-depth support. For unemployed persons in high-skilled occupations, supervisors should demonstrate that their qualifications match with the occupation and type of work performed by the unemployed person and that they have relevant professional experience.

In the case of persons with disabilities, certain adjustments in the workplace (e.g. related to access and daily working conditions) are necessary to enable the person to access the workplace and fulfil his/her obligations. An expert's view is typically required to identify the necessary adjustments. Following this assessment, the SEA can decide to pay up to EUR 711 to cover part of the cost for adapting the workplace and the involvement of experts required for persons with disabilities. Regional mobility support (see Chapter 4 of this Review) and sign language interpreters can also be provided to persons with disabilities, according to their needs.

A well-developed system of support for unemployed youth

Well before the introduction of the Youth Guarantee by all the Member States of the EU, Latvia had in place a number of programmes, which aimed to help youth acquire their first labour market experience and make a successful transition from school into the labour market. OECD (2015[14]) discusses in detail the programmes and services available for unemployed and inactive young persons registered with the SEA as well as the challenges that Latvia faces in reaching out to young NEETs to improve their connection with the labour market.

The main programme offering subsidised employment to youth is "Subsidized workplace for young unemployed" (*Subsidētā darba vieta jauniešiem*), that offers a monthly wage subsidy to employers who employ an unemployed youth for up to six months. Unemployed persons aged 15-29 who have been unemployed for at least six months, or who have not completed their full-time education more than two years ago and have not yet got a permanent job, are eligible for participation in this programme. The subsidy level is the same as for the programme targeting the vulnerable groups. For young persons with disabilities, it is equal to the minimum wage for low-skill jobs (elementary occupations) and cannot exceed 1.5 times the minimum wage. For all other young unemployed, the subsidy covers 50% of the total wage and cannot exceed the minimum wage.

As for the programme for adults, youth cannot be offered two subsidised jobs in a row: there is a minimum requirement of one year between two employment subsidy spells. As for the programme for vulnerable groups, some exceptions are permitted for interruptions that last less than half of the intended time of participation..

Young unemployed can also receive support through the programme "First work experience for youth" (*Pirmā darba pieredze jaunietim)*, which offers youth the opportunity to gain work experience for up to one year in new jobs. Employers receive EUR 200 during the first six months and EUR 160 during the last six months of the programme, while a higher subsidy is paid for persons with disabilities. Additional expenses are covered for supervisors (50% of the minimum wage for the first three months), for adapting the workplace to the needs of persons with disabilities and involving relevant experts such as assistants, sign language experts etc.

For unemployed youth wishing to acquire some work experience in Non-Governmental Organisations (NGOs), the programme "First work experience for youth in NGOs" (*Darbam nepieciešamo iemaņu attīstība nevalstiskajā sektorā*) offers limited support to participants (EUR 90 a month) for up to six months. One of the aims of this measure was to offer opportunities for work experience to youth when job opportunities were scarce. A total of more than 4 000 young unemployed individuals have participated in this programme since the beginning of the Youth Guarantee in 2014. A similar programme was also running prior to the Youth Guarantee, with participation of about 1 000-1 400 persons per year.

Table 5.4. Participants in employment programmes

	2012	2013	2014	2015	2016	2017
Programmes selected for in-depth evaluation						
Subsidised employment for vulnerable groups	788	1 670	1 315	864	979	870
Pre-Youth Guarantee: Work place for a young person	523	152				
Youth Guarantee: Subsidized work place for young people			283	508	534	514
Other programmes						
Pre-Youth Guarantee: Support for youth volunteering	859	1439	4			
Youth Guarantee: First work experience for a young person			70	172	110	133
Youth Guarantee: Development of skills necessary for work in NGOs			962	873	1 143	1 143
Youth Guarantee: Ergo therapy service			35	66	176	133
Temporary public works	31 166	32 129	19 225	84 30	10 937	13 032
Student Summer Employment Programme			4 287	3 804	4 239	4 975

Source: Latvian State Employment Agency.

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Moreover, workshops in vocational schools are offered to unemployed youth to help them make career decisions. These workshops give youth the possibility to try up to three different professions (on average two weeks experience per occupation) and offer them a monthly allowance. The strength of this programme is the combination of practical experience (minimum 60% of the time) with theoretical courses.

Young persons, like workers of all ages, can receive support to accept training and job offers outside the area they live in. This mobility programme is described in detail in Chapter 4 of this Review where its impact is estimated.

Finally, the programme "student summer work" offers students in secondary education the possibility to acquire work experience during their summer holidays. Students also receive career guidance. Municipal and other public institutions account for a large share of the employers. This programme attracts the largest number of participants among youth, reaching 4 239 persons in 2016 and 4 975 in 2017.

Only a small share of employers use the subsidies

On the employers' side, subsidies reduce the financial costs or risks associated with unknown productivity of the person to be employed. As with employment services, this is a scheme which is particularly relevant to youth entering the labour market for the first time, and whose (perceived) marginal productivity may be below market wages. Employment subsidies may also serve to lower the costs to employers of providing on-the-job training to youth. Such training subsidies offer the possibility of expanding the number of work-based training places for disadvantaged young people.

To avoid displacement (substitution) effects, wage subsidy programmes in OECD countries are available only for newly created jobs and/or impose a minimum period during which jobs should be advertised before the subsidy beneficiary can be hired. In some countries, the employment subsidies become available only when the total employment at the firm level has actually increased, to ensure beneficiaries do not displace other workers (Boockmann, 2015[15]). There is no such conditionality attached to the programme in Latvia but there is a requirement for the vacancy to be advertised for at least four months before a

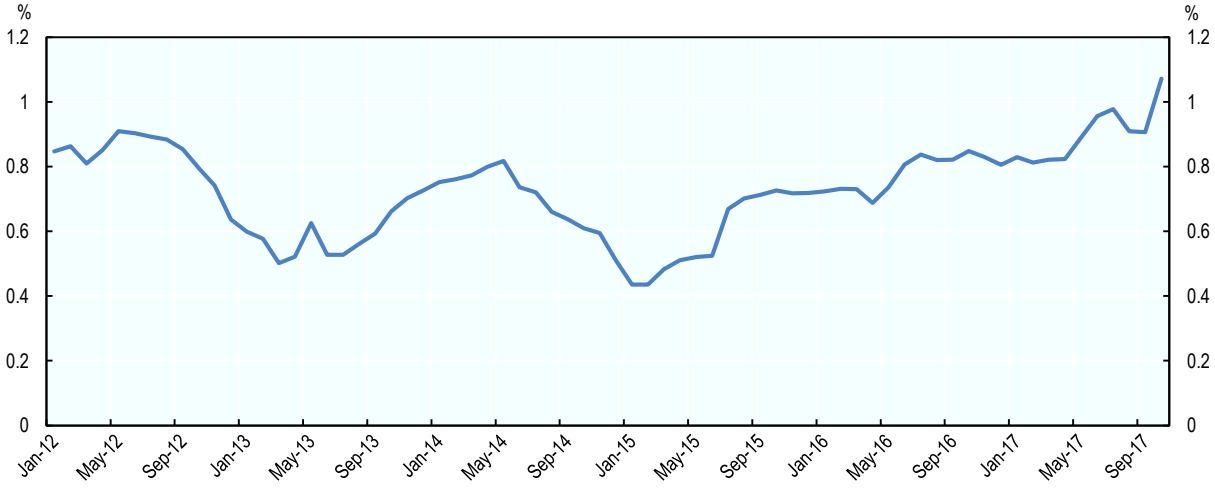
subsidised employee can be hired. In addition, the selected candidate should not have been an employee of the specific firm in the past year.

There is not sufficient evidence in the existing literature regarding the displacement effects of subsidies. Van Reenen (2004[16]) examines these effects in the case of the New Deal for Young People in the United Kingdom, finding little or no evidence of substitution effects against older unemployed persons.

Heavy bureaucratic procedures and stringent conditionalities which are sometimes attached to employment subsidies deter employers may lead to low participation rates of employers, especially when the amount of the benefit is relatively small. For example, stringent conditions relative to the perceived value of the subsidy by employers in the case of the French *Contrat Jeune en Entreprise* led to a very low take up of the programme (Roger and Zamora, 2011[17]). This programme offers a hiring subsidy to school dropouts for a three-year period and employers are required to retain the workers for the entire duration of the subsidy (except for reasons related to professional misconduct). In the case of the German Immediate Action Program for Lowering Youth Unemployment or *Jugend mit Perspektive* (JUMP), which combines a relatively generous benefit to employers, the conditionality of no early dismissal and a post-participation retention period (of half the period of the subsidised job) is not found to discourage employers from participating (Caliendo, Künn and Schmidl, 2011[18]).

In the case of Latvia's employment subsidy programmes, the share of employers receiving support is small but has somewhat increased over time, reaching 1% of all employers in 2017 from 0.85% in early 2012 (Figure 5.14). For employers using this measure, subsidised employees represented on average about 30-33% of their staff in 2017.

Figure 5.14. Share of firms hiring unemployed persons on employment subsidies



Source: Latvian State Employment Agency and OECD estimates.

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Retail trade firms represent the vast majority of employers using hiring persons on employment subsidies (70% in 2017), followed by farmers and fishermen and foundations and associations. In terms of sectors, 18% of these employers are in agriculture, forestry

and fishing and another 17% are in trade. Manufacturing and other services account for close to one quarter of all employers using subsidised labour.

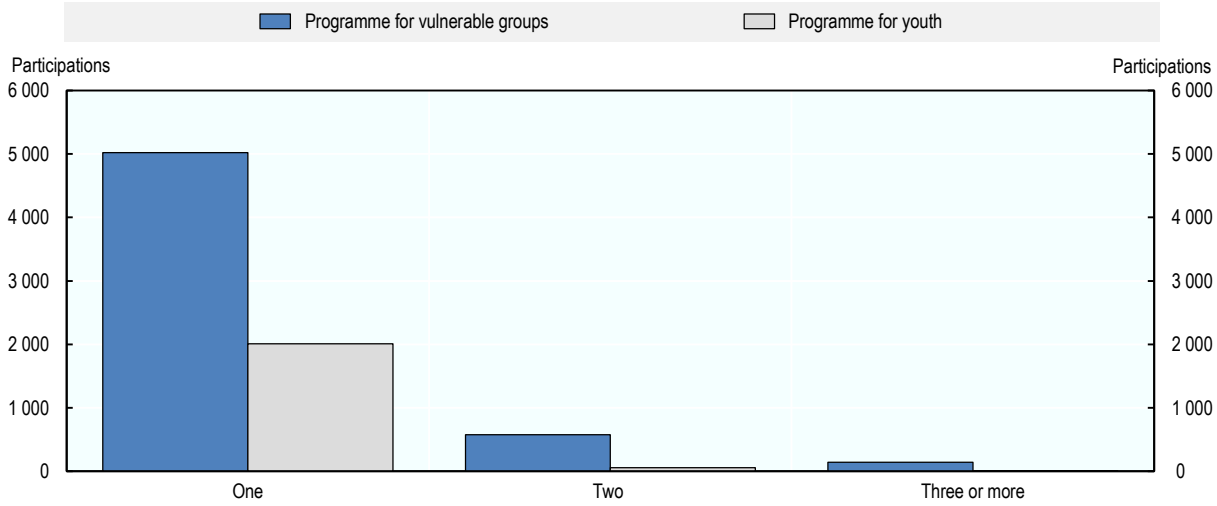
Participation in the scheme is associated with certain administrative burden for employers during and at the end of the programme, in addition to the process for applying for participation in the scheme described in the previous pages. Employers have to submit a monthly report to the SEA on the hours worked and wages, so that the subsidy can be calculated and paid, which can be time consuming. Time can be cut if this process is automated so that there is no need to involve administrative staff at the firm that hires the subsidised employee. The administrative burden that employers have to bear both before and during participation in the programme can be particularly constraining for small businesses, especially the first time they apply for participation in the programme. Between 2012 and 2017, small businesses of up to four employees represented close to half of all firms that participated in the scheme. Somewhat less than half of these firms were very small with one or two employees who are unlikely to have any dedicated administrative staff and accountants who can deal with the exchanges with the authorities regarding the requirements and conditions for participation in the scheme. For these firms in particular, it is important to minimise the administrative burden by using Latvia's well-developed IT system and interconnected databases: for example, such systems could be used to transmit the monthly information required on hours worked to calculate the amount of the subsidy to be paid.

Repeated participation is kept to a minimum

As in many other OECD countries, Latvia imposes a minimum gap of one year between two participations in employment subsidies for each person. This restriction is lifted for breaks which are due to reasons beyond the control of the unemployed person and for breaks that have lasted less than half of the intended period of participation. These exceptions allow treating the two participations as one single spell, interrupted for some well-defined reason.

Data from the SEA covering the period from January 2012 to October 2017 show that one out of ten beneficiaries of employment subsidies participate in the measure more than once (Figure 5.15). This is clearly a lower bound of repeated participation as programme participation prior to 2012 and post 2017 is not recorded in the data. In contrast, the share of persons participating twice in the subsidy programme targeting youth is very low (3%), most likely because of the age limit that restricts the time during which a young unemployed person can benefit from this programme. When other youth employment-related measures are considered, repeated participation goes up to 7%. For other employment-related support measures (which have not been included in the categories discussed above), close to one third of participants have multiple participations, with 14% of persons participating at least three times during the 5.5 year observation period.

Figure 5.15. Number of participations in employment subsidies per participant



Note: Includes all participations between January 2012 and October 2017.
Source: Latvian State Employment Agency and OECD estimates.

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From the side of the employers, there is no obvious indicator to assess whether some firms use the employment subsidies as a permanent way to hire workers. An analysis focusing on firms that hired at least one subsidised employee between January 2012 and October 2017, finds that these firms used subsidised employees for 28% of the period they had any recorded employment (with the median being 16% of the period with recorded employment). These firms used the subsidies on a continuous basis for 12 months on average (the median is seven months).

Data-related limitations need to be acknowledged

Despite the rich and detailed data compiled by the Latvian authorities and provided for the analysis in this Review, there are still a number of data-related issues that need to be discussed before turning to the analysis of the effectiveness of employment subsidies. First, a careful examination of the subsidy duration in 2013 and 2014 (Table 5.5) and the trends in participation in the different programmes presented in Table 5.4 may indicate that some participants in the youth programme in 2013 and 2014, just before and during the first year of the Youth Guarantee (fully implemented in 2015), may have been coded under the programme for vulnerable groups. The introduction and phasing in of the Youth Guarantee measures would explain the drop in the number of participants in the youth programme from 523 in 2012 to 152 in 2013 and 283 persons in 2014, before increasing again to about 500 persons per year in 2015-2017. At the same time, a temporary increase in the number of participants in the programme for vulnerable groups is observed in 2013 and 2014.

Second, matching subsidy spells with jobs spells is challenging. For the vast majority of participants (95%), the start date of the subsidy coincides with the start date of their job (for all their employment subsidy spells).[2] However, for 336 participants who represent 5% of all participants, at least one employment spell starts before the subsidy spell starts. The median difference between the start of the employment spell and the start of the employment subsidy spell is 12 months (for the first spell of employment subsidies) so it

is difficult to attribute this to administrative delays. These observations have been dropped from the analysis that follows.

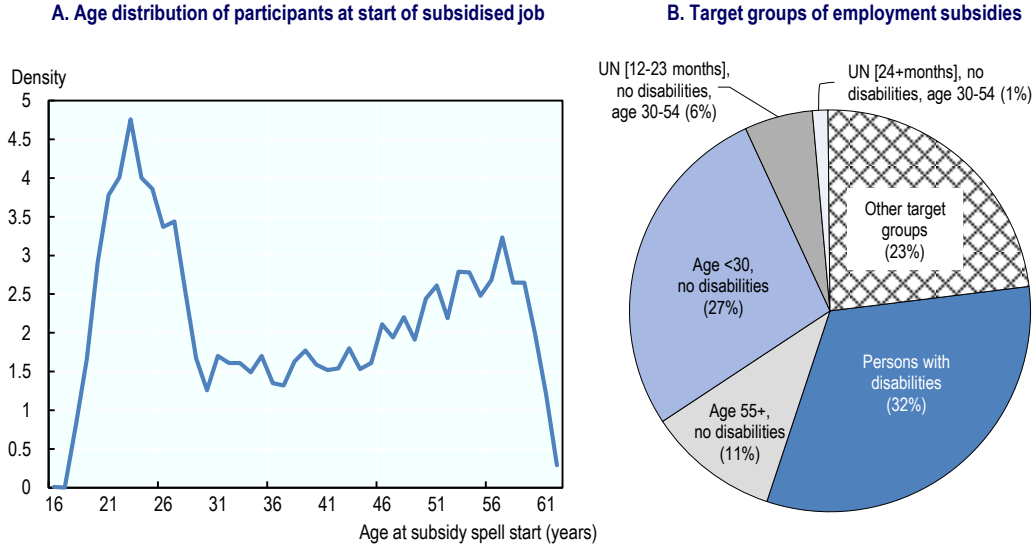
Moreover, prior unemployment status and unemployment duration are not accurately recorded for all registered unemployed. A careful examination of persons who receive a wage subsidy shows that about 20% of them were not recorded as unemployed in the period(s) prior to participation or were just recorded as unemployed only in the month before participation started. Some of these cases, had an unemployment spell within a year prior to participation in the subsidy programme, which was followed by a period when they were neither unemployed nor employed.

Who are the programme participants?

An analysis of the characteristics of the participants at the time they took up subsidised employment closely reflects the targeting of the programme. Figure 5.16 (Panel A), which draws the age distribution of participants at the start of their subsidised job, shows a clear spike for youth (around 24-25 years) and a second – less clear – spike at 55-56 years.

Figure 5.16. Employment subsidies seem well targeted

Individual characteristics of programme participants



Note: UN: unemployment duration. These figure include participants in the programmes for vulnerable groups and youth from January 2012 to October 2017. Individual characteristics are measured at the start of the subsidised job. In Panel B, the shares of persons aged 55 and over and youth exclude persons with disabilities who are taken into account in the "persons with disabilities" category.
Source: Latvian Office of Citizenship and Migration Affairs, Latvian Social Insurance Agency, Latvian State Employment Agency and OECD estimates.

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Persons with disabilities, one of the target groups of the programme for vulnerable groups, represent close to one third of all participants (Figure 5.16, Panel B). Among the remaining participants, 27% are young persons aged up to 29 years, 11% are individuals aged 55 and over, 6% are persons who had been unemployed for 1-2 years prior to participation and 1.2% are long-term unemployed (for two or more years). The remaining 23% comprise other eligible individuals such as refugees, those with alternative status, and possibly other

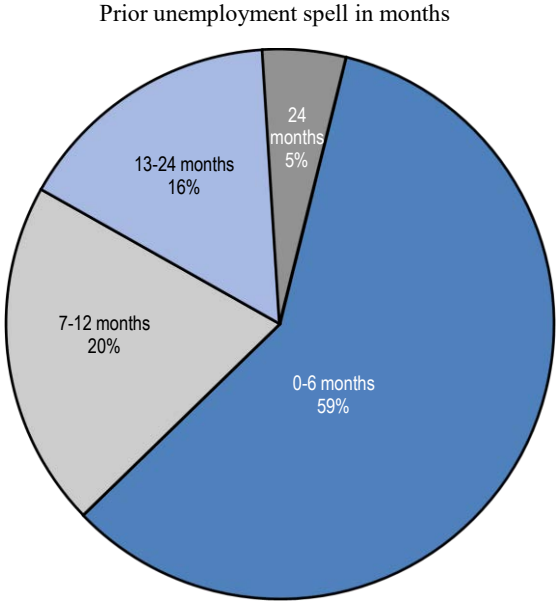
cases, on which it may be difficult to obtain accurate information. The low share of LTU among participants and the high share of all other remaining groups likely reflects the data limitation in the coding of prior unemployment duration described above.

Programme participation is equally split between men and women. More than half of all subsidy beneficiaries have secondary education (56%) and 21% have primary education only. Among young participants, three quarters have at most secondary education, while individuals with higher education represent just 13% of all participants. Beneficiaries of Slavic origin represent 36% of participants in the programme for vulnerable groups and 26% of participants in the youth programme. Only one quarter of persons in subsidised jobs live in households with children.

The distribution of participants across regions is driven by the distribution of subsidies across SEA local offices, described in earlier sections of the Chapter and tied to local labour market conditions and the size of the target groups in the area. Latgale represents 45% of all participants in the programme, followed by Kurzeme (15%) and Zemgale (12%). In contrast, only 17% of participants live in Riga or the Pieriga region.

Disaggregating the data according to the time spent in unemployment prior to participation, more than half of all employment subsidy recipients had been unemployed for 6 months or less (Figure 5.17). Persons with disabilities represent 28% of this group of short unemployment duration and youth (without disabilities) represent 32%. About 20% of all programme participants had been unemployed for up to 12 months prior to participation. Participants who had been unemployed for 13 to 24 months represented 16% of the total.

Figure 5.17. More than half of the participants in the subsidy programme were unemployed for six months or less prior to participation



Note: Includes participants in the programmes for vulnerable groups and youth from January 2012 to October 2017.
Source: Latvian Social Insurance Agency, Latvian State Employment Agency and OECD estimates.

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Programme duration varies by target group

The majority (84%) of all of the subsidy spells described above, for which the start date is observed, also have an end date within the observation period. The remaining 1 228 spells are right censored and are excluded from the analysis that follows. An analysis of the non-censored participation spells reveals two clear spikes in their duration at 11-12 months and 23-24 months. These correspond well to the expected duration of employment subsidies as described in Table 5.3. More than one third (38%) of all completed spells last for 6 months or less (the typical duration for subsidies to young persons) and an additional 44% last between 7 and 12 months. Another 17% of these spells go up to two years, which is the maximum duration for persons with disabilities, the LTU and some specific categories of the unemployed (Table 5.5).

More specifically, persons with disabilities stay on the subsidy for longer periods than all the other target groups. Their average subsidy spell is 14 months, versus 8.7 months for youth, 11 months for persons 55 and over, and 9.8 months for the entire group of programme participants.

Table 5.5. Actual duration reflects relatively well the expected duration for the different target groups

	All subsidy beneficiaries	Persons with disabilities	Youth (<=29)	Persons aged 55 and over
1-6 months	38.33	23.99	40.24	31.56
7-12 months	44.44	29.24	47.58	45.06
13-24 months	17.21	46.71	12.18	23.38
Average duration (in months)	9.8	14	8.7	11.2

Note: Data refer to the period between January 2012 and October 2017. The categories of youth/persons aged 55 years and more and persons with disabilities are not mutually exclusive as for example, youth (or older persons) with disabilities are counted under both the youth (older persons) group and that of participants with disabilities.
Source: Latvian Office of Citizenship and Migration Affairs, Latvian Social Insurance Agency, Latvian State Employment Agency and OECD estimates.

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The maximum duration of the subsidy for persons with disabilities increased from 24 to 36 months in 2014, but was cut again to 24 months in 2015. This change is somewhat reflected in the administrative data. Although the actual duration of subsidies for persons with disabilities does not exceed 24 months, an increase in the duration can be observed in 2014. In 2013, 34% of subsidy recipients with disabilities participated in the programme for 12-24 months, whereas in 2014, this share rose to 73%, to decline again in 2015 to 54% (Figure 5.21, Panel A). The reason for reverting to a shorter duration of the subsidy was based on financial considerations and the need to achieve a good predictability of financial resources necessary for this programme and reflect the actual duration of the subsidy for persons with disabilities. Moreover, as also indicated in the administrative data discussed in the previous paragraph, most employers used the subsidy for less than 36 months, hence its duration was de facto below the maximum duration stated in the legislation.

Subsidised jobs differ substantially from non-subsidised ones

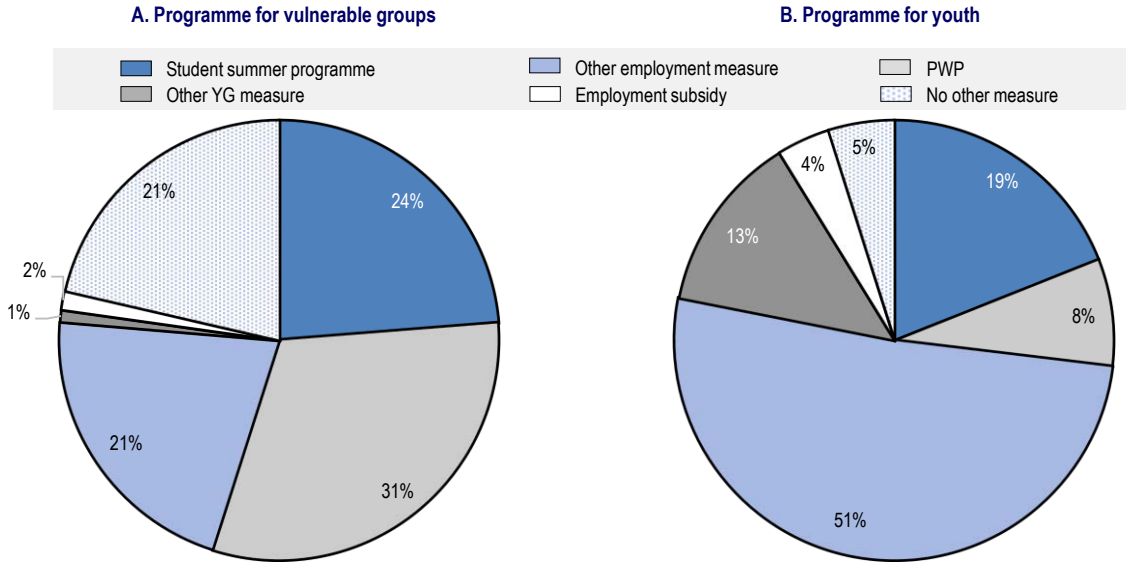
It does not come as a surprise that subsidised jobs are in many ways different from non-subsidised ones and are concentrated in specific sectors. Using the Statistical Classification of Economic Activities in the European Community (Nomenclature statistique des activités économiques dans la Communauté européenne, NACE) codes associated with each job, close to 17% of all subsidised jobs[3] are in agriculture, whereas the analogous share is only 4% for non-subsidised jobs. "Other services" also account for 10% of all subsidised jobs but only 2% of non-subsidised jobs. In contrast, public administration and transportation and storage, which accounts for 8% of non-subsidised jobs each, are much less prevalent among subsidised jobs (0.5% and 2% respectively).

Vitally, average earnings are lower for subsidised jobs. The average earnings for subsidised jobs are EUR 100 lower than those for no-subsidised jobs. However, this result is mainly driven by the upper tail of non-subsidised jobs. The median of the two sets of jobs is quite similar (about EUR 350), but the 75th percentile is EUR 479 for subsidised jobs, versus EUR 608 for non-subsidised jobs.

Combining different employment-support programmes

Many employment subsidy beneficiaries also benefit from other employment support programmes before, during or after the end of their participation in the subsidy programmes (Figure 5.18). Close to one-third of participants in the subsidy programme for vulnerable groups also participate in public works during the observation period. Two-thirds of them participated first in public works and then received the employment subsidy. There is also an important overlap between the main subsidy programme and participation in the student summer programme (24% of all subsidy beneficiaries). Two-thirds of these persons participated in the student summer programme first and subsequently went on to the employment subsidy programme. For youth, 19% of those participating in the youth subsidy had also participated in the student summer programme first. Around 13% of participants in the youth employment subsidy programme had first participated in some other employment programmes offered under the Youth Guarantee (such as volunteering work in NGOs, or first work experience subsidy). The combination of two types of employment subsidies (youth and vulnerable groups) is rather rare. Only 1.4% of participants in the main employment subsidy programme (for all groups besides youth) had also participated in the equivalent programme offered under the Youth Guarantee. Similarly, only 4% of those who participated in the youth employment subsidy programme had also participated in the main employment subsidy programme.

Figure 5.18. Many subsidy beneficiaries combine different ALMPs



Note: ALMPs: Active labour market policies. PWP: Public Works Programme. YG: Youth Guarantee. These figures include information on participation in employment-related measures between January 2012 and October 2017. Some individuals may have participated in more than two measures.
Source: Latvian State Employment Agency and OECD estimates.

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Labour market outcomes of programme participants

A simple analysis of the post-participation outcomes of subsidy beneficiaries reveals that 46% of them are employed one month after the end of the subsidy (Figure 5.19). This share declines to 38% three months after the end of the programme and stabilises around that level up until one year after programme participation. In the first three months after the end of the subsidy, the vast majority of former beneficiaries are employed on the same job as before (87% one month after the end of the subsidy and 70% two months later). However, their share declines over time. One year after the end of their subsidy, 57% of all employed former subsidy beneficiaries are on a new job. These descriptive statistics show that for more than half of those subsidy beneficiaries who remain in or re-enter employment, the programme operates as a stepping-stone for a non-subsidised job. However, this analysis cannot make causal inferences about the possible effect of the programme on post-participation outcomes. For that, it is important to have an appropriately defined control group that is similar to the group of participants. This makes it possible to estimate what *would have happened* to participants had they not received employment subsidies and, in turn, identify the true effects of the programme on participants' labour market outcomes.

Figure 5.19. Labour market outcomes of programme participants

By month after the end of the subsidy

Note: This figure refers to the period between January 2012 and October 2017 and reports the labour market outcomes of former subsidy beneficiaries one, three, 6 and 12 months after the end of the employment subsidy. It separates out persons who are employed in a new job from those who continue to be employed on the job for which they received the subsidy.
Source: Latvian Social Insurance Agency, Latvian State Employment Agency and OECD estimates.

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Impact evaluation of employment subsidies

A wealth of academic papers examine the effects of various ALMPs on participants' labour market outcomes in many OECD and developing countries and in a variety of settings and labour market conditions (see Card, Kluve and Weber (2018[13]) for a meta--analysis of the results of these papers). Overall, the literature suggests that ALMPs that promote work as early as possible during the unemployment spell such as job search assistance, or incentives to enter work quickly tend to have more positive effects in the short-term (which are also stable over time) than ALMPs that involve investment in human capital (such as training) which can have negative short-term effects but large and significant in the longer term. Moreover, the first group of programmes are found to be more successful for disadvantaged groups of participants who would have a very low probability of entering the labour market without such support, whereas the latter group of ALMPs is more successful for the LTU.

Stylised facts and trade-offs in the existing literature

The majority of papers that evaluate the impact of employment subsidies programmes focus on Austria, Germany, Switzerland and the Nordic countries. These papers demonstrate that the effectiveness of private-sector hiring subsidies depends on their design and targeting and on the size of their indirect effects, such as lock-in effects, deadweight losses and displacement effects (Card, Kluve and Weber, 2018[13]). The empirical literature highlights some important trade-offs policy makers face when implementing employment subsidies. These trade-offs typically depend on labour market conditions and the needs of the target groups.

Just as in the training programmes discussed in Chapter 3 of this Review, programmes providing support for private sector employment may have negative labour market effects in the short-term due to so-called lock-in effects. During their participation in the programme, the unemployed tend to limit their job search activities and hence may be less likely than non-participants or participants in other ALMPs to find a non-subsidised job (van Ours, 2004[19]; Fremigacci and Terracol, 2013[20]; Wunsch, 2016[21]). Lock-in effects may be related not only to the limited time that participants have to devote to job search but also to their actual status vis-a-vis the PES. In many cases, participants are considered as employed and are outside the radars of caseworkers. As a result, they receive limited or no assistance with job search. In addition, job search activities are less well monitored by the PES during their participation in subsidized employment programmes.

The size of lock-in effects depends on the duration of the programme, the state of the labour market (and hence the probability of finding employment quickly for non-participants with similar characteristics), and the timing of participation within the unemployment spell (See Wunsch (2016[21]) for a summary of the factors determining lock-in effects of activation measures). For instance, if participation in the programme occurs during the period when exit from unemployment to employment is highest (e.g. between four and six months of unemployment) the lock-in effects are likely to be higher.

The quality of targeting of employment subsidies is a key determinant of both their effectiveness and their indirect effects. The earlier employment subsidies are provided during the unemployment spell, the sooner they are likely to produce positive effects. Nevertheless, dispersing employment subsidies early may raise the likelihood of participants foregoing other employment opportunities as well as increasing the potential deadweight losses which appear because some participants might have found a job anyway, even without the help of a subsidy (Wunsch, 2016[21]; Boockmann, 2015[15]). Ideally, these programmes should thus be targeted to the unemployed who have already been unemployed for a certain time and need more intensive support to acquire work experience. This is the case for Latvia's programme for vulnerable groups. Nonetheless, there is a clear trade-off between this effort to minimise indirect effects and the need for early intervention to avoid long-term unemployment (OECD, 2015[22]).

Latvia's employment subsidies programmes that provide support to persons who have been unemployed for at least 12 months are in line with the evidence from other countries targeting the LTU (Brown, 2015[23]; Brown and Koettl, 2015[24]; Wunsch, 2016[21]). For example, strong effects of employment subsidies have been found for the LTU in Sweden (Sianesi, 2008[25]) and Switzerland (Gerfin, Lechner and Steiger, 2005[26]).

Nevertheless, although tight targeting is necessary to ensure the effectiveness of employment subsidies while minimising their possible negative indirect effects, it can also lead to stigmatisation of participants, who are perceived as low-productivity workers (Brown, 2015[23]).

Methodological choices and issues for discussion

The analysis in this Chapter compares the outcomes of programme participants (treated group) with those of similar individuals who do not (have not) participate(d) in the programme (control group). The motivation to compare individuals who have "similar" observed characteristics comes from the fact that programme participation is unlikely to be random. Only a sub-set of eligible individuals are selected for participation and this selection is made either by employers – who primarily select on the basis of perceived productivity of

workers – or by caseworkers – whose choices are assisted but not fully determined by the profiling tool introduced in 2013.

The probability to be treated for eligible unemployed persons is very low. Among persons who have been unemployed for 12 months or longer, the probability to be selected for participation in subsidised employment is 3%. For unemployed youth and persons aged 55 and over, the probability is even lower, 2.1% and 1.5% respectively. Nevertheless, among persons with disabilities, the probability to be treated is slightly higher, at 6.6%.

Quite surprisingly, more than one third (38%) of participants appear not to fulfil the eligibility criteria at the time of the start of their participation in the subsidy programme. However, there is not sufficient information in the data to identify refugees and those with alternative status who would be eligible for participation. Moreover, for youth who represent 40% of the ineligible persons, the information on past history is not sufficiently detailed to characterise perfectly their eligibility status which may explain some of these cases of ineligible youth participating in the subsidy programme.

The time that the "clock starts" (i.e. the moment when an unemployed person becomes eligible for support) both for the treatment and control groups is defined in two ways: i) at 6 months of unemployment; and ii) at 12 months. The first group includes all those persons who are eligible to participate in the subsidy programme soon after registering with the SEA (they are required to be unemployed for 6 months only). This includes unemployed persons who are eligible for participation without any requirement related to the duration of their unemployment spell, e.g. persons with disabilities, persons aged 55 and over, refugees and those with alternative status and certain categories of youth. Moreover, those selected for participation after only 6 months from registration are those treated as a priority by the SEA caseworkers. The second group is likely to capture the LTU, including those unemployed persons who have not been treated as a priority by caseworkers and those who have spent time participating in other ALMPs. Participants are compared with other unemployed persons who have been in unemployment for at least 6 months and at least 12 months respectively (for whom the "clock is set to start" at the same time). The two groups (treated and control) are in theory eligible for participation, but some persons are selected for participation whereas others are not.

The treated group includes persons who received the employment subsidy within 6 months of the moment they became eligible (when the clock starts), while individuals who began employment subsidies after that time are dropped from the analysis. Initially, analyses were also performed defining the treated group as those persons who were treated at *any* time after becoming eligible for employment subsidies, but interrupted unemployment spells and people coming back to participate later on in employment measures complicated the interpretation of the results. All remaining persons who spent either 6 months or 12 months in unemployment (and hence became eligible) are included in the control group.

In order to make the comparisons between the treatment and control groups more reliable, the econometric analysis controls for individual characteristics (age, gender, education, ethnicity, disabilities) household characteristics (any child in the household, urban residence) and location (dummies for regions) all measured at the start of the clock (i.e. when a person becomes eligible for support). Profiling outcomes (at the moment of registration) are also taken into account. All regressions also include month of registration dummy variables (to account for seasonal effects), as well as SEA branch fixed effects. The standard errors are clustered at the SEA branch level. Moreover, to account for other activities unemployed persons may be doing in the first months of their unemployment spell (6 or 12 months) and

before they become eligible for participation in subsidised employment, the analysis controls for participation in formal training, non-formal training and other employment measures.

The main results presented in this chapter are estimated using Ordinary Least Squares (OLS) regressions, because – as discussed in Box 3.2 in Chapter 3 – this presents three key advantages over using matching or other more complicated econometric techniques. Firstly, it is easier to compare multiple treatment groups and look at interactions between different treatments using OLS, whereas matching models are better equipped to estimate differences between a single treatment and a single control group. Secondly, matching estimators may be susceptible to the Incidental Parameters Problem: matching is typically done using a propensity score, which itself relies on a probit or logit model to estimate individuals' likelihood of being treated, yet it is helpful to include fixed effects (for example at the level of the SEA branch) to make the estimated treatment effects more reliable. Thirdly, using OLS substantially speeds up computation.

In order to further eliminate potential sources of bias, the OLS regressions are estimated using only observations that lie within the region of "common support".[4] Broadly, these are individuals that, given their observable characteristics, had at least some chance of being in either the treatment or the control group. To do this, the propensity score – a variable capturing individuals' likelihood of participating in employment subsidies – was calculated by running a probit model including all of the regressors used in the main OLS regressions.[5] It emerges that the main results are virtually unchanged whether the sample is restricted to the area of common support or not.

The main results persist if the same treatment effects are estimated using propensity score matching (the main results on employment can be found in Annex Figure 5.A.4) instead of OLS regression (the main results are presented in Figure 5.20), further suggesting that the findings are robust to tweaking the analytical approach. In particular, the results were re-estimated by taking the same propensity scores used to restrict the sample to the area of common support, and treatment and control observations were matched using the nearest neighbour technique. That the results remained largely unchanged suggests that assuming a linear relationship between the outcome variable and the control variables (as well as the employment subsidies treatment), as in the OLS regressions is a tenable model for these data. The similarity between the results emanating from OLS regressions and propensity score matching or other more complex techniques has also been seen in several other similar studies that evaluate the effects of ALMPs (see Box 3.2 in Chapter 3).

Nevertheless, it is important to recognise that OLS, propensity score matching, and other similar techniques can only estimate treatment effects conditional on observable differences between the treatment and control group. Unobservable differences – for example, in terms of motivation, latent ability, or idiosyncratic preferences – may still bias the results and this should be kept in mind when interpreting the results in this section.

Selecting outcome indicators

The main labour market outcome considered in this analysis is the likelihood of employment. Separate analyses are conducted excluding employment in subsidised jobs from the outcomes and comparisons are drawn between these results and those on the overall likelihood of employment. The objective of this programme is to help participants find a non-subsidised job after the end of the programme, either with the same or a different employer. However, for some groups with very low perceived productivity and limited chances to find a non-subsidised job, the time they spend in subsidised employment can be considered a

positive outcome through its effects on income, skills development and social inclusion, especially for the harder to reach groups of unemployed.

Ideally, additional employment indicators should be used to estimate the effects of the subsidy. For instance, in the evaluation of a subsidy programme for older, full-time, low-wage workers introduced in Finland in 2006, Huttunen, Pirttilä and Uusitalo (2013[27]) find a programme effect on the intensive margin (hours worked) but no effect on the extensive margin (the likelihood of employment). Unfortunately, it is not possible to calculate with precision the hours worked in the administrative that have been collected for this Review.

In order to provide some analysis on the quality of the job found after the end of the programme, the analysis also considers earnings as an outcome indicator. Chapter 3 of this Review includes a discussion about the possible bias introduced by the issue of selection into employment when earnings indicators are examined as possible outcomes. Employment and earnings outcomes are estimated at 6, 12, 18, 24, 30, 36, 42 and 48 months after the unemployed become eligible for support (at 6 or 12 months, depending on the model estimated).

A positive and persistent effect is found on the likelihood of employment

This section presents the effect of programme participation on the probability of employment up to four years after an unemployed person becomes eligible for participation in the subsidised employment programme, which can correspond to up to 4.5 or 5 years since the unemployment start. These are fairly long-term effects of employment subsidies, in comparison with the existing literature on such programmes. Indeed, very few studies examine the long-term effects of employment subsidies in other countries and no such study exists in Latvia. In one example, Sianesi (2008[25]) estimates long-term effects of an employment programme in Sweden and finds a higher probability of employment for participants of about 40 percentage points just after the end of the programme, and 10 percentage points five years later. These effects are usually stronger for the LTU.

The results presented in Figure 5.20 suggest that the estimated effect of the programme is strong and positive no matter when persons become eligible for participation (at 6 or at 12 months). Participation in the programme increases the probability of employment by 43 percentage points 12 months after the clock starts (Figure 5.20, Panel A). The size of the estimated coefficient is large but plausible, as most programme participants are still in their subsidised job 12 months after they become eligible for participation, which implies at most 11 months after they started their participation in subsidised employment. The effect declines to reach 14 percentage points at 36 months and then increases again to 18 percentage points four years after the clock start (for the persons who have been unemployed for six months, (Figure 5.20, Panel A). The corresponding effects estimated with propensity score matching can be found in Annex Figure 5.A.4.

The effects are even larger for persons who have been unemployed for at least 12 months (Figure 5.20, Panel B) up to two years after they become eligible (at least in terms of the point estimates). A number of reasons may explain this finding. First, this group comprises the LTU for whom the maximum programme duration can last longer, going up to 24 months. Second, the LTU, are – in most cases – more difficult to place, and may thus benefit more from programme participation. Moreover, those persons who have stayed longer in unemployment before participating in the programme could have participated in other activation measures in between.

The size of the estimated effects (Figure 5.20) is close to those found in other papers in the related literature. The majority of papers estimating the effects of subsidies on labour market outcomes compare participants with other unemployed persons with similar characteristics using a propensity score matching model (Carling and Richardson, 2004[28]; Sianesi, 2008[25]; Jaenichen and Stephan, 2011[29]; Bernhard, Gartner and Stephan, 2008[30]; Neubäumer, 2010[31]). The estimated effect is large in most of these papers. For example, Sianesi (2008[25]) and Bernhard, Gartner and Stephan (2008[30]) find increases in the employment rate of 20-35 percentage points and 40 percentage points respectively.

The SEA monitors the outcomes of the employment subsidies programme using data from the State Revenue Service and its own system to follow participants' labour market outcomes after their participation in the measure, but these statistics do not distinguish between employment in the employer offering the subsidised job and employment in a new workplace. This is an important distinction for evaluating the effectiveness of the programme. Figure 5.20 (Panel B) presents the results of the estimations excluding persons who are still on subsidised jobs at up to four years after they became eligible for participation (i.e. after the clock start). This is an attempt to assess the capacity of the programme to help the unemployed transition into non-subsidised employment.

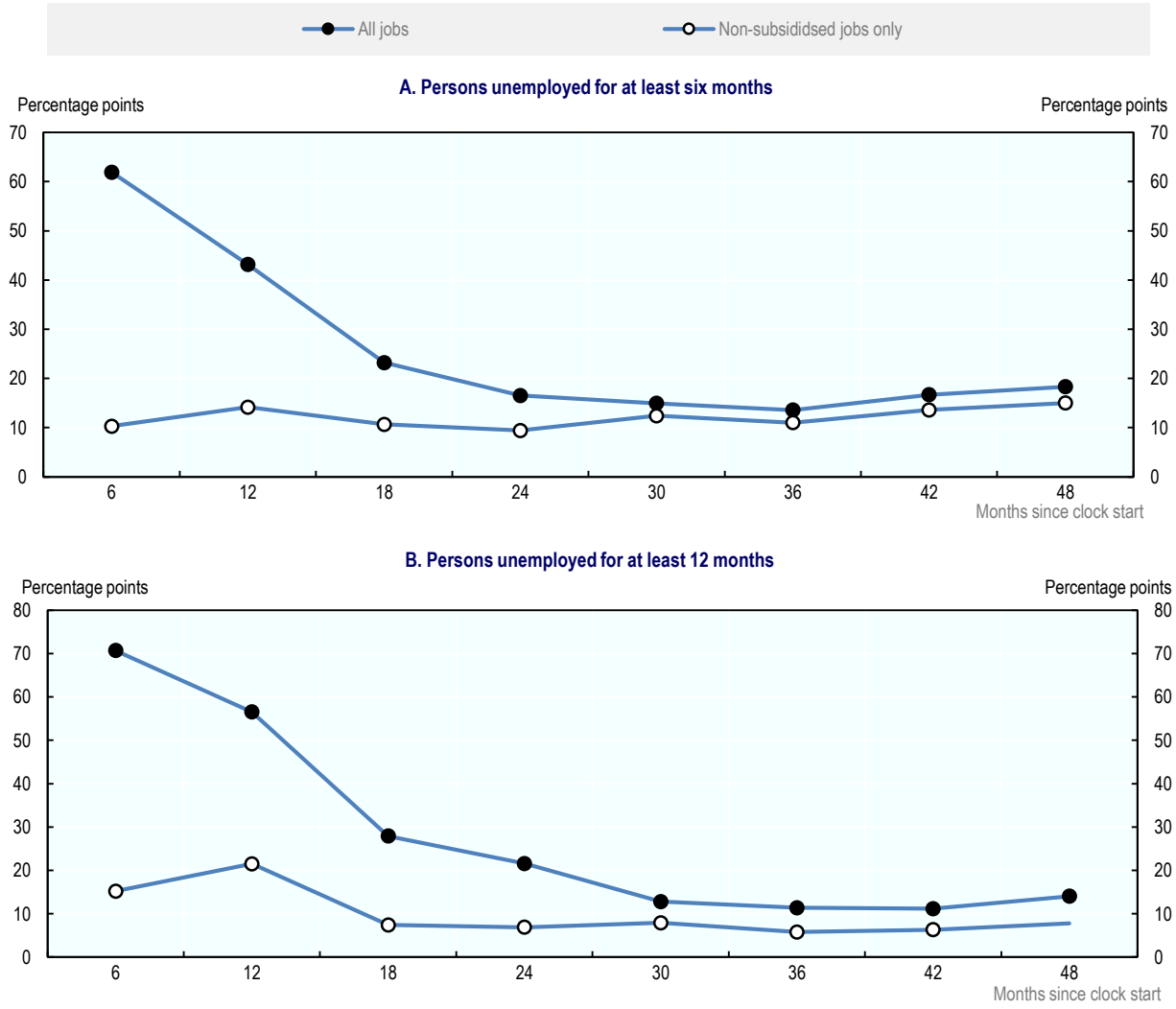
Overall, the impact of the programme on employment is lower when subsidised jobs are excluded, at least up to 24 months after the clock start (the respective results from propensity score matching are reported in Annex Figure 5.A.4). This result is well justified by the typical duration of the subsidies which can go up to 24 months for some groups of unemployed. The difference between the two lines in the two panels of Figure 5.20 gets smaller at 30 months after the clock start.

For persons who were unemployed for at least six months, programme participation is associated with a ten percentage points (11 percentage points) higher probability to be employed in a non-subsidised job 24 (36) months after they became eligible, and climbs to 15 percentage points at four years (Figure 5.20, Panel A). For those who had been unemployed for at least 12 months, the effect is seven percentage points at 24 months and six to eight percentage points thereafter (Figure 5.20, Panel B).

The programme is less effective for some groups of unemployed

To ascertain whether the effects of employment subsidies differ for certain sub-groups of the population, the analysis described above can be repeated with the sample restricted to i) individuals with disabilities; ii) individuals aged 55 and above; and iii) young people (20-29 years). Individuals are classified into these three groups according to their disability status and age at moment they register with the SEA. Rather than anchoring the analysis at six or 12 months after the month of registration as in the previous sub-section, instead the treatment group now comprises those who receive employment subsidies within six months of *registering* while the control group comprises those who receive no employment subsidies in that period. This is because different sub-groups – and even different individuals within the sub-groups – become eligible at different times. For example, disabled people and those aged 55 or more are eligible for at least some types of employment subsidies immediately after registering with the SEA, while young people may need to wait six months in unemployment to become eligible unless they have low educational attainment, limited work experience, or refugee status (see Table 5.3). The controls used are the same as in the analysis described above and the same specification tests have been performed.

Figure 5.20. The effect of programme participation on the probability of employment



Note: The clock is set to start at 6 months of unemployment for Panel A and at 12 months for Panel B and reflects the moment at which different groups of unemployed become eligible for participation in the programme. Therefore, the analysis includes all persons who have been unemployed for at least 6 and 12 months respectively. The reported coefficients represent the effect of the programme on the probability of employment in percentage points. Treated persons are those who participate in the subsidy programme within 6 months from the time the clock starts. The dependent variable is a dummy variable equal to one if the person is employed and zero otherwise. Every point in the figures indicate a coefficient on programme participation from a linear probability model. They are derived from a separate regression which includes controls for age, gender, education, ethnicity, disability status, household characteristics (any child in the household, urban residence), and regional dummies for regions all measured at the start of the clock. Profiling outcomes are also taken into account. Month of registration dummy variables and SEA branch fixed effects are also included in the regressions. Controls are included for participation prior to the clock start in formal training, non-formal training and other employment measures. The standard errors are clustered at the SEA branch level. The analysis is restricted to the region of common support. Missing dots in the figures indicate coefficients which are not significant at the 5% level.
Source: Latvian Office of Citizenship and Migration Affairs, Latvian Social Insurance Agency, Latvian State Employment Agency and OECD estimates.

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The results reported in Table 5.6 show strong positive effects for all three groups when all jobs (both subsidised and non-subsidised ones) are considered. The results phase out over time, reflecting precisely the fact that, in the first one to two years, many of these jobs are subsidised ones, which do not necessarily lead to non-subsidised employment. The decrease in the magnitude of the estimated coefficients kicks in earlier for youth than for persons with disabilities, reflecting again the longer duration of the subsidy for persons with disabilities than for many of the other beneficiaries.

When subsidised jobs are excluded from the analysis, the results are very different from those discussed in the previous paragraph. For persons with disabilities, the programme does not seem to have any significant effect on non-subsidised employment. In contrast, for youth, the estimated coefficients are initially smaller in size than the ones when all jobs are considered, but the results for all jobs and non-subsidised jobs become quite similar after 30 months. Young unemployed persons who participated in the programme have a seven (eight) percentage points higher probability of employment three (four) years after first registering with the SEA than similar unemployed youth who have not benefited from the programme. This suggests that there is a true effect of programme participation on non-subsidised employment for youth. For older persons, the results are quite mixed, but there is a positive and statistically significant effect three and four years after SEA registration.

Table 5.6. The effect of programme participation on the probability of employment for different population groups

	Months since unemployment spell start	6	12	18	24	30	36	42	48
Persons with disabilities	All jobs	0.724***	0.551***	0.295***	0.249***	0.031	0.051**	0.047*	0.123***
		(0.032)	(0.037)	(0.027)	(0.028)	(0.023)	(0.020)	(0.024)	(0.031)
	Non-subsidised jobs only	-0.004	-0.041	-0.047*	-0.034	-0.010	0.006	-0.033	0.021
		(0.047)	(0.031)	(0.025)	(0.029)	(0.026)	(0.023)	(0.027)	(0.035)
Youth	All jobs	0.539***	0.335***	0.137***	0.100***	0.094***	0.0.80***	0.084***	0.089***
		(0.021)	(0.018)	(0.020)	(0.020)	(0.023)	(0.023)	(0.028)	(0.025)
	Non-subsidised jobs only	0.023	0.069**	0.059***	0.041**	0.083***	0.066***	0.069**	0.077***
		(0.036)	(0.027)	(0.018)	(0.017)	(0.023)	(0.024)	(0.028)	(0.025)
Aged 55 and above	All jobs	0.703***	0.546***	0.207***	0.165***	0.089***	0.123***	0.062*	0.134***
		(0.027)	(0.038)	(0.037)	(0.038)	(0.032)	(0.036)	(0.036)	(0.049)
	Non-subsidised jobs only	-0.020	0.144***	0.000	0.030	0.041	0.092***	0.014	0.083*
		(0.058)	(0.052)	(0.036)	(0.038)	(0.028)	(0.034)	(0.033)	(0.045)

Note: The analysis includes all unemployed persons broken down in three (not mutually exclusive) groups: youth, persons aged 55 and above and persons with disabilities. The dependent variable is a dummy variable equal to one if the person is employed and zero otherwise. Every coefficient is derived from a separate linear probability model which includes controls for age, gender, education, ethnicity, disability status, household characteristics (any child in the household, urban residence), and regional dummies for regions, all measured at the start of the clock. Profiling outcomes are also taken into account. Month of registration dummy variables and SEA branch fixed effects are included in the regressions. Controls are included for participation prior to the clock start in formal training, non-formal training and other employment measures. The analysis is restricted to the region of common support. The standard errors (reported in brackets) are clustered at the SEA branch level.
Source: Latvian Office of Citizenship and Migration Affairs, Latvian Social Insurance Agency, Latvian State Employment Agency and OECD estimates.

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A positive effect on earnings is found three years after an unemployed person becomes eligible for participation

The analysis of the impact of employment subsidies on earnings finds a positive effect both when the clock starts at 6 months and when the clock starts at 12 months. Programme participation is associated with a 23% earnings premium at 12 months, 6% at 24 months and 9% at 36 months in the for persons who become eligible for participation after six months in unemployment. For those who need to be unemployed for at least 12 months in order to become eligible for programme participation (i.e. the clock starts at 12 months), the estimated coefficients are higher: 28% at 12 months and 17% at 36 months. When only non-subsidised jobs are included in the analysis, programme participation does not seem to significantly affect earnings. There is only a positive and statistically significant result of 6% at 36 months for persons who had been unemployed for 6 months before the clock starts and 12% for those who had been unemployed for 12 months.

Table 5.7. The effect of programme participation on earnings

	All jobs							
Months since clock start	6	12	18	24	30	36	42	48
Unemployed for at least 6 months	0.295***	0.231***	0.078**	0.064**	-0.027	0.091***	0.036	0.033
	(0.033)	(0.029)	(0.030)	(0.026)	(0.041)	(0.026)	(0.036)	(0.051)
Unemployed for at least 12 months	0.478***	0.283***	0.179***	0.070	0.079	0.170***	0.008	0.113
	(0.044)	(0.042)	(0.044)	(0.062)	(0.067)	(0.050)	(0.093)	(0.151)

	Non-subsidised jobs only							
Months since clock start	6	12	18	24	30	36	42	48
Unemployed for at least 6 months	0.108	-0.013	-0.008	0.029	-0.013	0.064**	0.008	-0.004
	(0.068)	(0.045)	(0.040)	(0.029)	(0.042)	(0.026)	(0.042)	(0.057)
Unemployed for at least 12 months	-0.045	-0.042	0.068	-0.022	0.023	0.116**	-0.085	0.027
	(0.151)	(0.089)	(0.073)	(0.073)	(0.073)	(0.053)	(0.109)	(0.174)

Note: The analysis includes persons who have been unemployed for 6 or 12 months. Treated persons are those who participate in the subsidy programme within 6 months from the time the clock starts. The upper panel considers all jobs, whereas the lower panel considers only non-subsidised jobs. The dependent variable is log earnings. Every coefficient is derived from a separate regression which includes controls for age, gender, education, ethnicity, disability status, household characteristics (any child in the household, urban residence), and regional dummies for regions all measured at the start of the clock. Profiling outcomes are also taken into account. Month of registration dummy variables and SEA branch fixed effects are also included in the regressions. Controls are included for participation prior to the clock start in formal training, non-formal training and other employment measures. The analysis is restricted to the region of common support. The standard errors (reported in brackets) are clustered at the SEA branch level.
Source: Latvian Office of Citizenship and Migration Affairs, Latvian Social Insurance Agency, Latvian State Employment Agency and OECD estimates.

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Assisting unemployed persons with disabilities

The results presented in the previous section suggest that the employment subsidies are less effective in boosting employment among persons with disabilities. There may be for a number of reasons behind this, including a relatively weak link between employment and social services and the need to increase the incentives for employers to hire persons with disabilities and support them to adapt to the workplace. Discriminatory practices may also

explain why participation in subsidised employment does not lead to employment for persons with disabilities after the end of the programme.

This negative finding should, however, be considered more broadly. Although boosting work outcomes is the main objective for activation measures targeting the unemployed, additional outcomes might be considered for persons with disabilities. For example, social integration and well-being outcomes may be equally important, or even more important, despite being much more difficult to measure.

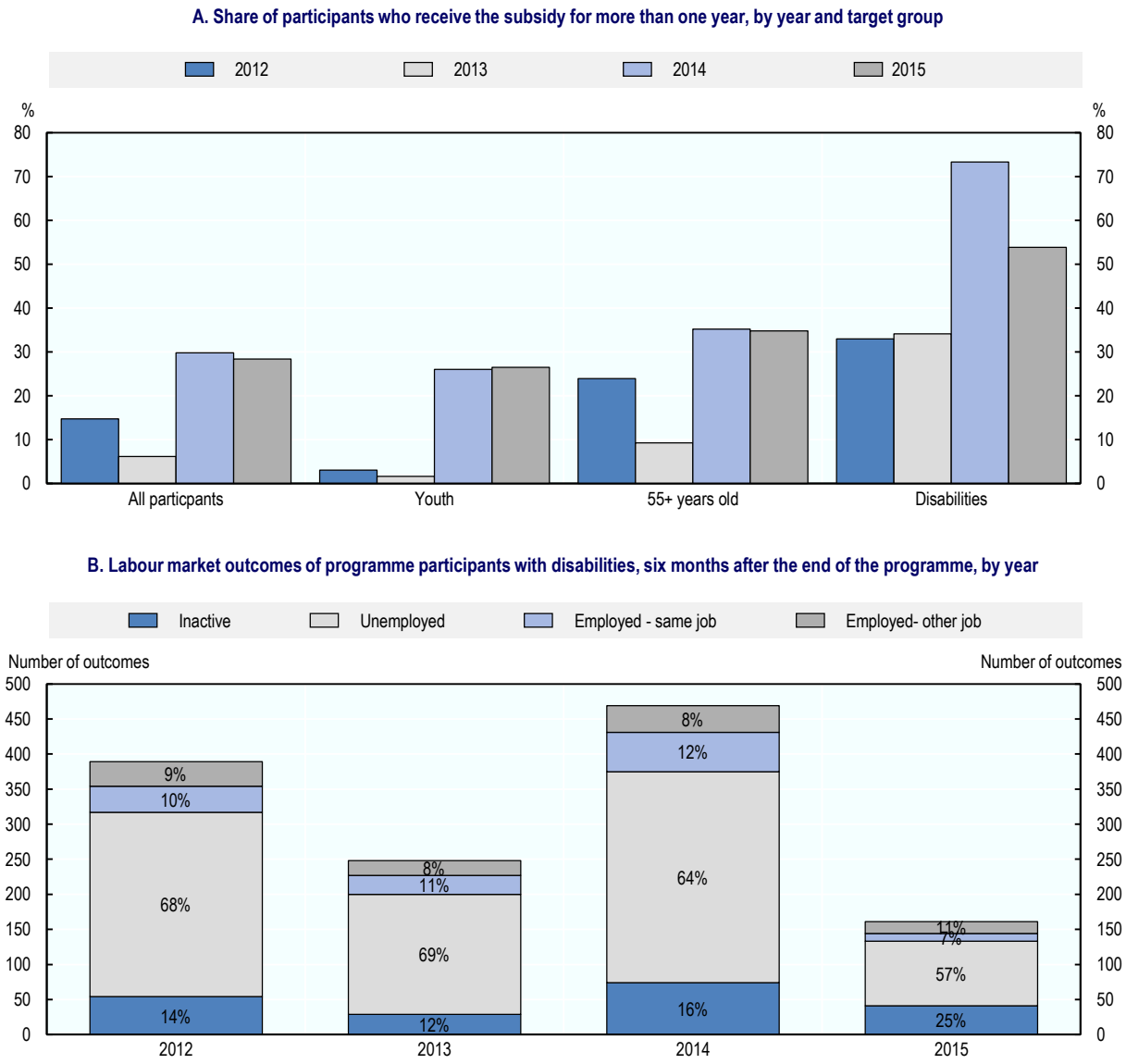
The temporary change in the maximum duration of the subsidy for persons with disabilities from 24 to 36 months in 2014 seemed to have an impact on the actual duration of subsidised employment for persons with disabilities. Although realised total duration never exceeded 24 months in total, there is evidence of an increase in the average duration, in particular for this group of unemployed persons in 2014 (Figure 5.21, Panel A). There was a simultaneous increase in subsidies' average durations for other target groups as well but this remains in 2015, whereas the increase observed for persons with disabilities can only be observed in 2014.

The number of participants with disabilities around the date when the maximum duration changed is too small to conduct an econometric analysis that would allow examining in a rigorous way whether this change was associated with better outcomes for unemployed persons with disabilities. Instead, it is possible to draw a simple comparison of the labour market outcomes of programme participants with disabilities before and after 2014. Figure 5.21 (Panel B) presents the labour market outcomes of former subsidy beneficiaries with disabilities six months after the end of the subsidy. There is no significant difference in the likelihood of employment between those who started their participation in the programme in 2014 and those who started before or after. Although these results do not represent any causal link between programme duration and labour market outcomes, they still hint towards the fact that extending the programme duration may do little for the group of unemployed persons with disabilities.

In many countries, subsidies offered to persons with disabilities – unlike subsidies for all vulnerable groups – are paid for long time periods, can extended several times, and can even go up to covering the entire duration of a job. This can happen, for instance, when there are no improvements in the work capacity of beneficiaries. Latvia's scheme is fairly flexible as it is available to a wide range of employers and is also fairly long in terms of maximum duration. However, renewal is not permitted and repeated participation is only allowed at least one year after the previous one.

Empirical evidence on the effectiveness of subsidies for persons with disabilities is rare. The few evaluations of the Flexjobs scheme in Denmark (Datta Gupta, Larsen and Thomsen, 2015[32]) and the wage subsidy scheme in Finland (Kangasharju, 2007[33]) find positive effects of the schemes (larger effects in the case of the Finnish scheme) but also evidence of deadweight loss (in the case of the Danish programme). Flexjobs concerns mainly part-time jobs and those where working conditions that can be adapted to the needs of the workers. Datta Gupta, Larsen and Thomsen (2015[32]) show that the scheme was effective among persons with less severe health conditions who were able to work. An evaluation of Sweden's subsidised employment scheme for persons with disabilities conducted in the early 2000s finds a small positive effect on employment, but also evidence of displacement effects, casting doubts about the overall efficiency of the programme (Calmfors, Forslund and Hemström, 2002[34]).

Figure 5.21. A short-lived change in the maximum duration of the subsidy for persons with disabilities



Note: In Panel A, the categories of youth/ persons aged 55 years and over and persons with disabilities are not mutually exclusive as for example youth (or older persons) with disabilities are counted under both the youth (older persons) group and that of participants with disabilities. Panel B reports the labour market outcomes of former subsidy beneficiaries six months after the end of the employment subsidy. The year reported in the Figure is the year when the subsidised job started. The analysis separates out persons who are employed in a new job from those who continue to be employed on the job for which they received the subsidy.
Source: Latvian Office of Citizenship and Migration Affairs, Latvian Social Insurance Agency, Latvian State Employment Agency and OECD estimates.

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Previous OECD work (OECD, 2010[35]) highlights the need for subsidies for persons with disabilities to be adaptable to changing circumstances on the side of the employer and the worker, notably to reflect changes in the work capacity of the persons with disabilities and

the changing job tasks and requirements. In the case of Latvia, the subsidy is fixed at 50% of the wage paid (with a cap of 1.5 the minimum wage for persons with disabilities). As such, the subsidy does not depend on assessed remaining work capacity or job-specific capacity. Moreover, there is no reassessment of the need for the subsidy at regular intervals nor is the subsidy amount and duration dependent on the person's work capacity or degree of disability as defined by the three disability groups according to the severity of their conditions. One option for consideration would be to differentiate the conditions of the subsidy (both its amount and duration) according to the person's specific needs and in accordance with the type of work to be performed. In addition, changes in the subsidy could be considered to match changes in the work capacity of the worker as well as changes in the job content. For persons with severe disabilities for whom this subsidy is absolutely necessary for them to have a job, the subsidy could take the form of a more permanent work-support measure.

Over the past few years, Latvia has introduced a number of new measures to further support the integration of persons with disabilities into the labour market. For example, mentoring support for unemployed persons with disabilities was introduced in 2018. For the moment, mentors are contracted by the SEA with public procurement procedures. Going forward, NGOs could be involved at the local level, given their deep knowledge of the needs and barriers that persons with disabilities face, which makes them well placed to assist the SEA in this role. Prior to participation in the six-month mentoring programme, clients follow a 20-day training course on CV writing, preparation for job search, etc. Moreover, all persons in disability groups I and II[6] (not only the unemployed ones) enjoy free use of public transport and some tax deductions.

Employers have a key role to play in hiring and retaining persons with disabilities and need to be trained to work with this group and be accompanied in this process. The SEA provides training and consultations to employers on a regular basis. A campaign to promote diversity among employers has been conducted by the Ministry of Welfare, but no further action or information campaign has been conducted by the SEA to promote the hiring of persons with disabilities among employers. It has been shown in other countries that small employers are likely to benefit more from wage subsidies for persons with disabilities, but such employers typically have limited information about the subsidies that are available to them.

The public works programme is useful for some groups of unemployed

Many OECD and developing countries have in place direct job creation schemes, which provide people with a source of income. Such schemes can be particularly useful during crisis periods where jobs are not available as they serve as emergency social safety nets. Moreover, they can help local authorities to maintain a decent level of public infrastructure (roads, schools, municipal buildings, etc.) in periods where public funds are limited. Nonetheless, critics suggest such schemes are imperfectly targeted with not-so-needy households and individuals participating in the scheme, as well as foregone employment opportunities.

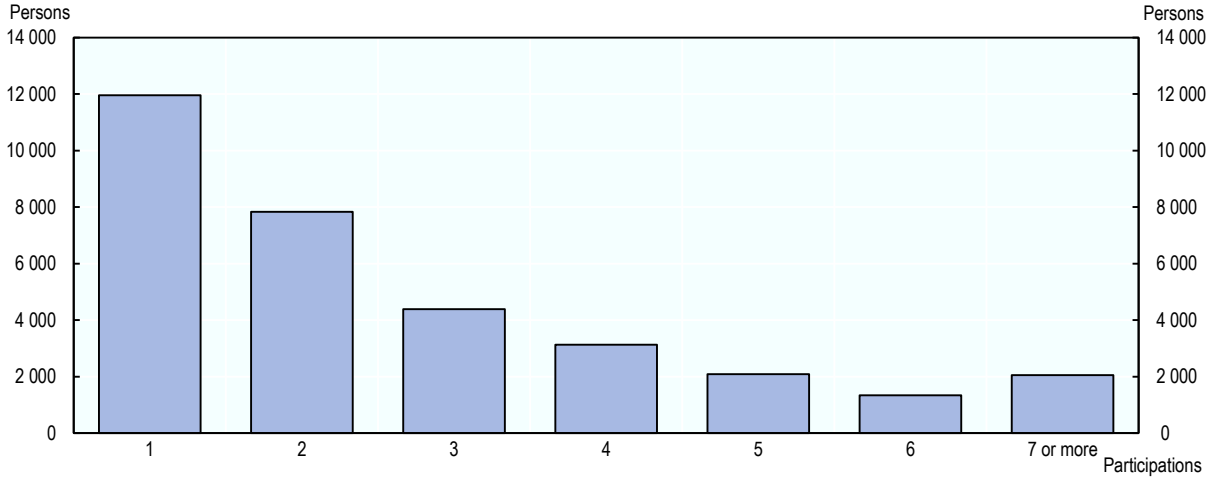
Direct job creation programmes, which include public works, represent 10% of Latvia's expenditure on ALMPs today, down from 34% in 2011. The "LVL 100" stipend programme (initially "Workplaces with stipend", replaced by the "Temporary Public Works Programme" in 2012), Latvia's main Public Work Programme (PWP), was introduced in September 2009 as a means to support household income and mitigate the effects of job and income losses, given that unemployment insurance and social assistance

reached only a small share of persons who were affected by the economic crisis. Moreover, the short duration of unemployment insurance left many eligible unemployed persons without income support.

Latvia's PWP mainly plays an activation and anti-poverty role, offering unemployed persons the possibility to acquire some work experience and earn a basic income (a monthly stipend of EUR 150 as well as social insurance contributions), while offering services to municipalities or non-profit organisations. Eligibility conditions include registration with the SEA for at least six months and non-receipt of unemployment benefits or old-age pensions. Persons who have been registered unemployed for less than six months but have been without employment in the past year are also eligible to participate in PWP. The tasks usually performed include services in schools and social care as well as infrastructure maintenance and repairing work. Using PWP to substitute existing employees is prohibited. Hires should be in newly created jobs or jobs that have been vacant for at least four months. During the programme, participants can devote two days a month to active job search under the guidance of the SEA or participate in short courses offered by the SEA.

The programme offers employment for up to four months (continuously or with interruptions) in a given year and participants cannot return before one whole year has elapsed.[7] Between January 2012 and October 2017, the period covered by the administrative data available for this Review, close to two thirds of participants benefited from the programme more than once and more than one quarter of all the participants participated in the programme four times or more Figure 5.22. Given that this is an underestimation of the total numbers of participations (they could well expand beyond that if data were available past October 2017), it becomes clear that repeated participation in the PWP is a life strategy for some individuals and households, especially in Latvia's remote areas.

Figure 5.22. Number of participations in the public works programme per person



Note: Refers to participations in the public works programme in the period between January 2012 and October 2017.
Source: Latvian State Employment Agency.

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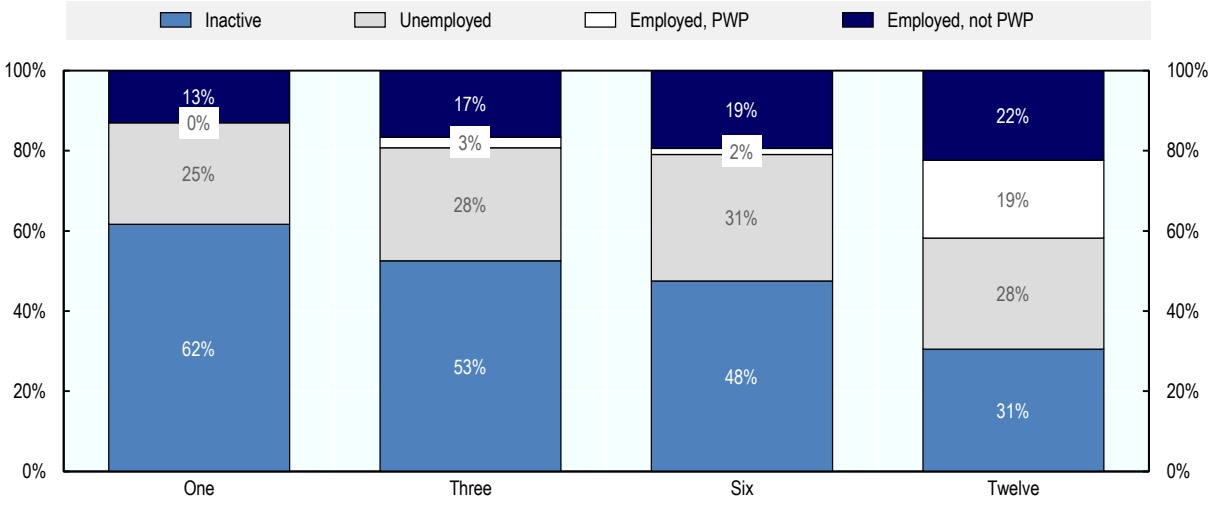
Latvia's PWP has been examined and evaluated from different perspectives by a number of studies. The evaluation by Azam, Ferré and Ajwad (2013[36]) uses propensity score matching and finds that the programme has been successful in raising participating households' incomes by 37% relative to similar households which did not participate in the PWP. Moreover, it may be well targeted to those persons most in need mainly because of the low amount of the benefit it offers and the work requirements that accompany the benefit. Furthermore, this evaluation finds only small effects in terms of forgone income. Public works plays the role of social protection during periods where jobs are scarce as was the case during the economic crisis and is often the case in remote areas, depending on seasonal labour demand.

This Chapter does not conduct an impact evaluation of the PWP on post-participation outcomes. Instead, Figure 5.23 reports the labour market outcomes of participants, one, three, 6 and 12 months after they left the programme. A number of interesting observations can be made. The share of former participants who find a job increases from 13% one month after the end of the programme to 41% one year later. This is mainly driven by the substantial share of participants who return to public works one year after their previous participation. Indeed, one in five former PWP participants return to the scheme one year later. Although it is unlikely that the programme creates employment beyond that offered under the scheme, it can have important effects on skill development and, in particular, on social inclusion for participants. The programme is used in a recurrent way by a number of unemployed or inactive persons as a safety net when there are limited alternative work opportunities and for this reason, it should be maintained. It is possible to quickly scale down (or up) such a scheme, depending on the prevailing economic conditions and on the prevalence of other ALMPs, as was done during and after the economic crisis.

Figure 5.23. Labour market outcomes of public works participants, at one, three, six and twelve months after the end of the programme



Note: PWP: Public Works Programme. This figure reports the labour market outcomes of former participants in public works, 3, 6 and 12 months after the end of the employment subsidy. For employed persons, it distinguishes between those who find employment in public works and elsewhere.
Source: Latvian Social Insurance Agency, Latvian State Employment Agency and OECD estimates.

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Using linked administrative data to evaluate the effectiveness of ALMPs

Latvia has a remarkable administrative data system in place, which makes it possible to link individual-level data from various sources and, in turn, analyse important labour market policy questions as well as many other socio-economic research and policy questions. This review has benefited from enormous efforts from the SEA and its data operator, UNISO, the State Social Insurance Agency, the Office of Citizenship and Migration Affairs, and ZZ Dats who maintain the municipal information system data base with the support of Latvia's 118 (out of 119) municipalities and who agreed to extract their data on social assistance.

A rich set of administrative data was provided to the OECD and was linked by the OECD team, which allowed for an in-depth and rich analysis of the impact of selected ALMPs to be carried out. Crucially, the linked administrative data made it possible to track individuals over relatively long time horizons, allowing both the short-term and longer-term impacts of programmes to be identified, and thus providing a better understanding of the mechanisms through which ALMPs may operate. Moreover, the detailed information on the participation of registered unemployed persons in all types of ALMP measures and on their interactions with the SEA allowed the review to explore how the effects of different elements of labour market policies interact. At the same time, having information on each individual's personal characteristics made it possible to control for observable differences between those participating and those not participating in a programme, reducing bias in the estimated impact of each programme that was evaluated.

Nonetheless, a number of limitations with the linked administrative data were identified in this Review. Some of them are driven by changes in the IT system used by the State Social Insurance Agency as well as Latvia's SEA. Other limitations concern missing – or difficult to acquire – parts of the data, such as full employment histories and certain training voucher information prior to November 2015.

It is important to maintain a well-developed system of detailed and linkable administrative data in order to facilitate the regular monitoring and evaluation of the effectiveness of activation measures. This data collection can also serve to answer other policy relevant questions, which are well beyond the field of activation policies. It is of primary importance to ensure comparability or some kind of continuity over time in the data produced in the system. This is a precondition for the assessment of policy changes and their impact on the outcomes of their target groups.

Latvia's efforts to build this rich data system requires further investment in human resources to build the necessary technical skills. This could be easily achieved in Latvia where investment in IT skills has been high. Lessons from other OECD countries (e.g. Estonia, the Netherlands, Norway, Germany, Flanders in Belgium, etc.) could be used to further boost Latvia's capacity in this field.

Notes

[1] The information on entitled persons is not available to the OECD team.

[2] In Latvia, after reaching retirement age a person with disabilities can either receive disability pension or old-age pension, and most persons with disabilities of retirement age switch to old-age pension. Still, given their disability status, they can be entitled for the transport compensation for persons with disabilities.

[3] It should be noted that the amount of the disability pension does not change after reassessment.

[4] From the 1st of July 2009 to December 31 2011, benefit entitlement required contributions for nine months out of the previous 12 months whereas before that it was 12 months within the previous 18 months.

[5] Full unemployment benefits were paid for the entire period of nine months if the contribution history was at 20 years and above; if the contribution history was 10-19 years, the full benefits were paid for 6 months; if the contribution history was less than ten years, full benefits were paid for four months only. For those months where the recipients were not entitled to full defined unemployment benefits, they received 45 LVL (EUR 64) per month.

[6] These groups include recipients of disability pension, old-age pension or state social security benefit, women on maternity leave, one of a child's parents or other person during a child care period, one of a disabled child's parents, if the child does not receive appropriate care services, as well as persons from 15 years of age who are acquiring full-time education in basic education, general secondary or vocational secondary education institution or either full-time students in higher education institutions.

[7] 22 months in the case of 2016-17.

[1] The relevant information is provided on the SEA website: http://www.nva.gov.lv/docs/32_5b8e575f211834.07019741.doc.

[2] This information corresponds to the participants for whom the start date of their employment subsidies is observed.

[3] Only persons with one job are included in the calculation of these statistics.

[4] Restricting the analysis to the area of common support ensures that the relationship that is estimated between the outcome variable and the control variables is not distorted by observations in the control group that were very unlikely to ever access employment subsidies and would therefore serve as poor comparators for observations in the treatment group. In other words, the extent to which the OLS regressions extrapolate the relationship between the outcome variable and the control variables from control observations to treatment observations (and, indeed, vice versa) is reduced.

[5] Any treatment group observations that had a propensity score greater than the maximum propensity score for the control group or less than the minimum propensity score for the control group were classified as off common support and were dropped. Equally, any control group observations that had a propensity score greater than the maximum propensity score for the treatment group or less than the minimum propensity score for the treatment group were classified as off common support and were dropped.

[6] Disability groups I and II include persons with severe disabilities, whereas disability group III refers to persons with milder disabilities.

[7] Only exception is for persons who did their training in local governments and return to work there as PWP participants.

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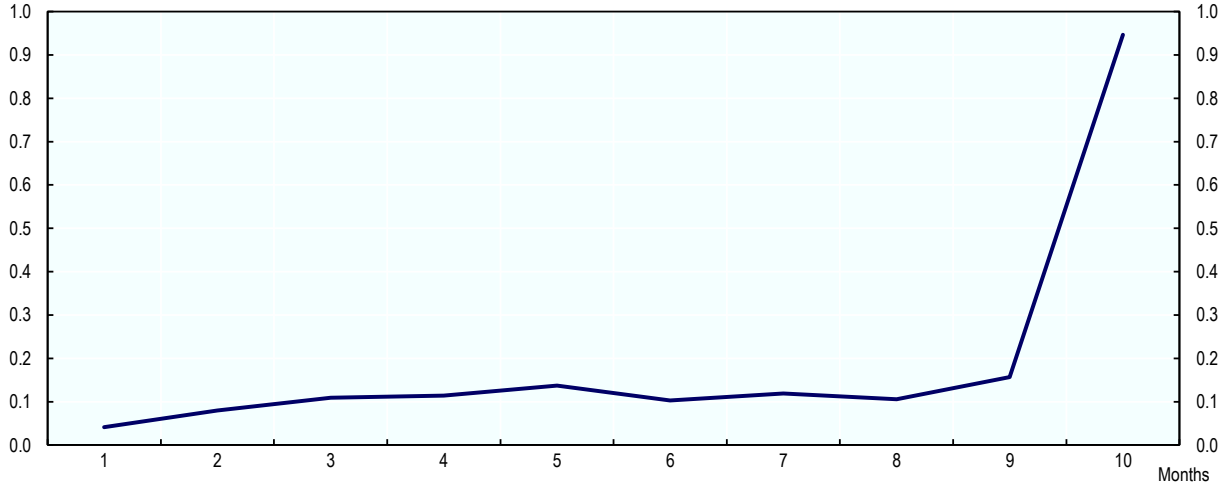
Annex 5.A. Additional figures

Annex Figure 5.A.1. Probability of exit from unemployment benefits

Exit rate by duration of benefit spell in months



Note: The sample includes beneficiaries of unemployment benefits aged 15-64, during the period January 2012 to October 2017.
Source: Latvian Social Insurance Agency and OECD estimates.

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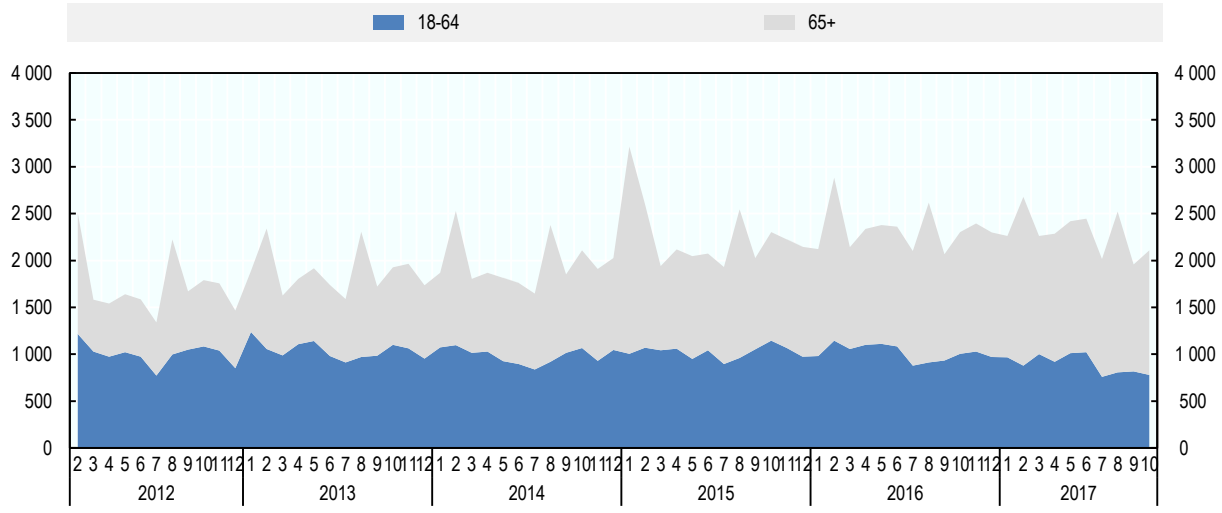
Annex Figure 5.A.2. Inflows into disability benefits, 2012-2017

Over time and by age group



Note: Only entrants (i.e. new disability benefit recipients) are included in the analysis. The figure shows the number of persons whose first observed disability benefit started in the reported observation month. Repeated disability benefit spells are not included in this graph.
Source: Latvian Social Insurance Agency and OECD estimates.

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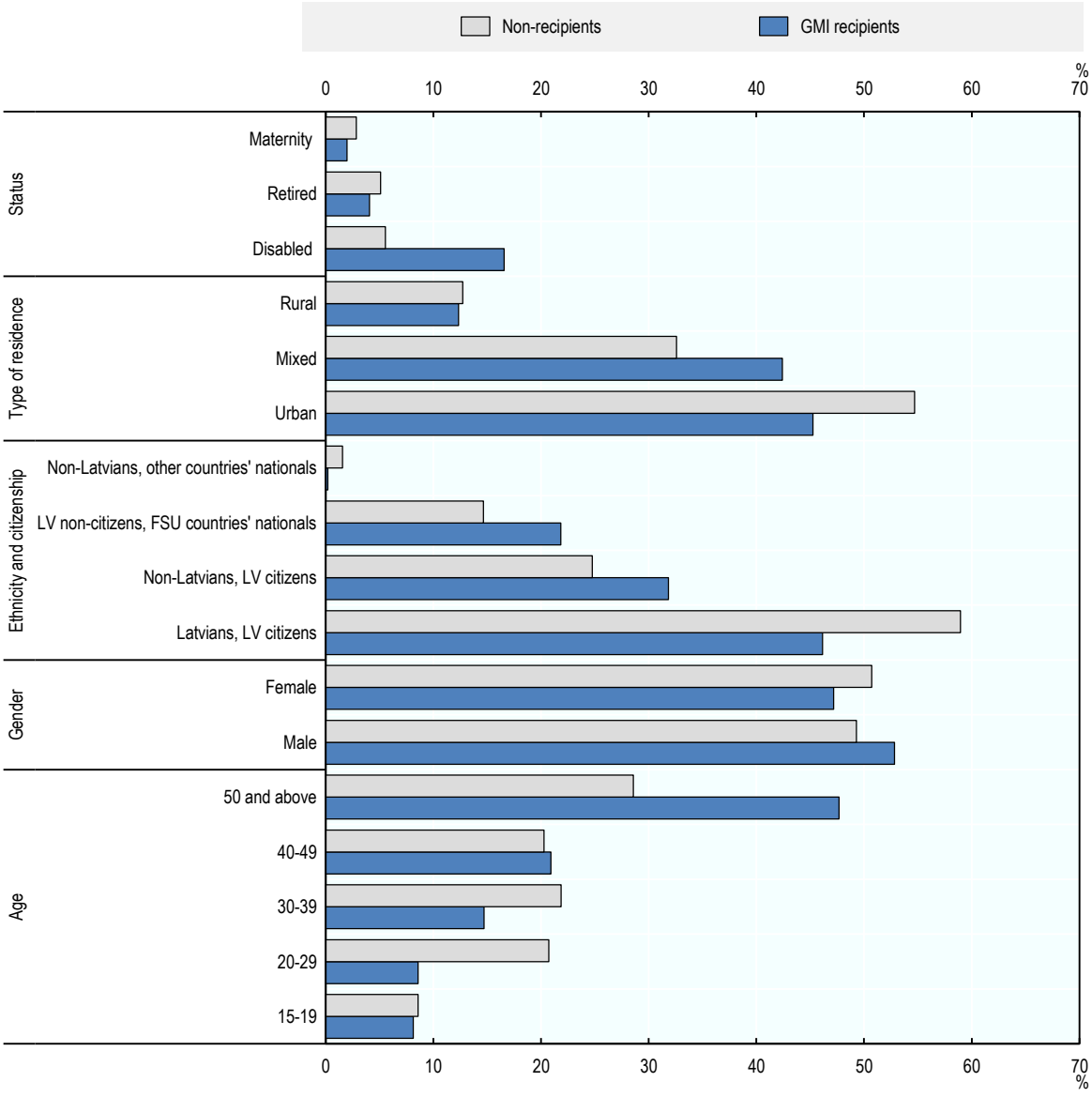
Annex Figure 5.A.3. Socio -economic characteristics of GMI benefit recipients and non-GMI beneficiaries, 2016-2017



Note: GMI: Guaranteed Minimum Income. This figure includes persons aged 15-64 and covers the period January 2016 to October 2017. Education is based on the SEA data and supplemented using SOPA data. Household size is derived from the SOPA data. Age and other personal characteristics indicated on this figure refer to January 2016.
Source: Latvian Office of Citizenship and Migration Affairs, Latvian Social Insurance Agency, Latvian State Employment Agency, Latvia's Municipal Information System Database and OECD estimates.

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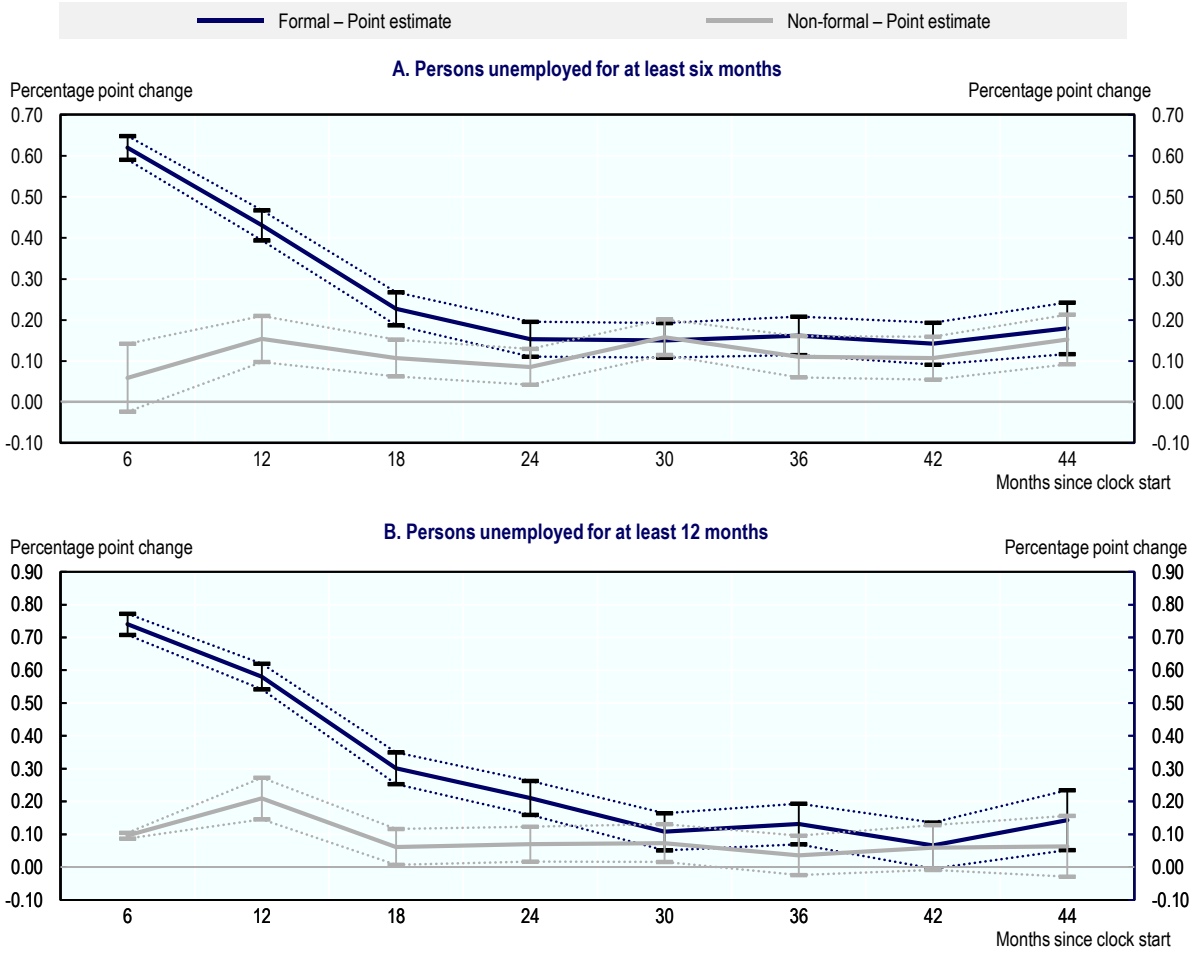
Annex Figure 5.A.4. The effect of programme participation on the probability of employment, results from Propensity Score Matching



Note: The clock is set to start at 6 months for Panel A and at 12 months for Panel B. The reported coefficients represent the effect of the programme on the probability of employment in percentage points. The analysis includes all persons who have been unemployed for at least 6 and 12 months respectively. Treated persons are those who participate in the subsidy programme within 6 months from the time the clock starts. The dependent variable is a dummy variable equal to one if the person is employed and zero otherwise. Every point in the figures indicate a coefficient on programme participation from a nearest neighbour matching estimator. Age, gender, education, ethnicity, disability status, household characteristics (any child in the household, urban residence), and regional dummies for regions all measured at the start of the clock are used for the matching. Profiling outcomes are also taken into account.
Source: Latvian Office of Citizenship and Migration Affairs, Latvian Social Insurance Agency, Latvian State Employment Agency and OECD estimates.

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Connecting People with Jobs

Evaluating Latvia's Active Labour Market Policies

This report on Latvia is the fifth country study published in a series of reports looking into how policies connect people with jobs. It focuses on Latvia's long-term unemployed and those at risk of long-term unemployment. The report analyses linked administrative microdata to evaluate quantitatively the impact of activation policies elaborated in Latvia's Inclusive Employment Strategy 2015-2020. More specifically, it assesses the effectiveness of training measures, employment subsidies and a programme promoting regional mobility. This report derives policy lessons from the empirical results to help the Latvian authorities adjust the activation strategies and measures in order to strengthen labour market participation of the unemployed and improve their labour market outcomes, helping them move into more productive and better quality jobs.

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