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LUXEMBOURG: HARNESSING SKILLS FOR MORE INCLUSIVE GROWTH

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By Jan Stráský

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ABSTRACT/RÉSUMÉ

Luxembourg: Harnessing skills for more inclusive growth

Digitalisation, automation and future technological changes are changing the world of work, affecting the skills needed to perform them. The future of jobs will not look like the present situation: increasingly, workers will have to adapt to fast technological change, accept more mobility during their career, and regularly upgrade their skills to remain employable. Luxembourg's workforce is highly skilled, reflecting the concentration in the country of sophisticated firms in the financial sector and other top-end international services. However, some middle-skilled routine jobs – especially back office, custodian and legal services in the financial sector – may disappear as a result of automation. Workers with strong and adaptable skills will be well prepared to thrive in this new environment. While many individuals working in Luxembourg already possess such characteristics, many others do not, resulting in a relatively high level of skills mismatch. Further improvements in the education system are needed to address this challenge, provide the young with learning-to-learn as well as technical capabilities and avoid that large groups of people are left behind. As skill sets will need to be updated during working careers, the system of initial education must be complemented by a flexible system of lifelong learning, tailored to the special needs of individuals with limited education attainment and older workers.

Better use of existing skills would entail reorienting labour market policies from supporting job creation towards high-quality training programmes with substantial on-the-job learning component and reflecting future labour market needs. The tax and benefit system needs to be adjusted to increase incentives to work for low-skilled youth, older workers and second earners. Fully individualised taxation would increase incentives to work of second earners and make the tax system more gender neutral, while an additional parental leave entitlement for fathers may result in more gender-balanced use of part-time work.

This Working Paper relates to the *2017 OECD Economic Survey of Luxembourg* (www.oecd.org/eco/surveys/economic-survey-luxembourg.htm).

JEL classification: I24, I25, I28, J21, J22, J24, J48.

Keywords: Luxembourg, skills, education system, vocational education and training, lifelong learning, labour markets, active labour market policies, long-term unemployment.

Luxembourg : mettre à profit les compétences pour que la croissance soit plus inclusive

Numérisation, automatisation et progrès technologiques poussent le monde du travail vers une mutation qui va influencer sur les compétences nécessaires pour accomplir les nouvelles tâches qu'elle implique. L'emploi va se transformer : de plus en plus, les travailleurs devront s'adapter à une rapide évolution technologique, accepter plus de mobilité tout au long de leur carrière, et améliorer régulièrement leurs compétences pour rester employables. La main-d'œuvre du Luxembourg est hautement qualifiée, reflète de la concentration d'entreprises spécialistes du secteur financier et autres services internationaux haut de gamme. Il se pourrait cependant que certains emplois moyennement qualifiés, consistant en tâches répétitives – notamment les services de post-marché, de conservation et juridiques dans le secteur financier –, disparaissent sous l'effet de l'automatisation. Les travailleurs dotés de compétences solides et adaptables seront bien préparés pour tirer parti de ce nouvel environnement. Si de nombreuses personnes travaillant au Luxembourg possèdent déjà de telles caractéristiques, ce n'est pas le cas de bien d'autres, ce qui se traduit par un niveau relativement élevé d'inadéquation des compétences. Le système éducatif doit faire l'objet de nouvelles améliorations afin de pouvoir relever ce défi, d'équiper les jeunes de capacités techniques mais aussi de leur apprendre à apprendre, et d'éviter que de grands pans de la population ne soient laissés pour compte. Comme les panoplies de compétences devront être actualisées au fil de la carrière professionnelle, le système de formation initiale doit être complété par un système souple d'apprentissage tout au long de la vie, adapté aux besoins spéciaux des personnes dotées d'un bagage scolaire limité et des travailleurs âgés.

Une meilleure exploitation des compétences existantes suppose de réorienter les politiques du marché du travail : au lieu d'appuyer la création d'emplois, elles devraient favoriser des programmes de formation de haute qualité, avec une forte composante d'apprentissage sur poste et en adéquation avec les besoins futurs du marché du travail. Le système de prélèvements et de prestations doit être ajusté de façon à renforcer les incitations à travailler pour les jeunes peu qualifiés, les travailleurs âgés et le deuxième contributeur de revenu au sein des ménages. Un régime d'imposition pleinement individualisé inciterait le deuxième membre des ménages à travailler et renforcerait la neutralité du système en fonction des sexes, tandis qu'un droit supplémentaire au congé parental pour les pères conduirait à un usage du travail à temps partiel plus équilibré entre hommes et femmes.

Ce Document de travail se rapporte à l'*Étude économique de l'OCDE du Luxembourg 2017* (<http://www.oecd.org/fr/economie/etude-economique-luxembourg.htm>)

Classification JEL : I24, I25, I28, J21, J22, J24, J48.

Mots clefs: Luxembourg, compétences, système d'éducation, enseignement et formation professionnelle, l'apprentissage tout au long de la vie, marchés du travail, politiques actives du marché du travail, chômage de longue durée.

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LUXEMBOURG: HARNESSING SKILLS FOR MORE INCLUSIVE GROWTH

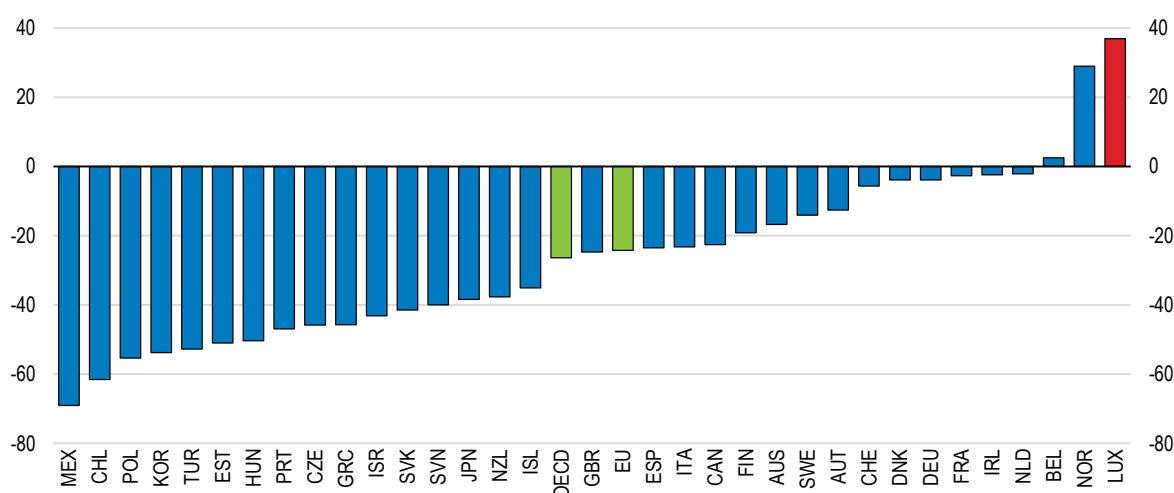
By Jan Stráský¹

The importance of skills and main challenges

Luxembourg is a high-income, high-wage economy that has consistently managed to keep a positive productivity differential vis-à-vis other OECD countries (Figure 1) by attracting top-end firms specialised in international services and workers with strong and adaptable skills. As Luxembourg prepares for a future of fast technological change, it will be crucial to adjust policy settings towards remaining attractive to such firms and highly-skilled workers. It will also be crucial to avoid leaving behind large groups of people currently lacking the necessary capacities to thrive in the digital economy. As a multilingual country, Luxembourg has a natural advantage in language skills, while substantial public investment into information and communication technologies infrastructure, including high speed internet, facilitates the development of computer skills (Figure 2).

Figure 1. High labour productivity reflects high level of skills

Gap with respect to the United States, per cent, 2015¹



1. Labour productivity is measured by GDP per hour worked.

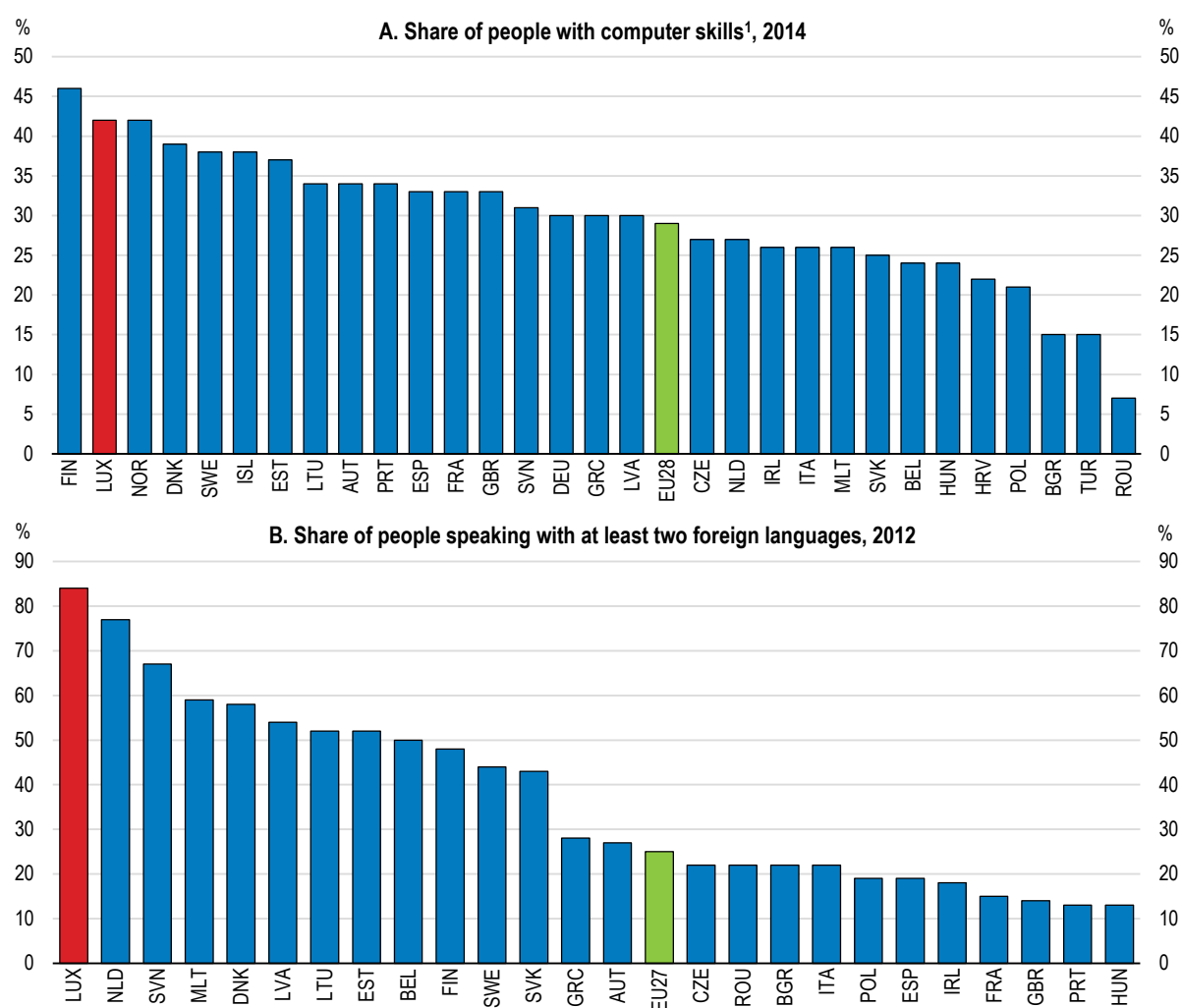
Source: OECD (2017), "GDP per capita and productivity levels", OECD Productivity Statistics (database).

The world of work is rapidly changing as a result of the development of the digital economy, with automation and digitalisation penetrating the domain of tasks that were until recently considered genuinely human and creating technological unemployment (Mokyr et al., 2015). Disruptive technological change is

1. Jan Stráský is an economist in the OECD Economics Department. The author is grateful to Pierre Beynet, Patrick Lenain, Gabriel Machlica, Álvaro Pereira, Álvaro Pina (all members of the OECD Economics Department), Bert Brys (OECD Centre for Tax Policy and Administration), Pauline Musset and Shane Samuelson (OECD Directorate for Education and Skills) for valuable comments and suggestions on earlier drafts. The author is also grateful for discussions with officials and independent experts from Luxembourg. Special thanks go to Corinne Chanteloup, Gábor Fulop and Hyunjeong Hwang (all members of the OECD Economics Department) for research assistance and to Claude-Annie Manga-Collard (OECD Economics Department) for editorial assistance.

affecting both jobs and the skill sets needed to perform them, leading to a potentially high likelihood of fast automation in some OECD countries (Arntz et al., 2016). Although the share of non-routine and low routine jobs is higher than in most OECD countries, somewhat limiting the risk of automation in Luxembourg (Marcolin et al., 2016), the labour market polarisation is underway. The demand for skills needed to perform abstract tasks (problem-solving, intuition, persuasion and creativity, in occupations such as law, medicine, science and engineering) and non-routine manual tasks (requiring adaptability, visual and language recognition and personal interactions in occupations such as personal health services and security) has increased strongly, while the demand for routine manual jobs (such as repetitive production or monitoring) declined only slightly (Figure 3).

Figure 2. Language and computer skills are above average



1. Share of individuals aged 16 to 74 reporting to have carried out five or six specific tasks related to computer use.

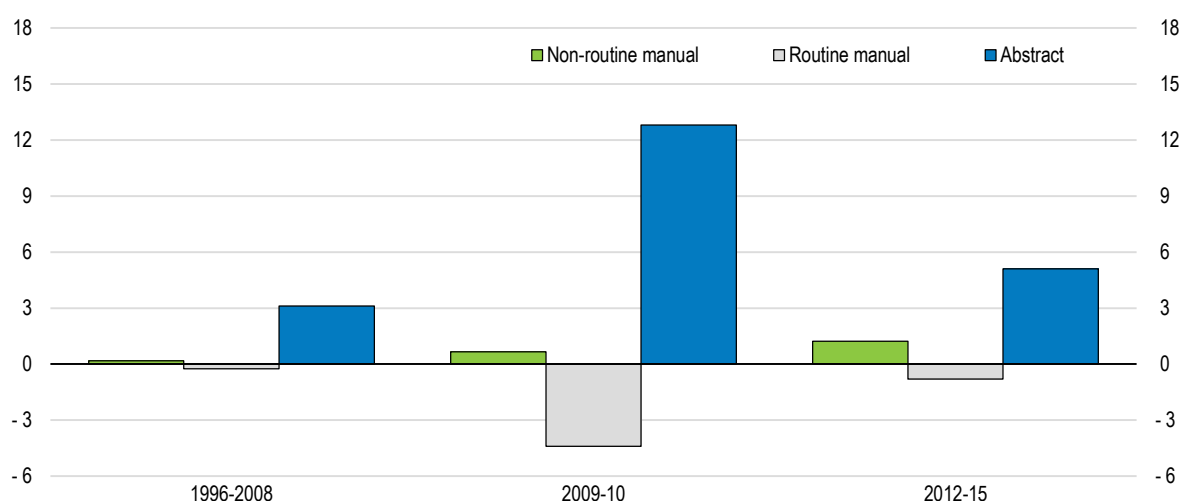
Source: Eurostat (2015), Individuals' level of computer skills; European Commission (2012), Special Eurobarometer 386: Europeans and their languages.

New financial technology is reinforcing the automation pressure on the mid-skilled financial sector jobs, such as back-office and data verification. Recent survey evidence suggests that incumbent financial firms in Luxembourg expect some 26% of the traditional financial business to be taken over by Fintech in

the next 5 years, especially in the area of asset and wealth management. At the same time, embracing Fintech innovations, such as low-cost analytics and big data, can lead to cost savings and other value chain improvements also for the traditional actors (PricewaterhouseCoopers, 2016). Although Luxembourg's financial sector withstood the 2008 financial crisis rather well, the experience from the restructuring of iron and steel industry suggests that without preventive measures Luxembourg may eventually suffer again the social consequences of a major restructuring (Box 1).

Figure 3. Labour market polarisation is changing the demand for skills

Average annual change in total employment by occupation categories requiring different tasks, thousand employed persons¹



1. Refers to population aged between 15 and 64. Abstract tasks refer to problem-solving, intuition, persuasion and creativity. Occupations attached to abstract tasks include managers, professionals, technicians and associate professionals. Routine manual tasks refer to well-understood procedures such as book-keeping, clerical and administrative work, repetitive production or monitoring. Occupations attached to routine tasks include clerical support workers, craft and related trades workers and plant and machine operators and assemblers. Although plant and machine operators and assemblers also include occupations such as drivers that should be classified as non-routine manual occupations, it is classified under routine manual occupations due to lack of data at 2-digit levels. Non-routine manual tasks refer to those requiring adaptability, visual and language recognition, and personal interactions. Occupations attached to non-routine tasks include service and sales workers. Occupations such as skilled agricultural, forestry and fishery workers, elementary occupations, armed forces occupations and those with no responses are not included. There is a structural break in the data due to change in classification in 2010/11. ISCO 08 classification 1-digit level.

Source: Eurostat (2017), Employment and unemployment (Labour Force Survey) (database), March.

The recent medium-term strategy of the government identified ambitious goals in the areas of sustainable energy consumption, mobility, industry and finance, outlining a vision centred on circular economy, openness to disruptive technological change and the diminishing distinction between production and consumption (Rifkin et al., 2016). The strategic study assessing the skills gap in the information and communication technology sector recently called for changes in the pedagogical framework and strengthening of online and computer-assisted learning approaches in closing the gap (Ant et al., 2016).

These strategic visions are welcome, as they position Luxembourg at the forefront of technology adopters. At the same time, the implications for education and lifelong learning to ensure meeting future skill needs should be elaborated. Legislation and regulations will have to be adjusted and new technical standards developed to enable the radical technological change, especially in the areas of green and circular growth. The effective impact of these strategic initiatives will depend on making the

economy more open to new talents and this chapter develops policy recommendations on how to further expand and make better use of existing skills.

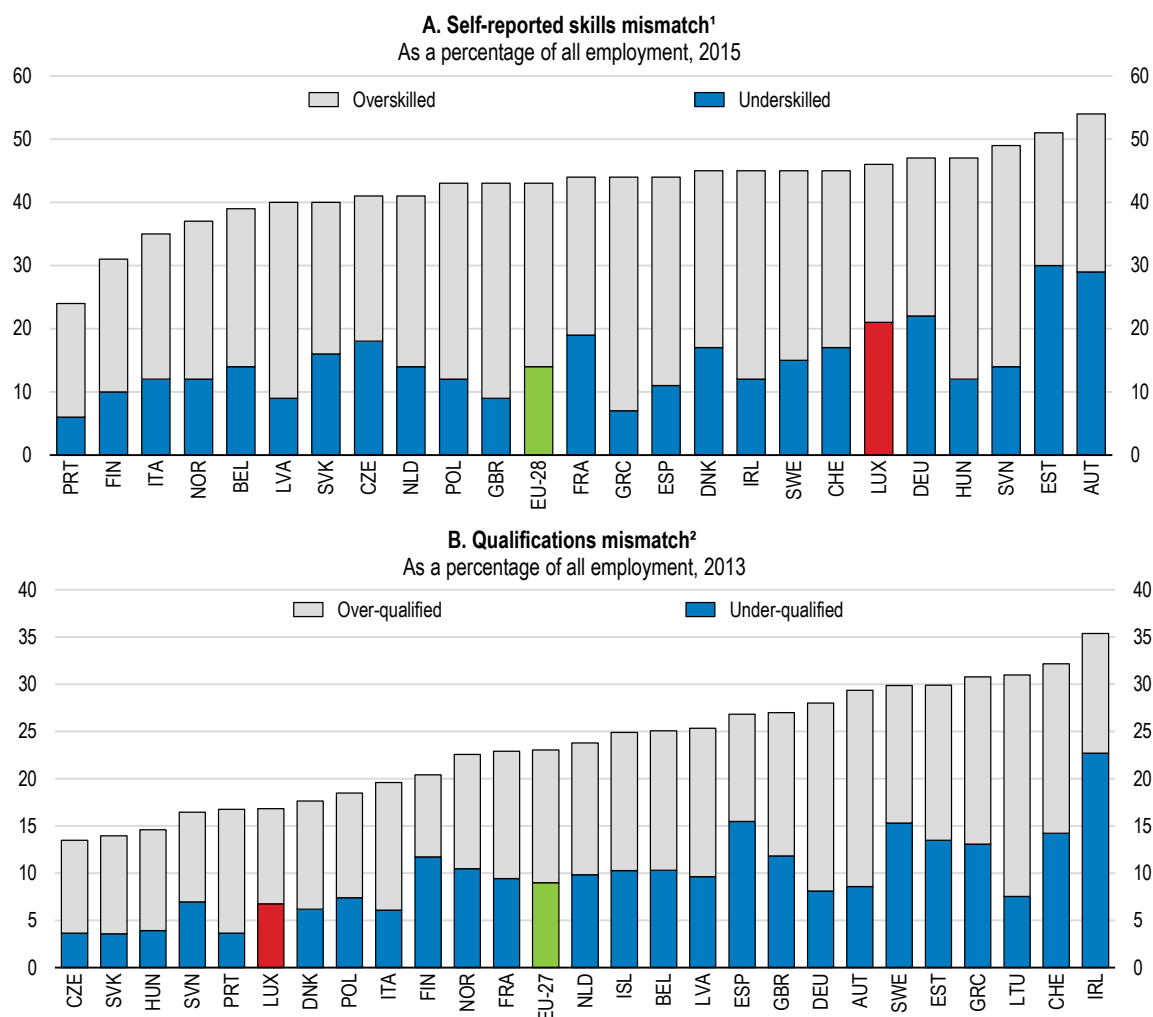
Box 1. The restructuring of Luxembourg's steel industry, 1975-1987

The world steel market collapsed in late 1974 and early 1975 with Luxembourg's steel output and prices falling by more than one third compared to 1974 averages. The government put in place policies for supporting employment and activity, which included subsidies to firms for compensating workers on short time working schemes, special public services projects to reduce unemployment and substantial aid to the Luxembourg railways (OECD, 1975). In addition, early retirement legislation enabling steel workers to bring forward their retirement was adopted in 1977. Almost 30% of workers that left the steel industry between 1975 and 1986 benefited from the early retirement scheme, which was extended to the whole private sector in 1987 (Government of Luxembourg, 2007). The number of people employed in the steel industry declined until 1978, mainly due to the fall in the labour market participation rate brought about by the early retirement programme. In 1979, thanks to strong growth in the construction and service sectors, the total number of persons in dependent employment increased slightly for the first time since 1975 (OECD, 1979).

At the institutional level, the crisis led to the creation of the tripartite system involving representatives of employers, workforce and public authorities. The original Economic Committee (Comité de conjuncture) developed into the Tripartite Steel Conference that in 1979 prepared a plan for and reached consensus on the restructuring and modernisation of the steel industry. The government also established the National Credit and Investment Company (Société nationale de crédit et d'investissement) that gradually invested into the main steel company ARBED (the united steelworks of Burbach, Eich and Dudelange), holding more than 40% of its total capital in the process. The costs of saving the steel industry in Luxembourg amounted to about 5% of the average budget expenditure from 1975 to 1987, while the share of steel production in total value added declined from 28% in 1970 to 9.8% in 1985 (STATEC, 1987).

Perceived mismatch in Luxembourg is, at more than 45%, above the EU average and relatively evenly divided between employees who perceived need for further training and those who felt they could cope with more demanding duties (Figure 4, Panel A). However, other measures, such as qualification mismatch, suggest less of a mismatch problem (Figure 4, Panel B). Persistent skills shortages can constrain the ability of firms to innovate, while skills mismatches reduce labour productivity due to misallocation of workers to jobs. Better skills, especially basic numeracy and literacy skills, also increase the chance of succeeding at school and finding a job, while the youth without a strong skills foundation are more likely to drop out of school and face difficulties finding jobs, resulting in greater risk of poverty. The need to foster better skills for all obliges governments to adapt education and training systems, to meet changes in the demand for skills, and to improve learning environments in schools and workplaces (OECD, 2015a).

Although the share of people with high level qualifications is well above the EU average, the projected needs for professional skills are even higher. Yet, the PISA results for 15 year-old students show skill levels in Luxembourg consistently below the OECD average for all three core competences, mathematics, reading and science (Figure 5). After two full cycles of the PISA assessments, there seems to be no clear trend and the gaps in performance appear stabilised. As discussed in more detail in Chapter 2, the below average position in overall PISA scores also reflect a composition effect due to the high number of immigrant students, but the challenge of improving the level of basic skills will have to be met. Similarly, the level of educational attainment in the working population is lower than the OECD average (Figure 6) and the upskilling of the labour force is lagging behind the best OECD performers (Figure 7).

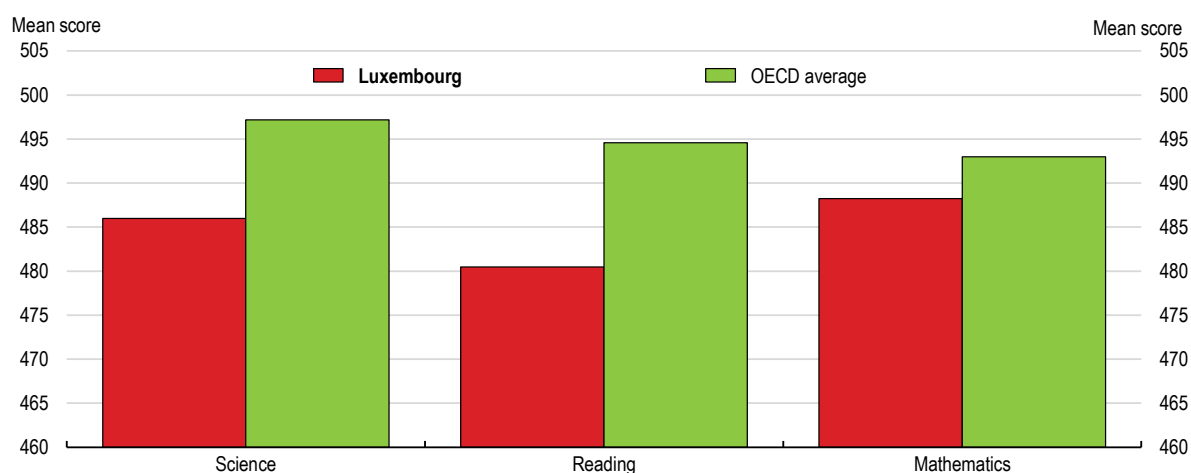
Figure 4. Some measures of skill mismatch are high

1. Workers are classified as underskilled if they report that they need further training to cope well with their duties or overskilled if they report that they have the skills to cope with more demanding duties.
2. Workers are classified as under-qualified (over-qualified) if their educational attainment (four categories) is lower (higher) than the modal educational attainment of workers in their occupation within the country.

Source: Sixth European Working Conditions Survey 2015; OECD (2016), Getting Skills Right: Assessing and Anticipating Changing Skill Needs.

Skills are not distributed evenly in Luxembourg. Many households rely on support from public transfers and low-skilled people are exposed to the risks of unemployment and poverty. Although the social benefits system is relatively efficient at redistributing market incomes, the risk of poverty, measured as a share of population below 60% of the median income after public transfers, increased by almost 2 percentage points between 2010 and 2014 and stood at 16.4%, below the EU-28 average of 17.2%, but above that of the Greater Region, the cross-border region comprising the adjacent areas of Belgium, Germany and France, at 15.6%, or in any of the neighbouring countries (IBA/OIE, 2016).

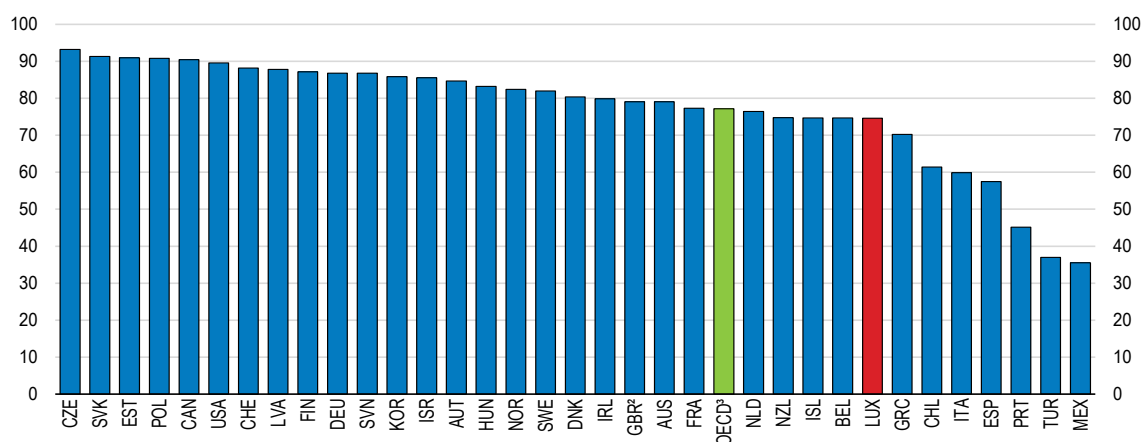
Figure 5. The overall PISA results show a persistent gap
Average PISA scores, 2009-2015



Source: OECD (2016), PISA 2015 Results (Volume I): Excellence and Equity in Education.

Figure 6. There is room for further improvement of skills

Percentage of working age population having attained at least upper secondary education, 2015¹

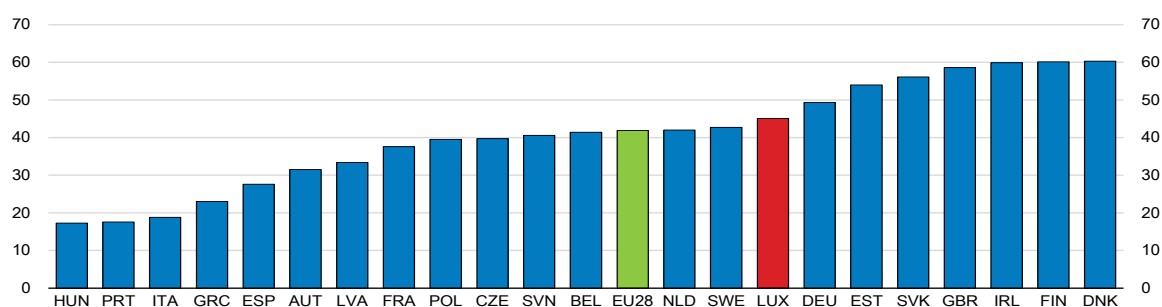


1. Working age population: 25-64 year-olds. 2013 for Chile and 2014 for France.
2. Includes completion of a sufficient volume and standard of programmes that would be classified individually as completion of intermediate upper secondary programmes (18% of the adults are under this group).
3. Unweighted average of data shown including Latvia.

Source: OECD (2016), Education at a Glance 2016: OECD Indicators.

Low labour force participation of the youth and older workers suggests that existing skills are underused in Luxembourg (Figure 8). Low conditionality and generous social transfers may contribute to this outcome by reducing incentives to work. Weak labour market attachment of certain groups of workers, evidenced by female unemployment rate exceeding male (Figure 9), high share of women in part-time work and the prevalence of temporary contracts among the youth, also limits the incentive to upskill through lifelong learning and professional training.

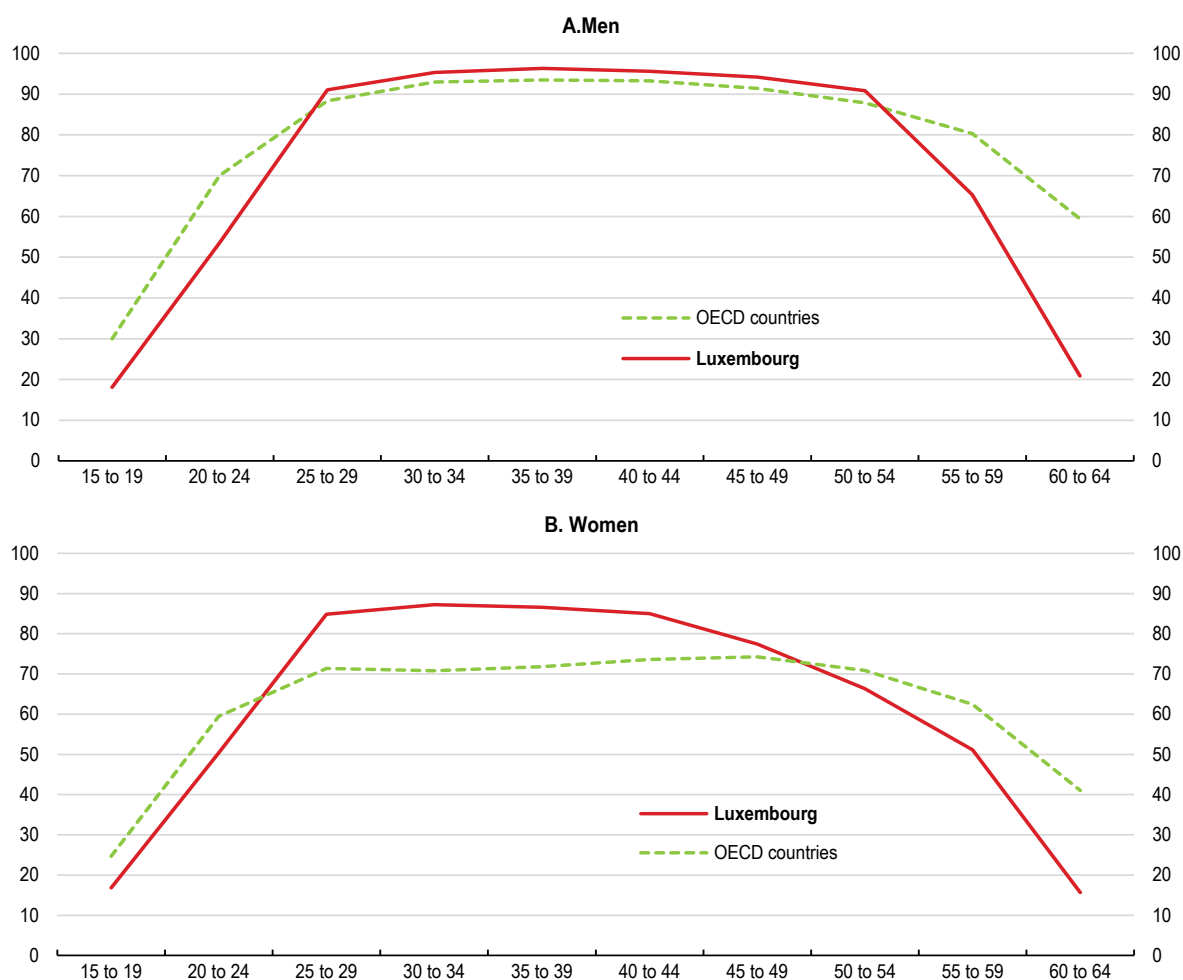
Figure 7. Upskilling of the labour force is lagging behind the best performers
 Per cent of persons who have received on-the-job training in the past year¹



1. Share of persons responding positively to the question "Have you had on-the-job training in the past year?".

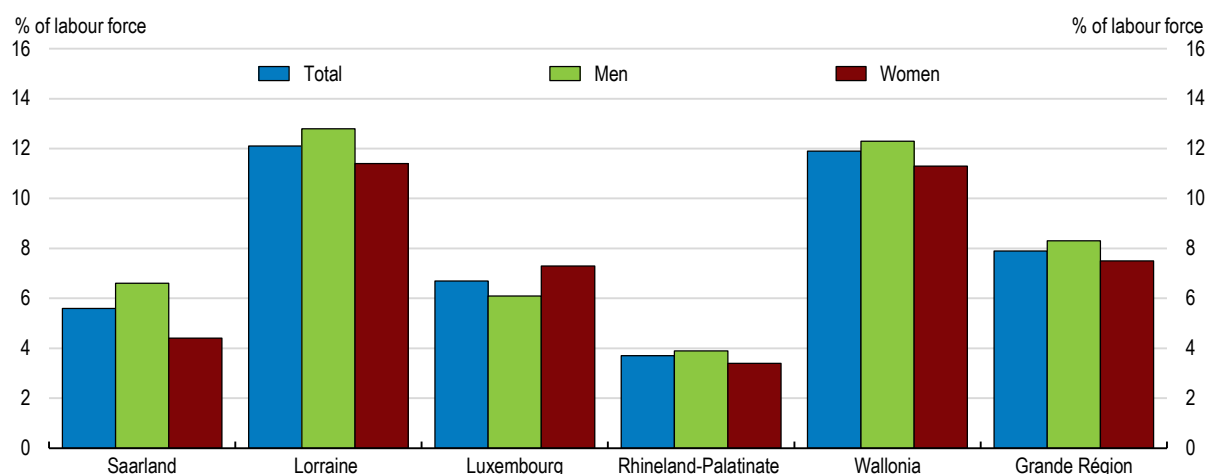
Source: Eurofound (2015), "Sixth European Working Conditions Survey: 2015", European Foundation for the Improvement of Living and Working Conditions.

Figure 8. Participation rates are low for the youngest and the oldest
 Labour participation rate by age brackets, per cent, 2015



Source: OECD Labour Force Statistics (database)

Figure 9. Female unemployment rate exceeds male
2015, age 15+



Source: IBA/OIE, Situation du marché de l'emploi dans la Grande Région, November 2016.

Policies ensuring flexible and continuously improving supply of skills

Analysing and anticipating changing skill needs

Skill assessment and anticipation exercises, such as skill needs assessments and forecasts, even though imperfect, are used in many OECD countries, providing information to stakeholders for better planning of education and training programmes in initial education and lifelong learning and for individuals to decide on their future careers and work, education and training paths (OECD 2016a). Skill assessment and anticipation instruments in Luxembourg are limited and confined to the medium term projections at sectoral level. Luxembourg's multi-sectoral business federation (FEDIL) has run biennial surveys of hiring intentions in the information and communication technologies (ICT) sector, in selected manufacturing sectors and in construction. The survey's results suggest employers' preference for upper-secondary qualifications.

At the EU level, the European Centre for the Development of Vocational Training (CEDEFOP) produces regular 10 year projections of trends in demand for skill, together with intermittent assessments of occupation mismatch. The 2016 report lists financial and administration professionals and ICT professionals as high shortage occupations for Luxembourg, mainly owing to growing demand and the difficulties of companies to find medium or highly qualified workers willing to come to Luxembourg. The shortage of qualified ICT workers is reflected in a high proportion of companies reporting hard-to-fill vacancies for ICT specialists, at 61% of enterprises that recruited or tried to recruit, compared to the EU average of 41% in 2016 (Eurostat, 2017). Other shortage occupations include medical doctors, due to the retirement of personnel and insufficient supply, as medical students need to pursue their studies abroad, beyond the first year offered at the University of Luxembourg (CEDEFOP, 2016). The long-term projection suggests that between 2013 and 2025, some 44% of jobs opportunities will require high-level qualifications (ISCED 5-6), although replacement demand would also mean opportunities for medium-level qualifications (ISCED 3-4). In 2025, about 49% of jobs could require higher skills, compared to 39% in 2013 (CEDEFOP, 2015).

Skills assessments and anticipation exercises can be a valuable input into policy making in several policy domains and should be used regularly to inform immediate policy interventions, such as

migration opportunities, as well as long-term policy orientations, for example in the employment and education policy (OECD, 2016a). In migration policy, information on skill needs is used, for example in Australia and the United Kingdom, to fast track workers with skills that are in high demand. In employment policy, skills assessments are used in, Australia, Belgium and New Zealand, to update occupational standards and design apprenticeships, re-training courses and on-the-job training programmes. In education policy, skills needs information is used in Portugal and Finland in curriculum development and career guidance that informs students' choice. In Canada, France, Ireland and Italy skill needs information is used to help in the transition to a greener and digital economy. In Luxembourg, where employment and education policies have regional cross-border implications, coordination within the Greater Region is essential in areas such as vocational and continuing education and recognition of professional qualifications. The government's attention to skills development in the programme for the presidency of the Greater Region in 2017 and 2018 is thus welcome.

Addressing future skill shortages through improvements in the education and training system

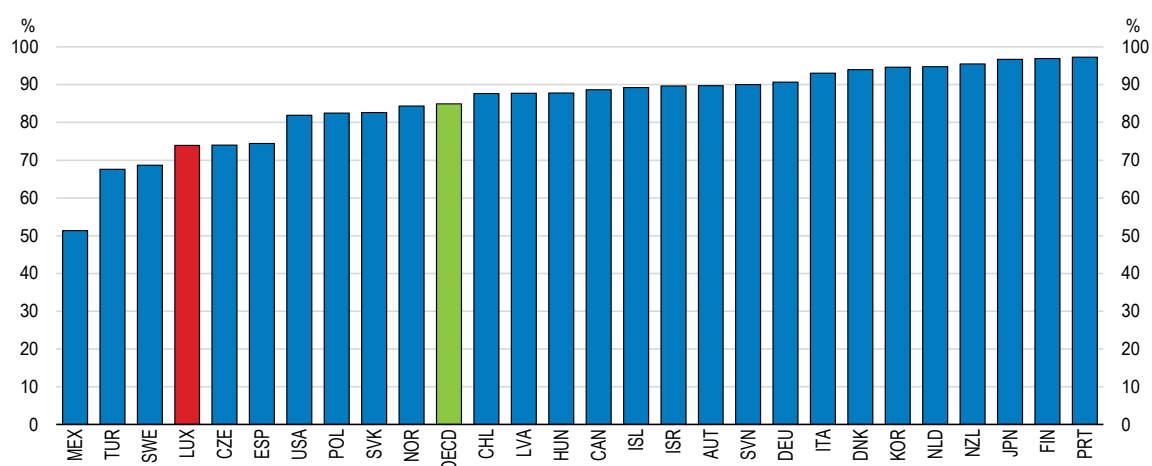
The ways to improve early childhood education are discussed in detail in Pina (2017) and primary education is successful in imparting the basic skills. It is at the beginning of the secondary education that the weaknesses of the system become more apparent as tracking decisions are made and grade repetition increases. Secondary and post-secondary education is also crucial in responding to labour market demand.

Secondary education in Luxembourg involves three separate tracks and students are separated according to their abilities at the age of 12. Although early tracking is sometimes believed to lead to more efficient learning, this is not without risks because it deprives low-performing students from interacting with stronger students and receiving positive benefits from this exposure. In addition, students in vocational tracks are often subject to a very different curriculum that sets them on a learning trajectory from which it is subsequently hard to escape. Because students develop at different paces, early tracking entails the risk of misallocation of students, a particular problem if initial misallocation cannot be easily rectified. Given the negative impact on students assigned to lower tracks, exacerbated inequities without raising average performance, as evidenced by persistent gaps in PISA performance, early tracking should be postponed to upper secondary levels and students should be given second chance to change tracks and be promoted upward whenever possible (OECD, 2015b). Even if students are tracked early, it is possible to mitigate the negative effects by introducing policies that increase flexibility to change tracks, such as temporary groupings with the possibility of changing tracks or classrooms, provide instruction differentiated by ability and ensure more aligned curricula between tracks (OECD, 2012a).

Grade repetition is widespread and concentrated in vocational secondary education, often reflecting language handicaps: while only 9% of 15 years old students in academic secondary education have repeated a year, the share is 36% in technical secondary education and 65% in the preparatory regime (*Ministère de l'Éducation Nationale, de l'Enfance et de la Jeunesse*, 2016). Despite its intention to provide more time to master the curriculum, grade repetition is costly and ineffective in raising educational outcomes. Students who repeat a year are more likely to drop out of school without qualification and they tend to hold more negative attitudes toward school than students who have not (OECD, 2016b). Some evidence even suggests that grade repetition in the earlier grades makes a student more likely to perform poorly later, as teachers may form lower expectations for these students or the students may find it more difficult to integrate into peer and school cultures (Kaplan, Peck and Kaplan, 1997; Roderick, 1994). More productive strategies focus on providing early, regular and timely support, including addressing learning gaps during the school year and limiting repetition to subjects or modules failed. Decreasing grade repetition also requires raising awareness across schools and society about the costs and negative impact on students and setting objectives and aligning incentives for schools (OECD, 2012a).

Successful completion of secondary education usually gives individuals better employment prospects. More educated people are also less dependent on public aid and better prepared to adjust to future changes. However, Luxembourg has, probably also due to the system of early tracking and widespread grade repetition, low completion rates in secondary education compared to other OECD countries (Figure 10). The graduation rates in vocational education and training are particularly low: two years after the expected graduation time only 64% of vocational education and training students in Luxembourg finish their course, compared to the OECD average of 79% (OECD, 2016c). This is a serious concern given the high enrolment rate in vocational education and training at 60% in 2015, compared to the OECD average of 46% (Figure 11).

Figure 10. Successful completion rates in secondary education are low
First-time graduation rates, upper secondary, 2014



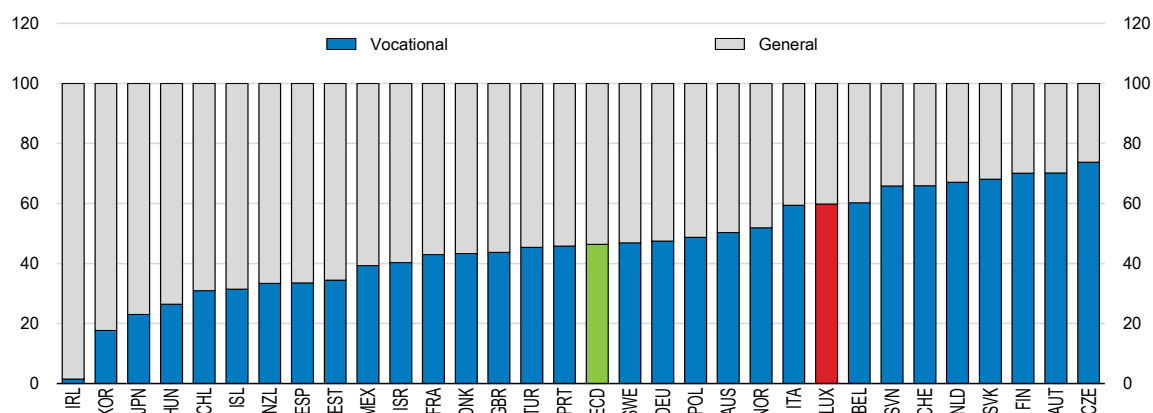
Source: OECD (2016), Education at a Glance 2016: OECD Indicators.

Vocational education and training (VET) should equip young people with technical and professional skills which not only meet labour market needs, but also open opportunities for further learning (OECD, 2010). VET programmes of study with a strong work-based learning component developed in close co-operation with employers and other stakeholders can lead to acquisition of valuable skills, while ensuring quality through employers' participation (OECD, 2015a). In Luxembourg, initial VET comprises 4 programmes into which students are tracked at the end of technical lower secondary education. These programmes lead, in decreasing order of depth and access to further studies, to the technical secondary school leaving diploma (DFEST, which gives access, *inter alia*, to academic tertiary education), the technician diploma (DT), the vocational aptitude diploma (DAP, often the minimum level required by firms) and the vocational capacity certificate (CCP, which only gives access to the DAP).

In 2008, an ambitious VET reform, largely inspired by the German and Swiss examples, attempted to introduce competence-based, modular learning with a stronger articulation between school and workplace training. However, this reform has faced major implementation difficulties, which are still being dealt with. Some difficulties have stemmed from insufficient preparation and stakeholder ownership, while others are rooted in more fundamental weaknesses of the education system. Legal texts were seen as complex and sometimes ambiguous, pedagogical documents for different trades had very unequal quality and teachers were often unprepared for the reform (Université du Luxembourg, 2015). Further, organising second opportunities for unachieved modules has in many schools proved difficult. The authorities have responded with successive adjustments, such as recently relaxing the principle that successful completion of all modules is required.

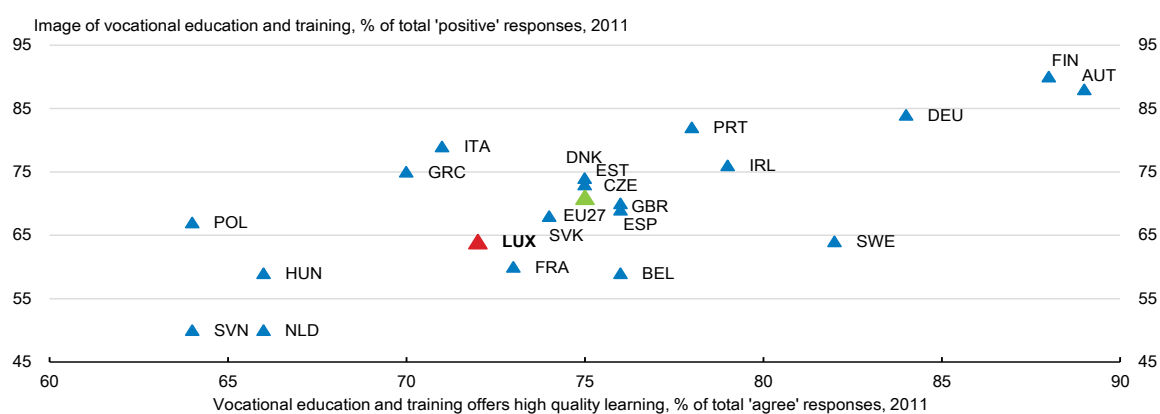
Figure 11. Enrolment in Vocational Education and Training is high

Percentage of upper-secondary students enrolled in general vs. vocational programmes, 2013



Source: OECD (2015), Education at a Glance 2015: OECD Indicators.

The social standing of vocational education and training is modest and could be improved (Figure 12). The weak general skills of many students and the meagre chances of upgrading to more advanced programmes pose even harder challenges. For instance, holders of a vocational capacity certificate often find it hard to join a vocational aptitude diploma programme, and holders of a vocational aptitude diploma may struggle in a technician diploma programme (*Université du Luxembourg*, 2015). Furthermore, students in a vocational capacity certificate programme sometimes cannot find an apprenticeship place (*Chambre des Salariés Luxembourg*, 2016), which threatens programme completion. Unsurprisingly, vocational capacity certificate students often face difficult school-to-work transitions, with long spells of unemployment or inactivity (*Observatoire de la Formation*, 2016).

Figure 12. Perceived vocational education and training image and quality are modest

Source: European Commission (2011), "Attitudes towards vocational education and training", Special Eurobarometer, No. 369, September.

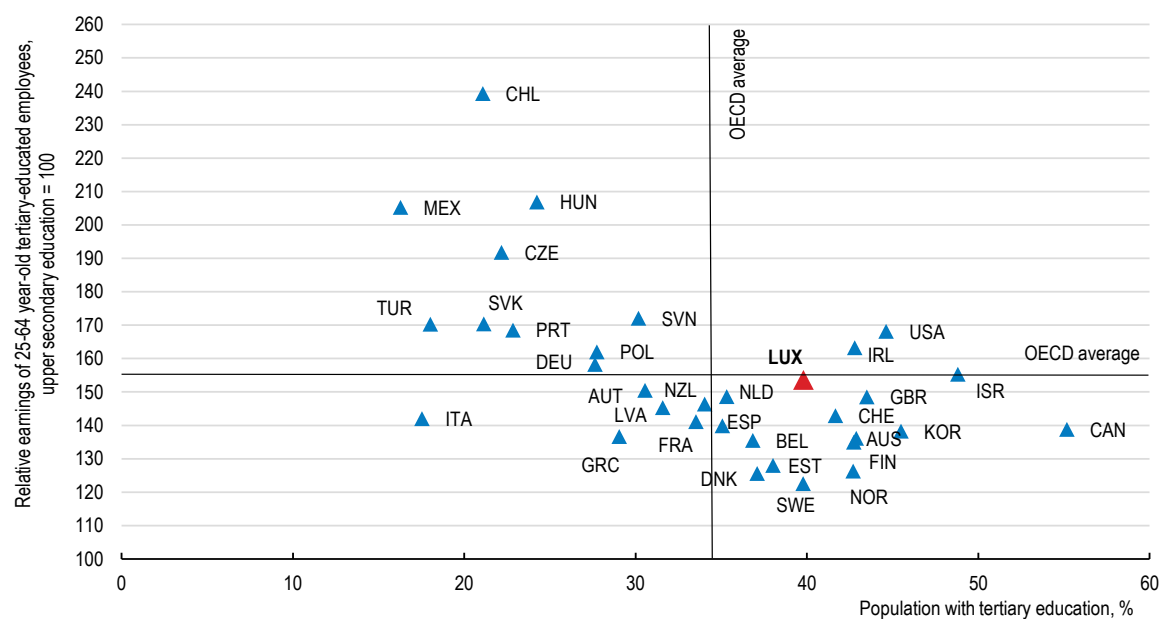
In co-operation with the different stakeholders, the authorities should continue to improve the organisation and curricula of VET programmes, placing particular emphasis on better integration of related trades across programmes, so as to enable students to upgrade to more advanced tracks. High-quality VET programmes, imparting similar generic skills as in more academic upper secondary programmes, better linked to the other parts of the education system, would help closing the gap between graduates of

academic and vocational tracks, both in terms of skills and earnings. Further, building on current plans for secondary education reform, tracking decisions should be improved to reduce the stigma associated to some programmes and take a broader perspective of a student's strengths and weaknesses. For instance, decisions could allow greater tolerance of weaknesses in either French or German, if a student's performance is otherwise satisfactory. Stronger links between upper secondary VET and post-secondary programmes, both vocational and academic, would facilitate ongoing professional development, broadening of skills and lateral career moves (OECD, 2014a).

Tertiary education sector is crucial in providing flexible skills and the authorities have substantially increased public investment in tertiary education in recent years. Between 2013 and 2015, the public funding of the University of Luxembourg, comprising state endowment, seconded personnel and other public funding, increased from 129 to 155 million euro, mainly reflecting increases in staff and research activity, while the number of students remained virtually unchanged (OECD, 2016d; *Université du Luxembourg*, 2016). The level of tertiary education attainment is high by the OECD standards and the wage premia associated with a university degree close to the OECD average (Figure 13). The incentives to pursue tertiary education are strong in Luxembourg, including basically free tuition, an expanding amount of scholarships and child benefits for those in full-time education until the age of 26 years. Targeted grants to students and more information about graduate labour market outcomes could help align the choice of the field of study with market signals reflecting future skill needs and encourage students to complete their studies within foreseen time limits (OECD, 2017a).

Figure 13. The share of tertiary-educated population is high

Relative earnings of tertiary-educated workers and their share in the population, 2014 or latest available data



Note: Tertiary education includes short cycle tertiary, bachelor's, master's, doctoral or equivalent degrees. Data on educational attainment refers to year 2015 or latest available year.

Source: OECD (2016), Education at a Glance 2016, Tables A1.3 and A6.1.

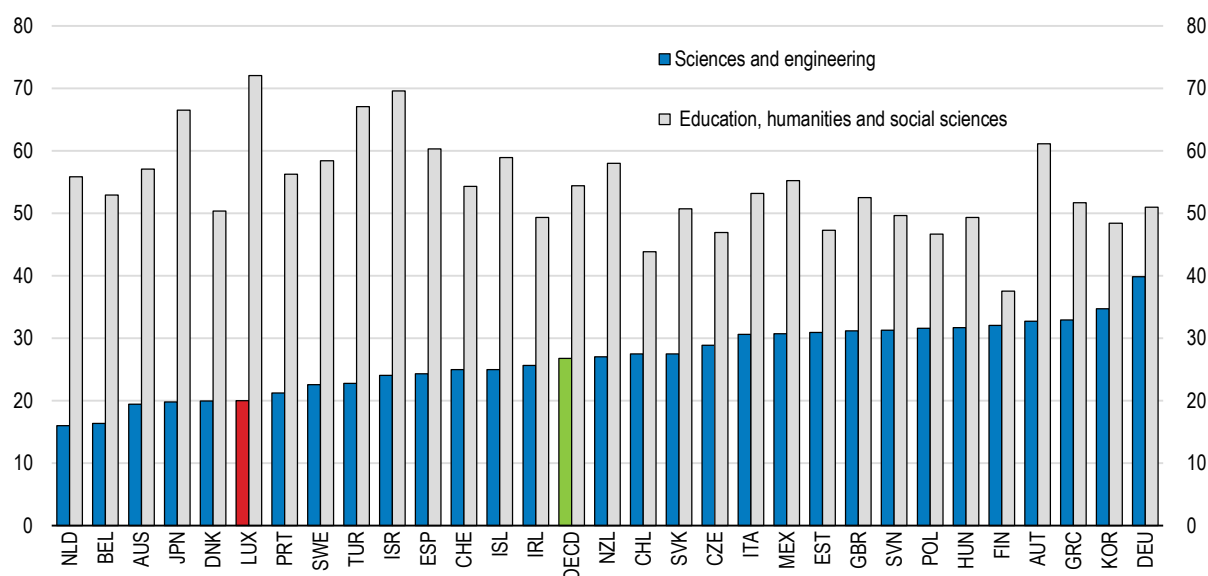
Although skills such as creativity and entrepreneurial capacity may facilitate innovation, traditional education policies aimed at improving innovation focus on increasing the number of graduates in science, technology, engineering and mathematics (OECD, 2012b). Very few tertiary students in Luxembourg, 3.6 per 1 000 people aged 20 to 29 compared to the EU average of 18, graduate in science, technology, engineering and mathematics, but the low number also reflects the fact that most students do

their studies abroad and are not included in the statistics (Figure 14). As in most European countries, science, technology, engineering and mathematics professionals in Luxembourg tend to earn more than other groups, partly reflecting demand for their particular skills (Goos et al., 2013). Yet, there is a widespread perception that young people are not very interested in scientific careers and initiatives, such as Go4Science and ProScience, were set up to promote science among students of all ages (OECD, 2016e).

Counselling and career guidance can boost skills by improving the match between young people and their chosen path. It can strengthen social mobility by informing young people of career paths that their family and social networks may not suggest, and encouraging them to choose paths more likely to lead to stable employment. Career guidance is of special importance to young people who consider vocational education and training as they affect students' career prospects more directly than general secondary programmes. Employers and other stakeholders should be engaged in career guidance, through career fairs and employer workshops, to support effective school-to-work transitions and to provide individuals with timely information on the market returns of various career paths and indicators of labour market outcomes of alumni by institutions and programmes (OECD, 2014b). Internships can also help orienting students on the labour market by providing first work experience and building links with local employers and thus play a positive role in career guidance. The share of the youth exposed to some form of career guidance is above the OECD average, but the number of internships could be increased, potentially beyond vocational education tracks (Figure 15).

Figure 14. Students are not interested in science and engineering careers

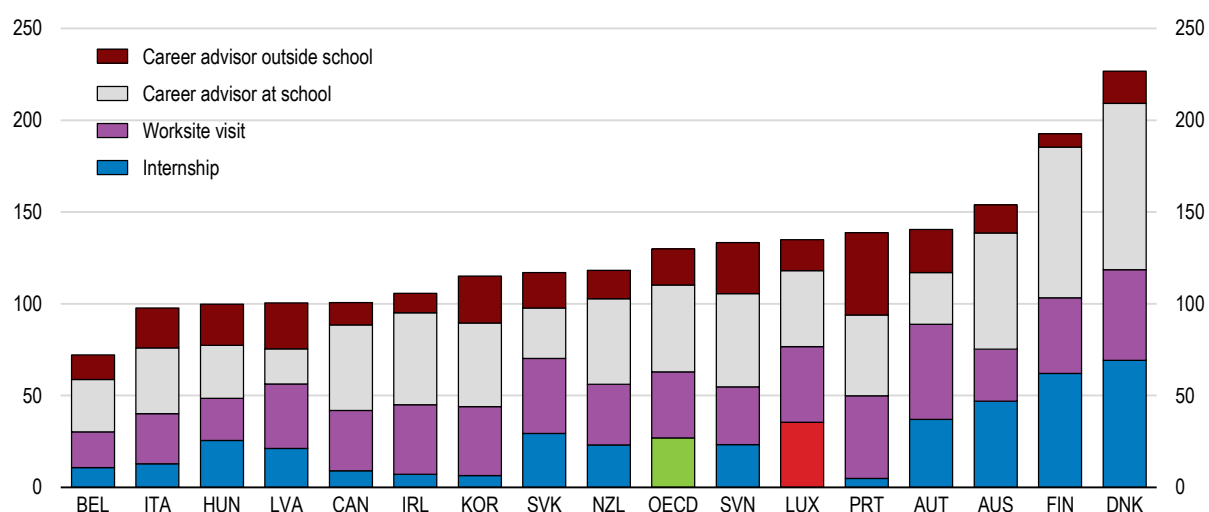
As a percentage of first-time new entrants into bachelor's programmes by field of education, 2013



Source: OECD (2015), Education at a Glance 2015.

Figure 15. Career guidance is widespread

Percentage of 15 year-olds who report having accessed different types of career guidance, 2012



Source: OECD (2016), Society at a glance 2016.

Improvements in life-long learning

Lifelong learning has a key role in boosting productivity by providing workers with relevant skills, preventing skills deterioration and supporting social mobility and Luxembourg has a wide range of lifelong learning providers. In addition to the school system, there is also training provided by professional chambers, training offered by sectoral organisations, such as those in banking, construction and health service sectors, as well as training for jobseekers provided by ADEM, communes and trade unions. Most of lifelong learning providers, about 80%, are small private sector firms with less than five employees.

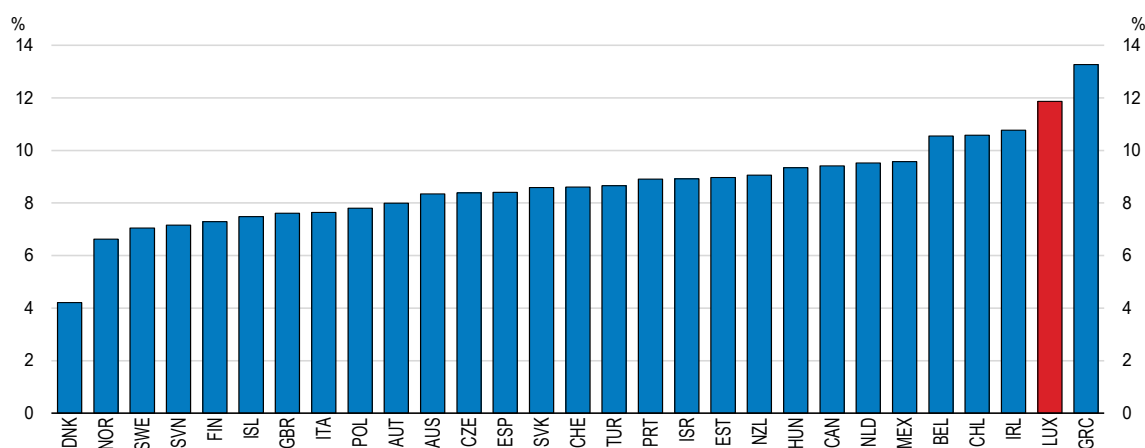
Nevertheless, maintaining human capital can be challenging for older workers as employers may be less likely to train those who may soon leave the labour market and the under-investment in skills can be strengthened by firms' fear of highly-skilled employees being poached by other firms. For many workers making significant skills investments in later life requires time off the labour market and high opportunity costs, in terms of foregone earnings. These externalities and possible under-investment in skills by firms and workers provide a rationale for government intervention (OECD, 2017b).

As in most countries, companies contribute a substantial share of the financial resources for lifelong learning, which they can then deduct from profits. However, such schemes may involve deadweight loss as public funds subsidise spending that firms would have undertaken anyway and encourage inefficiently low level of training in small and medium companies that are often less profitable than larger firms. Firms may also prefer to train their skilled workforce and neglect low-skilled staff, older and female workers (OECD, 2015b).

However, re-skilling later in life can be costly, especially if it requires a course of study, rather than workplace training. One reason may be that such course is not considered job-related and hence not eligible for most tax deductions for skills expenditures, putting a hidden burden on labour mobility. As a result, it can be more costly to finance such training that may involve changing careers than training that

facilitates advances within careers. In addition, older workers have fewer years in which to work and recoup the cost of education through higher wages (OECD, 2017b). Required wage increase that cover the cost of studying at older age is among the highest in the OECD, at more than 10% per year, showing that it can be difficult for the government to provide sufficient financial incentives for older workers to invest in skills (Figure 16).

Figure 16. For older workers studying is more costly than workplace training
Breakeven earnings increments on lifelong learning (% of wage before education)



Note: Data are for a 50-year-old single taxpayer with no children, who undertakes a one-year course of non-job-related education, earning 25% of the average wage during schooling. This figure shows results that incorporate tax deductions and tax credits for direct costs, tax exemptions for scholarship income, and reduced taxes on student wage income. Tax incentives in the personal income tax system are incorporated, but not the social security contribution system. They do not incorporate STEs that subsidise firm spending on education. It is assumed that the skills investment is financed wholly with savings: students do not incur any debt to make a skill investment.

Source: OECD (2017), Taxation and Skills.

Employees in Luxembourg have access to paid training leave that incentivises lifelong learning by compensating workers for the wage loss. However, the amount is limited to 20 days in two years and 80 days in total, which may not be enough to complete longer and more demanding qualifications and could, in justified cases, be extended or modified. For example in Spain, an individual training permit allows low-qualified workers to attend an officially-recognised training activity leading to a qualification, up to a maximum of 200 hours per year, while in Denmark a special allowance payable for up to 40 weeks exists, targeted at early school leavers (European Commission/EACEA/Eurydice, 2016). Targeted training allowances exist in Luxembourg for jobseekers (vouchers for non-formal education), low skilled workers (reimbursement of salary costs) and older employees (grants), provided they have worked in the company more than ten years. These instruments are useful as private income tax deductions for training may not benefit low-skilled workers and jobseekers that tend to pay little taxes. An alternative or complementary approach could be to create individual learning accounts that provide individuals with more responsibility and control, allowing for a better match between the individual needs and appropriate training. Experiences from other OECD countries, such as Canada and the Netherlands, suggest that individual learning accounts can be effective in facilitating lifelong learning (OECD, 2005).

To improve participation in lifelong learning, which is skewed towards those in employment and the better skilled, providers should offer a more flexible and user-friendly approach, such as wider use of online and distance learning, more part-time and modular courses. Flexibility is increasing in Luxembourg, where multilingual adults can use distance learning provision from neighbouring countries and an online personal skills register is being created, but more needs to be done. Incentives

should be put in place for low-skilled workers to seek training more actively as part of unemployment activation measures and while employed to prevent future periods of unemployment.

Flexible teaching modules allowing for self-paced learning or online training can combine basic skills development and practical learning, while open education, such as massive open online courses, can help young people to deepen their skills or acquire new ones (OECD, 2015a). However, in this self-guided environment, digital skills will need to be complemented by the development of critical analysis and evaluation skills (Institute of Directors, 2016). Potential cost savings and flexibility of online learning should be used to create a self-guided environment that will allow learners to combine courses from several providers gradually at different times coupled with more systematic recognition of skills and competences acquired in both formal and informal learning.

Quality assurance and evaluation is an integral component of adult learning. All providers of general adult education are obliged to provide information and guidance regarding their education and training programmes, which is welcome. The government has also established a guidance centre (*Maison de l'orientation*) that brings together several public guidance services and makes information on provider quality available to users.

Developing entrepreneurial skills and innovation

Entrepreneurship is an important driver of innovation and job creation, but insufficient entrepreneurial skills could be a barrier in starting a business. The social perception of entrepreneurs in Luxembourg is below the EU average: only 45% of Luxembourg residents regard entrepreneurship as desirable career choice compared to 56% in the EU. As in other countries, migrants in Luxembourg report higher entrepreneurial activity and more positive perception of entrepreneurship than non-immigrants (STATEC, 2016).

Education to entrepreneurship often involves development of specific technical skills, such as business planning, through simulation of real business enterprises, before engaging in entrepreneurship education programmes in higher education. The empirical evidence suggests that entrepreneurship is best supported by developing implementation skills rather than theoretical knowledge, through interdisciplinary programmes or in partnership with existing businesses. Entrepreneurship education needs to be better integrated also into vocational education and training programmes, with particular emphasis on real-world experience in the workplace and more effective engagement with entrepreneurs (OECD, 2015a). Outside the formal education system, role models of successful entrepreneurs are often pivotal in supporting entrepreneurial intentions. As the perceived gender gap in access to entrepreneurial training between men and women is pronounced in Luxembourg, alternative approaches based on mentoring and alumni networks may be effective to encourage efforts to start and sustain a new business.

Entrepreneurial skills can also be developed in the context of career guidance and active labour market policies. Governments can partner with business organisations and other stakeholders to promote entrepreneurship by providing a first-hand look at the day-to-day operation of small firms and help new entrepreneurs acquire the skills for running small businesses through interaction with other entrepreneurs. Multiple programmes of support run by professional chambers together with ADEM exist in Luxembourg, including Fit4Entrepreneurship and Fit4Start, providing early-stage funding and coaching in the context of professional reintegration. These programmes should be regularly evaluated and their cost effectiveness assessed.

Policies ensuring better use of existing skills

Skills must be used to bring value. Unused skills become obsolete as the demand for skills changes and represent a waste of the initial investment in skills, retraining or upskilling may be needed before their holders may return to employment. On the other hand, the more individuals use their skills and engage in complex and demanding tasks, the more can the skills decline due to ageing be prevented.

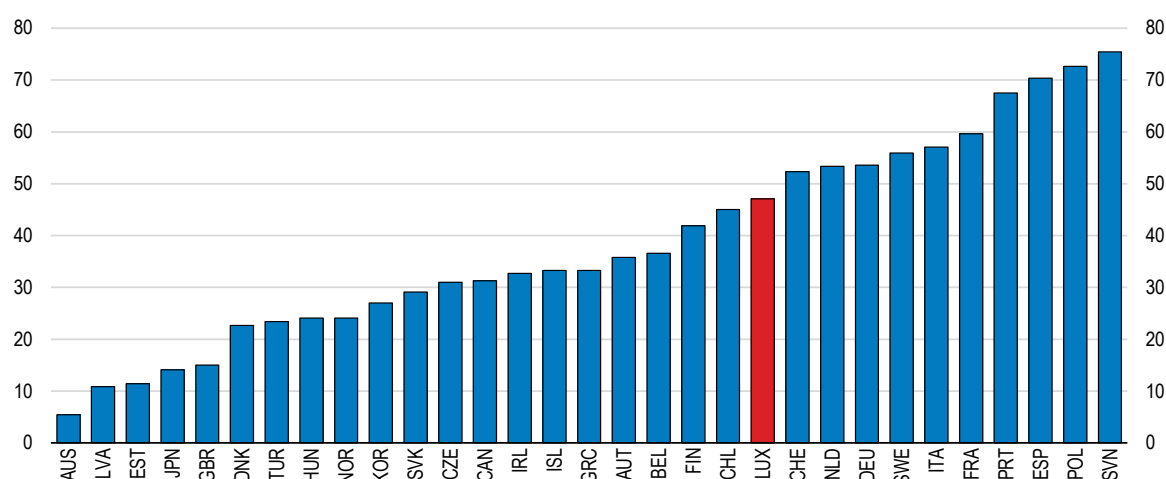
Improving the job matching

Smooth transition from school to work limits the risk of skills depletion and the emergence of “scarring effects” that may be caused by the experience of unemployment at the beginning of a career. Arrangements to combine study and work through apprenticeships and internships may facilitate school-to-work transition, as countries with a long apprenticeship tradition and stakeholder engagement exhibit lower NEET rates and youth unemployment, and below average repeated unemployment spells than countries with a school-based system (Quintini and Manfredi, 2009). Although the NEET rate in Luxembourg is low by OECD standards, low skilled youth can still face difficult school-to-work transitions. While apprenticeships are relatively common in Luxembourg, student jobs and internships are less so, as only a small fraction of students aged 15-19 work part-time or full-time (OECD, 2010).

The share of young workers on temporary contracts is relatively high in Luxembourg (Figure 17), possibly reflecting the level of employment protection for permanent workers, especially the protection against collective dismissal, that is above the OECD average. Narrowing of the difference between permanent and temporary employment by lowering of employment protection could improve school to work transition (Mills and Präg, 2014) and make the transition from temporary to permanent work more common. Moreover, the Survey of Adult Skills data show that workers on temporary contracts use their cognitive skills less intensively than workers in permanent employment, exposing them to the risk of skills depreciation. The 2016 reform simplifying employee representation in companies with more than 150 employees is welcome, as it may further reduce the cost of collective dismissals, although additional costs for external counsel to staff delegates that will be borne by employers may negatively affect competitiveness (Eurofound, 2016).

Figure 17. Young workers often work on temporary contracts

Share of temporary contracts, 15-24 years old, per cent of dependent employment, 2015 or last available year



Source: OECD Employment and Labour Market Statistics database.

Spending on active labour market policies (ALMP) is close to the OECD average, but only a small fraction, less than 10% of the total in 2014, is spent on training, compared to more than 20% in Belgium and more than 30% in France and Germany. Although the evidence on the effect of labour market training on employment tends to be positive mainly in the long term, the link is often found to be stronger for the youth and other disadvantaged jobseekers (Bredgaard, 2015). Other studies emphasize the right combination of measures, such as the effective job search assistance, wage subsidies in the private sector and labour market training (Martin and Grubb, 2001), showing that the mix of active labour market policies is as important as the size of the total ALMP spending (OECD, 2015c).

Well-targeted short trainings, quickly increasing employability and limiting lock-in effects, are crucial to prevent long-term unemployment and erosion of skills. Trainings focused on imparting problem-solving skills in technology-rich environments may be especially useful in increasing employability (OECD, 2015a). An effective activation regime should not only get people off benefits and into work, but help them access quality jobs. The public employment service (ADEM) should offer continued support to clients even after they have exited benefits into a job, ensuring that they enjoy some career progression (Martin, 2014).

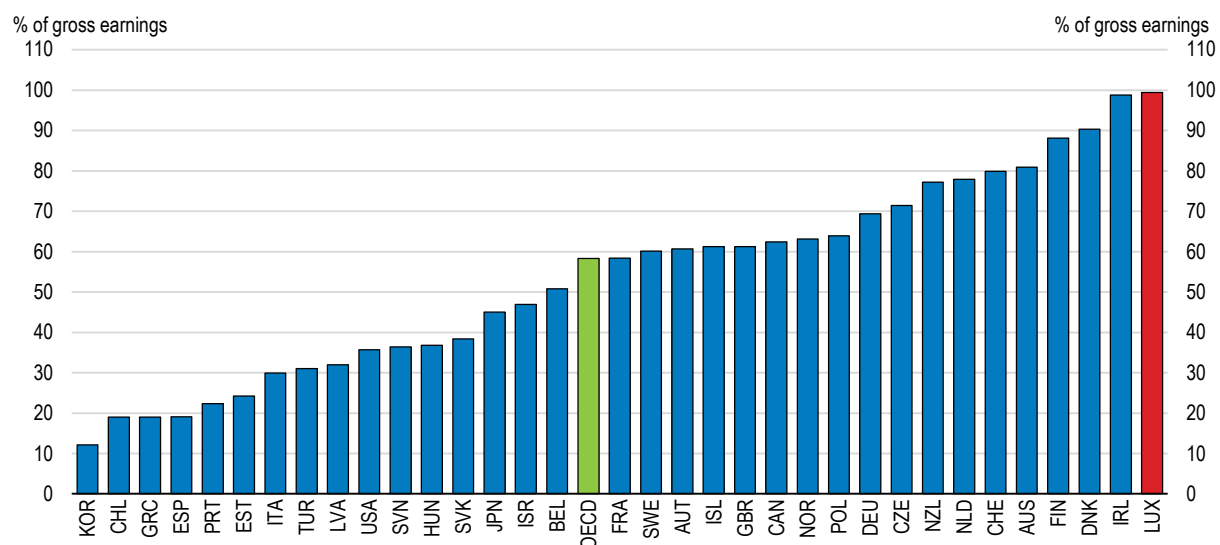
The recent reform of ADEM involved increases in funding and the number of staff, allowing larger share of staff to be allocated to direct customer services. The number of counsellors trained in advising young jobseekers was increased in 2015 and concentrated in three specialised ADEM branches. Intensified job-search assistance and higher frequency of jobseekers' meetings with caseworkers are welcome and may lower unemployment spells, particularly for the youth. In addition, the public employment service has recently introduced two new active labour market schemes for jobseekers older than 45, jobseekers with reduced working capacity and disabled: short-term professionalisation training and a long-term employment reinsertion contract (Clauwaert et al., 2016). These targeted measures that encourage employers to hire and retain older workers by subsidising the wage costs are combined with personalised support depending on the distance to employment.

However, ALMP programmes in Luxembourg could benefit from more systematic impact assessment. Monitoring and evaluation are essential for ensuring cost-effectiveness, even more so since the evidence from countries where there are strong obligations associated with participation in ALMPs suggests that the positive effect of ALMPs on labour market outcomes may even come from the threat of entering the programme rather than from the programme itself (OECD, 2015a). Hence, the outcome measures of local public employment service offices should be monitored to improve performance and could partly be made public (OECD, 2005b).

Improving the incentives for labour market participation

Inactivity traps in Luxembourg are high, especially for part-time workers and low income earners, with detrimental effects such as skill erosion and lower self-confidence. The marginal effective tax rate associated with an increase in working hours from 33% to 67% of the average wage for one-earner married couple is almost 100% (Figure 18). In other words, the additional earnings associated with increased work effort are almost fully taxed away by the combined effect of increasing taxes and decreasing benefits. Similarly, a transition from unemployment to employment presents large financial disincentives to work for low-income workers. The participation tax rate, the part of earned income taxed away when taking up a job due to the combined effect of increasing taxes and decreasing benefits, for a job earning 67% of average wage for one-earner married couple is 97%, well above the OECD average (Figure 19).

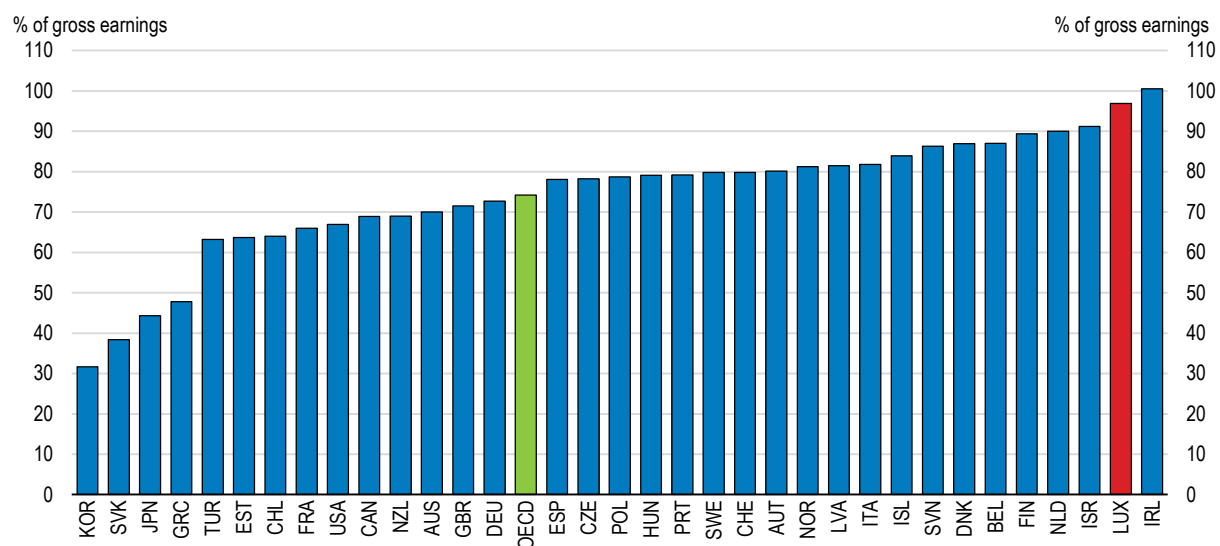
Figure 18. High marginal tax rates create an inactivity trap
Marginal Effective Tax Rates on increasing working hours¹, 2014



1. From 33% to 67% of average wage, supplements included, for married couple.

Source: OECD, Tax-Benefit Models.

Figure 19. High participation tax rates create an unemployment trap
Participation Tax Rates on moving into full-time work for persons receiving unemployment benefits¹, 2014



1. At 67% of average wage, supplements included, for married couple.

Source: OECD, Tax-Benefit Models.

Unemployment benefits are high compared to other OECD countries and particularly generous for younger and low-income workers. Net replacement rate for a single person at 67% and 150% of average wage in 2014 was 83% and 76%, compared to the OECD median of 65% and 45%. Luxembourg is also

one of the few OECD countries where young people with no employment record can receive unemployment benefits, after a waiting period of six months. In most OECD countries, unemployed youth who lack a sufficient employment history are entitled to social assistance or housing benefits that are usually means-tested at household level and, although available for unlimited period in most countries, less generous than unemployment benefits (OECD, 2016f). Moreover, older jobseekers can, under a temporary measure adopted during the financial crisis and recently prolonged until the end of 2017, draw on unemployment benefits for six months longer than other workers, provided that they have paid 20 years of unemployment insurance contribution. While this measure will help some vulnerable jobseekers who have difficulties finding employment, for other older unemployed workers it may just bridge them into generous early retirement schemes that still await reform, pending the outcome of negotiations with social partners.

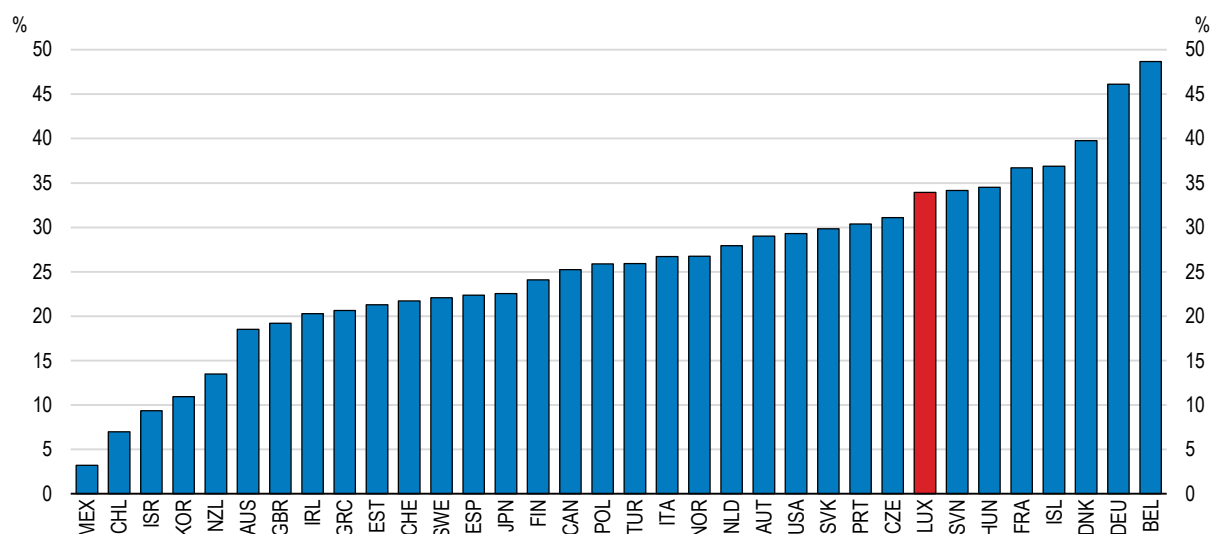
The minimum income scheme (*Revenue Minimum Garanti*, RMG) aims to ensure that all individuals and households attain a predefined minimum income, regularly adjusted for inflation. Gross income from all sources is taken into account for determining eligibility, while 30% of the gross income is disregarded in the income test and the minimum income can thus be paid as a top-up to income from other sources to a maximum level of 130% of the guaranteed minimum income. All benefit recipients are required to be resident in Luxembourg. Non-EU citizens who are not recognised refugees are required to have lived in Luxembourg for at least five out of last 20 years, while EU citizens without Luxembourg nationality are not eligible for the minimum income scheme during the first 3 months of stay or during their job search if they came to Luxembourg to seek employment (Königs, 2012).

While the minimum income scheme is successful in preventing extreme poverty, it does so at the costs of high persistence of receipts, with 38% of spells between 2001 and 2009 lasting longer than 2 years (Königs, 2012), and by reducing incentives for low income workers. Since any additional income above 30% of the guaranteed income is withdrawn one-for-one until reaching the minimum income scheme eligibility threshold, the scheme provides incentive to work at maximum 10 hours per week, remunerated at the minimum wage level, and imposes marginal effective tax rate of 100% on additional work (OECD 2012b). The draft bill replacing the minimum income scheme with new social inclusion income (REVIS) is welcome, as it replaces one-for-one withdrawal of income from work with a 25% rate, at which work income can be retained, up to the new eligibility threshold, while introducing stronger conditionality for recipients, who must actively search for employment.

Married couples and registered partners will, starting from 2018, be allowed to choose between joint and individual taxation and revise their choice for every subsequent tax year. In the case of individual taxation, most tax deductions will be equally split between partners. Since the policy is optional, allowing spouses to continue with joint taxation, its potential effect on work incentives of second earners may be limited. Although participation decisions of second earners are also influenced by factors beyond taxation, such as the availability and cost of childcare and paid maternity leave provisions, a system of fully individual taxation would maximise the incentives for second earners to enter employment and make the tax system more gender neutral (Figure 20).

Empirical evidence suggests that individual taxation in Luxembourg would incentivise married women to take on work, albeit mainly part-time work. Based on the 2009 income data and the Euromod tax-benefit system model, the overall female participation rate in Luxembourg is projected to increase by about 1 percentage point following the introduction of full individual taxation, while the number of hours worked should decrease, mainly due to increase in part-time work. On the other hand, the reform is projected to have a negligible impact on married men, who tend to have a very inelastic labour supply and are mostly already working full-time (Doorley, 2016).

Figure 20. Work disincentives for second earners are high
Net personal average tax rates on second earners¹, 2015



1. Second earner at 67% of the average wage (primary earner at the average wage level), no children. The net personal average tax rate is calculated as the increase in income tax and employee SSCs (net of inwork benefits) paid by the family as a result of the second earner entering workforce divided by the increase in family gross income as a result of the second earner entering in the workforce.

Source: Thomas and O'Reilly (2016).

The 2016 reform of parental leave extended the eligibility, increased the replacement income and provided more flexibility by introducing part-time leave. The new rules also enable both parents to take the leave at the same time. Parental leave is granted as non-transferable leave entitlement to both parents, which is welcome as it may promote fathers' take-up and more balanced sharing of leave entitlements. However, in order not to lose the entitlement, one parent still has to take parental leave immediately after the maternity leave, which may be overly restrictive. In order to increase take-up among fathers, some countries, such as Germany and Portugal, offer bonus parental leave if fathers take up a minimum amount. The experience from both countries where the proportion of fathers taking parental leave more than doubled, shows that such policies may be effective in raising fathers' participation in parental leave (OECD, 2012c).

Along with attitudes, the other important factor in fathers' low take-up rates is that they often earn more than their partners, so household income loss is smaller when parental leave is taken by mothers. Although the overall gender wage gap in Luxembourg in 2014 was only about 4%, the gap increases with age and during childbearing, being largest among the top earners (OECD, 2012c). Parental leave payment rates tend to be lower for individuals on higher wages and the differences in payment rates were especially high in Luxembourg where in 2014 a person on 150% of average earnings would receive a benefit covering less than 40% of previous gross earnings (OECD, 2016g). The 2016 reform has increased the coverage rate as the new replacement income, previously set as a fixed allowance, will be linked to the level of applicants' gross earnings, limiting the opportunity costs for the family. However, the allowance remained capped at EUR 3 200, which may be low to make the parental leave attractive to high earners.

Older workers require more flexible workplace practices, such as part-time work, flexible working times and distance working, in order to remain in employment or take up new employment opportunities. The need for flexible working time arrangements may stem from the caring obligations of older workers, if

they have to care for their older parents (Duell, 2015). Empirical evidence on the impact of reduced working hours on remaining in employment is mixed as part-time jobs may result in less training and less interesting job tasks (Hermansen, 2015; Earl and Taylor, 2015). Flexible work should be further developed and adapted to different sectors and life phases, as less standard working hours arrangements could have implications for communication and co-operation among employees and additional technology support could require new knowledge and training (OECD, 2015d). The social partners could co-operate in shaping working conditions under new working schemes and developing guidelines and sector-specific instructions to employers on promoting a better working life for older workers, but effective schemes for responding to an ageing workforce can also be set up at the company level (Tishman et al., 2012).

The conditions for return to work of people with limited disabilities have been reformed to strengthen the possibilities for reintegration, giving priority to redeployment within companies. The procedure has become faster and the role of the occupational health practitioner in the assessment strengthened. The decision on redeployment will be periodically reviewed and the sanctions for non-compliance, both of employers and employees, have increased. This reform is welcome, as it is likely to increase the labour market attachment of workers with limited disabilities and reduce the number of people dependent on the guaranteed minimum income scheme or entering early retirement. However, the impact of the reform needs to be assessed soon and the cost efficiency monitored, as some expenses associated with the reintegration framework, such as the compensatory allowance and tide-over allowance, have more than doubled between 2010 and 2015, to 180 million EUR (*Ministère du Travail, de l'Emploi et de l'Économie sociale et solidaire*, 2016).

To improve inclusiveness, reforms of disability benefit systems should be complemented by measures to improve employability of disabled people. The introduction of compulsory retraining or rehabilitation with the possibility for a disabled worker who refuses such a measure of losing the disabled status is a step in the right direction, as it integrates employment and health services. More could be done in the area of prevention of disability going beyond the work safety and injury prevention (Moes and Dominique, 2010) towards introduction of policies increasing awareness about the nature of disabilities, how they can be overcome and at what costs (Klein and Aggerstrøm Hansen, 2016).

Recommendations to improve skills for more inclusive growth

Ensuring flexible and continuously improving supply of skills

Key recommendations

- Reduce grade repetition by providing earlier individualised support to students falling behind.
- Improve the mobility between secondary tracks via curriculum alignment and differentiated teaching.
- Create individual learning accounts and expand the individual study leave to enhance access to lifelong learning.

Additional recommendations

- Make systematic use of the tools for assessing and anticipating skills needs in policy making, especially in education policy and immigration policy.
- Strengthen career guidance and counselling to improve responsiveness of tertiary education to labour market needs.
- Improve the organization and curricula of vocational education and training and ease upward mobility of VET students to tertiary education programmes.
- Tailor lifelong learning programmes to the needs of the low skilled and older workers.

Ensuring better use of existing skills

Key recommendations

- Provide incentives for fathers to share parental leave. Consider introducing bonus parental leave if fathers take up a minimum amount and remove the cap on parental leave allowance.
- Adjust the tax and benefit system to increase incentives to work for low-skilled youth, older workers and second earners. For example, limit the access to unemployment benefits for young people with no employment record.

Additional recommendations

- Improve the evaluation of existing active labour market policies and set and partly publish output measures for local PES offices.
- Move to a system of fully individual taxation to make the tax system more gender neutral.
- Close off various routes into early retirement and support more flexible workplace practices to strengthen labour market attachment of older workers.
- Assess the impact of the recent reform of support for return to work of people with partial disability and complement it with measures to improve their employability.

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