OECD Reviews on Local Job Creation

Future-Proofing Adult Learning in London, United Kingdom

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BETTER POLICIES FOR BETTER LIVES

Please cite this publication as:
OECD (2021), *Future-Proofing Adult Learning in London, United Kingdom*, OECD Reviews on Local Job Creation, OECD Publishing, Paris, *https://doi.org/10.1787/c546014a-en*.

ISBN 978-92-64-80177-6 (print)
ISBN 978-92-64-48707-9 (pdf)
ISBN 978-92-64-91421-6 (HTML)
ISBN 978-92-64-45132-2 (epub)

OECD Reviews on Local Job Creation
ISSN 2311-2328 (print)
ISSN 2311-2336 (online)

Revised version, March 2021
Details of revisions available at: *https:/about/publishing/Corrigendum-Future-Proofing-Adult-Learning-in-London.pdf.pdf*

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Corrigenda to publications may be found on line at: *www.oecd.org/about/publishing/corrigenda.htm*.

Foreword

This OECD report comes at a challenging time for governments around the world as they manage the economic crisis caused by the COVID-19 pandemic. The severe lockdown and social-distancing measures that aimed to protect public health in the UK gave rise to an unprecedented economic shock, with GDP contracting by more than 20% in the second quarter of 2020. Whilst the impact on the labour market has been softened by the national furlough scheme that offered support to firms and employees, unemployment and benefits claims have risen sharply. In London, the UK's economic engine, claimant counts more than doubled between March and December to just under 500 000 Londoners, with 700 000 Londoners on furlough schemes in July. With the looming end of this scheme and the resurgence of the pandemic, the medium to long-term labour market impacts of the pandemic remain uncertain.

Even before the COVID-19 pandemic, London's labour market was undergoing a transformation. Automation, digitalisation, job polarisation, and the emergence of non-standard forms of work such as platform work had already begun to change the labour market and skills needs in London. COVID-19 looks increasingly likely to accelerate these trends, in particular automation and digitalisation, as firms look to expand their use of technology and digital services and adapt to new models of working, in particular teleworking. Within a context of uncertainty and falling revenues, firms may also alter their hiring practices and increasingly look to non-standard contracts such as part-time employees or independent contractors to cut costs. For London, its extensive ability to shift many jobs into remote work has been a source of resilience but permanent shifts are also likely to change London's economic geography and put jobs at risk that rely on commuters and Central London office workers.

This OECD report sheds light on the threats and opportunities facing London's labour market in light of the future of work, set against a backdrop of a decade long stagnation in productivity, and widespread skills mismatches and gaps. It highlights the importance of adult learning, which is now more relevant than ever, with many workers at risk of technological displacement or looking for new jobs as a result of the current crisis. Adult learning provides a gateway for these Londoners to gain new skills, re-train for positions in different sectors, or up-skill to move to jobs less vulnerable to automation. The report analyses London's existing adult learning system and highlights challenges as well as opportunities that could make the system more effective and better align learning with local labour market needs.

This report is part of the OECD Review on Local Job Creation Series within the Programme of Work of the OECD Local Employment and Economic Development (LEED) Programme. Created in 1982, the LEED Programme aims to contribute to the creation of more and better jobs in more productive and inclusive economies. It produces guidance to make the implementation of national policies more effective at the local level, while stimulating innovative practices on the ground. The OECD LEED Directing Committee, which gathers governments of OECD member and non-member countries, oversees the work of the LEED Programme. This report was submitted for approval by the OECD LEED Directing Committee on 21 October 2020 [CFE/LEED(2020)16].

Acknowledgements

This report was prepared by the OECD Centre for Entrepreneurship, SMEs, Regions and Cities led by Lamia Kamal-Chaoui, Director. This work was conducted as part of the OECD’s Local Economic and Employment Development (LEED) Programme with financial support from the JPMorgan Chase Foundation.

The analysis and preparation of the report were co-ordinated by Lukas Kleine-Rueschkamp under the supervision of Jonathan Barr, Deputy Head of the Local Employment, Skills and Social Innovation Division and Karen Maguire, Head of the Local Employment, Skills and Social Innovation Division, OECD. The report was drafted by Lukas Kleine-Rueschkamp, OECD, and benefited from valuable contributions from Jonathan Barr (OECD) and Fiona Aldridge, Director for Policy and Research at the Learning and Work Institute. Andrew Paterson (OECD) also provided comments. Eric Gonnard, Michela Meghnagi, Miriam Odonkor and Ida Peltonen (all OECD) provided helpful statistical support. Pilar Philip and François Iglesias (both OECD) prepared the report for publication.

The OECD Secretariat expresses its gratitude to various representatives of the Greater London Authority. Special thanks are due to Michelle Cuomo Boorer, Forogh Rahmani, James Lee, Gabriele Piazza, and Anna Cooban for their support throughout the project in facilitating contacts with employers, training providers, and local policy makers in London, as well as for providing relevant data on London’s labour market and adult learning systems, and also to Edmund Worsley and Richard Garrett (UK Department for Education) and Poulomi Solanki (UK Department for Digital, Culture, Media and Sport) for their helpful comments.

The OECD Secretariat is very grateful to the representatives from the Skills for Londoners Board and Business Partnership for participating in many bilateral interviews as well two workshops that provided important input for the report. Special thanks are also extended to Hanka Boldemann, Executive Director of Global Philanthropy at JPMorgan Chase Foundation, as well as Michal Langton, Luisa de Simone, Jovana Lalic, and Sarah Moreau (all JPMorgan Chase Foundation).

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Executive summary

The COVID-19 pandemic is having an unprecedented impact on London, its economy, and its labour market. The UK's capital emerged as one of the country's COVID-19 hotspots early on in the pandemic and by February 7 2001 counted more than 680 0000 cases and 14 000 fatalities. Apart from the human costs, London has faced a severe economic contraction. Its economy is expected to have shrunk by more than 10% in 2020, with larger declines of 20-30% in sectors such as hospitality, tourism, or entertainment. As a result, unemployment has been rising, with the numbers of unemployment benefit claims going up by 160% between February 2020 and January 2021. So far, national support to employers and employees, in the form of the UK furlough scheme, has helped cushion the blow to employment in London. However, with the furlough scheme ending in April 2021 and firms increasingly struggling to finance their operations, 2021 might see a significantly stronger impact of the crisis on jobs and livelihoods in London. To prevent a 'lost generation', decisive action in terms of skills and career support is needed.

Even before COVID-19, London faced labour market challenges that required an effective adult learning system, but the crisis has made adult learning more important than ever before. While levels of educational attainment in London are high relative to other OECD metropolitan areas, partly due to high-skilled migration, labour productivity has been stagnant since the financial crisis in 2008. At least part of the suboptimal growth of productivity is linked to the fact that the existing skills of London's workforce are not optimally used and skills development does not match local labour market needs. In London, 37% of workers are mismatched by qualification, i.e. working in a job that is either below or above their level of qualification. Skills gaps and mismatches have a direct negative impact on employers in London. Pre-COVID, more than a fifth of firms in London had unfilled vacancies, with a lack of qualified, skilled candidates being the main reason. As a result, firms sometimes face difficulties in meeting customer demand, problems in producing new products or services, or lose business to competitors.

The current crisis creates new labour market risks that could exacerbate social and economic inequality in London. COVID-19 is also a catalyst for technological change and is likely to accelerate digitalisation and automation significantly. Historically, economic crises have spurred the adoption of automation in the workplace as firms replaced workers with routine tasks with a combination of better skilled workers and new technologies. With far-reaching lockdown and social-distancing measures, COVID-19 has forced employers and employees alike to experiment with remote work and new digital tools. Digitalisation seems to have made great leaps forward and automation might follow suit, not least as the pandemic could incentivise firms to invest in automating the production of goods and services to minimise their exposure to future confinement measures. While London appears less vulnerable to automation than many other OECD metropolitan areas, it nevertheless implies considerable challenges for a significant part of London's labour force. Around 29% of jobs are vulnerable to automation in London, of which 8% are at high risk, meaning that these jobs are made-up primarily of tasks, which are easy to replace with machines and artificial intelligence. The remaining 21% of these jobs are likely to see significant changes in skills requirements. An acceleration in automation could mean that these risks materialise earlier than previously thought.

The scale and nature of the pandemic call for even greater efforts to strengthening the adult learning system in London. In providing opportunities to re-train or up-skill, adult learning is a vital element of a well-functioning skills development system. Employers play an essential role in adult learning and skills development, both through work-based training and the adoption of business and management practices that encourage learning and effective skills use. Yet, despite the importance of skills, employers in London are not investing enough into training. Job-related training has been falling in London over recent years, with less than 18% of economically active Londoners receiving such training in 2019. Furthermore, job-related training does not reach those that could benefit the most, with low-skill workers being less likely to receive it. As costs and limited financial resources are major impediments to more training provision by London's firms, an expansion of online training as a complement to traditional learning modules could mitigate this problem because it can increase the accessibility of training at a lower cost. Currently, however, less than half of London's firms take advantage of e-learning or online training.

London is among the leading OECD cities in recognising skills as a fundamental driver of economic growth and resilience. The Greater London Authority (GLA), the governing body of Greater London, has made adult learning a priority with the development of the Skills for Londoners Strategy. The strategy sets out the Mayor's vision to create a post-16 technical and vocational education and skills system that meets the needs of Londoners and local businesses, based on the devolution of the Adult Education Budget to London. Currently, major obstacles to participating in adult learning are time constraints, work and family responsibilities, as well as financial constraints. Addressing these barriers to adult learning is within the scope of public action in London via targeted information and guidance on the benefits of skills development, the creation of flexible, shorter or modular types of learning programmes, targeted financial support, and better aligning adult learning programmes with labour market needs.

To future-proof its adult learning system and deliver on- and off-ramps for workers to transition into new jobs or careers, London could build on the recommendations of this OECD report:

Creating an adult learning ecosystem in London

- **Examine opportunities for further devolution to foster an integrated and joined-up adult learning offer:** London could work with national government departments to examine possibilities for further devolved adult skills funding such as the National Skills Fund and the National Careers Service, in particular with a focus on aligning different services such as career guidance and adult learning and pro-actively engaging employees who face redundancy. Additionally, the GLA requires access to consistent local data to shape adult learning decisions and priorities. Finally, London needs to ensure that any new adult learning strategies or funding addresses the multi-dimensional barriers faced by some groups to enter the labour market:
- **Provide quality information and advice about careers and jobs in London:** Opportunities could include a newly created "made in London" career guidance platform that provides employers and workers with valuable labour market information on local training and employment opportunities, ensuring a more effective match of workers with jobs. Furthermore, the increased use of technology could help to engage Londoners more in careers counselling and training aligned to an evolving labour market.

Bringing employers on board to strengthen investments in adult learning and workplace training

- **Strengthen workplace training and apprenticeships:** The GLA could play a leading role in promoting apprenticeships by expanding its London-specific apprenticeship campaign, the London Progression Collaboration. By actively involving employers in designing adult learning programmes, London could shape training provision with local needs and incentivise firms to make use of training. By introducing new support measures for training in SMEs, London could overcome barriers for training provision in smaller businesses.

- **Ensure firms make use of available skills:** To benefit from effective skills use and development, London could increase awareness on the benefits of high-performance practices in firms through a targeted campaign or setting up award mechanisms. With the Good Work Standard, London has already set out guidelines on good practices that employers should adopt. To further spread good workplace practices among firms and boost productivity growth, London could establish peer-learning platforms that help share knowledge on successful managing practices, internal skills development strategies, and uptake of new technologies or other innovation.

1 Assessment and recommendations

Managing labour market uncertainty due to COVID-19

This OECD report comes at a time of great uncertainty as the world and London's economy are facing the COVID-19 pandemic crisis, which has been the source of an unprecedented economic contraction. Because of confinement and social distancing measures, London's labour market experienced a significant shock that still lasts as the pandemic continues. According to estimates produced by the Greater London Authority in September 2020, London's economy is likely to contract by more than 10% in 2020. Benefits claims in the UK capital have gone up by 154% between March and August 2020, with young workers affected the most. National support from the UK furlough scheme has helped to limit the damage so far. At the end of July 2020, more than 700,000 Londoners received support via the furlough scheme. The possible end of this scheme raises questions about how much unemployment could increase over the coming months and in 2021.

Prior to the COVID-19 outbreak, London's labour market had enjoyed a boom in employment. Between 2010 and 2019, the unemployment rate in London fell from 9.4% to 4.4%. Over the same period, labour market participation among the population aged 15 years or more also increased by 3 percentage points, reaching 68.2% in 2019, 5 percentage points above the UK average. The economic repercussions of the COVID-19 pandemic put some of these gains at risk.

Remote work and changing patterns of commuting are changing London's economic geography. Employers and employees in London have embraced telework as a means to keep business operations running, which has led to a transformation of how people work. This transformation is likely to be part of the "new normal" going forward. London has shown great flexibility in terms of remote work, in part due to its economic structure and focus on the service economy, which has been a source of economic resilience. However, not all jobs could shift to remote work and consequently, sectors such as hospitality have been devastated by the crisis. The pandemic has led to reductions in commuting, which remained around 70% below pre-crisis levels as of February 8 20201, putting the retail and service industry in Central London under considerable duress. The lack of commuters, international tourists, and thus customers, has resulted in significantly subdued business activity of high-street stores and the Central London service economy.

COVID-19 will likely accelerate automation, which will fundamentally change London's labour market

While the long-term impact of COVID-19 is still unknown, the pandemic creates large risks of exacerbating social and economic inequalities in London. Apart from the economic impact, the pandemic appears to be a catalyst for technological change. The rapid rise in telework and adoption of digital solutions indicate that digitalisation has experienced a significant boost. Additionally, the pandemic is also likely to accelerate the pace of automation in the labour market. The adoption of automation in the workplace tends to accelerate in times of economic crises, as firms replace workers performing routine tasks with a mix of technology and better skilled workers. COVID-19 could further incentivise firms' investment in technology to automate the production of goods and services in order to reduce their exposure to any potential future social distancing and confinement measures.

Even before the onset of COVID-19, automation was transforming the world of work in a profound manner. OECD estimates show that 29% of jobs (as a share of total employment) are vulnerable to automation in London, of which 8% are at high risk, meaning that these jobs are made-up primarily of tasks, which are easy to replace with machines and artificial intelligence. Around 21% of jobs in London are likely to face significant change, with the skills requirement of those jobs to change fundamentally. Overall, automation risks are lower in London than in all other regions of the UK as well as most parts of the OECD, which is partly explained by the sectoral composition of London’s economy with its reliance on high-skill service jobs in areas such as finance, public administration or legal services.

While London is less vulnerable than many other cities, the impacts of automation are likely to disproportionately impact disadvantaged groups. Risks of automation are concentrated on specific sectors and vulnerable groups, in particular low-skilled and low-paid workers. Moreover, young people (15-24 year olds) and immigrants face the highest automation risk. Almost 43% of young people in the labour market face at least a significant risk of automation, making the young the most vulnerable group in London with respect to the effects of automation that might lead to job losses. Immigrants are the second most vulnerable group, with almost 41% facing significant risks of automation. Alongside COVID-19, this represents a double-whammy that could further entrench disadvantage and inequality in London’s labour market.

Technological change tends to drive the polarisation of labour markets in London and other metropolitan areas. Digitalisation and automation are skills-biased technological changes that tend to complement the jobs and tasks of high-skill workers but offer substitutes for middle-skill jobs, which often consist of more routine tasks. The share of middle-skill jobs in London’s economy has declined by more than 9 percentage points since 2000, a faster pace than in most major OECD metropolitan areas. The question becomes whether the decline in middle skilled jobs is offset by growth of higher or lower skilled jobs. In London, a significant increase in high-skilled jobs (+ 6.9 percentage points) has compensated the disappearance of middle-skill jobs. However, the share of low-skilled jobs also increased by more than 2.3 percentage points. In absolute terms, these changes correspond to a reduction of 64,000 middle-skilled jobs, offset by increases of 940,000 high-skilled jobs and 349,000 low-skilled jobs.

While most of the attention often focuses on its negative consequences, automation can also be a new source for growth and innovation. Labour productivity in London has been stagnant since the 2008 financial crisis, falling well short of the productivity growth in other OECD metropolitan areas. Automation and digitalisation, when accompanied with workers with the right set of skill, can help reinvigorate productivity growth. Promisingly, recent job creation in London has mostly taken place in occupations with low risk of automation. Since 2011, job creation was concentrated in high-skill occupations that are less vulnerable to automation such as business and administration professionals (150,000 new jobs) or ICT professionals (50,000 new jobs). Finally, jobs created by new technology are often better paid than the jobs that are replaced. Helping displaced workers getting into those new, higher-paying jobs is a policy priority and requires support in terms of learning and training opportunities that allow workers to develop the necessary skills.

As most places in the OECD, London has seen a rise of non-standard or “gig” forms of work, consisting of temporary, part-time or self-employed work. While non-standard work offers new opportunities such as greater compatibility of family and professional life or an easier transition into the labour market for youth, it also creates new challenges. Individuals in non-standard work arrangement have less social protection, are less likely to benefit from training and adult learning opportunities, and are more vulnerable to economic shocks. Many of these types of jobs, such as food delivery drivers, face greater risks of exposure to COVID-19 since this work involves more face-to-face interaction in how the job is performed.

To weather the storm of automation and COVID-19, local decision makers in London need to identify policy complementarities between employment and skills programmes. Actors from the public and private sector should work together to leverage new job opportunities, especially in occupations that are less vulnerable to automation. As part of this effort, training programmes should offer “on” and “off” ramps for people to up-skill and re-train going forward.

Before the global pandemic, skills gaps and mismatches were significant labour market challenges in London

Skills mismatches and an ineffective use of skills are widespread in London and could explain why labour productivity has not increased in recent years. Although London has a high educational attainment rate relative to the OECD average and other metropolitan areas, its labour productivity performance has been poor, suggesting that the existing skills of the workforce is not being optimally used. Skills mismatches are a drag on productivity performance and competitiveness. A high prevalence of mismatch usually means that the training systems is not providing the skills demanded in the labour market, or that the economy does not create jobs that correspond to the skills of individuals. One measure of skills mismatch is over or under qualification, which happens when the field of education does not correspond to the field of occupation. This report shows that 37% of London’s labour force are mismatched working in jobs that do not correspond to their level of qualification, with roughly equal shares of over and under qualification.

Alongside skill mismatches, many firms were struggling before COVID-19 to access the skills they need for their business operations. In 2017, more than 21% of firms in London had unfilled vacancies and the main reason for vacancies was a lack of qualified, skilled candidates. Almost two-thirds of firms report the quality of applicants as the main problem in filling vacant positions. Such unfilled vacancies have a direct impact on firms’ performance, including difficulties in meeting customer demand, problems in producing new products or services, or loss of business to competitors.

Despite the importance of skills and training, employers in London are not investing enough into staff training. Over recent years, job-related training has been falling in London, with less than 18% of economically active Londoners receiving such training in 2019 throughout the preceding four months. Such training does not reach those that could benefit the most, with low-skill workers being less likely to receive job-related training. Costs and limited financial resources are a major impediment to providing more training for London’s firms but an expansion of online training could mitigate this problem given that it increases the accessibility of training at low cost. However, currently, less than half of London firms take advantage of e-learning or online training.

Apprenticeships offer employers a direct way of training staff with skills that are relevant for firm-specific needs. The apprenticeship system in London has become more important over the past two decades, with the number of apprenticeship in London rising more than fourfold between 2005 and 2017. However, since the introduction of the national apprenticeship levy in 2017, the number of apprenticeships has fallen in London, albeit less drastically than in the UK overall where apprenticeships numbers have fallen by around 20%. With the pandemic still not abating and despite new UK-wide measures to allow more remote learning, workplace learning and apprenticeships face new difficulties given that they usually require individuals to complete on-the job training in the workplace. Only a minority of apprenticeships continue as normal and fewer firms are deciding to hire new apprentices because of COVID-19.

The combination of COVID-19 and technological change will affect labour market and skills needs in London. With increasing sophistication of technology in the workplace, some skill sets will experience increasing demand while others will become obsolete. The accelerated uptake of digital solutions and automation means that the world of work is likely to change faster than previously anticipated. Therefore, skills development programmes including in the areas of adult education, vocational education and training, or on-the-job learning might need to be re-adjusted to ensure that London's economy has the labour supply it needs.

Amid the current crisis, training and adult learning are undergoing a transformation led by a move towards online learning. Until recently, most adult learning provision took place via face-to-face teaching and direct interaction between teachers and learners. Such learning facilitated building personal relationships between learners and their instructors, which could re-enforce learners' progress and persistence. However, the pandemic has made face-to-face delivery difficult or even impossible. Instead, adult learning providers in London needed to adapt their teaching methods quickly with online learning achieving a breakthrough. While online learning has the potential to broaden access to programmes at a low cost, it raises significant new challenges such as access to digital equipment or decent learning conditions, factors that could exacerbate inequality in learning opportunities. Furthermore, questions remain about the effectiveness of online learning compared to face-to-face delivery as well as the feasibility of moving some courses online that are more practical in nature such as those related to construction or manufacturing.

Adult learning is more important than ever before, as the changing world of work calls for targeted support through learning and training for workers and firms

Enhancing skills development in London via adult learning is now important than ever. The crisis has led to thousands of job losses. Additionally, hundreds of thousands of Londoners remain on government support schemes, facing significant employment uncertainty, as some jobs will be lost when the UK furlough scheme ends. The crisis has affected some sectors such as hospitality, tourism and retail particularly hard. Even if these sectors recover over time, many firms and jobs in those sectors will be at risk of redundancy in the short-term to medium term. Workers in these sectors require opportunities to transition into other sectors and new careers. Adult learning can help them to re-train or up-skill and can thus facilitate worker career mobility and resilience.

The future of work causes a significant overhaul of jobs and skill needs across London's economy**.** COVID-19 is a catalyst for digitalisation and could further accelerate automation. Consequently, the pace at which new jobs emerge and others disappear is increasing. With the increasing use of digital services and new technologies, skill requirements for jobs are also undergoing significant change. For example, digital skills are becoming even more important. Yet, more than 40% of London's population still lacks the necessary skills to thrive in a digital work environment. All the developments necessitate an adjustment of skill development and, in particular, the adult learning system in order to address pressing, local labour market challenges.

Adult learning can offer the necessary support for workers that lost jobs due to the crisis or face uncertainty resulting from automation. For most workers, finding a new job or changing careers entails challenges in adapting to different tasks and responsibilities. London's adult learning systems plays a crucial role in guiding and supporting them in this process by enabling them to (i) refresh old skills, (ii) up-skill to move into a new job with higher skills requirements, or (iii) re-train to find employment in a different sector.

Despite the essential importance of adult learning, participation and funding have fallen. London recorded an even steeper decline in adult learning participation than the rest of the UK, with learning participation falling from 40% in 2015 to 28% in 2019. Some important obstacles to participation in learning can be shaped by targeted policy. Time constraints as well as family obligations and work-place responsibilities that appear incompatible with spending time on learning are among the most important barriers. Another major barrier are financial constraints. For 17% of Londoners who do not participate in training or learning, the available opportunities were too expensive or unaffordable.

Addressing these barriers to adult learning is within the scope of public action in London. As shown across the OECD, raising awareness of the returns of skills through targeted information and guidance can boost potential learners' motivation. Furthermore, an increased availability of flexible, shorter or modular types of learning programmes can mitigate time constraints. Offering targeted financial support can help alleviate the financial constraints, especially of the low skilled and economically disadvantaged. Finally, making sure that adult learning programmes offer higher labour market relevance could entice more adults into taking advantage of opportunities to up- or reskill.

The UK government recognises the important role of further education for an inclusive recovery from the economic crisis. The new government white paper *Skills for Jobs*, published in January 2021, sets out a new high-level vision for further education, adult learning, and apprenticeships. *Skills for Jobs* proposes a reform of the further education system that will put firms at the centre and could lead to more demand-driven training, which better aligns with local economic and skills needs. The white paper acknowledges the importance of the local level in designing and delivering further education that is more effective.

London has made adult learning a priority with the development of the Skills for Londoners Strategy, which sets out the Mayor's vision to create a post-16 technical and vocational education and skills system that meets the needs of Londoners and businesses. As of 2019, the Mayor of London took over responsibility for the Adult Education Budget, which includes about GBP 306 million in new devolved funding. This Adult Education Budget (AEB) funds training for adults aged 19 and above. Some of these qualifications funded through the AEB include basic English and maths skills, basic digital and adult community learning. These courses are delivered by a range of different providers, including further education colleges, local authorities, independent training providers, institutes for adult learning, sixth form colleges, and universities. In 2019, the Mayor committed to make relatively few changes to the adult learning budget, recognising the need to provide stability to the sector during the transition period. Going forward, the Mayor will begin to make changes to the system to align it with London's labour market and economic needs.

What are the policy opportunities for London to future proof its adult learning system?

This OECD report has been developed following extensive consultations with stakeholders across London, including the Skills for Londoners Board as well as the Business Partnership. Both of these bodies were set-up by the Mayor to inform the future development of London's adult learning system. As London looks to make changes to its adult learning system, the following recommendations could be considered.

Creating an adult learning ecosystem in London

The delegation of the Adult Education Budget (AEB) provides new opportunities for London to adapt training to its local needs. London was able to respond more quickly to the challenges of the pandemic and could better tailor adult learning offers to local conditions. However, the AEB funding is a small piece of the overall training system. This could lead to further fragmentation due to the different controls and contracts held by different UK departments vis-à-vis the Greater London Authority. The current approach to adult learning may create inefficiencies due to competing priorities. Instead of being able to design fit-for-purpose adult learning programmes based on a target groups needs and desired outcomes, local training providers in London must navigate different funding priorities from both the national and local government - resourcing, managing and knitting together multiple contracts for a 'best-fit'.

There is an opportunity to examine how further devolution of employment and skills policies to London could create a robust adult learning ecosystem. This would include looking at opportunities to devolve UK Shared Prosperity Funding, the National Skills Fund and the National Career Service, alongside the ability to incentivise nationally funded system to better meet local needs, such as apprenticeships. Preliminary evidence based on the evaluation of the delegated AEB in London shows that training providers have changed their programme delivery in line with high local priorities, which suggests that devolution has enabled a greater match between adult learning provision and local skills and labour market needs. Increased provision in London included more support for low-income learners, courses relevant to the priority sectors in London, provision of core, basic skills, as well as more opportunities for ESOL (English as a second language) learners.

Further devolution could enable London to develop and refine place-based skills development programmes that address the full range of worker and employer needs. In its 2019 report *Skills for Londoners: Call for Action,* the GLA demanded further devolution and set out plans on how to use such devolved powers in its skills strategy. At its core, the GLA aims to create an integrated skills and employment system and asks for more responsibility in careers advice, apprenticeships, traineeships, devolution of funding for 16 to 18 year olds, employment support and other areas. Further devolution could enable the GLA to develop partnership approaches and joined up local delivery based on organisational strengths of the range of adult learning providers. However, devolution should not be viewed as a panacea. Any moves towards further devolution would need to be backed by sufficient capacities and resources.

Feedback gathered from stakeholder consultations for this OECD study points to the importance of careers advice and support, which is unequal. The need for action is fundamental to drive change throughout London's skills system. Careers information is too often over-looked and under-valued by individuals as well as by institutions that deliver training. The current careers landscape is complex with a number of players, including the National Careers Service, Jobcentre plus and the Office for Students. New interventions are introduced on a continuous basis by different government departments and London has little oversight or accountability in this area. There could be value for London to take on more responsibility with the goal of integrating careers advice with other local services used by workers such as employment, housing, education services. Going even further, as part of London's new adult education funding responsibilities, the city could aim to embed personal guidance outcomes in all skills provision. Pursuing these objectives and integrating various local services could offer London the chance to make better use of data on workers and learners to match people to pathways and opportunities.

Recommendations to create an integrated adult learning system in London

Examine opportunities for further devolution to foster an integrated and joined-up adult learning offer

- *Work with national government departments to examine possibilities for further devolved adult skills funding*: This would include looking at how more flexibility can be injected into the management and implementation of the UK Shared Prosperity Fund, the National Skills Fund, and the National Careers Service.
- *Ensure London has access to consistent local data to shape adult learning decisions and priorities*: This would include improved access to consistent data on adult learning participation, learners' progress, learners' subsequent employment outcomes (via the UK Individualised Learner Record), as well as outcomes for individual local training provider. Ideally, these data would be consistently shared with the GLA or provided in a simplified manner through a data cube. Thus, the GLA to could regularly evaluate training providers and assess policy priorities.
- *Ensure any new adult learning strategies or funding addresses the multi-dimensional barriers faced by some groups to enter the labour market*: London should aim to fund place-based programmes based on evidence that they address the full range of adult education and skills needs, supporting individual to access and progress in employment.

Create quality information and advice about careers and jobs in London

- *Look at opportunities to create a "made in London" career guidance platform*: Such a platform would aim to provide employers and workers with actionable labour market information on local training and employment opportunities. As the labour market changes rapidly, quality information about jobs and careers should be available for Londoners. Steps could also include strengthening the partnership with the London provider of the National Careers Service, which provides information and free tools for young people and adults about jobs, careers, writing a CV and training via its website. Such information and accompanying support should serve everyone, regardless of their career level or life stage. It would be critical to ensure equal access to access among all learners and target disadvantaged groups.
- *Use technology to help individuals engage more in careers counselling and training aligned to an evolving labour market*: London could aim to create skills development roadmaps and networking opportunities through digital badges or skills passports. Digital badges would enable individuals to demonstrate digital skills acquired and acknowledge the breadth of learning that can take place online.

Bringing employers on board to strengthen investments in adult learning and workplace training

This OECD report shows that despite the importance of adult learning, skills shortages and gaps are growing and less people are participating in training. Employers continue to report that they have hard to fill vacancies due to a lack to suitable candidates and yet many firms also report sub-optimal investments in developing the skills of their employees.

One way of involving more firms in training and ensuring training meets demand is through apprenticeships. An apprenticeship is a blend of on and off-the job learning which develops skills, knowledge and behaviours needed to perform a job, resulting in occupational competency for the learner and preparing them for their future career. The government funds a minimum of 95% of the training and assessment costs while an employer pays the salary and, with the training provider, supports an apprentice during their programme. In the UK, apprenticeships are recognised as the key route to undertake training while learning within a working environment. Substantial reformation of the system has taken place to increase employer ownership and design, including through the introduction of a UK-wide apprenticeship levy. Prior to the levy, apprenticeships starts in London increased from around 11,000 to above 44,000 between 2005 and 2017. Since the introduction of the levy, has fallen by around 4-5% and estimates predicted a further decline in 2019/20 even before the pandemic ensued. Recent national reforms aim to re-boost apprenticeships through additional funding and financial incentives for employers.

Within the UK, there tends to be less debate about the role of local authorities in the apprenticeship system. Employers are often locally rooted, and therefore local authorities well placed to engage employers. More autonomy could be created for London to speak with businesses about apprenticeships, supporting employer take-up and promoting them to people of all ages and backgrounds. It would be particularly important to ensure the provision of customised support to SMEs that often lack the capacity to participate in comparison to large employers. New UK-wide rules on greater flexibility of firms to transfer unspent levy funds to SMEs could provide the impetus needed to help SMEs, though London will need to link it with administrative support tailored to the needs of SMEs.

Alongside the development of skills, it is increasingly important to ensure those skills are effectively deployed in the workplace. This is a relatively new area for public policy, as it requires active engagement with firms to ask fundamental questions about their human resources and talent management strategies. As opposed to “fire-fighting” skills shortages reported by firms, a skills use approach seeks to understand if there are broader issues related to the way a job is designed as well as the pay and working conditions on offer.

There is a strong rationale in London to look at how to work closer with firms to encourage them to use their skills better. Skills use is particularly important for London because of its sub-optimal productivity outcomes as well as the fact that firms continually report shortages and hard-to-fill vacancies. While there is an increasing amount of evidence about the benefits, it is less clear what actions can be taken, especially at a local level, to identify and embed practices that enable the better use of skills within companies. One potential avenue for better skills use is promoting high-performance working practices (HPWPs). Such practices include, for example, employee reward programmes, more flexible working hours, mentoring and leadership development courses, as well as a company culture that promotes training and development. London has initiated the *Good Work Standard*, which aims to encourage employers to adopt high standards in terms of fair pay, workplace wellbeing, skills and progression and diversity and recruitment. To reap the full benefits of HPWs, the scheme requires further uptake among employers. Establishing peer-learning platforms and a mentoring system, particularly for SMEs and start-ups, could provide further opportunities for London to raise awareness about the benefits of improved organisational and management practices, including teamwork, task discretion, mentoring, job rotation, applying new learning, incentive pay, and flexible working hours.

Recommendations to encourage employer involvement in adult learning and training

Strengthen workplace training and apprenticeships:

- *Actively involve employers in designing adult learning programmes*: Stronger collaboration and exchange of information between training providers and local firms could help shape programmes according to local needs and incentivise firms to make use of such training opportunities. This could be considered within any accountability provisions to providers from London Adult Education Budget.
- *Introduce new support measures for training in SMEs to overcome barriers of training provision in terms of capacity and financial resource in smaller businesses*: Training tax credits, issued by the national government, could help alleviate those barriers. Furthermore, employer-led training networks could help SMEs play an active role in identifying training needs and shaping programmes. London could also look at how discretionary funding could be used to influence and incentivise employer take-up of apprenticeships as well as support SME engagement with the Apprenticeship Service.

Ensure firms make use of available skills

- *Raise awareness of the benefits from effective skills use and development, for example through targeted campaigns or by setting up award mechanisms for employers who do implement high-performance work practices*: This could also include a local strategy that emphasises skills use policies. Currently, there is no explicit focus on improving skills use as an overall objective in the Skills for Londoner Strategy. Such a focus would help to join-up thinking and action to support short-term employer skills needs, while linking them to business performance and development as well as longer-term local economic development aspirations.
- *Appoint a local coordinator, if feasible, to act as a catalyst for engagement*: The success any new initiative focused on better using skills requires the co-ordination and marshalling of stakeholders and resources. Having an identifiable person within the GLA who can raise awareness, while engaging local firms and linking them with human resources consultants, could help operationalise such actions.
- *Establish peer-learning platforms that spread good workplace practices among London's firms and facilitate knowledge sharing of successful managing practices, internal skills development strategies, and uptake of new technologies or other innovation*: It would be important to identify businesses that already demonstrate good company practices and can provide champions for change among local firms. A peer network with mentors drawn from exemplar firms can help provide mentoring support and advice, particularly for SMEs and start-ups, as well as within industries and supply chains. These champions could help drive a local "business case" about how and why skills use policies benefit local firms.

2 Enhancing adult learning in light of the consequences and opportunities of the COVID-19 pandemic

This chapter examines the impact of the COVID-19 pandemic on London's economy, its firms, and its workers. It analyses the importance of adult learning for providing re-training and up-skilling opportunities. The chapter focuses on i) the consequences of the COVID-19 pandemic for sectors, jobs, and skills in London; ii) the current adult learning system in London and its growing importance for addressing pressing labour market challenges; and iii) London's vision for a devolved adult learning system.

In Brief

The ongoing COVID-19 pandemic will put the adult learning system in London under pressure while also making it more important than ever

- **The ongoing COVID-19 pandemic crisis is causing widespread disruption in London's labour market, with some sectors expected to shrink by more than 20% in 2020**. Recent estimates predict a drop of London's GDP of more than 10% in 2020. Consequently, many jobs and livelihoods are at risk. Between March and August 2020, unemployment benefit claims in London rose by 154%. The impact of the economic crisis is concentrated on specific sectors and certain groups in London. Sectors such as hospitality, arts and entertainment will likely record revenue losses of 20-30%. Before COVID-19, London had enjoyed an employment boom, with low unemployment rates. However, COVID-19 risks erasing those gains.
- **The pandemic might have a lasting impact on where and the way people work in London.** COVID-19 has been a catalyst for technological change in the labour market, as remote working has become the new normal. Inadvertently, remote working is changing London's economic geography, putting many jobs in Central London's service industry at risk.
- **Adult learning is more important than ever as displaced or furloughed workers require learning opportunities to up-skill or re-train.** Unemployment is rising and further job losses will likely materialise in 2021. As of 31 July 2020, more than 700 000 Londoners remain on government support via the furlough scheme. Adult learning will need to play a vital role in allowing furloughed and displaced workers to transition to new employment opportunities by allowing them to gain the skills needed in other jobs and sectors.
- **London has developed a dedicated skills strategy but many aspects of the adult learning system remain centralised.** While the Greater London Authority (GLA) has set out a clear skills strategy, *Skills for Londoners*, many adult learning funding streams and competences, including apprenticeships, remain centralised at the national level, limiting the levers available for the GLA to create a joined-up training offer that combines skills delivery alongside other supports, such as careers advice, job counselling, and other social supports.
- **Devolution of adult learning could provide more opportunities for London to better align the delivery of skills programmes to its labour market needs.** Through the Skills for Londoners Strategy and new devolved funding for adult education, London is aiming to address local skill needs more effectively through closer consultation with employers and training providers, and by establishing a more flexible local skills system. While devolution in itself is not a panacea to address London's adult learning challenges, preliminary evidence indicates that training providers are better at gearing programmes to disadvantaged individuals. Notwithstanding this progress, adult learning in London will need to keep adapting, in particular due to the implications of COVID-19, as digital skills become even more important and online-learning has become the main channel for the delivery of programmes.

Introduction

The COVID-19 pandemic poses unprecedented challenges to London's economy and labour market. London emerged as an epicentre of the pandemic in the UK and one of the worst hit large cities in Europe. Economically, the pandemic has not only resulted in an unparalleled economic shock with significant repercussions for firms and workers, but it could also accelerate structural changes that were already in motion before the pandemic. Megatrends such as automation, job polarisation or digitalisation have been transforming the world of work and are likely to be reinforced by the pandemic and measures to contain and live with it. As social distancing and teleworking became the new normal for millions of workers, COVID-19 appears to be a catalyst for long-lasting change in the way firms operate and people work.

The COVID-19 pandemic and its impact on certain sectors and groups of workers, make adult learning in London more important than ever. As sectors such as hospitality, tourism, or the creative industries experienced an erosion of their current business models, hundreds of thousands of workers have been put at risk of job loss. As long as the pandemic lasts, a full recovery is likely to take years for these sectors, even if a return to the "pre-COVID-19 normal" takes place. Many of the workers that face the highest job risks due to the crisis were already disadvantaged before the pandemic. The low skilled and young appear to bear the brunt of the economic crisis and will need sufficient learning opportunities to gain new skills or to retrain in order to find a job or make a career transition.

What is the impact of COVID-19 on London's economy?

COVID-19 is an enormous shock that has caused a historically unparalleled fall in economic activity in London. Despite a strong recovery in the summer months of 2020, London's real gross value added is still expected to fall by 10.5% in 2020 (GLA Economics, 2020[1]). While current projections for 2021 and 2022 predict fast growth (+7.9% and 4.7%, respectively), a full recovery to pre-COVID levels is likely not to occur before mid-2022. In terms of job loss, government support schemes have provided a strong support mechanism but a significant contraction of London's labour market in 2021 is expected.

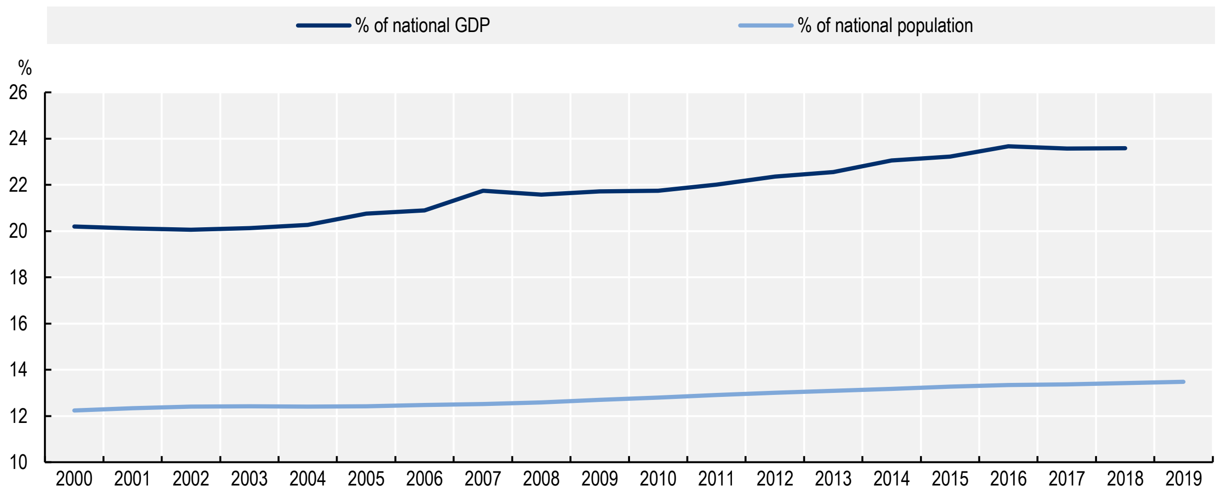
The pandemic creates new challenges for London's economy and threatens to exacerbate already existing labour market inequalities. This section analyses the impact of COVID-19 on London's economy. First, it provides an overview of London's economy, its relative strengths compared to other OECD metropolitan areas, and its challenges in terms of labour market inequalities. Second, it assesses the effects of COVID-19 on job losses, economic inactivity, vacancies, and specific sectors in London. Third, it examines how the pandemic is changing the economic geography and the way people work in London. Fourth, it examines how furloughed and displaced workers could benefit from public support, mainly through an effective adult learning and career guidance system.

London has a strong economy but large labour market inequalities exist

As the United Kingdom's capital and one of the leading financial services hubs of the world, London boasts a strong economy with an internationally competitive labour market.[1] With its population of around 9 million inhabitants (more than 13% of the UK's population of 66.8 million),[2] Greater London contributes almost 24% of the national GDP. The economic importance of London has steadily grown in recent years (Figure 2.1). While London's share of the national population grew by 9%, its contribution to the national GDP has increased by 17% between 2000 and 2018.

Figure 2.1. London's demographic and economic importance for the UK

Changes in the share of national population and GDP, 2000-19



Note: The figure displays the data for the TL2 region of London, which corresponds to Greater London.
Source: OECD regional database, 2020.

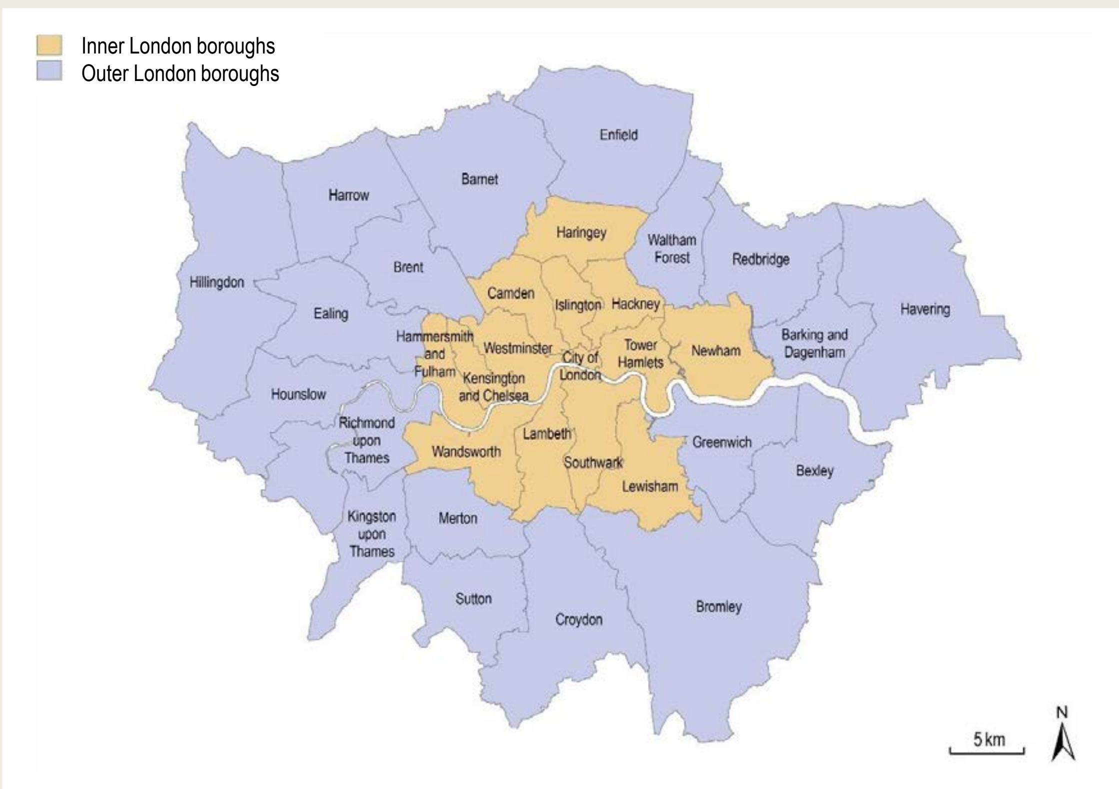
Over the past decade, London, like most parts of the UK, has benefitted from a boom in employment, which has driven a significant reduction in unemployment. Since 2010, the unemployment rate in London has fallen from 9.4% to 4.4% in 2019. Over the same period, labour market participation of those over 15 years old also increased by 3 percentage points, reaching 68.2% in 2019, 5 percentage points above the UK average.[3] This surge in new employment opportunities has not only increased material welfare but also enhanced socio-economic mobility as vulnerable groups such as the young or low skilled enjoyed better access to jobs and fewer difficulties in entering the labour market.

Box 2.1. The geography and local government structure of London

The Greater London Authority and the local councils in London

Local government in London consists of 32 borough councils and the City of London. London boroughs are further divided into Inner London and Outer London (Figure 2.2). In 2000, the Greater London Authority (GLA) was created, comprising the Mayor of London and the London Assembly. The GLA is the devolved regional governance body of Greater London and is responsible for setting the overall vision for London with scrutiny from the Assembly. It holds powers over transport, policing, economic development, and fire and emergency planning. The boroughs and City of London provide many local services in London such as social services, leisure and recreation, or waste collection and disposal, and are also responsible for revenue collection. In this report, analysis of London refers to Greater London, unless stated otherwise. In addition, the report uses complementary analysis of differences within London, which are based on London's boroughs.

Figure 2.2. Map of London's 32 boroughs and the City of London



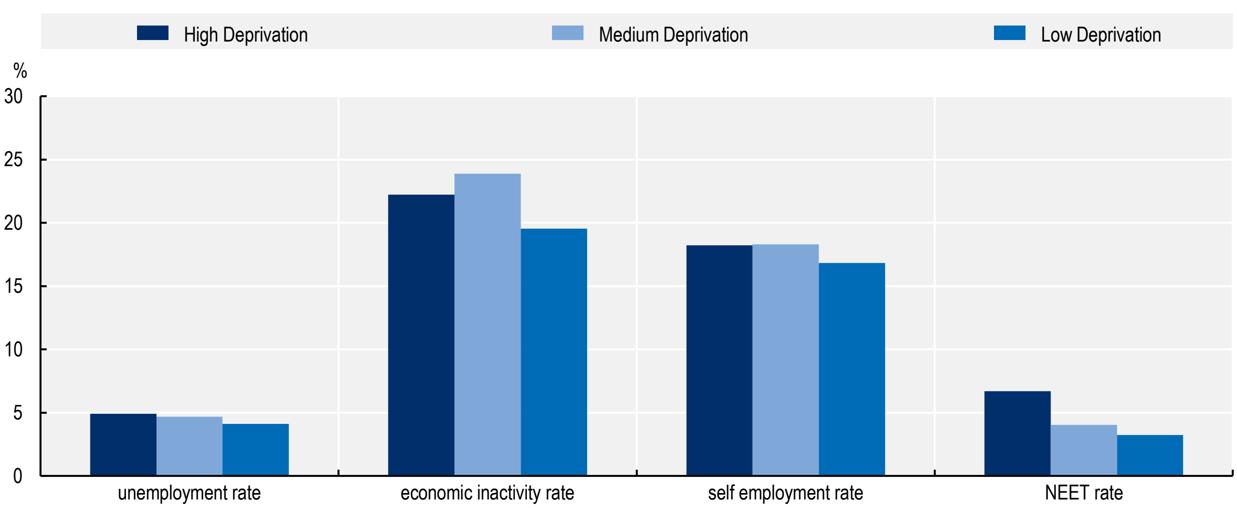
Source: Produced by the OECD, based on official boundaries provided by ONS.

Internationally, data on economic activity, productivity, labour market trends, and income document the strength of London's economy. In a comparison with other major OECD metropolitan areas, London records the highest disposable income level (Annex Table 2.A.1). Furthermore, London is among the top 40% in terms of economic activity as measured by GDP per capita. Equally, it had relatively high labour productivity of almost USD 120 000 per worker in 2018, making it the metropolitan area with the seventh highest productivity level out of 18 OECD metropolitan areas.[4] London also reports relatively high labour market participation and low long-term unemployment rates. Finally, it benefits from a large pool of highly qualified workers, as documented by the second highest share of graduates with a tertiary degree (53.6%), only trailing Toronto where almost two-thirds of the labour force have completed tertiary education.

Despite strong economic growth, some parts of London lag behind economically and have much higher levels of deprivation than other parts of the UK capital. Based on ONS data, multi-level deprivation including factors such as income, employment, health, or education and skills, is more than twice as common in the poorest boroughs as in the most affluent boroughs of London.[5] In the 10 most deprived boroughs, the pre-COVID unemployment rate and economic activity rates reached 5% and 22%, compared to 4.3% and 19.7% in the 10 least deprived boroughs. Differences within London are especially striking for youth not in employment, education or training (NEET). In London's 10 most deprived boroughs, 6.5% of youth are not in employment, education or training (Figure 2.3). In contrast, the NEET rate only amounts to 3.1% in the 10 least deprived boroughs. These labour market inequalities leave some parts of London, its most deprived boroughs, and their residents more exposed to economic crises. The COVID-19 pandemic is likely to exacerbate these inequalities across London. In responding to the unprecedented challenges of the COVID-19 pandemic, policy makers will need to find solutions for these disadvantaged areas to prevent further inequality (see Figure 2.4 for geographic differences in deprivation across London).

Figure 2.3. Labour market indicators by level of deprivation in London

Unemployment, economic inactivity, NEET, and self-employment rates by level of deprivation, 2019

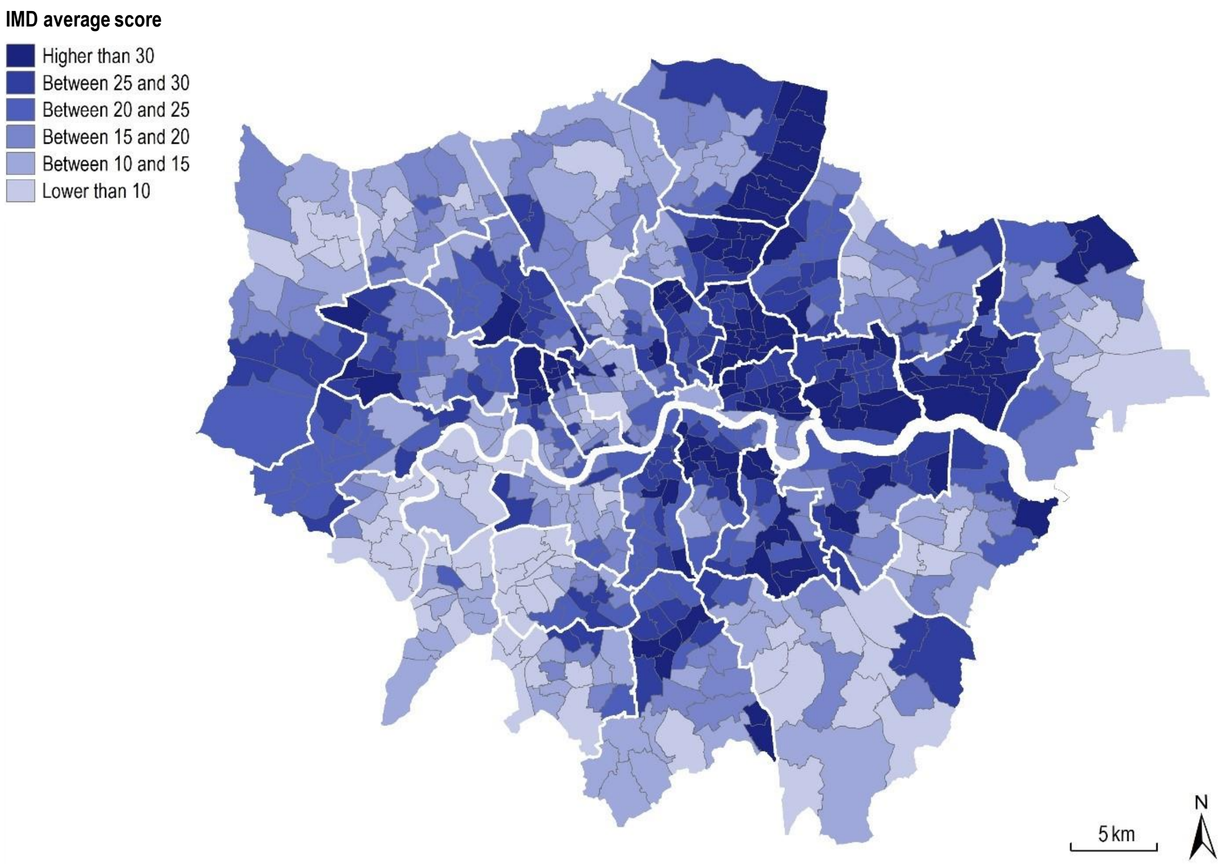


Note: The figure shows unemployment, economic inactivity, NEET, and self-employment rates for London boroughs by level of deprivation. London's 32 boroughs are classified into high, medium, or low deprivation based on the UK *Indices of Deprivation 2019* (Ministry of Housing, 2019[2]).

Source: OECD elaboration based on data from (Ministry of Housing, 2019[2]) *and ONS.*

Figure 2.4. Deprivation across London boroughs

Index of multi-level deprivation (IMD) across wards, sub-divisions of London boroughs, 2019



Note: IMD scores approximate the proportion of the population living in deprived households. Thus, higher scores indicate higher multi-level deprivation.
Source: OECD elaboration based on data from (Ministry of Housing, 2019[2]) *and ONS.*

COVID-19 heightens risks of employment and job loss, especially among vulnerable groups

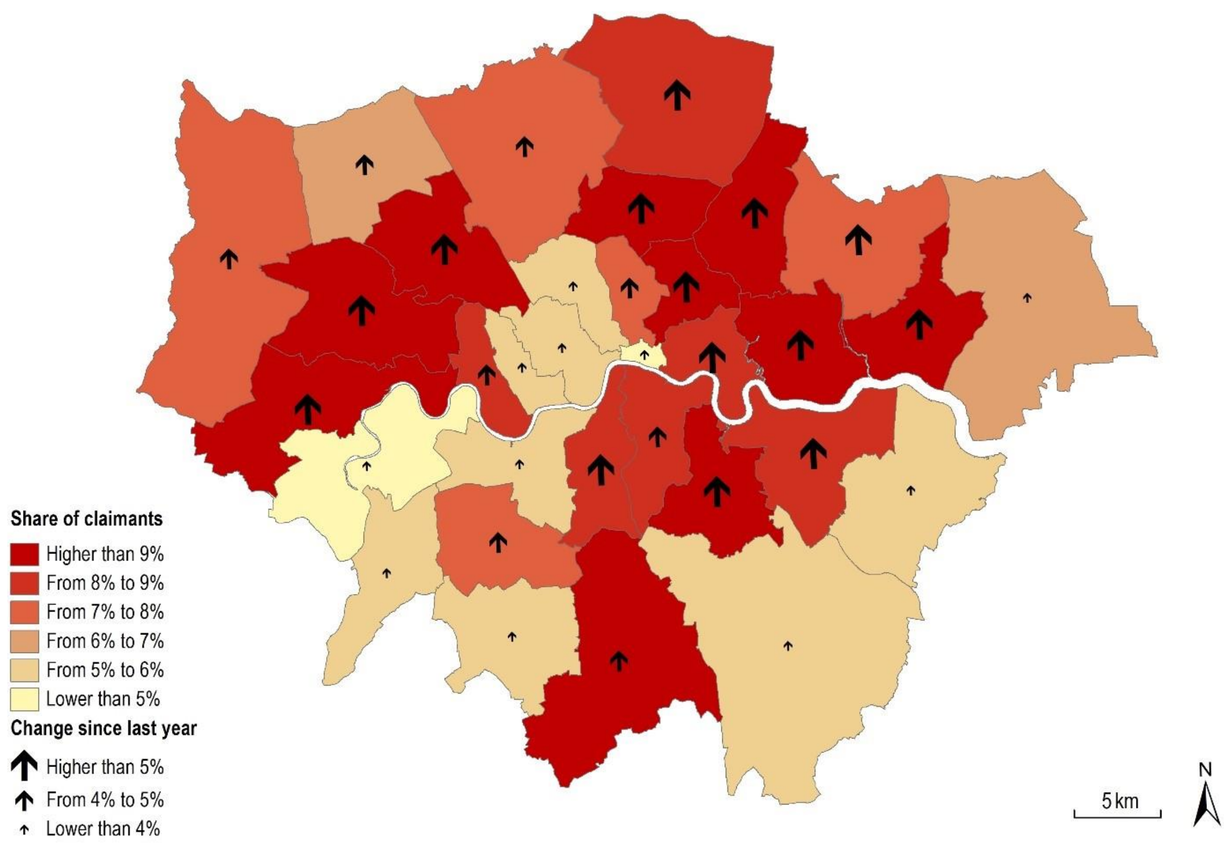
Notwithstanding the overall positive development over the past decade, London's labour market faces both novel as well as structural challenges. The COVID-19 pandemic is already having a severe impact on lives, jobs, wages and inequality in London. London had some of the country's highest COVID-19 mortality rates in March 2020 due to high levels of deprivation in some areas. To prevent a lost generation of young people who enter the labour market and workers who are losing their jobs, London needs proactive plans to help those groups most affected by the recession.

Data from the ONS showed the UK's economy shrank by 20.4 per cent in April – the first full month of lockdown – suggesting the UK is on course for a historic recession. According to September 2020 estimates, the London economy will contract by more than 10% in 2020 (GLA Economics, 2020[1]). Nowcasting data from ESCOE show that London's Q3 2020 gross value added was 11.2% below its level in 2019, meaning London has experienced the worst contraction apart from Wales among all UK regions (Koop et al., 2019[3]). This contraction is smaller than initially feared but the negative impact is concentrated on certain sectors and is more pronounced for low-paid and low skill jobs. Already, the crisis has led to a considerable fall in employment and, given a significant drop in vacancies as well as the pending rollback of government aid such as the furlough scheme, the pandemic is likely to have long-lasting effects.

During the peak of the pandemic in the spring 2020, London lost thousands of jobs as lockdown measures hit the economy. Compared to the preceding three months, the employment rate of 16-64 year olds between April and June 2020 fell by 0.4 percentage points (to 76.5%) in London, a decrease that was more pronounced than the national figures, as the UK employment rate fell by 0.2 percentage points. While the unemployment rate in London appeared to be unaffected, economic inactivity rose by 0.3 percentage points in London. As new containment measures become necessary, more jobs could be at risk. Recent OECD estimates suggest the share of jobs in sectors most directly impacted by containment measures varies from less than 15% to more than 35% across regions, with large cities and tourist destinations such as London having a higher share of jobs at risk (OECD, 2020[4]). In fact, as of October 8 2020, the number of universal credit and jobseeker allowance claims has increased by 5% across London compared to last year (Figure 2.5).

Figure 2.5. Claimants of universal credit and jobseekers allowance in London, October 2020

Share of population that claimed universal credit or jobseeker allowance and evolution of claimant numbers since last year, by borough



Note: The figure presents the percentages of each borough's population aged from 16 to 64 that claimed Jobseekers Allowance (JSA) or some Universal Credit (UC) based on data from October 8 2020. The UC claimants that are included are 1) those that were recorded as not in employment (May 2013-April 2015), and 2) those claimants of Universal Credit who are required to search for work, i.e. within the Searching for Work conditionality regime as defined by the Department for Work & Pensions (from April 2015 onwards). Additionally, the figure presents the relative increase in claimant numbers in percent over the past year.
Source: OECD elaboration based on ONS data.

These headline figures do not reveal the full extent of the labour market impact of COVID-19. Although overall economic activity in London dropped significantly, with its GDP by more than 19% between March and May 2020, government support schemes have provided a cushion against fast rising unemployment and income shocks (GLA Economics, 2020[5]). The UK government expanded the entitlement to unemployment related benefits and introduced a far-reaching furlough scheme (see Box 2.2 for more details). Together, these measures are providing support to around 2 million London residents.[6]

Box 2.2. The UK furlough scheme

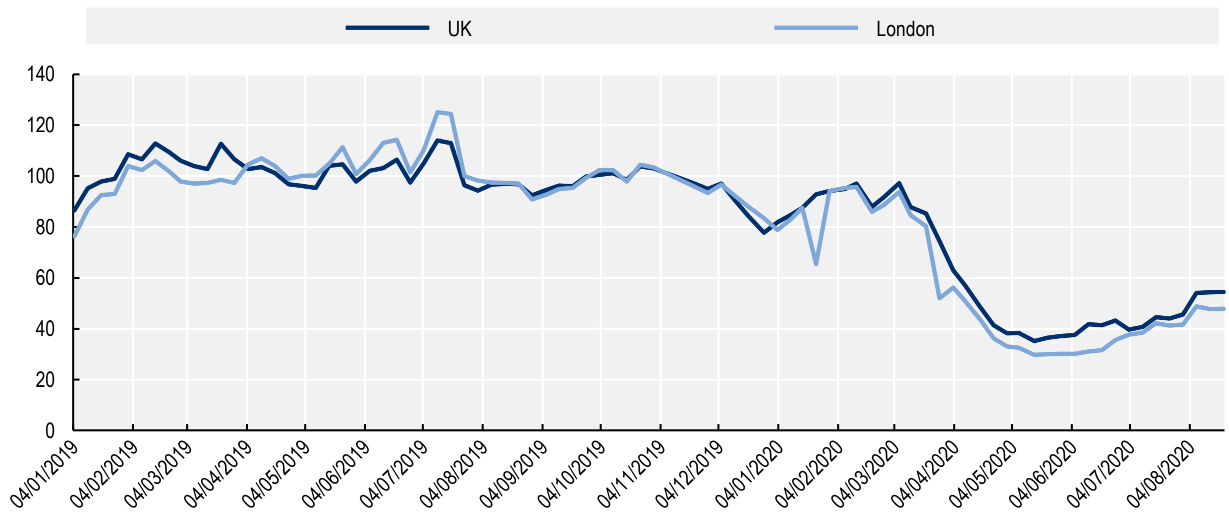
On 20 March 2020, Rishi Sunak, the Chancellor of the Exchequer, announced the Coronavirus Job Retention Scheme. The scheme offers a financial package designed to help employers and businesses during the COVID-19 pandemic. As part of this furlough scheme, the central government provides grants to employers to pay 80% of a staff wage each month, up to a total of GBP 2 500 per person per month. Initially foreseen for three months, the scheme was eventually extended and was foreseen to expire at the end of October 2020. At the end of October and early November 2020, the UK government announced the extension of the furlough scheme until the end of March 2021.

Benefits claims in the UK capital have gone up by 160% between February 2020 and January 2021, with young workers being affected the most. In London, the number of claims by residents aged 16 or older has increased by almost 300 000, reaching a total of 485 000 in January 2021 (GLA, 2021[6]) . Among young workers aged 25-29, claims even rose by almost 250%. The rise in claim counts is significantly higher than for the UK overall, where claims increased by 117% (or almost 1.5 million). London experienced the second highest relative increase of all UK regions, only exceeded by the South East (+154%). Due to the size of its economy and the large rise in local claims, London accounted for a fifth of all new benefit claims in the UK.

While London's economy is losing jobs, its firms are also significantly reducing hiring efforts. Compared to the average number of vacancies posted online throughout 2019, London has seen a drop in available vacant jobs of more than 50% by August 2020 (Figure 2.6). While all regions and countries of the UK saw lower vacancies numbers following the start of the pandemic, London experienced a significantly larger decrease (- 52.1%) in the number of vacancies than the UK overall (-45.5%). The only region In the UK with a larger fall in vacancies, relative to the 2019 average, is Yorkshire and The Humber (- 55.6%). In comparison to London, firms' hiring decisions in Wales, Northern Ireland, or the East Midlands appear to be considerably less affected, with vacancies having decreased by around 30-35%.

Figure 2.6. Evolution of vacancies in London and the UK

Number of vacancies relative to the 2019 average



Note: The underlying data are created based upon job adverts provided by Adzuna. The data include information on several million job advert entries each month, live across the UK across the period January 2019 to August 2020, broken down by region and job category.
Source: ONS, based on job adverts provided by Adzuna.

Recent evidence based on data from indeed, the largest online job site in the UK, further points out the large hit to London's economy. Compared to other regions of the UK, London documented the greatest fall in online vacancies in percentage points as of September 18 relative to the same period in 2019.[7] In contrast to improvements seen in all other regions of the UK over the last weeks of August 2020 and first weeks of September 2020, online vacancies remained stagnant in London. In fact, job postings in London were 54.6% below the number of vacancies observed on 18 September 2019, only slightly above their lowest point of -56.9% in early June 2020. With the government reversing its push to get more people back into offices, city centre economies are set to face further headwinds, with London in particular likely to suffer.

The economic impact of the crisis is concentrated on sectors of London's economy that have been particularly hard hit by containment measures and those sectors are unlikely to recover quickly. Certain sectors such as hospitality, leisure, tourism, and the creative industries have been devastated**.** Since February 2020, these sectors reported revenue declines of more than 30%. Current estimates predict that the three sectors with the greatest decline in real gross value added in 2020 will be Accommodation and foods services (-30.1%), arts, entertainment, and recreation (-25.3%), and education (-24.7%) (Figure 2.7). The recovery for the accommodation and entertainment sectors is likely to be slow as international tourism is anticipated to decrease by 60-80% in 2020, and is not expected to rebound quickly (OECD, 2020[7]) (see Box 2.3). Other sectors that face significant contraction include construction and manufacturing, with a predicted fall in revenue in 2020 of around 19% and 17% respectively.

Figure 2.7. Projections for GVA in 2020 and jobs in 2021 across sectors in London

Growth rates of GVA (2020) and jobs (2021) across sectors of London's economy

Real GVA annual growth rate in 2020	
Sector	**%**
Agriculture, forestry and fishing	-2.8%
Mining and quarrying	-2.9%
Manufacturing	-16.6%
Electricity, gas, steam and air-conditioning supply	-2.4%
Water supply, sewerage and waste management	-0.5%
Construction	-19.0%
Wholesale and retail trade; repair of motor vehicles	-14.0%
Transportation and storage	-14.2%
Accommodation and food service activities	-30.1%
Information and communication	-7.8%
Financial and insurance activities	-6.6%
Real estate activities	-8.5%
Professional, scientific and technical activities	-10.5%
Administrative and support service activities	-9.6%
Public administration and defence; compulsory social security	-10.1%
Education	-24.7%
Human health and social work activities	13.2%
Arts, entertainment and recreation	-25.3%
Other service activities	-7.5%
Activities of households	-9.1%

Workforce jobs annual growth rate in 2021	
Sector	**%**
Agriculture, forestry and fishing	-3.5%
Mining and quarrying	-4.3%
Manufacturing	-7.5%
Electricity, gas, steam and air-conditioning supply	-4.9%
Water supply, sewerage and waste management	-5.4%
Construction	-6.8%
Wholesale and retail trade; repair of motor vehicles	-7.8%
Transportation and storage	-7.5%
Accommodation and food service activities	-10.5%
Information and communication	-5.3%
Financial and insurance activities	-2.0%
Real estate activities	-4.8%
Professional, scientific and technical activities	-4.1%
Administrative and support service activities	-5.8%
Public administration and defence; compulsory social security	-3.0%
Education	-8.5%
Human health and social work activities	0.5%
Arts, entertainment and recreation	-9.3%
Other service activities	-4.3%
Activities of households	-3.8%

Note: Estimates are based on a gradual return to economic growth. Green indicates growth, orange indicates decline, and red indicates large decline.
Source: Estimates from GLA Economics.

Box 2.3. The impact of COVID-19 on tourism and hospitality in London

Tourism plays an important role for London's economy. In 2019, London attracted 21.7 million overnight visits from abroad (ONS, 2020[8]). These international tourists spent almost 16 billion GBP in London, which is equivalent to more than 3% of London's total GDP. The actual contribution of tourism to London's GDP is even larger if domestic day tourists are included in the spending figures.

COVID-19 has brought tourism in London to a standstill. **Revised OECD estimates indicate that the shock caused by COVID-19 could amount to a 60-80% decline in the international tourism economy in 2020**, depending on the duration of the crisis and the speed with which travel and tourism rebounds (OECD, 2020[7]). The top five countries in terms of tourism spending in London, the United States, China, France, Italy, and Germany, alone accounted for more than 5.5 billion GBP or 35% of all international tourism spending in London. Given that these countries either face a resurgence of the pandemic or are subject to travel restrictions, the revenue loss for London's tourism economy will be drastic.

The lack of international and, to a lesser degree, domestic tourists will have a severe impact on particular sectors of the economy. The sector that is hit hardest is accommodation and food service activities, which accounts for around 2.8% of GVA and 380 000 jobs in London. Many of those jobs are now at risk. The arts and entertainment industry, which contributes 2.1% to London's GVA and employs around 140 000 people, is another sector that will face significant difficulties due to the lack of tourism.

Source: OECD Regional database 2020; (ONS, 2020[8]); (OECD, 2020[7]).

The bulk of employment loss in London will likely materialise in 2021 and could cause long-term scarring effects for workers. Across London, current estimates predict a relatively small reduction of employment in 2020 but a much larger fall in 2021, with total employment to decline between 5.6% and 2.8%, depending on the speed of the economic recovery (GLA Economics, 2020[1]). Based on the scenario of a gradual return to economic growth (as opposed to persistently low economic growth or fast economic recovery), several sectors could see drastic falls in employment. Jobs in accommodation and food service activities could fall by 10.5%. Several other sectors, including arts, entertainment and recreation, education, or manufacturing could also a decline in the number of jobs of 7.5% or more. While the true extent of employment losses will only be clear in several months' time and depend on the containment of the COVID-19 pandemic, job losses in London will be concentrated on specific sectors and certain groups of workers. Displaced workers could see lower earnings for years while young workers who enter the labour market during this economic crisis could not only suffer from lower earnings but also lower life satisfaction.

The pandemic has changed the way people work, with a fundamental shift towards remote-working

COVID-19 has brought about a new normal of remote working**.** As social distancing and confinement measures made traditional office-based work difficult to uphold, employers and employees throughout the OECD embraced telework. Wherever possible, businesses have undergone a transformation to operating virtually, with an enormous surge in the use of videoconferencing technologies. According to the Office for National Statistics (ONS), only 1.7 million people in the UK worked from home before the pandemic. At the height of the national lockdown in the UK, this number rose to more than 20 million people.

Not all local economies have been able to shift towards remote working. The extent to which remote working is feasible differs significantly across OECD regions and cities. The share of jobs that are amenable to teleworking depends on the structure of the local economy and the types of jobs that are locally available (see Box 2.4 for a detailed explanation). Jobs differ in in their tasks content, which in turn determine whether the job can be performed remotely or not. For instance, many high skill jobs in the service sector are amenable to teleworking, whereas low-paid service jobs that require physical proximity or jobs in the manufacturing industry have a low potential for remote working.

Box 2.4. Assessing the regional share of occupations amenable to remote working

The assessment of regions' capacity to adapt to remote working is based on the diversity of tasks performed in different types of occupations and is structured in two steps.

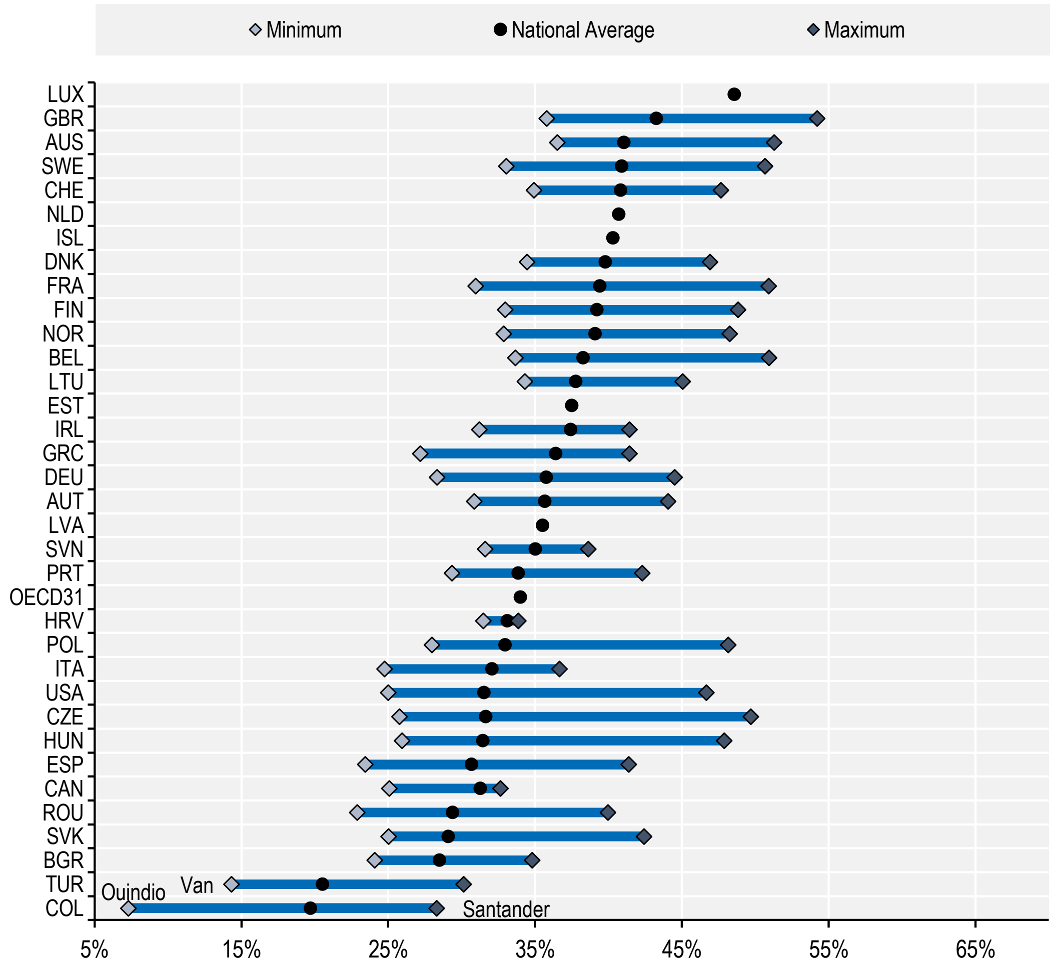
First, it classifies each occupation based on the tasks required and according to the degree to which those tasks can be performed remotely. For example, occupations requiring workers to be outdoors (e.g., food delivery person) or to use heavy equipment (e.g., a vehicle) are considered to have a low potential of remote working. In contrast, occupations requiring only a laptop and an internet connection (e.g., an accountant, finance specialist, etc.) will have a high potential to work remotely. This classification is based on a recent study (Dingel and Neiman, March 2020[9]), which is built from the O*NET surveys conducted in the U.S. These surveys include targeted questions that make it possible to assess the potential of remote working of occupations in a systematic way (see note below).

The second step relies on data from labour force surveys and consists of assessing the geographical distribution of different types of occupations and subsequently matching those occupations with the classification performed in the first step. Combining the two data sets allows assessing the number of workers that can perform their task from home as a share of the total employment in the region.

Note: While other authors have used the US Standard Occupational Classification system (SOC) to classify occupations, this OECD analysis uses the International Standard Classification of Occupations (ISCO), requiring a crosswalk between the two schemes for associating each occupation to a level of remote working potential in other countries. It is worthwhile noting that this work assumes that task content of occupations is consistent across countries, as in (Saltiel, 2020[10]) or (Gottlieb, Grobovsek and Poschke, n.d.[11]). Other studies focused on specific countries have categorised the remote working potential of occupations based on subjective, expert judgement, such as (OFCE, 2020[12]) and (Centre for Cities, 2020[13]) for France and the United Kingdom, respectively.
Source: (Özgüzel et al., 2020[14]).

No other city or region across the OECD has a greater capacity for remote working than London. In a comparison of OECD regions, London ranks first in terms of jobs amenable to teleworking (Figure 2.8). Overall, around 55% of jobs in London can easily be transitioned to teleworking.[8] This places London significantly above the UK average (43%) and other major OECD cities such as Zurich (47%), Stockholm (51%), Hamburg (44%) or Washington DC (47%), all of which have the highest teleworking capacity in their respective country. This adaptability of London's economy is a major asset; without it, COVID-19 could have had an even more severe impact on London's economy. Furthermore, it boosts resilience if future shocks should arise or if additional lockdown measures could become necessary. However, there is a growing risk that the London's labour market is increasingly divided along a new line determined by individuals' skill level, between those who telework and do not travel as much within or into the city and those, especially low-skilled workers, who cannot telework and thus face unemployment and a lack of job growth in their sectors (Espinoza and Reznikova, 2020[15]).

Figure 2.8. Share of jobs amenable to remote working across the OECD, 2019



Note: The number of jobs in each country or region that can be carried out remotely as the percentage of total jobs. Countries are ranked in descending order by the share of jobs in total employment that can be done remotely at the national level. Regions correspond to NUTS-1 or NUTS-2 regions depending on data availability. Outside European countries, regions correspond to Territorial Level 2 regions (TL2), according to the OECD Territorial Grid.
Source: Based on (Özgüzel et al., 2020[14]). OECD calculations based on European Labour Force Survey, American Community Survey, Turkish Household Labour Force Survey and Occupational Information Network data (accessed in April 2020).

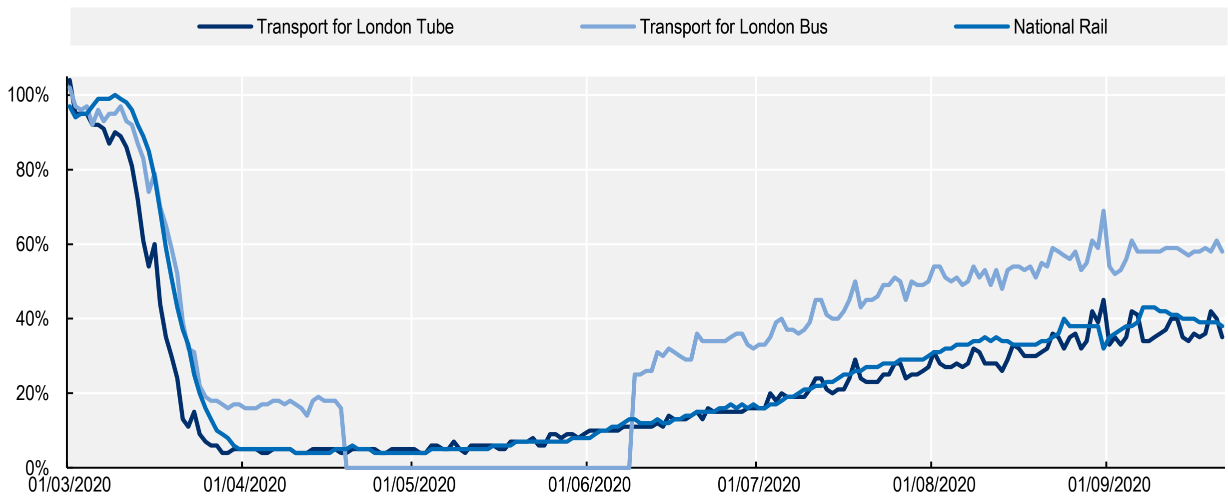
While remote-work has kept parts of London's economy running, it changes the economic geography of London and threatens the viability of the service industry in the city's central parts. The shift away from office-based work towards remote working in combination with other COVID-19 measures have led to a dramatic fall in transport use in London and the UK. Commuting numbers have plummeted, which has hit Central London particularly hard. Before COVID-19, more than 900,000 people, or around a fifth of London's workforce, commuted into London on a daily basis. Commuters constituted a vital source of customers for Central London's service economy, ranging from cafés and restaurants to high-street stores.

Since March, commuting in and to London has fallen by more than 50%. Many parts of Central London, normally busy with office workers, tourists, and shoppers, are especially quiet. Use of the Transport for London Tube services and Transport for London Bus services still remain significantly below their usual passenger numbers, remaining at 40% and 60% of the transport use of the same period in 2019 (Figure 2.9). Many workers use the National Rail services in normal times to travel to London from commuter towns. However, National Rail service use is also down by around 60% compared to 2019.

While the initial drop in transport use was driven by the fact that most non-key workers stayed at home, the slow recovery of transport use suggests a sustained and potentially long-lasting reduction in commuting flows to London.

Figure 2.9. Transport use relative to previous year, March to September 2020

Use of the London tube, London bus services, and national rail relative to the previous year (=100%)

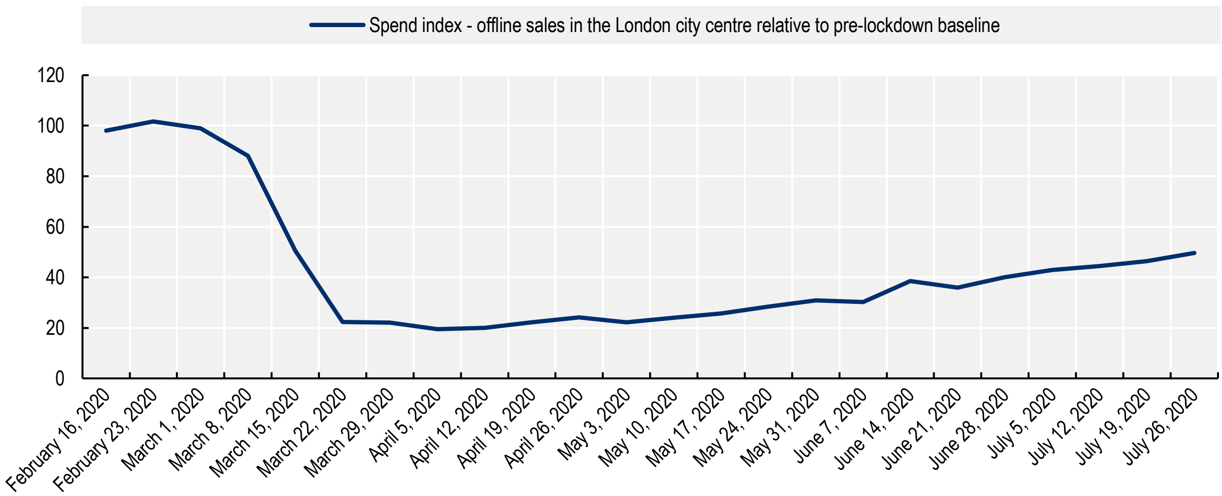


Note: The figure displays the use of transport (London Tube, London Bus, National Rail) relative to the use on the equivalent day or week in 2019. Numbers are denoted in percentages of the use in 2019.
Source: OECD elaboration of data from the UK Department for Transport.

For businesses in Central London or central parts of other big cities, the loss of commuters results in significantly subdued business activity. Overall, high-street footfall in the UK in July 2020 was down by 42% compared with a year ago and for high-street businesses, the fall was even higher at 47.5%. The lack of commuters compounds the negative effects of the reduction foreign tourism. In contrast, online retail business has soared, with non-store retail revenues growing by 28.6% in January to August 2020 compared to the same period in 2019 (ONS, 2020[16]). According to the Centre for Cities' high streets recovery tracker, London has experienced one of the slowest high-street recoveries of cities and large towns in the UK (Centre for Cities, 2020[17]). In London, footfall remains the third lowest compared to pre-lockdown levels. In terms of high street spending, London has had the slowest recovery in the UK, with high-street spending at half the pre-lockdown level (Figure 2.10).

Figure 2.10. Tracking the high-street recovery in Central London

Offline sales in the city centre relative to a pre-lockdown baseline (100)



Note: The figure shows the volume of offline sales in London's city centre relative to the sales volume before the UK lockdown started.
Source: Based on (Centre for Cities, 2020[17]).

The business model and, therefore, the jobs associated with service providers in Central London faces significant uncertainty. As a survey from the British Council for Offices (BCO) suggests, the pandemic appears to have changed working patterns for good. In the future, many white-collar workers plan to adopt a mixed approach, combining several days a week in the office with remote working (Guardian, 5 October 202[18]). Almost half of all respondents (46%) stated planning to divide time between remote work and office work over the coming six months. An additional 15% intend to shift completely to remote work. While this paradigm shift might help boost local economies in commuter belt downs, it will also erode the business model of some of Central London's high-street stores and, thus, create a risk of redundancy for many workers.

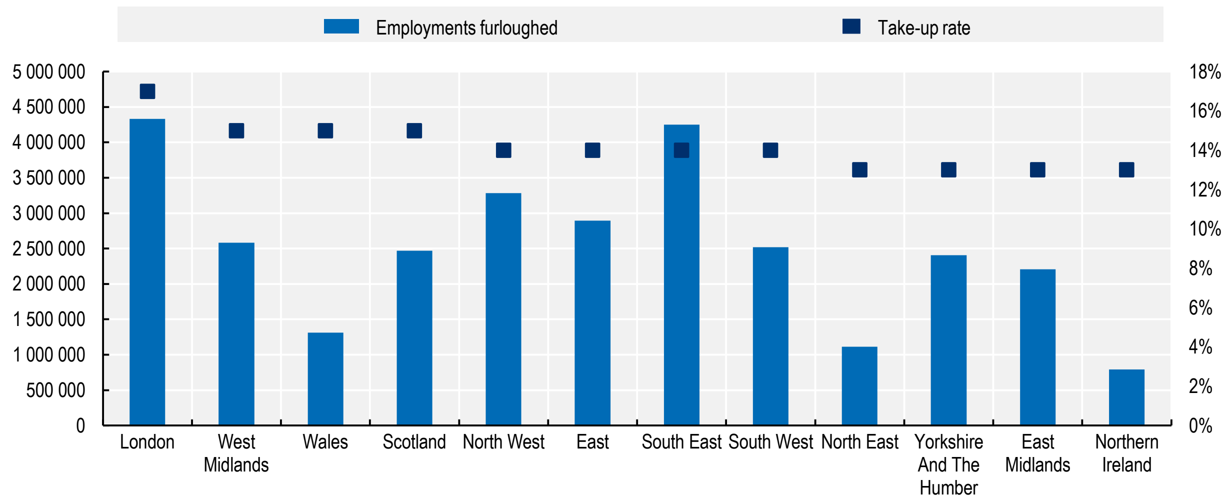
What happens when furlough ends?

The UK furlough schemes offers an even more telling view of the severity and the uneven impact of the crisis on London's economy than unemployment statistics. Rapid action by the central government protected millions of jobs in the UK. If not for government support, many enterprises in London would have faced even greater financial difficulties and, consequently, hundreds of thousands of jobs could have been lost in London. While the furlough scheme has shielded local economies across the UK, it begs the question of what will happen once furlough ends.

The end of the central government's furlough schemes, which has supported millions of workers during the pandemic, will pose a serious threat for London's labour market. At its peak, around 1.4 million Londoners were furloughed and even now, many Londoners remain on furlough. As of the end of July 2020, of the 4.8 million people furloughed in the UK, more than 700 000 are in London. London has not only the highest absolute number of furloughed employees among all regions of the UK but it also has the highest furlough take-up rate at 17%, as the proportion of jobs on furlough is higher than anywhere else in the UK (Figure 2.11).[9]

Figure 2.11. Furloughed employment in London and the UK, 31 July 2020

The total number of employments furloughed and their share relative to all eligible jobs

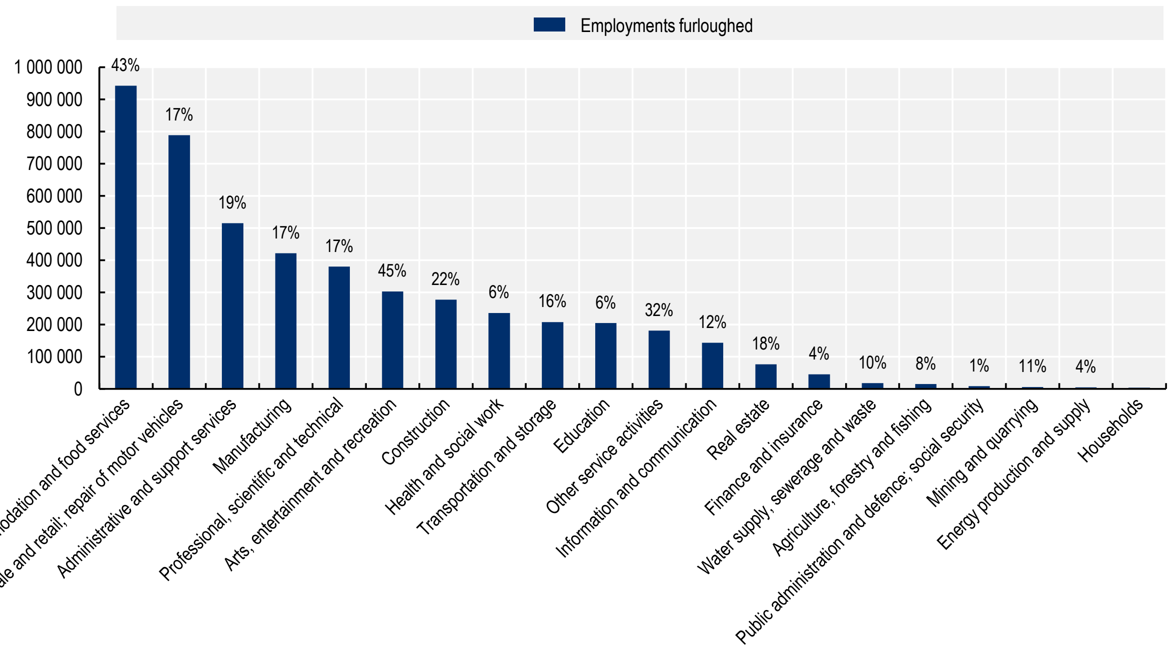


Note: The figure shows the total number of employments on furlough (left axis) and the take-up rate (right axis), i.e. the number of furloughed jobs as a share of all eligible employments.
Source: OECD elaboration of data from HMRC CJRS and PAYE Real Time Information.

Some sectors have a particular strong reliance on furlough and thus face heightened risks of employment loss. Across the UK, more than 900 000 workers in the accommodation and foods services sector (or 43% of the overall workforce) are still on furlough (Figure 2.12). In arts and entertainment, almost half of all employees (45% or around 300 000 in total) also rely on furlough. Such sectors have lost their revenue base and face additional difficulties due to the lack of foreign tourists and, in London's case, the shift away from central office work to remote working. Therefore, the economic recovery of these sectors will be slow, which threatens associated jobs as the furlough support ends in October. Furthermore, small and medium-sized enterprises (SMEs) make greater use of the furlough scheme than large enterprises since they tend to have smaller financial reserves and, often, cannot react as quickly to implement new work methods such as digital tools to continue business (Table 2.1). As a result, risks of insolvency and job loss could also be more concentrated among SMEs than large enterprises.

Figure 2.12. Furlough claims in the UK by sector, 31 July 2020

The total number of furlough claims and share of furloughed jobs by sector



Source: OECD elaboration based on data from HMRC CJRS and PAYE Real Time Information.

The COVID-19 could exacerbate existing labour market inequalities when furlough ends as disadvantaged groups bear the brunt of the crisis. The sectoral concentration of furlough take-up reveals that the impact of the economic crisis is relatively worse in sectors with low-skilled employees. Furthermore, the young, another vulnerable group, also disproportionately rely on furloughed employment. Across the UK, take-up rates range between 26% and 31% for all age groups apart from those aged 16-25, among which 44% are furloughed.[10]

Table 2.1. Furlough in the UK by employer size, July 2020

	Employments		
Employer size	**Number of employees furloughed**	**Number of eligible employees**	**Take-up rate**
1	175,500	727,600	24%
2 to 4	520,600	1,682,900	31%
5 to 9	462,100	1,547,800	30%
10 to 19	469,400	1,792,700	26%
20 to 49	654,600	2,615,300	25%
50 to 99	400,200	1,977,600	20%
100 to 249	452,900	2,606,600	17%
250+	1,673,700	17,402,600	10%
Unknown	5,500	-	-
Total	**4,814,500**	**30,353,200**	**16%**

Source: Data from HMRC CJRS and PAYE Real Time Information.

Even though the full impact of COVID-19 is still to materialise, the documented recent trends in economic activity, employment and firms' vacancies suggest that the repercussions will be huge and long lasting. To ensure a successful and sustainable economic recovery, policy makers need to enable workers on furlough to pre-emptively participate in adult learning and facilitate workers to transition into different or new jobs. Adult learning will be essential in this quest as it offers workers opportunities to develop skills, re-train, and thus enhances their employability and resilience. In sectors with the highest risk of redundancies such as hospitality, many workers might have to adopt by gaining new skills to find a job and London's adult learning needs to be prepared to offer them learning opportunities that align with the rapidly changing needs of the local economy.

The adult learning system in London and its relevance for a sustainable economic recovery that offers new opportunities for all

Adult learning is more important than ever

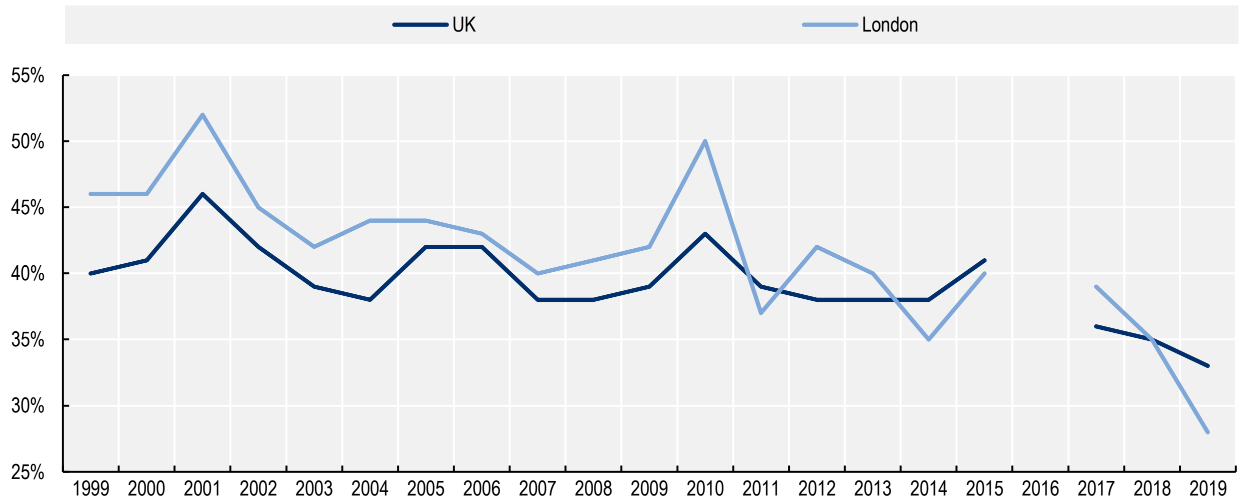
Enhancing skills development in London via adult learning has become even more important because of the COVID-19 pandemic. As documented in the preceding section, the economic crisis caused by the pandemic has led to a significant loss of jobs in London. Furthermore, hundreds of thousands of Londoners remain on government support schemes. Once national programmes such as the furlough scheme end, many more jobs will be at risk of redundancy. The crisis has affected some sectors particularly hard and, to some extent, has cast questions about the viability of their business models. Workers in these sectors require opportunities to transition into other sectors and new careers. Adult learning can help them to re-train or up-skill and can thus facilitate worker career mobility and resilience.

Risks of unemployment and displacement are concentrated on vulnerable groups of London's population. As documented in the preceding section, sectors with primarily low-pay and low-skill jobs have experienced the highest economic contraction and face long-lasting revenue loss. Furthermore, the young were disproportionately affected by the furlough scheme, with a higher share of individuals aged 16-24 being put on furlough than from any other age group.

Despite its importance in the current context, adult learning participation has fallen in recent years. For most of the period from 1999 to 2015, participation in adult learning remained relatively stable, with some small increases or decreases between years. However, since 2015, participation in adult learning has significantly fallen from 41% to 33% in 2019 (Figure 2.13).[11] In London, the decline in adult learning participation was even larger than for the rest of the UK, falling from 40% in 2015 to 28% in 2019.

Figure 2.13. Participation in adult learning in the UK and London, 1999-2019

Share of adults participating in adult learning within the last three years



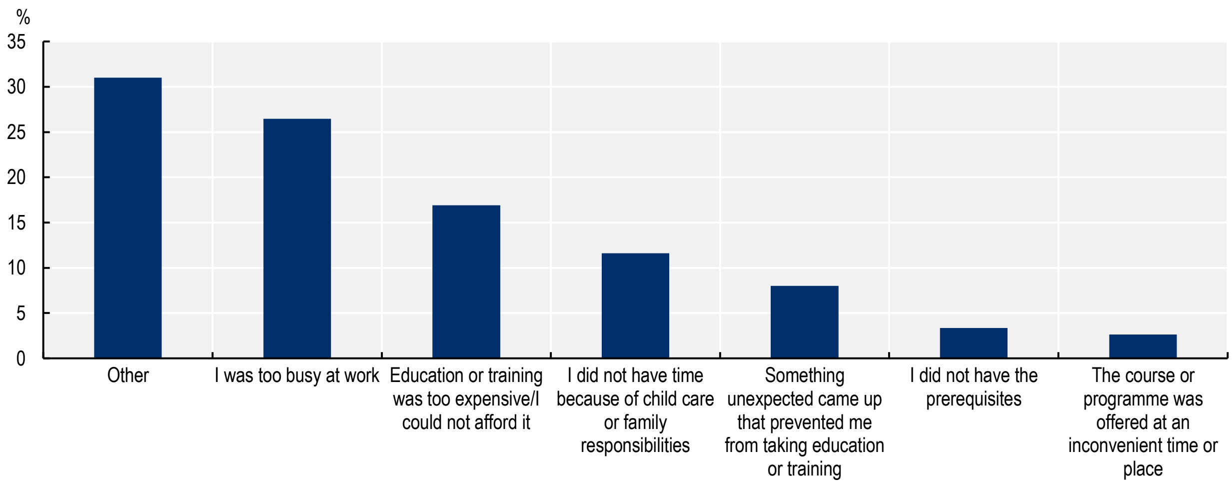
Note: Data is missing for 2016 because the survey did not take place that year.
Source: OECD elaboration based on Adult Participation in Learning survey 2019, https://learningandwork.org.uk/what-we-do/lifelong-learning/adult-participation-in-learning-survey/.

Overcoming existing barriers to learning in adulthood remains critical for raising learning participation in London. Evidence from OECD countries suggests that those who would benefit the most from adult learning do not have access to or lack the means or motivation use it. On average, workers who are more exposed to risks of automation are less likely to participate in training (OECD, 2017[19]). Furthermore, those who could require upskilling or training opportunities because their skills do not allow them to find a job, tend to participate the least. Adult participation in education and training of the unemployed or economically inactive trails that of the employed in all OECD countries (OECD, 2017[19]). Raising awareness of the benefits of learning and training among workers remains a crucial issue. Data from PIAAC suggest that more than 80% of those who do not participate in adult learning lack the interest or motivation to do so (OECD, 2018[20]).

Across Greater London, various factors provide significant obstacles to participation in learning opportunities. Work-place responsibilities are the leading reason for non-participation in adult learning (Figure 2.14). More than a quarter of adults who did not do any training or learning state time their workload prevents them from doing so. A lack of available time is also a major constraint for around 12% who felt that family and care responsibilities were incompatible with learning offers. Another major barrier are financial constraints. For 17% the learning and training opportunities were too expensive or unaffordable.

Figure 2.14. Barriers to participation in adult learning, Greater London, 2015

Main stated reasons for nor participating in adult learning



Note: 18+ year olds. The figure is based on a small sample size of 178 responses to the PIACC survey in London, representing sample of 1.4 million people. The category "other" contains all potential reasons not included in the six other categories.
Source: OECD Survey of Adult Skills (PIAAC), 2012 and 2015.

Lessons from various OECD countries can provide useful examples to address the main barriers to adult learning in London. Among other things, raising awareness of the returns of skills through targeted information and guidance can boost potential learners' motivation. Furthermore, offering flexible, shorter or modular types of learning programmers can mitigate time constraints. Providing targeted financial support can help alleviate the financial constraints, especially of the low skilled and economically disadvantaged. Finally, making sure that adult learning programmes offer higher labour market relevance should entice more adults into taking advantage of opportunities to up- or reskill (OECD, 2019[21]).

Developing a vision for adult learning and skills in London

Following the first English devolution deal in 2014, the Greater London Authority (GLA) and London Councils proposed skills devolution to London. Their proposal consisted of a series of high-level outcomes sought for the London skills system by 2020 and suggestions on devolving skills funding, including the Adult Education Budget (AEB), London's share of advanced learner loans and a guaranteed 'proportionate return' to London from the apprenticeship levy. It also foresaw the creation of a Skills Commissioner for London. In 2016, the UK government announced that it would delegate the Adult Education Budget to London from 2019-20, subject to readiness conditions.[12] To date, there has been no further skills devolution to London. However, London has continued to develop and articulate its vision for adult learning and skills, and to use available resources to put this into place:

London has published a dedicated post-16 skills and adult education strategy. *Skills for Londoners: A skills and adult education strategy for London* sets out a vision for "A city for all Londoners - making sure Londoners, employers and businesses get the skills they need to succeed in a fair, inclusive society and thriving economy" (GLA, 2018[22]). Within the London skills strategy, the Mayor set out an ambition to seek significant devolution of skills funding for the capital – including careers information, advice and guidance, apprenticeships funding, and the UK Shared Prosperity Fund – in order to create "a single, integrated skills and adult education offer for London to deliver a more strategic, whole-system approach to post-16 skills."

The Strategy identifies three priorities for action:

- Firstly, to empower all Londoners to access the education and skills to participate in society and progress in education and work – through the creation of an all-age careers offer, targeted employment and skills provision for the most disadvantaged groups, and devolution of the AEB.
- Secondly, to meet the needs of London's economy and employers, now and in the future – through the Mayor's Good Work Standard (GLA, 2021[23]) and Growth Hub[13], alongside a focus on developing apprenticeships and London's wider technical and vocational provision. A London Occupational Skills Board was also created to advise on aligning skills provision with skills needs in London.
- Thirdly, to deliver a strategic city-wide technical skills and adult education offer – through the creation of a new Skills and Employment Knowledge Hub, to work with sub-regional partnerships and others to create a more collaborative and strategic skills system.

In 2019, the Mayor of London and London Councils published *Skills for Londoners: A call for action,* demanding a new devolution and funding deal to create an integrated skills and employment system. *Call for Action,* argued that the combination of London's record of devolution to date, the Mayor's mandate and labour market intelligence, and the boroughs' reach into local communities mean that London government is better placed than the UK government to tailor solutions to local communities (GLA, 2019[24]). The plan also provides an overview of all the elements that an integrated local skills and employment system for London should contain (Figure 2.15).

Figure 2.15. Skills for Londoners: A Call for Action

Recommendations for a devolved skills and employment system for London

WHAT SHOULD A DEVOLVED HOLISTIC SKILLS AND EMPLOYMENT SYSTEM FOR LONDON INCLUDE?

Run at a local level, with London government in charge, we will deliver these elements of the system in a way that is nimbler, has greater impact, is more responsive to local circumstances and business needs, and is unrestricted by central government funding siloes.

ADULT EDUCATION

Full devolution of the adult education budget, restored to at least pre-austerity levels, to embed a genuine lifelong learning culture across the capital and a greater focus on learning outcomes.

CAREERS ADVICE

Devolution of careers advice services to establish a London Careers Service for Londoners of all ages that is fully integrated with London boroughs', local services and networks of support to schools and local residents.

TRAINEESHIPS

Devolution of traineeships to leverage London government's unique links to business to drive up traineeship starts and create progression opportunities.

APPRENTICESHIPS

Devolution of the capital's non-levy allocation (levy contributions not spent by the contributing employer), the ability to use these funds flexibly to meet the capital's skills needs, and responsability and funding for promoting apprenticeships via a London Apprenticeships Service.

EMERGENT SKILLS

Devolution of the powers and resources to support more Londoners to learn emergent skills, including via Advanced Learner Loan write offs and new metrics for measuring widening participation in higher education.

EMPLOYMENT SUPPORT

A commitent from government to establish a 'local first' approach to employment support services, where services are provided at the most feasibly local level, enabling join up with other local services and better support for marginalised communities.

16 TO 18 SKILLS

Devolution of funding for 16 to 18 year old skills provision to create a coherent post-16 offer and improve outcomes for young people.

FURTHER EDUCATION CAPITAL FUNDING

Continued devolution of capital funding to invest in new facilities and technologies and support further education providers to repaire London's further education estate.

IMMIGRATION SKILLS CHARGE

Devolution of London's share of the funding raised by the Immigration Skills Charge, should government decide to continue with it, to spend on addressing skills shortages in the capital.

UK SHARED PROSPERITY FUND (UKSPF)

Full devolution of London's share of the UKSPF, allowing London to integrate the skills and employment elements into the capital's holistic skills and employment system to better meet the needs of disadvantaged Londoners.

Source: OECD illustration based on (GLA, 2019[24]).

How does London plan to deliver its skills and adult learning vision?

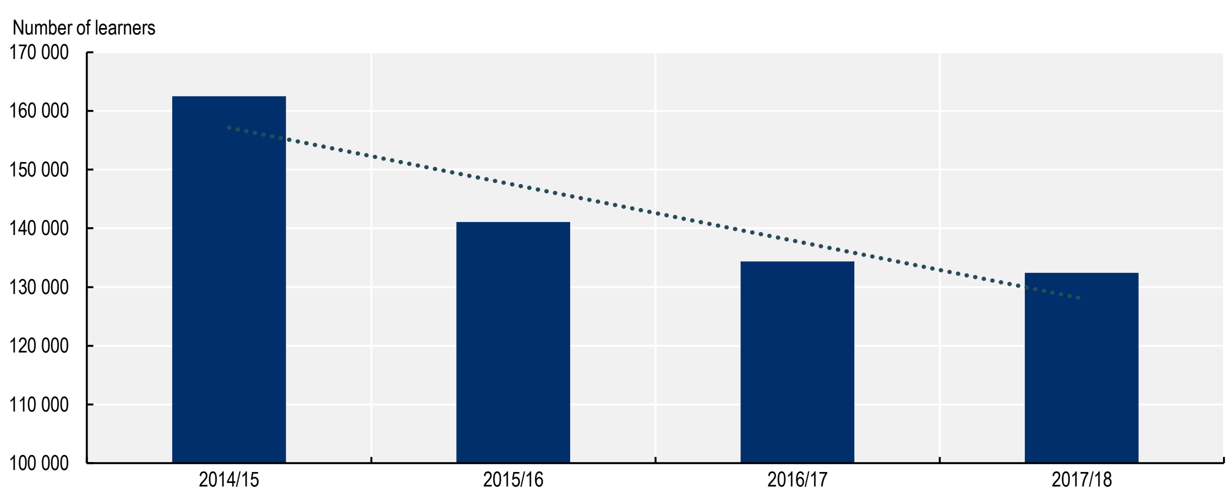
To deliver its skills and adult learning strategy, the GLA has set up two advisory bodies. The Skills for Londoners Board of key stakeholders provides advice on skills and employment programmes, including the AEB. The Skills for Londoners Business Partnership aims to improve and better align provision to meet London's skills need. Building on the devolved Adult Education Budget, which corresponded to GBP 318 million in 2019/20, the Mayor of London has outlined ambitious plans to tailor provision to London's specific needs. The Skills for Londoners Framework, published in 2018 outlined eight priorities for the AEB:

- Eligibility for full funding for people in low-paid work (less than GBP 17 004 a year).

- English and maths skills: While more than 3m Londoners have poor literacy skills and more than 4.5m have poor numeracy skills, participation in English and maths courses in London fell by 19% between 2014/15 and 2017/18 (Figure 2.16). The GLA is pursuing research on participation, achievements rates, and best practices and has increased funding to better support Londoners.
- English for speakers of other languages (ESOL): National funding cuts for ESOL since 2010 have hit London disproportionately as over half of the country's ESOL provision is delivered in London. A review of the quality and delivery of ESOL provision in London has been undertaken to support future commissioning.
- Basic digital skills: One in five Londoners lack basic digital skills. The introduction of a basic digital skills entitlement in August 2020 aims to address this.
- Adult and community learning (ACL): Following a review of ACL funding, actions are being taken to ensure allocation better meets local needs and is more focused on priority groups.[14]
- Support for disadvantaged learners: To direct financial support where it is most needed, London plans to move away from the national approach of providing a disadvantage uplift based on postcodes, and instead base it on learners' personal characteristics. The GLA has committed to widen funding support and offers help with costs for accommodation, travel, course materials, equipment and childcare, substantial learning barriers for some adults.
- Learners with special educational needs and disabilities (SEND): High quality adult learning and training can mitigate the large employment gap of disabled people in London. Building on a pan-London review of post-16 SEND provision, London is seeking to develop a more inclusive adult learning and skills system for SEND learners.[15]
- Addressing London's sectoral and occupational skills needs: The GLA plans to introduce outcome-related payments as part of London's AEB to incentivise providers to be more responsive to the needs of businesses and employers (for example, see Box 2.5).

In responding to the COVID-19 pandemic, the GLA have consulted training providers and other AEB stakeholders. As a result, it has added new AEB priorities. It expanded funding for unemployed Londoners and those on low wages, regardless of prior attainment, to help them access new employment opportunities. Additionally, it raised training providers flexibility in delivering and designing courses (GLA, 2020[25]).

Figure 2.16. Adult learning participation in English and maths courses in London



Source: (Department for Education, 2019[26])

Box 2.5. Mayor's Construction Academy

London has a growing construction skills shortage, and construction sector employers require a site-ready workforce to help build the homes Londoners need. To make sure Londoners benefit from the wide range of opportunities available in the sector, the Mayor set up his Mayor's Construction Academy (MCA), connecting Londoners to training in the skills they need to access vacancies in the capital's developments, in trades, professions and management.

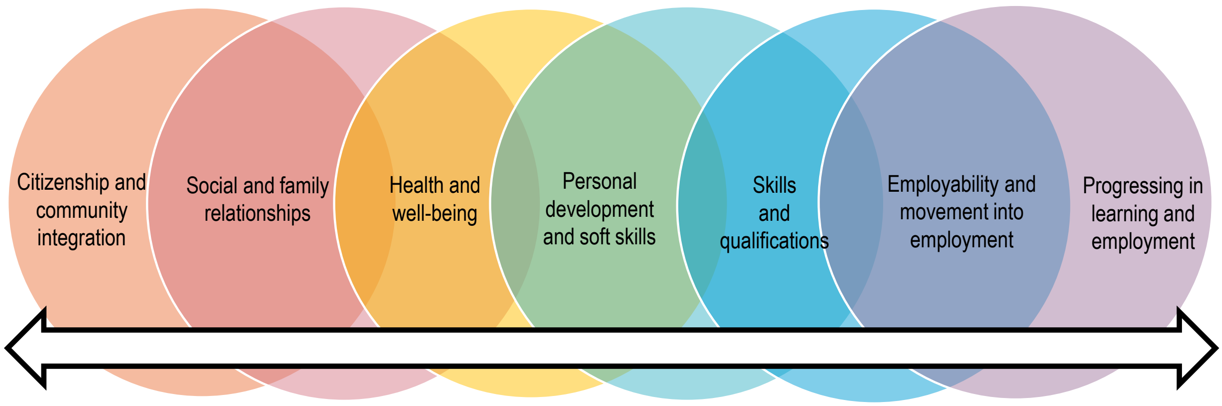
The MCA includes: a Quality Mark that identifies and recognises high-quality construction skills training provision in London; hubs to support Londoners, employers and training providers connect and deliver better outcomes; and investment in equipment and facilities to support the delivery of high-quality construction training.

London is currently developing an impact measurement framework for its adult education budget in order to meet both economic and social objectives. Evidence demonstrates that AEB provision can deliver a range of impacts, from employment, earnings and further learning, to wider social outcomes such as health, well-being and social integration (Figure 2.17). As part of wider efforts to ensure that AEB provision becomes more responsive to London's needs, the GLA is developing a new framework for impact measures. This will require better collection and use of data on learner progression and destinations. To achieve this, the GLA is working to develop a London Learner Survey to capture wider impact of learning, which could include:

- Progression in employment, including better wages, conditions or work quality, or reduced skills mismatch/underemployment,
- Employability outcomes, including progression towards employment and into work,
- Skills and qualifications,
- Personal development and soft skills, including self-efficacy, financial capability, communication skills
- Health and well-being, including mental health and access to health services,
- Social and family relationships, including children's readiness for school and educational attainment,
- Citizenship and social integration, including volunteering, greater democratic participation, digital inclusion.

Once agreed, there will be a need to develop a robust baseline of these measures, before data can provide valid and meaningful evidence of the impact of AEB provision.

Figure 2.17. Potential outcome domains for Adult Education Budget provision in London



Source: OECD elaboration based on the Skills for Londoners: A Call for Action.

Preliminary evaluation results suggest that the devolution of adult learning funding to London has been successful. Early signs indicate that provision is becoming more 'plan-led', with a greater uptake of qualifications in skills shortage sectors (WECD, 2020[27]). Furthermore, growing evidence seems to point out several other benefits of employment and skills devolution. It appears to (i) ensure a better matching of skills supply to employer demand, boosting productivity, (ii) increase flexibility in tailoring employment and skills support to the distinct and changing needs of local communities and economies, (iii) raise accountability and local ownership, and (iv) improve educational and employment outcomes (IFF Research, 2020[28]).

Implications of the COVID-19 pandemic on adult learning in London

Given the scale of the current economic crisis, the GLA is supporting a number of new policy priorities, which also aim to enhance the effectiveness of adult learning. The GLA has started the *London Recovery Programme,* consisting of multiple policy programmes centred on missions (GLA, 2020[29]). As part of the mission *Helping Londoners into Good Work,* the GLA aims to strengthen London's adult learning system by better co-ordinating skills, careers and employment support. Furthermore, the GLA plans to establish sector specific London 'Academies' to support Londoners to gain relevant skills and move into good work in sectors that might be vital for a sustainable recovery including the digital economy, health, social care, the green economy, and creative and cultural industries. Finally, these initiatives also aim to foster a closer working relationship with employers to promote good work opportunities.

In designing effective learning programmes, decision makers need to take into account that the global pandemic has had a profound impact on training and adult learning. Until recently, most adult learning provision took place via face-to-face teaching and direct interaction between teachers and learners. In fact, building personal relationships between learners and their instructors is thought to provide positive re-enforcement effects to learners' progress and persistence. COVID-19 has made such personal interaction and face-to-face delivery of learning programmes difficult or, to some extent, impossible. Consequently, adult learning providers in London needed to adapt their teaching methods quickly.

The pandemic has caused a breakthrough of online learning. Forcibly, adult learning providers had to shift, at least most, their courses online as physical meetings had to be abandoned during the strict lockdown period and remained more difficult to uphold even after the lockdown was eased. Online learning has the potential to broaden access to programmes at a low cost, as many components of online course work as well as online learning platforms are scalable. The increased use of digital learning solution may also foster deeper student learning (Box 2.6).

Box 2.6. Longer term opportunities of using online educational platform

The COVID-19 pandemic has provided an opportunity for experimentation and for envisioning new models of education and new ways of using the face-to-face learning time.

- *Explore different time and schooling models*: Exploring how students can learn in different places and at different times will create a better understanding of the potential of digital learning solutions. Students are used to a busy school timetable and workload, but new solutions may help provide students with opportunities to have more agency by being given more autonomy.
- *Empower teachers to make the most of digital advances*: Teachers have the opportunity to try out different digital learning solutions, and test how technology can help foster deeper student learning. They need to be encouraged to think creatively about their role as facilitators of student learning, and how technology can support them in doing so.

Source: (OECD, 2020[30]).

The move to online learning creates new significant challenges for adult learning in London. First, learners require adequate digital skills to benefit from online learning opportunities fully. Second, computer equipment and a decent learning environment are prerequisites but in many deprived households both might be hard to come by, which might further disadvantage already disadvantaged groups. Third, online learning can only be as good as teacher's ability and experience in delivering online courses. Given the sudden surge in online solutions, teachers will need support and training on the most effective use of using digital tools for their courses. Finally, an important part of adult learning in London is currently work-based. This type of learning is hard to move online and faces significant impediments due to COVID-19 (see Box 2.7 for other challenges). Overall, the proliferation of online learning might create risks of disadvantaged and low-skilled individuals struggling even further to access learning and training.

Box 2.7. Challenges of using online educational platforms

Learning and collaborating in an online environment might not come naturally to teachers and students. In considering policy responses, policy-makers need to consider ways to:

- *Balance digital with screen-free activities*: Simply replacing the schooling hours by online lectures and discussions is likely to have a toll on students' health. Lectures can be shortened and combined with non-digital learning activities.
- *Students' emotional health*: The context of the virus and school closures has the potential to be unsettling and disorientating for students. Technological solutions need to find a way to provide connection, interaction, and support whilst learning is happening.
- *Access to devices*: Students are more likely to have access to smartphones than to laptops at home, where there might be more students than devices. Governments could lend laptops or provide alternative resources (printed work booklets) (e.g. GBR, JPN).
- *IT infrastructure*: Having all students connected at the same time may be a problem in some places. Access to IT infrastructure should be monitored to provide good access to all.

Source: (OECD, 2020[30]).

The changing demand for specific jobs and the transition to online learning needs to be taken into account of evaluating adult learning providers. Adult education providers will have to adjust their programme curriculum to reflect the changing labour market and the impact of the crisis on available jobs. Additionally, providers have already, and will further need to, revise the delivery of their services and find new ways of assessing student engagement. Future accountability and funding frameworks for adult learning providers should reflect these changes.

Digital skills are now even more essential for both learning and succeeding in the labour market. Two thirds of businesses in the United Kingdom have unfilled digital skills vacancies, as 11.3 million adults lack basic digital skills needed for life and work (CBI, 2019[31]). In addition to current recruitment challenges, the prospect of future explosive growth in the demand for digital skills is another concern for employers as around 70% or more of SMEs report that their digital skills needs will become more severe over the next years. While the share of people with essential digital skills for work is higher in London (57%) than the national average (48% for the UK), more than 40% of the population still lacks the necessary skills to thrive in a digital work environment. Addressing this digital skills gap should be a key priority for adult learning providers in London, as it not only prepares workers for employment but also empowers them to learn independently online (Lloyds Bank, 2020[32]).[16] In England, Local Digital Skills Partnerships funded by DCMS offer interesting examples on boosting the development of digital skills in line with local business needs (Box 2.8). Local Digital Skills Partnerships bring together cross-sector partners to tackle local skills gaps and build thriving regional economies. Across the OECD, cities are starting new initiatives to foster digital skills (see Box 2.9).

Box 2.8. Lancashire Digital Skills Partnership

The Lancashire Digital Skills Partnership (LDSP), established in conjunction with DCMS, sits within the Skills and Employment Hub of the Lancashire Enterprise Partnership (LEP). It brings together public, private and charity sector organisations to address the digital skills needs of the county. The LDSP has enabled the LEP to establish a strategic approach to engaging stakeholders in a collaborative partnership aimed at driving up digital skills at every level. The local approach aligns with the strategic themes within the Lancashire Skills and Employment Strategic Framework: Future Workforce (future pipeline of digital skills and talent), Skilled and Productive Workforce (digital skills in the workplace and for technology adoption), Inclusive Workforce (digital inclusion) and an Informed Approach (evidence based to justify all activity).

Based on an examination of Lancashire's digital landscape, the LDSP made key recommendations articulated in eight focus pillars of activity for the LDSP. These pillars include: careers education; equality and diversity; curriculum design; promotion of Lancashire as a desirable place to live and work in the digital sector; develop the digital skills of businesses; digital apprenticeships; coherence across the digital strategies of the 15 authorities in Lancashire and other strategic partner; and digital inclusion.

The digital sector is a priority sector for the LEP due to its significant projected growth. However, the LDSP has identified recruitment challenges within the digital sector, which has a much higher incidence of skills shortage vacancies than other sectors. To alleviate some of this problem, the LDSP is working with Greater Manchester Combined Authority on the Fast Track Digital Workforce Fund, a GBP 3 million programme funded by DCMS. The programme aims to find innovative ways to help local employers address hard-to-fill vacancies in specialist digital skill areas. LDSP brings together consortia of employers and training providers to co-design and co-deliver innovative, short, intensive training packages aimed at filling specific roles in priority skill areas and supporting participants in to these roles with guaranteed interviews. This approach combined local innovation with skills priorities, with training opportunities focused on promoting diversity and inclusion within tech businesses.

As part of the Fast Track Digital Work Force Fund, Lancashire has benefitted from eight projects, each with a focus on recruiting presently underrepresented participants. These projects range from digital marketing programmes and robotics to data science and cyber-security. Overall, 800 Lancashire and Greater Manchester residents have received training. In addition to the Fast Track Fund programmes, the LDSP has brought to the county other training opportunities through developing partnerships with corporate partners such as Google, Lloyds Banking Group and Freeformers. Training by Google Digital Garage and Lloyds Banking Group (Digital Know How) attracted over 850 SMEs to learn more about digital skills.

Source: https://www.lancashireskillshub.co.uk/digital-skills-partnership/; https://www.lancashireskillshub.co.uk/digital-skills-partnership/fasttrack/ .

Box 2.9. Helsinki: Collaborating with Google to open a Digital Learning Space

In 2019, Google opened a learning space in Central Helsinki, Finland, which is free of charge and open to all. This learning space, known as the Google Digital Garage, provides digital skills training for a broad range of people including jobseekers, entrepreneurs and students. The learning space is part of the Grow with Google programmes, aimed at helping people, businesses and local communities gain digital skills for employment, as well as career and business growth. In addition to the learning space, the Digital Garage offers free online courses, which are also open to everybody in the city.

Helsinki aims to be a city where everybody has equal opportunities to develop their skills. Thus, considering the rapid change towards digitalisation in the job market, the City of Helsinki's collaboration with Google provides everyone the opportunity to complement their digital skills to meet the demands of the job market. Additionally, Helsinki has set the objective of finding new employment paths for about 500 jobseekers through the customised digital coordinator training programme.

The digital co-ordinator programme, jointly organised by Google and the City of Helsinki, targets jobseekers who are interested in employment with social media, analytics and online advertising. Jobseekers receive a three-week digital marketing training in their interest area. Applications for the programme are made directly to the City of Helsinki. The learning space assists SMEs in better utilising digital tools in their businesses, through various courses and workshops.

Source: City of Helsinki (2019), Google opens Digital Garage learning space in Helsinki, www.hel.fi/uutiset/en/kaupunginkanslia/google-opens-digital-garage-learning-space-in-helsinki (Accessed 13 October 2020).

The importance of digital skills will rise further as the economy is in the process of a significant transition. As firms adjust to the future of work, embracing digitalisation and automation, being able to work and learn in a technology-rich environment becomes essential. COVID-19 has further accelerated this transition. Chapter 3 reviews this development in more detail and analyses the impact of the future of work for London's labour market, its employers, and its employees.

Devolution of the UK adult learning system: Opportunities and challenges for adult learning in London

The UK has a complex and fragmented adult learning system, which limits the room for manoeuvre in London

Adult learning and skills policy in the UK is complex. In the UK, responsibility for adult learning and skills policy is devolved to Scotland, Wales and Northern Ireland. In England, the adult learning system has seen some devolution, in recent years, to a number of areas including London. Overall, responsibility for the education system in England lies with the Department for Education whose remit includes early years, schools, higher and further education policy, apprenticeships and skills, and adult learning.[17] However, other government departments also have relevant responsibilities, including but not limited to:

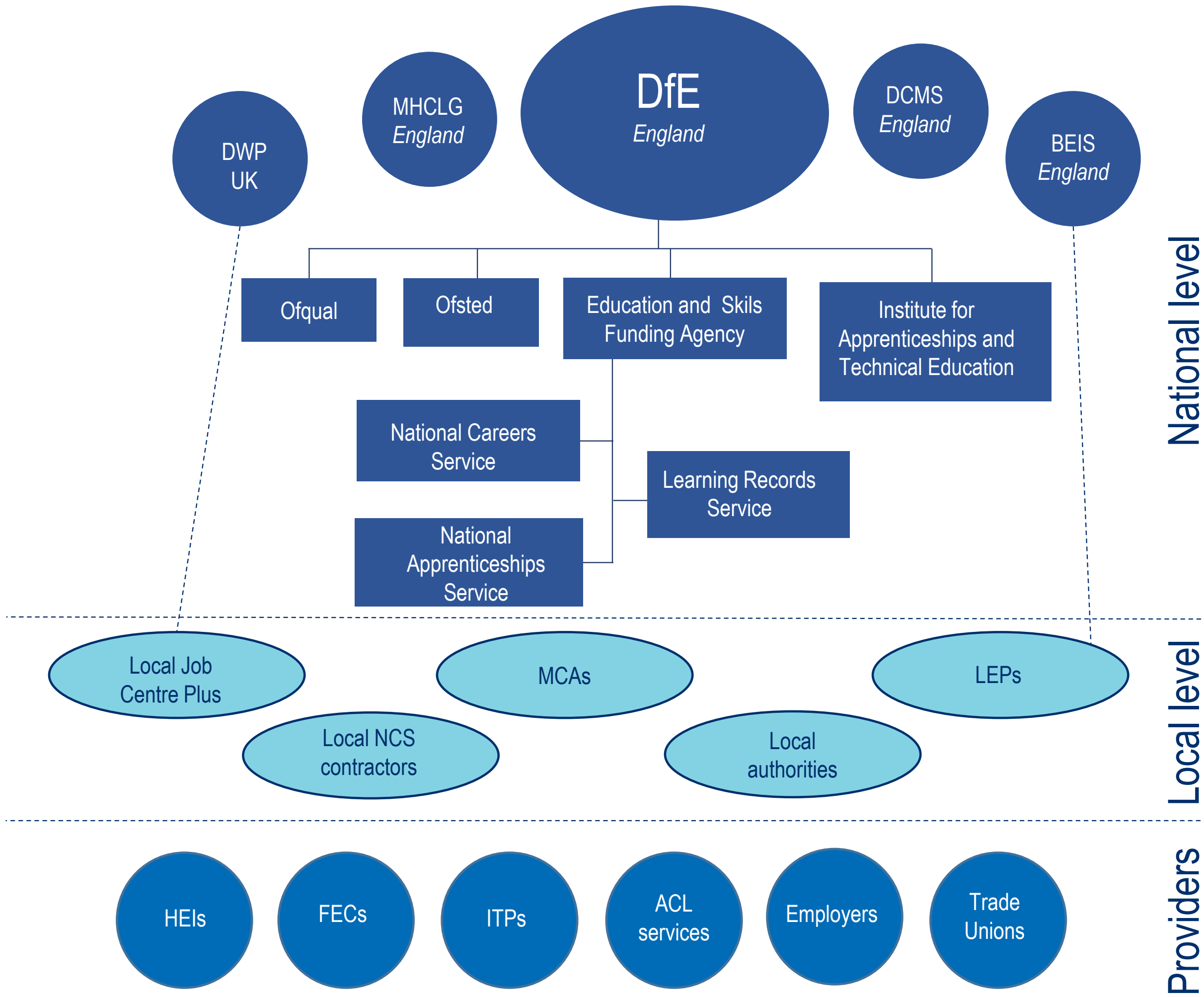
- the Ministry of Housing, Community and Local Growth has responsibility for devolving powers and budgets to boost local growth in England; and in supporting communities with public services.
- The Department for Business, Energy and Industrial Strategy is charged with delivering the Industrial Strategy and driving business growth and improved productivity.
- The Department for Culture, Media and Sport is responsible for promoting digital skills and inclusion.
- The Department for Work and Pensions is responsible for welfare and employment support.

Most of the funding and regulation of adult learning as well as career advice are also centralised in England. The Education and Skills Funding Agency (ESFA) supports the Department for Education nationally. It is responsible for funding and regulation of the education and training sector, as well as for the delivery of major projects and key services such as the National Careers Service, the National Apprenticeship Service and the Learning Records Service. The regulation of the system is also undertaken nationally by the Office for Standards in Education, Children's Services and Skills (OFSTED) and the Office of Qualifications and Examinations Regulation (OFQUAL). The National Careers Service provides information and advice about learning, training, and work opportunities for young people and adults through a national phone line and website supplemented by face-to-face support for some adults through contracted area-based services. Jobseekers support is provided through a network of local Jobcentre Plus offices, part of the UK-wide Department for Work and Pensions.

At the sub-national and local level, a myriad of actors are involved in skills and adult learning policy in England. Sub-nationally, 38 local enterprise partnerships (LEPs) play a key role in determining local economic priorities and co-ordinating activity to drive economic growth and job creation, improve infrastructure and raise workforce skills within local areas. LEPs are business-led partnerships between local authorities and local private sector businesses, charged with developing local industrial strategies that set out a long-term economic vision for their area. At a local level, England's 229 councils are responsible for delivering a range of public services, including schools and some post-16 provision. In addition to the England's councils, local adult training providers are directly involved in offering and delivering adult training.

Figure 2.18. Institutional structure of adult learning in England

Institutional structure of adult learning in England across the national, sub-national and local level



Source: OECD mapping of relevant institutions and stakeholders in adult learning in the England.

In London, the key actors of the adult learning system comprise the mayor of London, the London Economic Action Partnership, London's boroughs, training providers, and employers. The Greater London Authority (GLA), created in 2000, consists of the Mayor of London and the London Assembly. The Mayor is responsible with setting the overall vision for London with scrutiny from the Assembly. In London, local government consists of 32 borough councils and the City of London; they provide many local services and often directly offer adult learning opportunities. The London Economic Action Partnership (LEAP) is the local enterprise partnership for London, bringing businesses together with the Mayor and London Councils to identify strategic actions to support and lead economic growth and job creation in the capital.

Over the past few decades, there has been a high level of volatility in the adult learning and skills landscape. This volatility included frequent machinery of government and ministerial changes, numerous strategies, white papers[18] and Acts of Parliament, and significant changes to the system infrastructure and provider base.[19] Each of these changes aimed to ensure that the UK has a highly skilled workforce, equipped to meet the challenges ahead (Productivity Insights Network, 2019[33]). However, the pace and scale of reform has created further challenges in having a coherent, well understood adult learning and skills system that effectively meets the needs of learners, businesses, and the wider economy.

Furthermore, different levels of devolved responsibility in each government department make the challenge of ensuring coherence at a local level even more pressing. For example, the Department for Work and Pensions is a UK wide department, while Department for Education has an England only-remit. In terms of local devolution, the DWPs' Work and Health Programme, which helps disabled people into work, is devolved to London's sub-regions, while London's Mayor, along with a number of Mayoral Combined Authorities (MCA's) across England, has taken responsibility for the Adult Education Budget (AEB) on a pan-London basis. This fragmented system makes it difficult for English cities such as London, to take a strategic approach to tailoring their adult learning, skills and employment services to local need.

The new national white paper, Skills for Jobs, could provide a significant increase in the importance of and the support for further education (including adult learning) in England and London. It sets out an ambitious reform agenda to strengthen further education (Box 2.10). In particular, it aims to put employers at the centre of the further education system, which could lead to more demand-based learning and improve the alignment of training with local skills needs. It also aims to boost the apprenticeship system and raise the quality of teaching. While the suggested reforms could benefit London's adult learning systems, it remains unclear whether the Local Skills Improvement Plans, a cornerstone of the agenda, would fall under the responsibility of the GLA or would instead work in parallel to local Skills Advisory Panels.

Box 2.10. Skills for Jobs: national white paper on lifelong learning

In January 2021, DfE published the white paper *Skills for Jobs: Lifelong Learning for Opportunity and Growth*, which sets outs a reform agenda for further and technical education. It aims to strengthen links between employers and further education providers and place employers at the centre stage of defining local skills needs. The white paper identifies five priority areas for further education:

- Strengthening the role of employers to ensure that education and training leads to jobs that can improve productivity and fill skills gaps.
- Investing in higher-level technical qualifications that provide a valuable alternative to a university degree.
- Enhance access to lifelong training and learning via the *Lifetime Skills Guarantee*.
- Make providers more responsive through more effective accountability and funding and greater autonomy.
- Support and improve teaching in further education.

Skills for Jobs also seeks to strengthen the apprenticeship system by supporting enterprises hit by the pandemic, facilitating transfers of funding between firms, and raising the quality. *Local Skills Improvement Plans* will play a vital role in DfE's reform agenda. Informed by continuous and effective engagement between colleges and other providers and local employers, the Local Skills Improvement Plans are meant to provide a framework for addressing local skills mismatches and aligning training courses with local labour market skills needs.

Source: (DfE, 2021[34]).

The current adult learning system limits opportunities for local decision-makers in England, including the GLA and London's boroughs, to influence the priorities, funding and delivery of national government departments and agencies, in relation to adult learning and skills. There is no requirement for national organisations to discuss with councils how services will work in local areas, or how they will reflect local economic and social priorities. Different national departments and agencies often have different objectives, priorities, eligibility, criteria, accountabilities and ways of working that make collaboration – both nationally and locally – challenging. As a result, investment can often fail to meet local need, address local economic and social challenges, or make a decisive impact on local priorities. To address this, many councils and combined authorities have developed employment and skills programmes of their own (see Box 2.11).

Box 2.11. West London Skills Escalator

In 2014, The West London Alliance (on behalf of the London Boroughs of Hounslow and Harrow) developed the Skills Escalator, a support service of personalised advice and skills acquisition for working people on low incomes to move into better-paid and more stable employment.

The programme offered residents an integrated support offer, comprising

- Direct marketing to eligible individuals using Housing Benefit data,
- One-to-one support from an adviser, structured around a personalised action plan ,
- A core offer of referral to existing skills provision (e.g. training providers, the National Careers Service (NCS) and colleges), with the cost of this covered by the service,
- Wrap-around support from other existing services,
- Employer engagement.

In 2017, an evaluation showed that over a period of 18 months, the programme supported 361 clients, with over a third taking up training. This training resulted in a range of outcomes including increased earnings, improved self-esteem, confidence and improved job performance. One in five participants increased their earnings while on the programme, by securing a new job or a promotion.

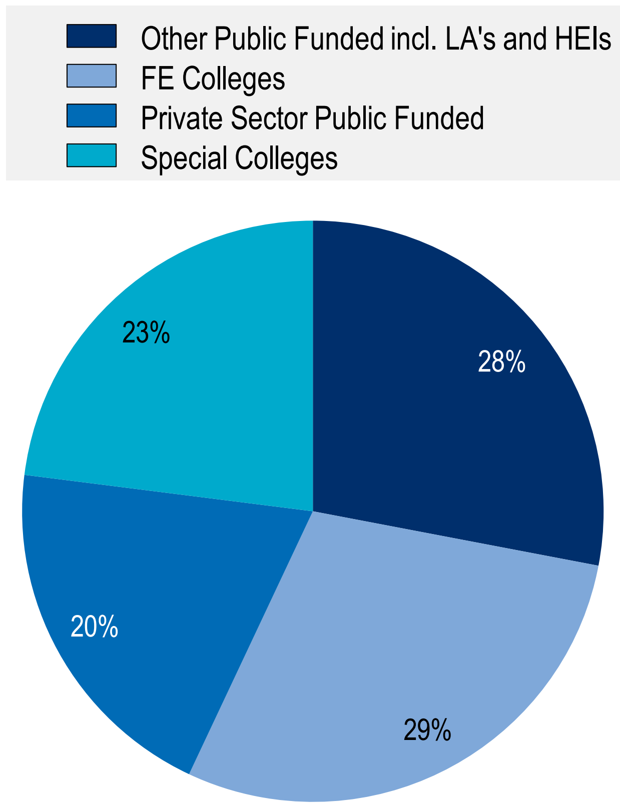
A cost benefit analysis of the programme suggested that, when taking into account the full range of public value benefits (including the economic benefits of earnings increases and the benefits of wellbeing improvements as a result of these increases in earnings), there was a public value return on investment of GBP 3.41 for every GBP 1 spent on the programme.

Although discussions around adult learning and skills are often framed around the concept of a 'system', England has moved towards a market-model of adult learning and skills. In this model, providers compete for tenders to deliver training. Successive governments have pursued a market-based model in the belief that it reduces costs, increases choice and responsiveness to the labour market and optimises quality. Increasingly however, the issue of whether adult learning and skills should be a competitive market or a collaborative system is critical to optimising provision and balancing what employers want with what learners choose and what the government is seeking to achieve.

As part of its market-based model, a large and diverse network of actors is involved in delivering adult learning in London but collaboration among providers is limited. Providers include higher education institutions, general and specialist further education colleges, independent training providers (ITPs), local authorities and charitable organisations. As of 2018/19, learners in further education, which includes any study after secondary education that is not part of higher education, mainly use four different type of providers (Figure 2.19). Roughly equal shares of learners use programmes of further education colleges (29%) or local authorities or other publicly funded providers such as higher education institutes (28%). Another 23% are associated with special colleges and the remaining 20% with private sector providers. A common criticism of the system and its large number of providers is a lack of collaboration between providers. In a number of localities, where the AEB has been devolved, local commissioners are seeking to establish a more collaborative approach (see Box 2.12).[20]

Figure 2.19. 19+ Learners by type of further education provider in London, 2018/19

Share of further education learners aged 19+ in London, by provider



Source: Own calculations based on data from (Department for Education, 2019[35]).

Box 2.12. AEB devolution to the West Midlands Combined Authority (WMCA)

Prior to the devolution of AEB to the WMCA, 75% of the region's AEB funding was spent on low-level courses, focused on unemployed participants, with little tangible evidence that training was helping people to gain employment, or progress within work. Provision did not focus on key growth areas, such as digital, and local skill needs, and was limited for those in work looking to upskill or retrain

The local system comprised over 400 providers, working in isolation and/or competition, with limited collaboration and evaluation of impact. Colleges wanted to do more to support local communities and employers. For employers, the system was not delivering. Local authorities and job centres felt disconnected from training resources – unable to influence provision to meet local needs. Through devolution, the CA has set clear expectations of what it wants skills training to lead to:

- More training that leads to jobs – direct link to employers to train and recruit people into jobs.
- More focus on higher-level skills.
- More training in priority skill areas - 33% increase in provision in regional priority sectors.
- More innovation –new courses in critical skills areas, e.g. a 66% increase in digital courses.
- A clear offer to adults in work –more flexible training, including evenings and weekends.
- Fewer but more collaborative providers – from 400+ to less than 100, with a clear emphasis on local and sector-based collaboration.

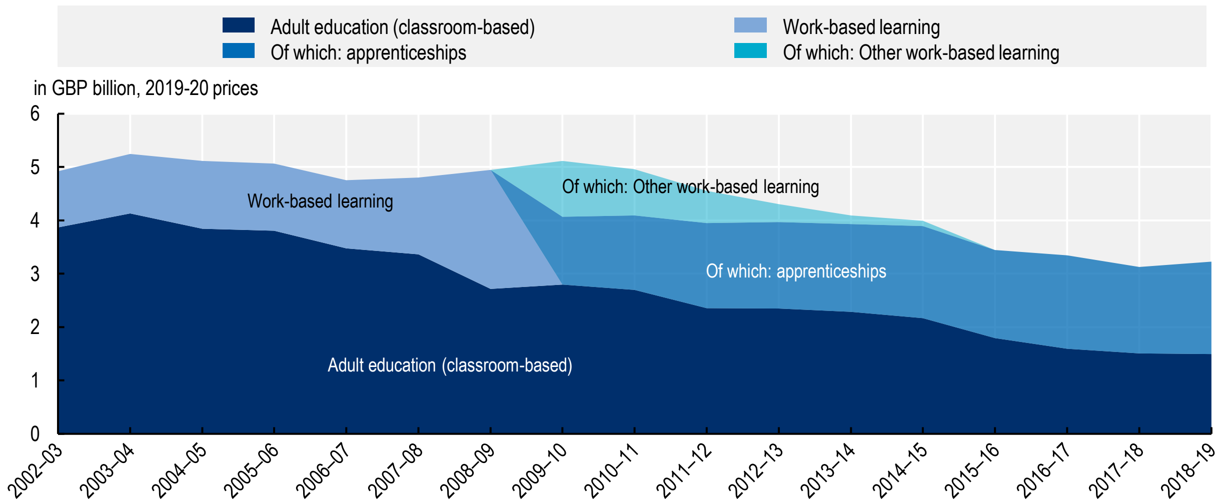
The AEB is now focused on what the economy needs – not just what the system will easily fund. The CA has also been able to link AEB to other funding streams, ensuring greater complementarity, improved impact and value for money. A new Employment Support Framework aims to better coordinate existing resources, and improve the impact of delivery, away from the proliferation of training schemes that emerged from the multiple funding streams in the absence of strategic coordination.

In light of the fragmentation of the adult learning system, the national membership body for local authorities has called for the creation of a more joined up, local system. They propose an integrated and devolved employment and skills service. Their proposal, Work Local[21], lays out plans for combined authorities and groups of councils, working in partnership with local and national partners, to have the powers and funding to plan, commission and have oversight of a joined-up service bringing together advice and guidance, employment, skills, apprenticeships and business support for individuals and employers.[22]

Adult learning and skills funding is also highly centralised and has been falling

In recent years, England has seen significant reductions in budgets for adult learning and skills. Total spending on classroom-based adult education (excluding apprenticeships) has fallen by nearly two-thirds since 2003-04 and by 47% in the decade between 2009/20 and 2018/19 (Figure 2.20). Cuts were mainly driven by reduced learner numbers, from 4.4 million in 2004/05 to 1.5 million in 2017/18, particularly on lower level courses (IFS, 2019[36]). Over this period, spending has increasingly focused on apprenticeships. In 2003-04, 21% of the GBP 5.3 billion spent on adults was for apprenticeships or work-based training; by 2018-19, this proportion had increased to 54% of the total spending on adult education and skills in England, a real terms increase in apprenticeship spending of 36% in the decade between 2009-10 and 2018-19 (IFS, 2019[36]).

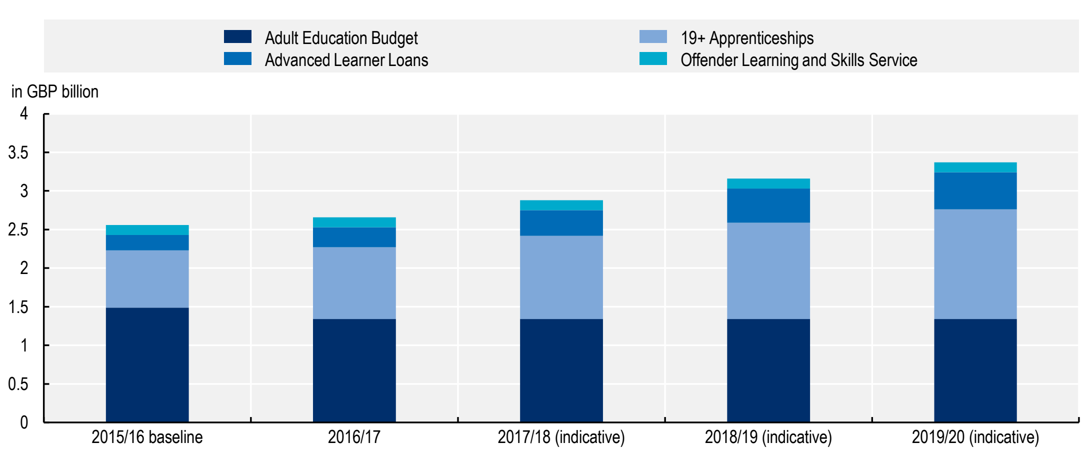
Figure 2.20. Total spending on adult education and skills in England



Note: Distribution of adult education funding into classroom-based and work-based learning.
Source: (IFS, 2019[36]), annual report on education spending in England.

As well as having a predominantly nationally led structure, funding for adult learning and skills is also highly centralised. An increasing proportion is also directed by the individual decisions of employers and individuals through the apprenticeship levy and advanced learner loans, which give individuals access to financial support for tuition costs (Figure 2.21). Although there has been some devolution of adult learning funds in a number of areas in recent years, in this context the opportunities for cities and regions to strategically direct funding to address local need remains limited. The majority of public funding for adult (19+) further education and learning in England is provided by the Education and Skills Funding Agency, through the Adult Education Budget (AEB)[23], which aims to "engage adults and provide the skills and learning they need to progress into, or within, work or equip them for an apprenticeship or other learning." The AEB enables providers to deliver flexible tailored programmes of learning, which may or may not require a qualification, to help learners engage in learning, build confidence, and/or enhance their wellbeing.

Figure 2.21. Funding of 19+ further education teaching and learning by funding source



Note: Funding only shown for 19+ year olds. The apprenticeship levy came into force on 6 April 2017 requiring all employers with an annual pay bill of GBP 3 million or more to pay 0.5 per cent of their pay bill to invest in apprenticeship training. The budget allocation for Advanced Learner Loans was planned to increase from GBP 0.20bn in 2015/16 to GBP 0.48bn in 2019-20. Actual spend will depend upon demand for loans.
Source: (Foster, 2019[37]).

The AEB supports statutory entitlements to full funding but only certain types of learners benefit, which has led to falling learner numbers (see Box 2.14). Beyond these entitlements, learner eligibility depends on personal circumstances, with funding generally focused on lower skill levels, younger adults, low earners and the unemployed. Adults who are eligible for funding either have all their course fees paid or the ESFA pays some of the fees and the learner or provider are responsible for paying the remainder.[24] Learners who are not eligible for AEB funding may be able to fund their studies through an Advanced Learner Loan, available for learners aged 19 and over studying at levels 3-6 (see Box 2.14 for a description of levels) at approved colleges or training providers. Following the introduction of loans in 2013/14, the number of adults studying at levels 3 and 4 has fallen steadily, while in 2013-18, 58% of loans funding – totalling almost GBP 1 billion – went unspent. Finally, the European Social Fund Agency (ESFA) was expected to support projects across the UK to the value of GBP 864 million until 2023 for vocational training for adults, especially in less economically developed regions, and for adult learners not supported by other funding streams.[25]

Box 2.13. AEB entitlement and UK qualification levels

Learners for the following qualifications are eligible for full funding support:

- English and maths, up to and including level 2, for individuals aged 19 and over, who have not previously attained a GCSE grade A*-C or grade 4, or higher, and/or
- first full qualification at level 2 for individuals aged 19 to 23, and/or
- first full qualification at level 3 for individuals aged 19 to 23.
- Information technology ('digital') skills, up to and including level 1, for individuals aged 19 and over, who have digital skills assessed at below level 1 (from August 2020).

Table 2.2. UK qualification levels and examples

Level	Examples
8	Doctorate
7	Master's (MA, MSc, MEng, MBA), PGCE
6	Bachelor's degree (BA, BSc)
5	Foundation degree, HND, DipHE
4	HNC, full Accounting Technician qualification
3	A levels, BTEC diplomas, City & Guilds trade Diplomas (e.g. plumbing), Dental Nursing Level 3 Diploma (for dental assistants), Access to HE diplomas A 'full Level 3' must be substantial: 2 A level passes or a BTEC National Diploma count as 'full'
2	GCSEs at grades A-C/9-4; Level 2 occupational qualifications A 'full Level 2' must be substantial (e.g. 5 GCSEs, an occupational qualification requiring a full year to complete)
1	GCSEs at D-G/3-1
Entry level (subdivided into three sublevels)	Entry-level certificates in e.g. English for speakers of other languages, literacy, numeracy, employability and a range of independent and life skills

Source: (Department for Education, 2019[38]).

Recent devolution has transferred funding to mayoral combined authorities (MCAs) including the Greater London Authority but the resources at the GLA's disposal remain limited. From 2019/20, control of around half of the AEB transferred to six mayoral combined authorities to encourage better alignment between local economic needs and adult skills provision. Thus, the GLA is now responsible for commissioning and funding AEB provision for learners in London. In 2019/20, London received GBP 306m of AEB funding. Additionally, the Mayor of London, advised by the London Economic Action Partnership (LEAP), is responsible for commissioning European Structural and Investment Funds (ESIF), including GBP 422m of ESF funds, to support 399,000 disadvantaged Londoners. Given the pressing need for adult learning and designing training with the demand of London's labour market, the Mayor of London has called for its share of the UKSPF to be devolved in full, enabling London to strategically coordinate funding to support its most disadvantaged residents and to tackle poverty, exclusion, and inequality. The Mayor has also called for the level of funding to be at least that of current ESIF levels, and for funds to be allocated to areas according to a fair funding formula relating to the needs of the population.[26]

Box 2.14. Creating a more responsive, local adult learning system via AEB devolution: Thames Valley Combined Authority

In preparation for devolution of GBP 29.5m AEB funding, Thames Valley Combined Authority committed to creating a more responsive and flexible system that would meet the economic, personal, social and cultural needs of everyone living and working in the area. Their ambition was to support skills provision in a more strategic way by linking budget allocations to areas of local economic growth and encouraging greater collaboration between providers. An analysis of the existing provider base and skills provision had revealed significant duplication, provision of training not directly linked to the labour market, a lack of learner progression, and a paucity of specialist provision required by local employers.

To address this, the CA undertook a single commissioning process and invited training providers to submit delivery plans for how they would meet the needs of learners, employers and local priorities, in relation to key growth business sectors as set out in their strategic skills plan.

Over a transitional phase of two years, TVCA seeks to promote stability across its core provider base while it works with local partners to develop its priorities. This strategic approach will enable the CA to maintain effective relationships with a manageable number of providers and engage them in the wider strategic agenda. Throughout, it will assess the value of subcontracting arrangements, the progression of learners, and monitor providers. Through this collaborative approach, the CA is seeking to ensure that provision meets local needs, is of high quality, and provides value for money to the taxpayer.

Key differences since devolution:

- The number of providers receiving AEB funding has reduced from 290 to 33.
- A commissioning process for grant funding has replaced the national procurement exercise. Procurement does not have to be re-run annually but can continue as long as delivery meets quality standards and the needs of the region.
- Greater flexibility for in year change if delivery no longer matches local labour market need.

Source: OECD.s

Devolution: What are the challenges for London's adult learning system?

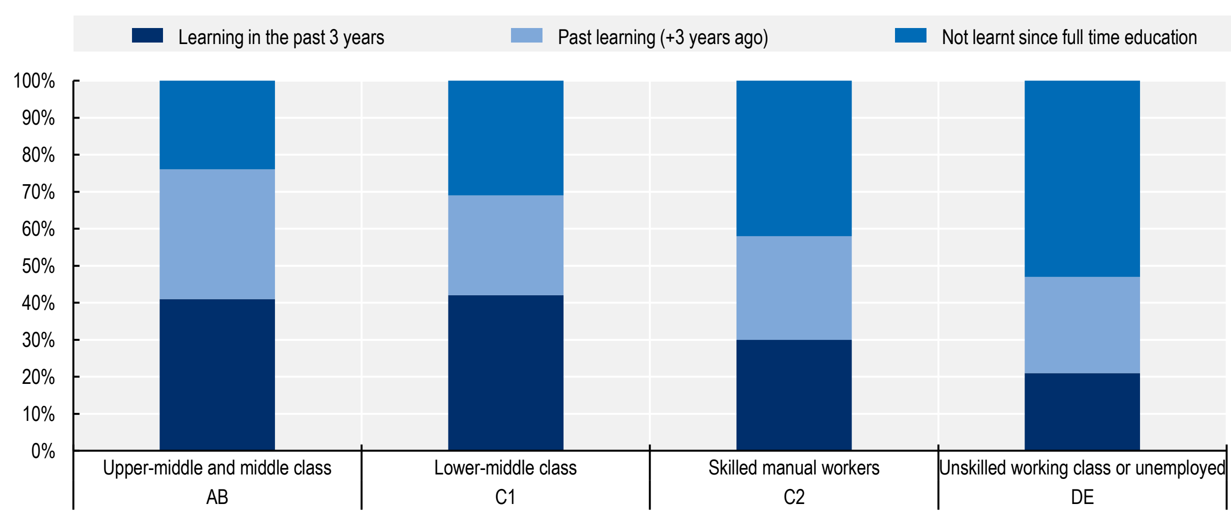
As indicated by preliminary evidence on London's adult learning system, devolution can provide new opportunities in improving the system.[27] It can increased efficiency by better aligning skills provision to local needs, it can react quickly to emerging crisis, and it can improve outcomes of adult learning provision in London. However, devolution of adult learning also creates a number of new challenges.

Devolution in itself is not a panacea for all existing problems of the adult learning system. The pace of economic and technological change means that the skills that London's businesses and individuals need are also rapidly changing. Other uncertainties, such as the impact of COVID-19 and the future of the UK's trading relationship with the EU further heighten the need to ensure that cities such as London are able to develop a culture of lifelong learning and create a responsive skills system to ensure their ongoing success and prosperity. In doing so, however London faces a number of challenges.

Adult learning in London is under-funded. In line with the wider national picture of reduced funding across the adult education system, London's funding for adult learning has significantly decreased over the last decade. The reduced funding has led to fewer opportunities for learning, training and skills development; in 2010-16 the number of publicly funded adult learners in London fell by 30%.[28] Total funding risks declining further unless the UK Shared Prosperity Fund replaces the GBP 70m of yearly ESF funding spent on supporting disadvantaged Londoners.

Persistent inequalities in access to learning opportunities exist. Those who could benefit most from opportunities to learn and train as adults, often have least opportunity to do so (Figure 2.22). Younger adults, those who already have higher-level qualifications and those in higher socio-economic classifications are most likely participate in learning and training. In contrast, participation declines with age and distance from the labour market and is lowest for those with fewer or no formal qualifications.

Figure 2.22. Participation in learning by social class, UK



Note: Social classes are derived from the Office for National Statistics' occupational classification. Social Grade A includes the upper and upper-middle classes and is generally grouped with Grade B, the middle classes. Grade C1 includes the lower-middle class, often called white-collar workers. Grade C2 mainly consists of skilled manual workers. Grade D comprises the semi-skilled and unskilled working class, and is usually linked with Grade E, those in the lowest grade occupations or who are unemployed.
Source: Adult Participation in Learning survey 2019, (Learning and Work Institute, 2019[39]).

The longstanding centralisation of learning and skills policy in England also creates challenges in terms of administrative costs and London's capacity to manage a devolved system. One consequence of centralisation of learning and skills policy in England is that many cities do not have sufficient expertise and capacity to design and deliver effective services. While this is less of a concern in London with its more established record and greater levels of expertise and capacity, the GLA would require significant resources to take on further devolution. Operating a fully devolved system would necessitate additional investment in local expertise and capacity. Furthermore, devolution from a centralised system also risks increasing the cost of administration as economies of scale are lost, and functions such as policy development, commissioning and monitoring are carried out separately in different geographical areas. However, in the case of London, the size and scale of the region might be sufficient to yield economies of scale and better integration of services within London could instead reduce costs and create economies of scope. Moreover, if skills devolution contributed to more effective service delivery and better targeted provision, this could outweigh any increase in administration costs.

The fragmentation of different funding sources for adult learning and skills make it difficult for London's government to develop long-term planning to meet the skills needs of the city. While some sources of funding are devolved, other are not. Devolved AEB funds are insufficient and too restricted to fully meet London's skills needs. Wider sources of funding, increasingly available through the levy and loans, and funding streams that are directed at a national level provide limited opportunities for London to strategically direct funding to address local needs.

In addition to a fragmentation of adult funding, there is also a considerable disconnect with funding for young people, placing limits on London's ability to create a coherent post-16 skills system. At present, the Department for Education oversees 16-18 provision nationally with funding rules set by the Education and Skills Funding Agency. Traineeships are one such example of this disconnect. They are ESFA-funded skills development programmes for young people aged 16-24 that include a work placement and typically last up to 6 months. They aim to help young people with limited experience of the labour market to find work or an apprenticeship. Although Traineeships for 19-24-year olds are part of the AEB, this part of the budget is not devolved to local areas. As such, the GLA is unable to create a clear and coherent offer to young people and businesses in their local areas and to develop accessible pathways for trainees to progress into apprenticeships, employment or further learning.

The move towards a competitive and segmented market-based approach to adult learning has exacerbated fragmentation of the system, making it hard to navigate. While many ongoing policy reforms have been positive, too often they have been developed and commissioned in isolation, with insufficient regard to how they come together within an overall learning and skills strategy and aside from any vision of an integrated ecosystem of providers and wider services. As a result, learners and employers can find it difficult to navigate the system and identify the right opportunities for them, while local government and employer intermediaries are hampered in their efforts to create an overarching infrastructure for employer engagement that enables them to offer holistic business support. A lack of local strategic influence over funding and policy for careers and employment services adds to this disjoint and limits London's ability to offer an integrated employment and skills service, which can not only signpost and support people into locally valuable learning and training, but also equips them to find jobs, progress at work and build careers (see Box 2.15 for more information on career advice and employment support).

Box 2.15. The National Careers Service and Jobcentre Plus

The National Careers Service provides careers advice for adults (as well as for young people aged 13 and over). Face to face support is available through an area-based service for: 18-24 year olds not in education, employment or training (NEETs); low-skilled adults without a level 2 qualification; adults who have been unemployed for more than 12 months; single parents with at least one dependent child; adults with special educational needs and/or disabilities; and adults aged 50+ who are unemployed or at demonstrable risk of unemployment. The service receives funds based on customer satisfaction, career management and jobs and learning outcomes. For London-based service, the budget was GBP 7.6 million in 2018/19, down from GBP 9.3 million the previous year, and down a third since 2013/14. Over the same period, there has also been a tightening in the priority groups on which providers are incentivised to focus.

Jobcentre Plus (JCP), part of the Department for Work and Pensions, provides employment support for unemployed adults. It operates through local. With the roll out of Universal Credit, JCP will also become responsible for supporting adults in-work but on low pay to seek an increase in their earnings. In addition to providing advice and support, JCP has access to the Flexible Support Fund (FSF), which can be used to provide support for claimants to move towards and into work, for example by funding work-focused training.

London's proposal for a devolution and funding deal with the UK government addresses many of the challenges of the adult learning system in London. At its core, it seeks to develop a properly funded and integrated employment and skills system focused on the needs of Londoners and London businesses[29]. However, it leaves room for improvement in multiple areas. While Call for Action has a strong focus on developing the skills of Londoners to meet the needs of London businesses, there is less of an emphasis on the wider efforts required to stimulate economic growth, increase productivity, support strategic business development, and improve skills utilisation. London's Local Industrial Strategy[30] could be integrated into its skills strategy to avoid reflecting the silos that exist within national policy making. Furthermore, an integrated approach will also be essential if London is not to only to meet current skills needs but also to raise employer demand for skills. As such, London could seek to develop a coherent and integrated offer of strategic business support, in which skills development and utilisation are a key pillar. Given the significant impact of COVID -19 on London's businesses – particularly in sectors such as leisure, tourism, hospitality and retail, and those dependent on the footfall of London-based office workers – the need for effective and holistic support is critical if businesses are to survive and successfully adapt.

The current offer of careers advice, overseen nationally and delivered by a range of providers, creates unnecessary duplication and waste. All Londoners require a coherent offer of information and support if they are to navigate this significant period of economic change successfully. The predominant focus of services on young people and unemployed adults, leaves working adults under-served. Additionally, information and advice on careers needs to be tailored to the needs of Londoners and the London labour market. The devolution of careers funding to create an all-age pan-London service, "Made in London", could be a step towards addressing this.

The sectoral nature of the current recession means that many Londoners will need to retrain and change careers in the coming months and years. To do so, they are likely to need more targeted in-depth support. An integrated careers service would need to include more intensive support from a career adviser/work coach, access to training tailored to specific career pathways and jobs, financial assistance with the costs of retraining, and work placements/employer engagement activity.

The COVID-19 pandemic might create new impetus for London's adult learning system. More adults are recognising the need to learn and train by taking advantage of online delivery and the use of technology to do so. Businesses are undergoing significant change and, although many face unprecedented challenges that limit their resources to invest in training, a lot of businesses have recognised the need to upskill and develop their staff to respond to their changing context. While the immediate economic challenge can seem most pressing, London faces a wide range of longstanding challenges in relation to poverty and inequality, community cohesion, health and well-being – all of which can be positively impacted by a well-designed and properly funded adult learning and skills system. The forthcoming Devolution White Paper from the Ministry for Housing, Communities and Local Government (MHCLG) and the Further Education White Paper from the Department for Education provide a unique opportunity to align these two agendas and to take a strategic approach to devolution of adult learning and skills.

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Notes

[1] See Box 2.1 for an overview of London's geography and local governance structure.

[2] Data are based on the ONS population estimates for 2019 and the ONS subnational population projections for 2018.

[3] The statistics are for Greater London and are based on the OECD Regional Database.

[4] The sample of comparators consists of other large OECD metropolitan areas that are either capitals or economic centres with a similar economic structure, and which have available data.

[5] The Index of Multiple Deprivation consists of seven distinct aspects of deprivation. See more detail: https://www.gov.uk/government/statistics/english-indices-of-deprivation-2019.

[6] The UK Government's response to COVID-19 expanded the eligibility for Jobseeker's allowances and Universal Credit for individuals "searching for work". People in work but on low incomes became eligible for these benefits.

[7] Data and analysis on online vacancies are from the indeed hiring lab: https://www.hiringlab.org/uk/blog/2020/09/22/uk-job-postings-through-18th-sept/

[8] This estimate corresponds closely to the actually documented share of people that worked remotely, at least part of the time, in London according to the ONS (ONS, 2020[40]).

[9] At its peak, almost a third (30%) ff the 4.3 million employees in London eligible for furlough used the scheme.

[10] As of June 2020.

[11] Each year, survey respondents are provided with the following definition of learning and asked when they last took part in learning: 'Learning can mean practicing, studying or reading about something. It can also mean being taught, instructed or coached. This is so you can develop skills, knowledge, abilities or understanding of something. Learning can also be called education or training. You can do it regularly (each day or month) or you can do it for a short period of time. It can be full time, or part time, done at home, at work, or in another place like a college. Learning does not have to lead to a qualification. We are interested in any learning you have done, whether or not it was finished.'

[12]The following year, the government also published a memorandum of understanding, stating that "the government will continue to work with the GLA and London Councils so that employers can take advantage of the opportunities offered by the apprenticeship levy and will explore options for greater local influence over careers services, with a view to better aligning skills provision and careers services with local needs and priorities: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/597291/London-Devolution-MoU.pdf

[13] https://www.growthhub.london/

[14] https://www.london.gov.uk/sites/default/files/london_adult_community_learning_review_report.pdf

15 As part of this, from 2020-21, London's AEB can now be used to fully fund teaching and learning support staff to deliver improved specialist provision. It can also be used to fully fund learners whose first language is British Sign Language (BSL).

16 Essential digital skills as defined by (Lloyds Bank, 2020[32]) comprise 17 different digital tasks, covering areas such as communicating, transacting, problem solving, handling information and content, and being safe and legal online/

17 https://www.gov.uk/government/organisations/department-for-education

18 White papers are **policy documents produced by the Government that set out their proposals for future legislation.**

19 https://www.cityandguilds.com/-/media/cityandguilds-site/documents/news/2014/oct-14/cgskillsreport2014-pdf.ashx?la=en&hash=FADB400B2354F7C59D66BF453DBEF415D67D2DBB

20 https://www.policyconnect.org.uk/sc/sites/site_sc/files/news/528/fieldnewsdownloads/englandsskillspuzzle-piecingtogetherfurthereducationtrainingandemployment.pdf

21 https://www.local.gov.uk/topics/employment-and-skills/work-local

22 Its guiding principles call for (i) a 'one stop' service, rooted in place, flexible to local needs, (ii) clear and responsive local leadership, (iii) driven by local opportunities and needs, (iv) a common national framework for devolution, (v) improved offer for individuals and employers, (vi) governance by local Labour Market Agreements.

23 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/909529/AEB_2020_to_2021_funding_rules_V3.pdf

24 From 2016/17 to 2019/20, the AEB was protected in cash terms at GBP 1.5 billion[24], although inflation has led to a real term cut over the period.

25 https://www.gov.uk/government/publications/skills-funding-agency-annual-report-and-accounts-2015-to-2016

26 https://www.london.gov.uk/sites/default/files/call_for_action_.pdf

27 See previous section for the preliminary assessment of adult learning delivery since devolution.

28 https://www.london.gov.uk/sites/default/files/skills-strategy-evidence-base.pdf

29 https://www.london.gov.uk/sites/default/files/call_for_action_.pdf

30 https://www.london.gov.uk/business-and-economy-publications/evidence-base-londons-local-industrial-strategy-final-report

Annex 2.A. Comparison with OECD metro areas

Annex Table 2.A.1 Economic comparison of selected OECD metropolitan areas

Summary statistics for 18 OECD metropolitan areas, 2018 or latest year

Metropolitan area	GDP per capita	labour productivity (GDP per worker)	share of national GDP	disposable income	participation rate	primary education	secondary education	tertiary education	R&D expenditure (% gdp)
Vienna	54890	108522	35%	29028	73.9%	13.7%	46.1%	40.2%	3.0%
Brussels	74574	131432	36%	22675	83.3%	17.9%	34.8%	47.2%	2.1%
Toronto	49056	91589	22%	25160	77.1%	8.4%	25.7%	65.9%	1.9%
Berlin	45311	87571	6%	25192	79.5%	10.9%	51.7%	37.3%	3.1%
Hamburg	60741	105648	5%	29431	78.9%	13.6%	55.1%	30.6%	2.3%
Copenhagen	61970	109672	40%	22893	78.2%	17.0%	36.4%	42.5%	4.6%
Madrid	50434	98242	19%	24978	76.8%	25.5%	26.2%	48.3%	1.6%
Barcelona	43790	93765	12%	23391	75.4%	35.0%	22.9%	42.1%	1.4%
Paris	70751	136765	32%	26513		17.3%	33.2%	49.0%	2.9%
Milan	58567	113645	13%	27734	70.8%	31.0%	46.6%	22.4%	1.0%
Amsterdam	72567	118034	22%	23354	81.1%	19.2%	37.8%	41.8%	1.6%
Oslo	65647	123108	29%	26538	82.2%	15.6%	31.7%	52.7%	3.0%
Stockholm	68540	118699	31%	26852	85.1%	13.7%	37.4%	48.5%	3.7%
London	68496	117337	29%	30574	79.3%	12.8%	33.4%	53.6%	1.4%
New York (Greater)	85565	130449	9%			17.2%	46.5%	36.3%	
Los Angeles (Greater)	65368	108705	6%			25.0%	48.3%	26.7%	
Chicago	68836	108048	3%			15.7%	50.0%	34.2%	
Boston	93233		2%			12.9%	47.5%	39.6%	

Note: For international comparability, the data provide the estimates for each metropolitan areas based on the corresponding larger (TL2 or TL3) region. Regional values are downscaled to better reflect the values of the metropolitan area.
Source: OECD regional database, 2020.

3 Preparing London for the impact of automation and technological change

This chapter analyses the main trends, challenges and opportunities for the labour market in London, with a particular focus on three dimensions: i) labour productivity; ii) the implications of a changing future of work; and iii) the rise of non-standard work. In doing so, the chapter benchmarks London with other regions in the UK and with selected comparable metropolitan areas across OECD countries.

In Brief

Automation could change London's labour market significantly and its impact will likely be accelerated by the ongoing COVID-19 pandemic

- **London's labour productivity has been stagnant since the financial crisis, which holds back London's economy and prosperity.** Since the financial crisis, London has had low labour productivity growth compared to other OECD metropolitan areas. While many cities recorded an increase in labour productivity of more than 10% between 2008 and 2018, labour productivity only grew by 2% in London.
- **The COVID-19 crisis could accelerate the impact of automation and digitalisation.** A wide body of evidence shows that firms are more likely to invest in automation following economic crisis periods. Due to social distancing and lockdown measures, firms and employees in London have embraced remote-working and digital tools.
- **Automation could re-shape the labour market in London. Combined with COVID-19, the impacts could be a double whammy on disadvantaged groups, entrenching inequality.** OECD estimates show that a number of jobs are at high risk of automation in London (8% of total employment in 2018) but many more are likely to face significant change (21%). The impact of automation is concentrated on specific sectors of London's economy and certain vulnerable groups, in particular low-skilled and low-paid workers. Additionally, youth and immigrants face the highest automation risk. Encouragingly, recent job creation in London has mostly occurred in jobs and sectors that are less exposed to automation.
- **Driven by skills-biased technological change, London is experiencing a polarisation of the labour market, with the share of middle-skill jobs declining by 9 percentage points since 2000**. Most of those jobs have been replaced by high-skill jobs but middle-skill worker require learning and training opportunities to move into such occupations.
- **As most places in the OECD, London has seen a rise of non-standard forms of work, consisting of temporary, part-time or self-employed work.** While non-standard work offers new opportunities such as greater compatibility of family and professional life or an easier transition into the labour market for youth, it also creates new challenges. Individuals in non-standard work arrangement have less social protection, are less likely to benefit from training and adult learning opportunities, and are more vulnerable to economic shocks such as the current COVID-19 pandemic.

Introduction

Megatrends related to digitalisation, automation and artificial intelligence (AI) are driving one of the largest transformation of labour markets across the OECD in decades. These trends will change London's labour market profoundly. Their impact has already started to materialise and with the COVID-19 pandemic, digitalisation and automation are likely to accelerate. As social distancing and teleworking became the new normal for millions of workers, COVID-19 appears to be a catalyst for long-lasting change in the way firms operate and people work as they embrace technological change to find innovative solutions that allow them to work.

The impact of the future of work will put some people and sectors of London's economy more at risk than others. Furthermore, the crisis could exacerbate existing structural issues within London's labour market. Skills gaps and imbalances as well as sluggish labour productivity have been important challenges for London's economy. With new types of jobs and alternative work arrangements such as part-time work potentially on the rise, a concerted effort is needed to ensure that skills development in London is prepared for and tailored to these new developments. As London and the UK recover from the crisis, policy makers need to manage not only the direct effects of the pandemic but also provide solutions that address the structural labour market challenges to ensure a strong and sustainable economic recovery. In analysing these trends and challenges, this chapter is structured as follows. The first section provides an overview of London's productivity performance in recent years. The second section analyses the impact of automation on London's local labour market, and in particular on vulnerable groups. Furthermore, it describes how job polarisation affects the availability of different types of jobs. Finally, the third section shows trends in the growth of non-standard work, which creates both opportunities and new challenges for individuals.

Stagnant labour productivity and changing skill needs pose challenges for London's economy

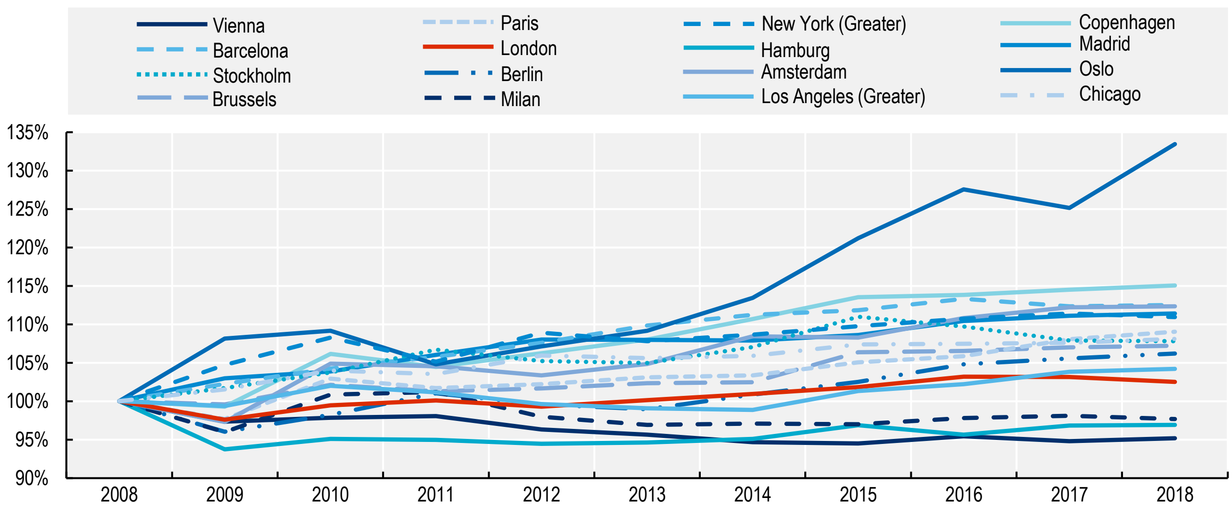
Besides having a direct impact on London's economy, the COVID-19 pandemic may exacerbate already existing structural challenges within London's labour market**.** Even before the pandemic started, London faced a number of significant challenges that inhibited its economic progress. Its labour productivity has been stagnant. Its labour market is changing rapidly, due to automation, digitalisation, and job polarisation. Finally, it is facing issues in terms of skills, with issues of skills shortages and mismatches, indicating that skills supply and labour market needs are not well aligned.

Sluggish labour productivity London leaves room for improvement

Compared to other large metropolitan areas in OECD countries, London's labour productivity has been sluggish over the past 10 to 12 years. While London records the seventh highest labour productivity in a comparison of 18 OECD metropolitan areas, it has virtually stagnated since the financial crisis (Figure 3.1). GDP per worker in London in 2018 was only 2% higher than it was in 2008. This subpar performance means that London recorded the fourth slowest growth in labour productivity of the metropolitan areas considered. The issue of stagnating productivity becomes even more apparent when compared to the significant gains made in many other cities in the OECD. Oslo, the best-performing OECD metropolitan area, increased its labour productivity by more than 30% between 2008 and 2018. Others, including Amsterdam, Barcelona, Copenhagen, Madrid, New York and Paris, also experienced significant progress, with labour productivity rising by around 10%.

Figure 3.1. Labour productivity in OECD metropolitan areas, 2008-18

Changes in labour productivity in selected metropolitan areas since 2008



Note: Labour productivity is measured by GDP per worker in USD, constant prices, constant PPP, base year 2015. All values are presented relative to the starting point in 2008.
Source: OECD regional database and OECD metropolitan database.

The stagnation in labour productivity poses a risk for London's competitiveness as a place of business and work. Had the pre-crisis trend (2000-07) in productivity growth continued, output per worker would have been 47% higher in London than it was by 2018. The stagnant productivity in London holds back local living standards, as it inhibits the growth of real wages and real GDP per capita (OECD, 2017[1]). After adjusting for price inflation, London has experienced the largest reduction in median full-time earnings (real wages) of all UK regions over the period 2008-2019 as real wages fell by 6% (ONS, 2019[2]).

The looming impact of Brexit might yield a further shock to London's labour market. Through a combination of productivity gains and higher labour resource utilisation, immigration has helped to enhance living standards in the UK (OECD, 2017[1]). Compared to most other EU countries, EU migrants in the UK tend to have high levels of educational attainment (Kierzenkowski et al., 2016[3]), which is particularly true for London. As shown by recent research, migration has had a positive impact on productivity in the UK due to the fact that many EU migrants are skilled and offer complementarities to the skills of the UK population has (Wadsworth et al., 2016[4]). Since the Brexit referendum, net EU migration to the UK has fallen drastically by almost 75%, compared to peak levels in 2014 and 2015 (ONS, 2020[5]). As London is the destination of 30% of EU migrants to the UK, its economy is at risk of missing out on vital labour resources.

Digitalisation and tailored skills policies could help boost labour productivity in London. Through targeted policy measures, London could aim to address its stagnation in labour productivity. As discussed in Chapter 2, London now has devolved responsibility for adult learning, which can help raise skills of workers and contribute to a better match with employers' needs. Furthermore, technological progress via digitalisation and automation might drive productivity growth, if they are complemented with workers with the right type of skills. The next section examines the impact of automation on London's labour market.

The future of work: how is automation reshaping London's labour market?

Over recent decades, labour markets in OECD countries have undergone significant structural changes. New technologies and products drove the emergence of new types of jobs. At the same, some traditional industries and jobs have been in decline. This has led to a shift in the type of skills that firms seek and workers need to thrive professionally. The increasing pace of global megatrends such as automation and digitalisation will further drive this structural transformation of the economy leading to a significantly different future of work. Additionally, the impact of the COVID-19 pandemic is likely to accelerate the speed of these developments, as the crisis has been a catalyst for change. Forced by global lockdown measures, firms and employees have embraced new solutions, ranging from the far-reaching increases in remote working to a sudden uptake of digital technology and services, which will fundamentally alter both how people work as well as what type of skills they need to have.

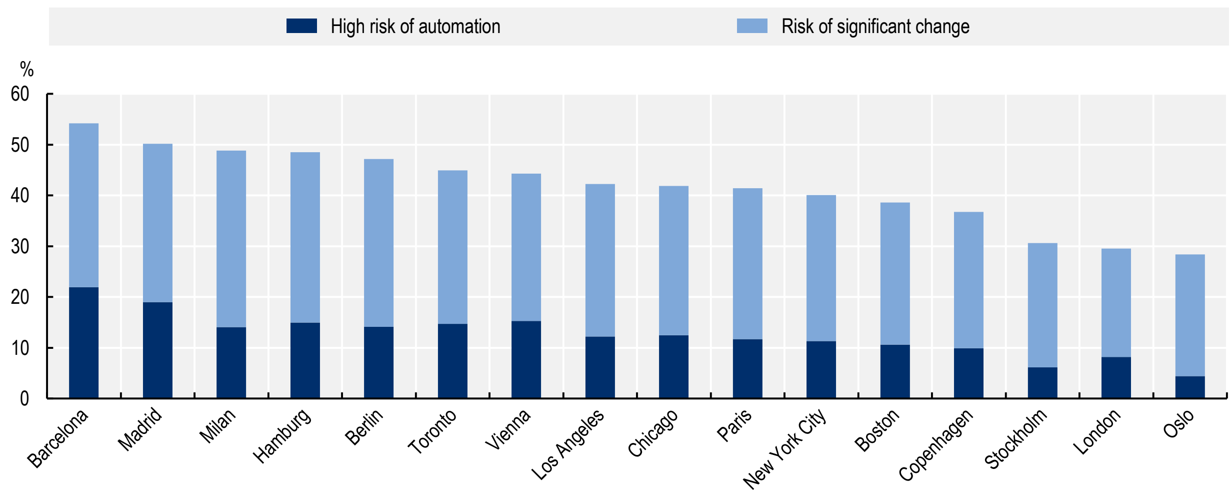
Automation threatens a third of jobs in London

Automation will cause one of the most significant transformation of labour markets in OECD countries in decades. On the one hand, it offers new opportunities such as enhancing productivity, thus raising prosperity and living standards. On the other hand, it poses new and unequal risks to workers. Automation is a skills-biased technological change that tends to benefit some workers (mainly high-skill) but potentially replaces the jobs of other workers (mainly low-skill or middle-skill). Automation will drive a replacement of certain tasks and jobs, creating a risk that some workers may miss out on the benefits that automation can generate. In particular, some workers might struggle to find new jobs given the changing labour market and skill needs (OECD, 2018[6]). Additionally, automation might exacerbate existing socio-economic inequalities by leading to lower wages for some jobs and further job polarisation across types of skills (Acemoglu and Autor, 2011[7]).

The current risk of job automation presents an uneven picture across metropolitan regions. While about 46% of jobs across the OECD are highly automatable (i.e., probability of automation of over 70%) or have a significant risk of being strongly affected by automation (Nedelkoska and Quintini, 2018[8]), these risks tend to be slightly smaller in metropolitan areas (Figure 3.2). However, several metropolitan areas in Spain, Italy, or Germany, face an even higher automation risk to jobs than the OECD average (Figure 3.2). For instance, in Barcelona and Madrid, more than 50% of jobs are likely to be automated or significantly transformed, which will change their skills requirements. In comparison, London's labour market is relatively well shielded to the pending effects of automation. In total, 8% of jobs in London are highly automatable and a further 21% are likely to be changed significantly by automation (see Box 3.1 for a detailed explanation of the computation of risks of automation).

Figure 3.2. Percentage of jobs at significant and high risk of automation by metropolitan areas, 2018

Share of jobs facing a high or significant risk of automation



Note: The metropolitan regions are the corresponding TL2 regions. 'High risk of automation' refers to the share of workers featuring a risk of automation of 70% or above. 'Significant risk of change' reflects the share of workers with a risk of automation between 50% and 70%.
Source: OECD Calculations on EULFS and Census data.

Box 3.1. Estimating the risk of automation across OECD countries and metropolitan areas

(Frey and Osborne, 2017[9]) (FO) estimated the number of occupations at high risk of automation in the United States using a two-step methodology. They conducted a workshop with a group of experts in machine learning, whom they provided with a list of 70 occupations and their corresponding O*NET[1] task descriptions. Experts were asked "Can the tasks of this job be sufficiently specified, conditional on the availability of big data, to be performed by state of the art computer-controlled equipment?". This allowed for the coding of each occupation as automatable or non-automatable. FO then used a machine learning algorithm to find out more about the links between the coding to automate and the list of O*NET variables. They were able to identify those variables (and their associated bottlenecks) with higher prediction power. High scores on these bottlenecks are likely to mean that an occupation is safe from automation. They could then compute a "probability of computerisation" for each occupation in the US, leading to the aggregate estimate that 47% of US jobs have a probability of automation of more than 70%.

Table 3.1. Automation bottlenecks

Computerisation bottleneck	O*NET variable
Perception and Manipulation	Finger dexterity Manual dexterity Cramped workspace; awkward positions
Creative intelligence	Originality Fine arts
Social intelligence	Social perceptiveness Negotiation Persuasion Assisting and caring for others

Note: Please refer to (Frey and Osborne, 2017[9]) for further details on the definition of automation bottlenecks.
Source: (Frey and Osborne, 2017[9]), The Future of Employment: How Susceptible are Jobs to Computerisation?

Building on this approach, (Nedelkoska and Quintini, 2018[8]) (NQ) calculated the risk of automation across 32 OECD countries. The approach is based on individual-level data from the OECD Survey of Adult Skills (PIAAC), providing information on the skills composition of each person's job and their skillset. While drawing on FO, this methodology presents four main differences: (i) training data in the NQ model is taken from Canada to exploit the country's large sample in PIAAC; (ii) O*NET occupational data for FO's 70 original occupations were manually recoded into the International Standard Classification of Occupations (ISCO); (iii) NQ uses a logistic regression compared to FO's Gaussian process classifier; (iv) NQ found equivalents in PIAAC to match FO's bottlenecks. PIAAC includes variables addressing the bottlenecks identified by FO, but no perfect match exists for each variable. No question in PIAAC could be identified to account for job elements related to "assisting and caring for others", related to occupations in health and social services. This implies that risks of automation based on NQ could be slightly overestimated.

Table 3.2. Automation bottleneck correspondence

FO computerisation bottleneck	PIAAC variable
Perception and Manipulation	Finger dexterity
Creative intelligence	Problem solving (simple) Problem solving (complex)
Social intelligence	Teaching Advising Planning for others Communication Negotiation Influence Sales

Note: Please refer to the source below for further details on the definition of the PIAAC variables.
Source: (Nedelkoska and Quintini, 2018[8]), "Automation, Skills Use and Training", OECD Social, Employment and Migration Working Papers, No. 202.

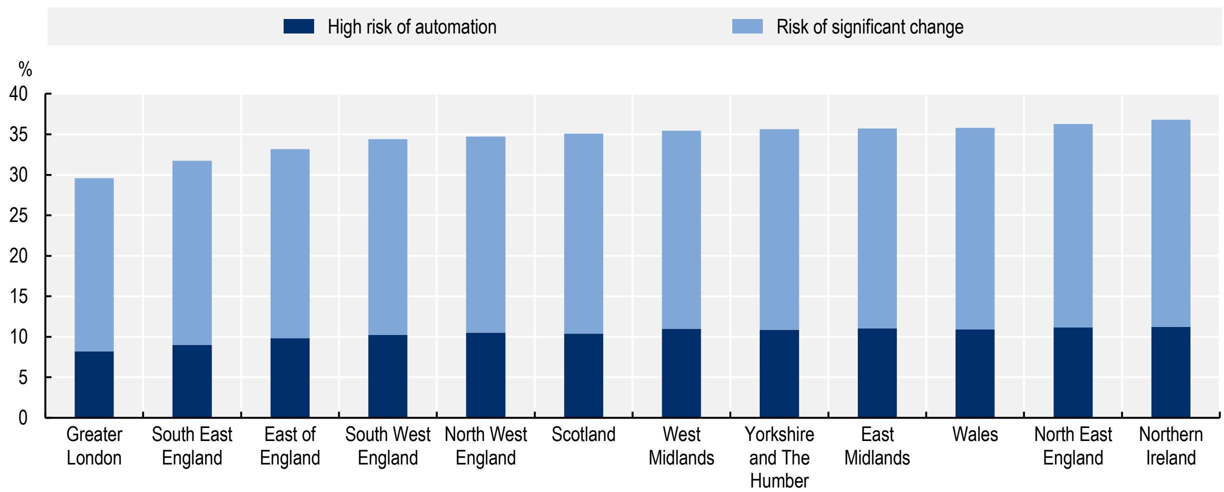
Recent studies have pointed out the difficulty in predicting the risk of automation, as different models and variables come into play. Frey and Osborne's original examination of the impact of automation on jobs was focused on machine learning and mobile robotics, but these are not the only key technological developments likely to impact the future of skills. Others have identified the rise of various forms of telepresence and virtual/augmented/mixed forms of reality, as well as the expansion of digital platforms as trends that will have important impacts on the future. The inherent unpredictability of technological progress means that within the growing literature, estimates of the jobs at risk of automation can vary widely, and the timeframes within which these impacts are predicted to occur are similarly broad, ranging from 10 to 50 years. Both the shape disruption will take, and its extent, are uncertain. What is certain is that workers will need to learn new skills and develop new competencies to adapt to changes are on their way (Crawford Urban and Johal, 2020[10]).

Source: Based on (OECD, 2020[11]).

Across UK regions, London records the lowest share of jobs at risk of automation. On average, 11.7% of workers face a high risk of automation and another 26.0% work in occupations that are likely to see their task contents and necessary skills changed significantly due to automation (Figure 3.3). In London, the share of jobs at high risk of automation and the share of jobs that will be significantly changed are both lower than in any other UK region. Overall, Northern Ireland and North East England face the highest risks of automation, with a total of 37% and 36% of jobs with either high automation risk or significant change. However, this still places both regions markedly below the OECD average of 46% of jobs.

Figure 3.3. Risk of automation across UK regions

Share of jobs at significant and high risk of automation by UK region (%), 2018

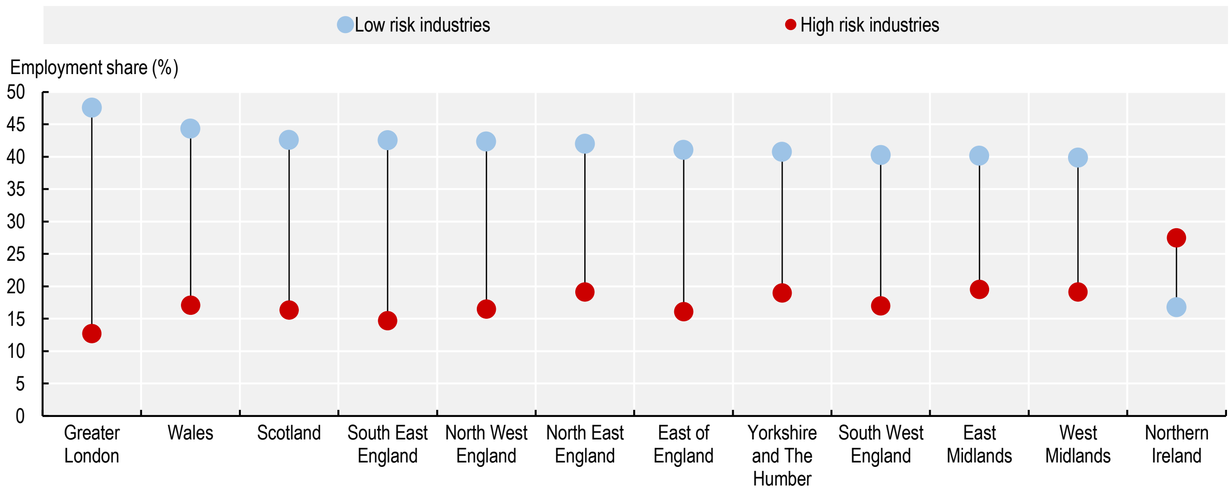


Note: The metropolitan regions are the corresponding TL2 regions. 'High risk of automation' refers to the share of workers featuring a risk of automation of 70% or above. 'Significant risk of change' reflects the share of workers with a risk of automation between 50% and 70%.
Source: OECD Calculations on EULFS and Census data.

Differences in the occupational profile of local labour markets drive the differences in the risk of automation both within the UK and across OECD metropolitan areas. Occupational differences mainly reflect different industrial structures of regions or metropolitan areas. For example, sectors such agriculture, construction, food and beverage services, manufacturing, or transport have a higher probability of losing jobs to automation (Box 3.1). UK regions that face a higher risk of automation than London also tend to rely more strongly on employment in such sectors. Almost 50% of employees in London work in a sector with low automation risks, whereas less than 13% work in high-risk sectors (Figure 3.4). In contrast, in Northern Ireland, the share of employees in industries with high automation risks amounts to almost 28% and is in fact larger than the share of employees in industries with low automation risks. Employees in London face lower risks of automation because many work in occupations and industries that involver fewer routine tasks. For instance, London is the UK region with the largest share of jobs in professional and scientific services, finance, or real estate.

Figure 3.4. Employment share in industries with the lowest and highest risk of automation

Large (TL3) regions of the UK, 2017

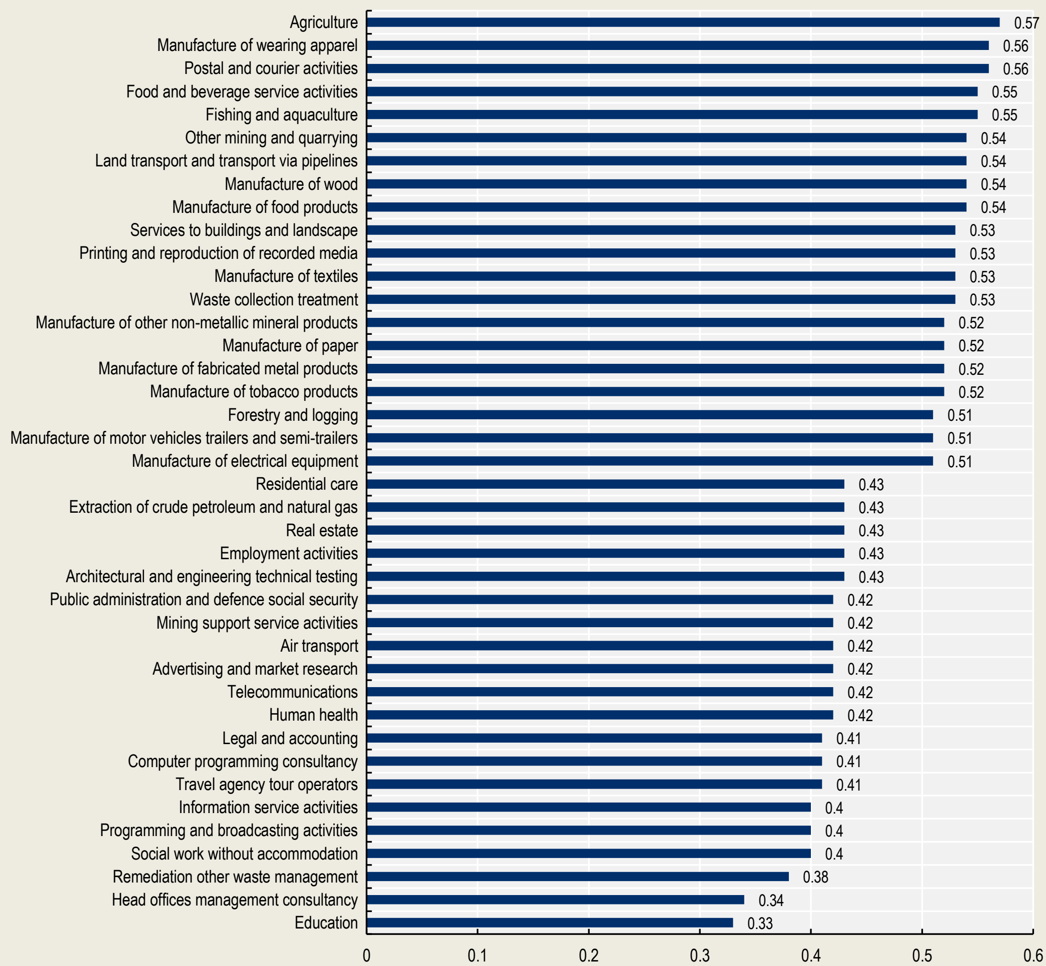


Note: The figure displays the employment shares in the 20 industries with highest average risk of automation and the 20 industries with lowest average risk of automation. Industries are classified according to the ISIC Rev. 4, 2-digit. Automation risks are presented in (Nedelkoska and Quintini, 2018[8]). Box 3.2 presents the top and bottom 20 industries in terms of automation risk.
Source: OECD elaboration based on the OECD.

Box 3.2. Which industries have the highest risk of automation?

The following table presents the 20 industries at highest average risk of automation and the 20 industries at lowest risk. The industries with high risk of automation belong mostly to the primary and the secondary sector. Few service industries face a high risk of automation, though exceptions include food and beverage services, land transport, waste collection and treatment, and services to buildings and landscape. In contrast, almost all industries with relatively low probability of automation belong to the service sector.

Figure 3.5. Mean probability of automation



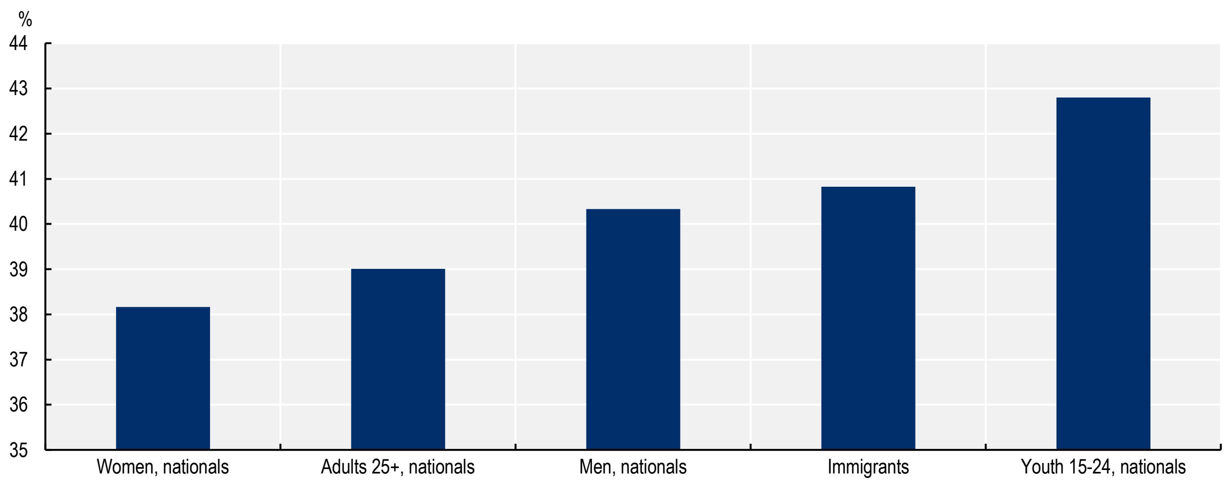
Note: The figure only includes the 20 industries with highest average risk of automation and the 20 industries with lowest average risk of automation. The classification is ISIC Rev. 4, 2-digit.
Source: Survey of Adult Skills (PIAAC) 2012, 2015; (Nedelkoska and Quintini, 2018[8]).

Vulnerable groups are most exposed to automation risks, potentially leading to greater socio-economic disparities in London

While automation will affect fewer jobs in London than in most OECD metropolitan areas or regions of the UK, it might still aggravate disparities in London's labour market. The threat of automation will affect vulnerable segments of London's population the most. Youths and immigrants face the highest risk of being negatively affected by automation (Figure 3.6). Almost 43% of youths (15-24 year olds) face at least a significant risk of automation, making the young the most vulnerable group in London with respect to the effects of automation that might lead to job losses. Immigrants are the second most vulnerable group, with almost 41% facing significant risks of automation. This contrasts with all adults as well as women in London's labour market, among which 39% and 38% are in jobs that could be automated, respectively.

Figure 3.6. The impact of automation across groups, London

Average risk of automation by population group in Greater London, TL2, 2018



Note: Y axis is cut.
Source: OECD calculations based on Labour Force Survey data.

Low-skill professions make up the largest part of jobs with a significant risk of disruption or replacement by automation. The ten most affected occupations consist predominantly of jobs with low skills requirement and employ more than 260 000 people combined in London (Table 3.3). The two occupations with the highest risk of automation are drivers and mobile plant operators as well as sales workers, each accounting for almost 50 000 employees at risk. Other occupations with large numbers of employees at risk of automation are refuse workers and other elementary workers (26 700), labourers in mining, construction, manufacturing and transport (26 300), numerical and material recording clerks (24 000) and cleaners and helpers (23 800). Among the ten occupations with the greatest numbers of jobs with significant automation risks are only two occupations that predominantly compose high-skill jobs, Legal, Social and Cultural Professionals and Science and Engineering Professionals. However, those occupations record a markedly lower relative automation risk, as only a small share of employees in those occupations are affected.

Table 3.3. Number and % of people with jobs in high risk or in risk of significant change in London, 2018.

Occupation	High risk, % of occupation	Number of employed people in thousands at high risk of job destruction
Drivers and Mobile Plant Operators	33	47.4
Sales Workers	23	47.0
Refuse Workers and Other Elementary Workers	42	26.7
Labourers in Mining, Construction, Manufacturing and Transport	27	26.3
Numerical and Material Recording Clerks	20	24.0
Cleaners and Helpers	26	23.8
Customer Services Clerks	16	23.7
Personal Services Workers	11	17.2
Legal, Social and Cultural Professionals	6	16.2
Science and Engineering Associate Professionals	17	12.1

Note: Top 10 occupations looking at the number of people with jobs in high risk or in risk of significant change, 2018.
Source: OECD calculations based on the European Labour Force Survey data.

Automation risks are much higher for low-pay jobs than it is for high-pay jobs but automation can also generate great gains if workers can access new technology-driven jobs. Estimates by Frey and Osborne point out that automation risks are concentrated on individuals with low earnings. For example, jobs paying GBP 30,000 or less are five times more at risk of automation than jobs paying GBP 100,000 or more (Deloitte, 2015[12]). However, the same analysis also points out that the impact of technology has had delivered broad positive gains. According to 2013 UK earnings data, each new job that was created due to new technology pays approximately GBP 10,000 per annum more than the job it replaces. Helping displaced workers getting into those new, higher-paying jobs is a policy priority and requires support in terms of learning and training opportunities that allow workers to develop the necessary skills, especially given the impact of COVID-19 on low-skilled and vulnerable groups (see Box 3.3 for an example of targeted city policies for vulnerable labour market groups).

Box 3.3. Munich: retraining and career transition support to vulnerable groups

The city of Munich, Germany, established the Munich Employment and Qualification (MBQ) programme to deal with the impact of the COVID-19 pandemic, which has accelerated the move towards digitalisation and increased the need for lifelong learning. To address these changes, the MBQ programme seeks to provide learning opportunities for the workforce and increase job opportunities. The programme aims to assist vulnerable groups such as women, university graduates, migrants and the self-employed in need of re-schooling. The MBQ programme includes retraining offers, facilitating transitions across sectors and strengthening co-operation between the city and companies in the area such as job matching. To adequately address the city's challenges, the MBQ programme has four funding areas with specific target groups:

- Area 1: Reducing long-term unemployment; the target groups are long-term unemployed persons unable to find work, have fewer opportunities and who receive unemployment benefits.
- Area 2: Gender equality at the workplace; the target groups are women who are looking to change careers or who are preparing for self-employment, as well as women who are disadvantaged in the workplace.
- Area 3: Transition from education/higher education to the world of work; the target groups are young people, students, graduates and highly skilled international workers.
- Area 4: Knowledge and expertise development in companies and industries; the target groups are freelancers and entrepreneurs (often migrants) who run small and medium-sized enterprises.

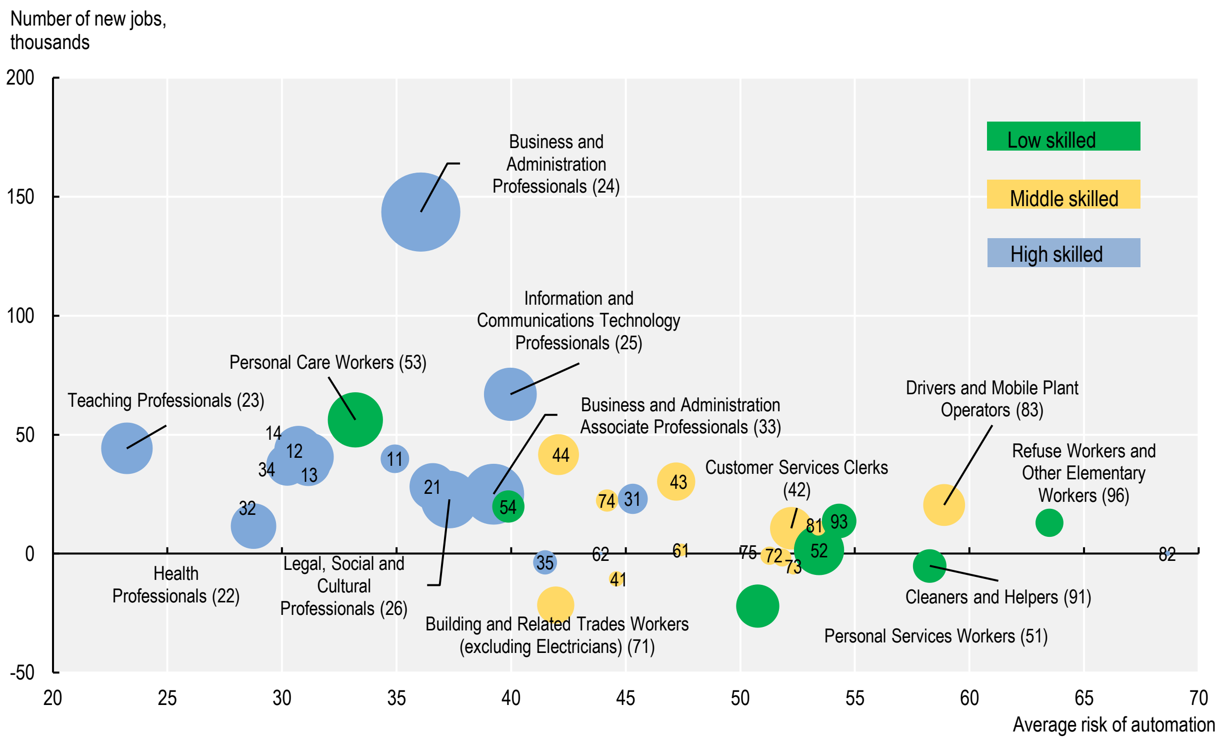
In line with the global digital transition and the growth in healthcare sector opportunities, the MBQ programme is provided online and has incorporated digital skills learning and development for participants. The programme also includes skills development in the nursing sector such as a one-year preparation for nursing training and a two-year-support and training programmes to help promote specialist-nursing assistants.

Source: https://www.muenchen.de/rathaus/home_en/Department-of-Labor-and-Economic-Development/labormarket-policy.html.

Promisingly, recent job creation in London has mostly taken place in occupations with low risk of automation. Since 2011, job creation was concentrated in high-skill occupations that are less vulnerable to automation (Figure 3.7). For example, the number of jobs for business and administration professionals increased by around 150 000. Workers in this occupation are not only high skilled but also face a relatively low risk of automation. Similarly, London's economy created 50 000 jobs or more for teaching professionals or ICT professionals. Encouragingly, those low skill occupations that are more robust in light of automation, such as personal care, fared better than low skill occupations that are highly vulnerable. Overall, these trends leave London's labour market less exposed to the risk of automation compared to most of the OECD. However, the data on job creation also reveal that the low skilled are particularly affected by automation, as little to no growth in employment occurred in occupations that provide employment for people with low levels of educations.

Figure 3.7. Job creation compared to risk of automation in London, 2011-18

Breakdown of job creation by occupation and their average risk of automation



Note: The change in number of jobs in thousands is calculated between 2011 and 2018. Occupations (ISCO-08 code indicated in the bubble) are ranked from low to high risk of automation along the horizontal axis. Changes in the number of jobs for each occupation are reported along the vertical axis. Bubble size represents the share of jobs in the occupation with respect to total employment in the region.
Source: OECD calculations based on EU Labour Force survey data.

Automation and digitalisation make digital skills ever more relevant and London, especially for those groups that are most at risk of redundancy. To enhance employability of vulnerable groups in the labour market, London has started a new programme that aims to enhance digital skills (Box 3.4). Digital skills are essential for people to maximise life's opportunities, work efficiently in a job; and are crucial for ensuring productivity and growth in London's economy. According to estimates of the Department for Digital, Culture, Media and Sport, by 2030, 90% of all jobs will include some level of digitisation, making digital skills more and more important at every level for most workers, ranging from a high street retailer to workers in advanced manufacturing.

Box 3.4. Digital talent programme, London

To improve the quality and quantity of relevant digital skills, London has started a new programme, the *digital talent programme*. It aims to increase the digital skills and employment opportunities of young people, especially for females, disadvantaged groups as well as individuals from black and ethnic minority background (BAME). The programme consists of 10 projects designed to address several inequalities in the sector:

- Under-representation of female workers - just 17% of Tech/ICT workers in the UK are female, only one in ten females are currently taking A-Level computer studies;
- Under-representation of BAME workers - 15% tech workers are BAME; 8.5% senior management are BAME;
- Under investment in educators.

As of October 2020, the programme has exceeded its targets of reaching underprivileged groups. Most of the participating learners move on to a work placement or receive financial and mentoring support to start their own businesses, after completing training on the programme. As part of the programme, London also aims to increase the capacity and knowhow of SMEs in providing apprenticeships, with a stronger focus on digital skills.

Source: https://www.london.gov.uk/what-we-do/skills-and-employment/skills-londoners/digital-talent-programme.

Labour markets in London and other metropolitan areas are polarising, partly reflecting a shift in labour supply

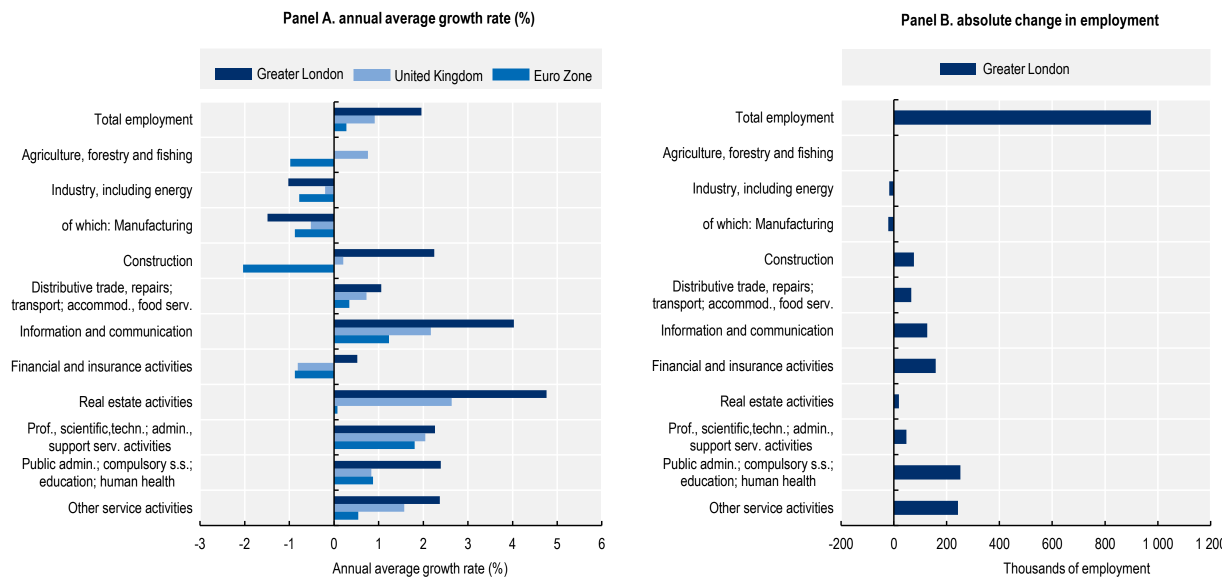
Even before the onset of the COVID-19 pandemic, OECD economies experienced dramatic shifts in their labour markets. Labour markets across the OECD have become increasingly polarised over the last decades. The share of employment in middle-skill jobs has declined strongly relative to jobs with higher or lower skill levels (OECD, 2017[13]). High-skill jobs include managers, professionals and technicians; middle-skill jobs compose clerks, craft and related trades workers, machine operators and assemblers; and low-skill jobs include elementary occupations, service workers, and shop and market sales workers. In almost all OECD countries, job polarisation has been characterised primarily by a shift towards high-skill occupations (OECD, 2019[14]).

Job polarisation is part of the general public concern about growing inequality in OECD societies. Historically, middle-skill jobs were considered to be sufficient for achieving a middle-class lifestyle and offered socio-economic mobility for future generations. In recent years, growth in high-skill occupations has outpaced growth in middle- and low-skill occupations in OECD countries, shifting the overall labour market distribution towards higher-skill jobs. This has led to a change in the relationship between skills and income classes. Consequently, middle-skill workers are now more likely to be in lower-income classes than middle-income classes (OECD, 2019[14]). Furthermore, the wage structure in many OECD countries is now also observing a growing divide between top earners and other, instead of experiencing growth at both ends of the wage structure.

London has benefitted from a decade-long boom in employment, in particular in service sectors with many high skill jobs. Between 2008 and 2017, total employment in London grew by an annual rate of almost 2%, compared to 0.9% in the UK and 0.3% in the Euro Zone (Figure 3.8). This corresponded to the creation of almost 1 million new jobs in London. The two sectors that recorded the fastest employment growth in London were real estate activities and information and communication services, which grew by 4.8% and 4.0% per year, respectively. In total numbers, employment in public administration, education, and health services grew the most, with more than 250,000 jobs created since 2008. In contrast, employment in manufacturing declined by more than 20,000, corresponding to an annual decrease of 1.5%.

Figure 3.8. Changes in employment by sector, 2008-17

Changes in employment by sector in terms of annual growth rates (left panel) and absolute growth (right panel)

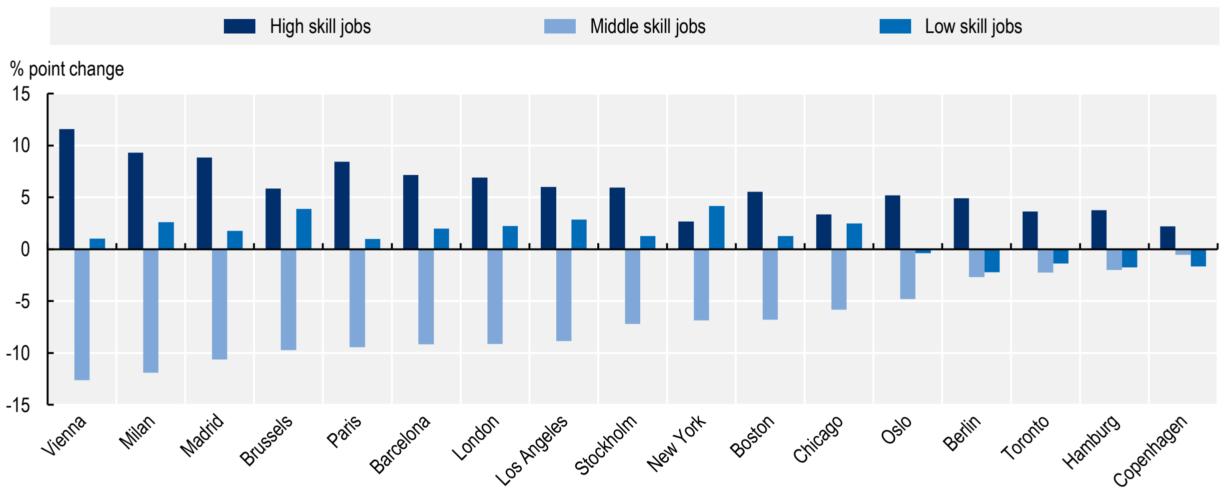


Source: OECD elaboration based on the OECD Regional Database.

Driven by skills-biased technological change, labour markets across the OECD are increasingly polarising. This is particularly noticeable in large cities, which tend to be at the forefront of labour market transformations. Across OECD metropolitan areas, labour markets are increasingly polarising. Overall, middle-skill jobs are rapidly disappearing. All the 17 OECD metropolitan areas considered have lost middle-skill jobs in relative terms since 2000 (Figure 3.9). On average, the share of workers in such jobs decreased by more than 7 percentage points between 2000 and 2018. Almost all of them have replaced them with both high-skill and low-skill jobs, with the former recording the largest relative increase in jobs. In fact, 16 metropolitan areas have mostly replaced middle-skill jobs with high-skill jobs.

Figure 3.9. Job polarisation in OECD metropolitan areas

Relative change in jobs by skill level across London and other metropolitan regions, 2000-18



Note: The data correspond to the TL2 regions that compose the respective metropolitan area.
Source: OECD calculations based on Labour Force Survey data.

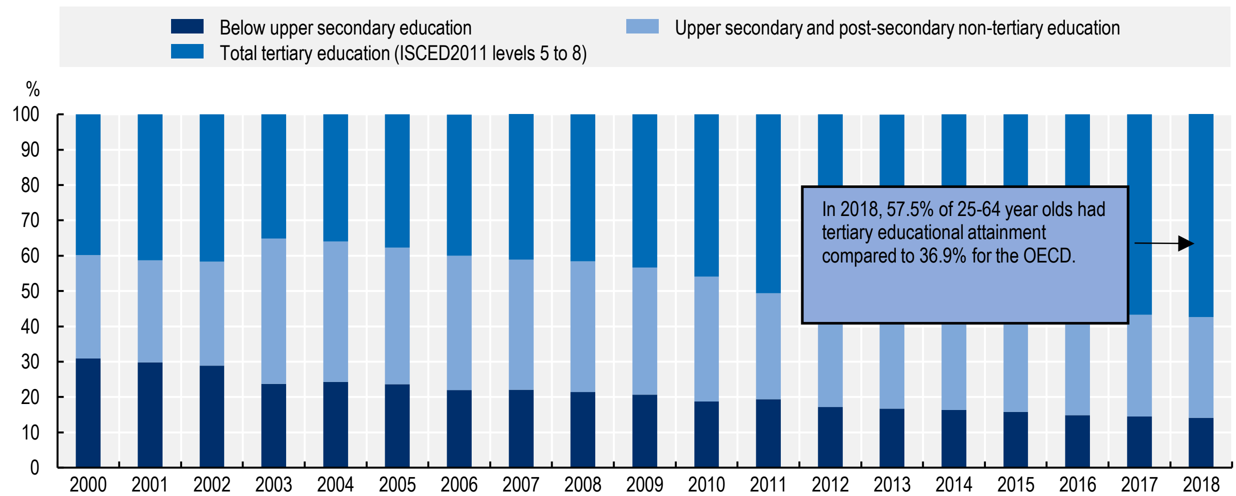
Middle skill jobs have disappeared in London by more than 9 percentage points since 2000 (Figure 3.9). The loss of middle-skilled jobs was primarily made up for by a significant rise in high-skilled jobs (+ 6.9 percentage points). However, the share of low-skilled jobs also increased by more than 2.3 percentage points. In a context of rising total employment, these changes correspond to increases of 940,000 high-skilled jobs and 349,000 low-skilled jobs, as well as a reduction of 64,000 middle-skilled jobs. Internationally, middle-skilled jobs in London have disappeared at a faster pace than the average rate in OECD metropolitan areas. Nationally, the polarisation of jobs in London is comparable to the UK average.

Technological change drives the disappearance of middle-skill jobs. While Information and Communication Technology (ICT) is believed to complement high-skill jobs, it typically offers a substitute for middle-skill jobs. Instead, technological developments and their capacity to replace routine tasks are drivers of job polarisation, as the impact of technology on jobs varies across the skills distribution. Across industries, occupations, and education levels, digitalisation is linked with reduced labour input of routine manual and routine cognitive tasks. Meanwhile, technological change and digitalisation are associated with an increase in non-routine cognitive tasks (Autor, Levy and Murnane, 2003[15]). As middle-skill jobs, such as clerical and production jobs, often entail routine tasks, they are easier to automate. In contrast, low-skill jobs often also involve non-routine manual tasks, which are more difficult to automate.

Job polarisation in London partly reflects a strong increase in the supply of high-skilled labour. Overall, educational attainment among 25-64 year olds in the Greater London area has shifted to higher qualifications over the last 18 years (Figure 3.10). Between 2000 and 2018, the share of 25-64 year olds with completed tertiary education has risen by almost 18 percentage points from 39.8% to 57.5%. During this period, the share of the adult population who attained only below upper secondary education more than halved, from around 31% to 14%. In contrast, the population share with upper secondary and post-secondary non-tertiary education remained stable.

Figure 3.10. Educational attainment in London over time

Educational attainment among 25-64 year olds in London, 2000-18



Note: Share of population 25 to 64 year-olds by educational attainment.
Source: OECD Regional Database.

What other challenges and opportunities could have an impact on London's labour market?

Non-standard forms of work can offer flexible work arrangements

Across OECD countries, labour markets have undergone a gradual transition away from traditional open-ended contracts. Instead, non-standard forms of work, including temporary, part-time, or self-employed work, have been on the rise (see Box 3.5 for information on the definition of non-standard work). Technological development and changing consumer preference are two important factors explaining the increase in non-standard work forms. Technological progress has enabled firms to adopt more job flexibility and outsourcing of tasks, including the hiring of temporary help or freelance contractors. Consumer preferences have shifted to more just-in-time delivery and customised services.

While non-standard work offers opportunities to some workers, it also creates new challenges such as a deterioration of working conditions for others. On the one hand, non-standard work arrangements can increase worker flexibility and enhance the compatibility of work and family life, enabling some workers who would otherwise have stayed out of the labour market – especially women – to have a job in the first place. Furthermore, it can be a stepping-stone for young people, allowing them to transition into the labour market and gain experience, which, in turn, can offer other job opportunities later on in life (OECD, 2018[16]). On the other hand, non-standard work might be associated with worse working conditions. Typically, non-standard work reduces job security, increases income volatility, and potentially hampers career progression.

Box 3.5. Defining non-standard work

Non-standard work (NSW) arrangements are defined by what they are not: full-time dependent employment with a contract of indefinite duration – or what is generally considered the "standard" work arrangement. NSW therefore includes:

- Temporary workers - workers in fixed-term contracts, including casual employees (duration is not fixed, but hours can vary), and seasonal workers;
- Part-time workers;
- The self-employed.

While this definition may be considered problematic – as it lumps together precarious and non-precarious forms of work – the convention is followed by a large part of academic research as well as by international organisations. For this reason, this chapter adopts this definition.

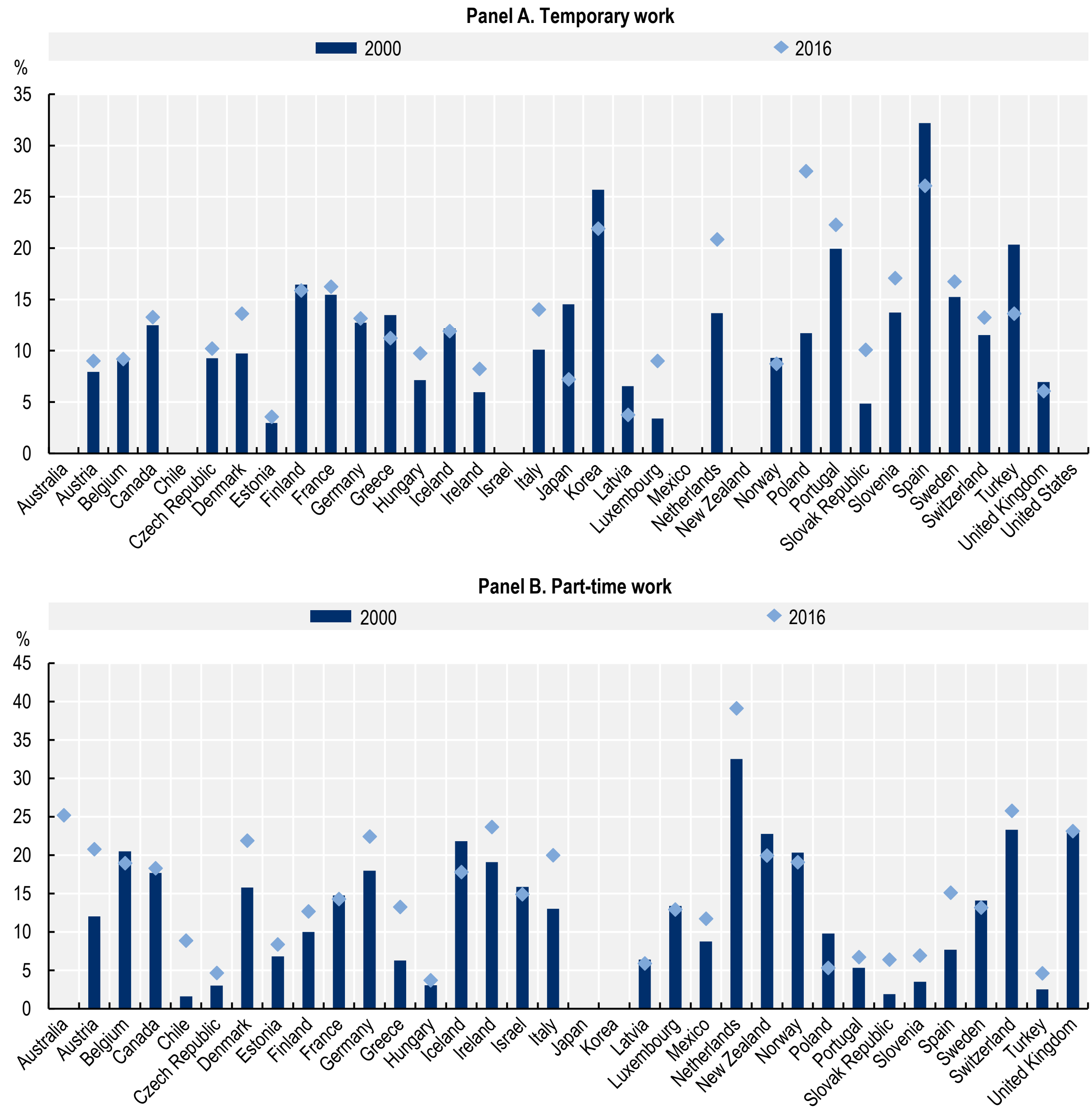
An additional challenge lies in the fact that the distinction between different forms of employment has become increasingly intricate. In particular, there is a growing grey area between self-employment and wage employment. The growing numbers of self-employed working for just one company represent a group on the border between two categories. While these blurred lines are at the heart of the current debate on the benefits and downsides of the gig economy, data that allows researchers to settle the debate is scarce

Source: (OECD, 2018[16]),Job Creation and Local Economic Development 2018: Preparing for the Future of Work, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264305342-en; (OECD, 2015[17]), "Non-standard work, job polarisation and inequality", in In It Together: Why Less Inequality Benefits All, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264235120-7-en.

Non-standard work employment has increased in most OECD countries since 2000**.** Temporary contracts have become more common in OECD countries, especially among young workers (Figure 3.11 Panel A). Compared to 1980, the share of OECD workers under the age of 26 in a fixed-term contract has risen from 17% to 25% in 2016. Moreover, the share of employees in part-time work has also increased significantly (Figure 3.11 Panel B). While a large part of this trend is due to the entry of women into the labour market that historically struggled to combine family and professional life, part-time work has also increased amongst men.

Figure 3.11. Non-standard employment across OECD countries, 2000-16

Share of temporary and part-time work, OECD countries



Source: OECD (2018), "Labour Market Statistics: Employment by permanency of the job & Full-time and part-time employment - common definition: incidence", OECD Employment and Labour Market Statistics (database), http://dx.doi.org/10.1787/lfs-data-en.

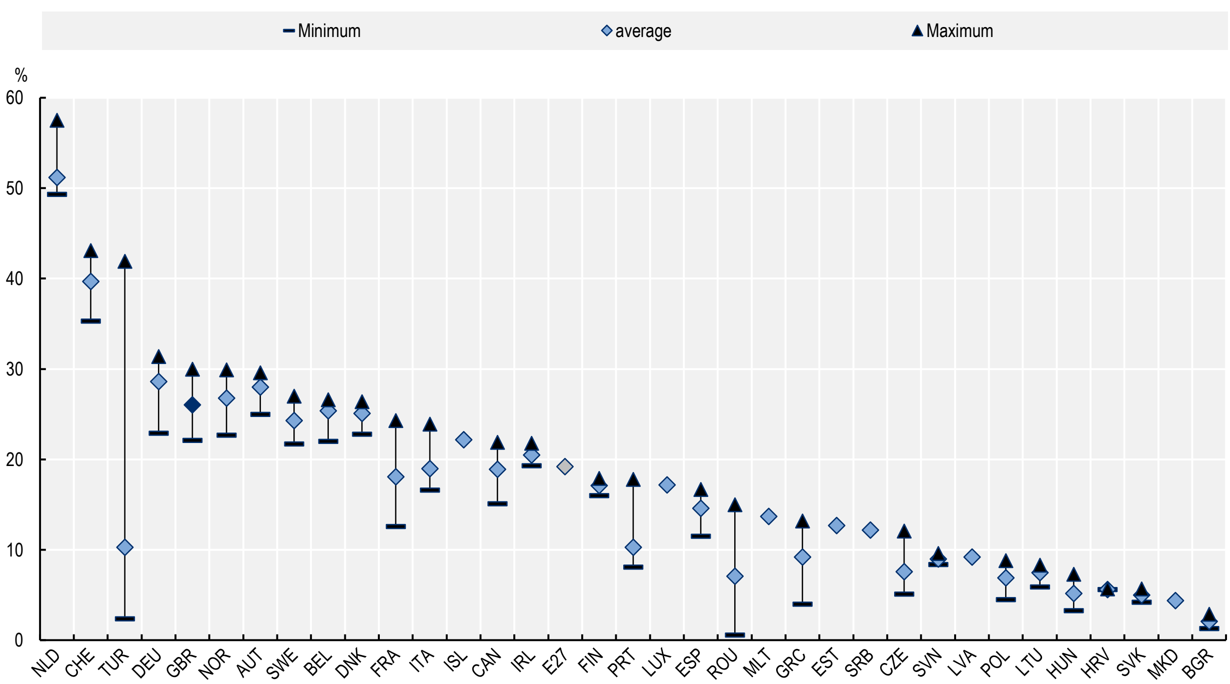
Part-time work has increased in London, the UK and across the OECD

Non-standard forms of dependent employment (i.e. jobs that are part time or of short duration) represent more than 28% of wage and salary workers in OECD countries. Part-time employment makes up the majority of non-standard dependent employment. Over the past two decades, the share of part-time workers has increased by 2 percentage points and now accounts for 16.5% of all employment. Among the young, non-standard work is even more common and rising faster. In the decade up to 2018, non-standard dependent employment increased by 5 percentage points among employees aged 20 to 29, mostly drive by a rise in part-time employment (OECD, 2019[18]).

The share of part-time employment varies significantly across regions and countries. In countries such as the Netherlands, Switzerland, Germany, the United Kingdom or Norway, more than 25% of employment is part-time (Figure 3.12). In those countries, women's increases labour market participation partly explains the rise in part-time employment. Women are more than twice as likely as men to work part time and on average, almost one quarter of women – often mothers – work part-time (OECD, 2020[19]). Part-time employment can be an effective means of achieving work-life balance and making family and professional life compatible. However, part-time work often comes with significant disadvantages.

Figure 3.12. Share of part-time work across OECD regions, 2019

% of employment that is part-time – individuals aged 16-64



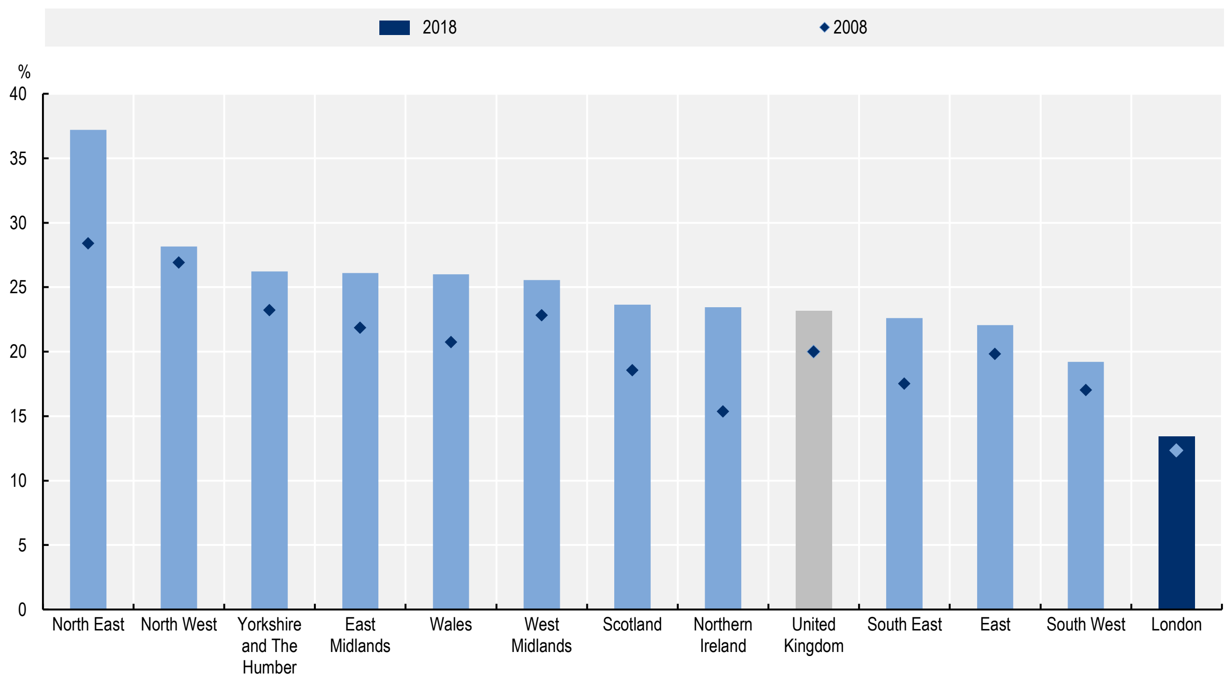
Source: OECD Regional Database, 2020.

Part-time employees face higher job security and tend to earn lower hourly wages in OECD countries (OECD, 2018[20]). Poverty rates tend to be higher for part-time workers than for standard employees. While on average 10% of part-time workers live in a household with an annual disposable income of less than 50% of the national median, this is only the case for 3% of standard employees (OECD, 2020[19]). Furthermore, part-time workers are less likely to participate in training, which has a negative impact on their future earnings. Lower training participation also means that part-time workers are less likely to adapt to the future of work and changing skills requirement. As pointed out in the previous section, automation and digitalisation change labour market needs and skill profiles that employers seek. Part-time workers are less able to react to these developments by using learning opportunities to re-train or up-skill.

In London, part-time employment has been growing but a slower pace than in the rest of the UK. In 2018, 13.4% of employment in London was part time, up from 12.3% a decade earlier. In comparison, UK-wide part time employment rose by more than 3 percentage points in 2008-18, reaching 23.2% in 2018. Overall, London has the lowest share of part-time employment among regions in the UK. The different industry and occupational structure in London is only part of the explanation of London's lower share of part-time employment. Other factors might help further explain the gap (GLA Economics, 2015[21]). London has the highest childcare costs in the UK, which contributes towards higher opportunity costs from working. Furthermore, direct and indirect costs of travelling to work might also be a factor, with long commuting times being common in London.

Figure 3.13. Changes in part-time employment across UK regions

% in employment in part-time



Source: OECD elaboration based on data from NOMIS (NOMIS, 2019[22]).

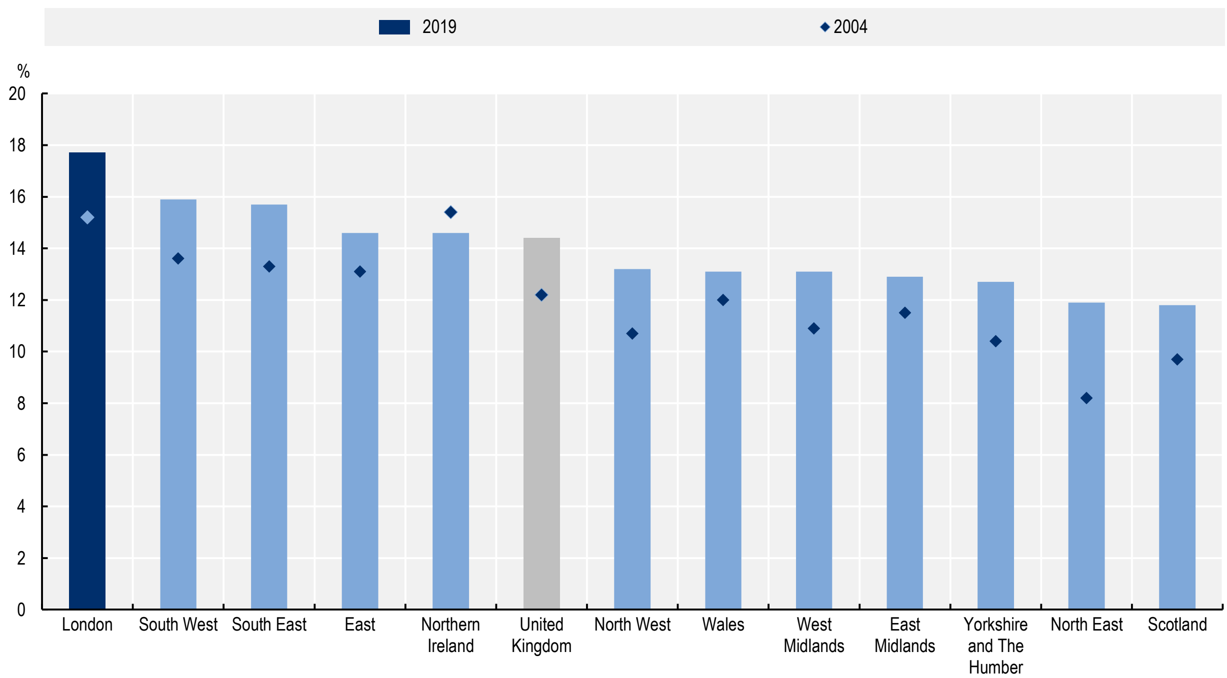
The number of self-employed are on the rise in London

The emergence of non-standard forms of work poses new challenges to employment regulations, which are mainly designed for traditional employer-employee relationships. Historically, workers' employment status functioned as a gateway to specific rights and social protection (OECD, 2019[18]). With the rise of non-standard work arrangements, many workers risk losing out on those rights and protection mechanisms. Furthermore, non-standard workers tend to have less access to training, which becomes a pressing concern in a world of work that is evolving rapidly as skills needs change and require up-skilling or re-training. These challenges are particularly relevant for the self-employed. The rise of the gig-economy has led to a proliferation of what some people call false self-employment. Individuals work for a company but are officially registered as self-employed, leaving them with limited social protection.

In the UK, London has the highest rate of self-employment and also records the highest increase in self-employed work. Around 14% of UK residents in employment currently work as self-employed. In London, almost 18% of workers are self-employed and their share is rising (Figure 3.14). Between 2004 and 2019, the share of self-employed of London's labour force has increased by 2.5 percentage points. The emergence of the digital economy is one factor that explains the rapid rise of self-employment in London. Some self-employed workers have used the new markets and opportunities the digital economic has created to find high-value added work, e.g. independent professionals, freelancers. However, other self-employment in the digital economy takes on precarious forms with workers working for one client that is effectively their employer, without benefitting from the benefits of a formal employer-employee relationship including social security or work regulation that protects employees.

Figure 3.14. Changes in self-employment rate across UK regions, 2004-2019

% in employment who are self-employed - aged 16-64



Source: OECD elaboration based on data from NOMIS (NOMIS, 2019[22]).

A boom of the "gig economy" via online platforms drives the rise in self-employment in London and the UK. Driven by new technology platforms, self-employment has become easier and more common, as technology has decoupled jobs from location, allowing people to work from anywhere, any time. Overall, the terms "gig economy" or "platform work" cover a wide range of jobs that are accessed using a laptop, smartphone or other internet-connected device and are found via a website or app such as Uber or Deliveroo. Platform workers offer labour supply for task-based demand for labour. Between 2016 and 2019, the number of people working in the gig economy has doubled in the UK. Nearly 1 in 10 (9.6%) working-age adults surveyed now work via gig economy platforms at least once a week, compared to around 1 in 20 (4.7%) in 2016 (TUC, 2019[23]).

False self-employment poses new challenges in ensuring quality jobs and labour market protection. False self-employment, also called disguised, sham, bogus or pseudo self-employment, refers to working arrangements that are essentially the same as those of employees but firms hire workers as self-employed workers to avoid regulations, taxes and unionisation. Due to its lack of regulation, false self-employment hurts workers as it shifts economic risks onto them. In many countries, including the UK, fiscal and regulatory differences between employment forms drive the deliberate misclassification by employers of workers, thus contributing to the growth in non-standard forms of work. Such misclassification does not only harm workers but also affects public finances due to lower tax revenues. In the United Kingdom, estimates suggest that the self-employed account for GBP 5billion of the GBP 7billion uncollected 'tax gap' for self-assessment income tax, national insurance contributions and capital gains tax combined (Adam, Miller and Pope, 2017[24]). Consequently, some governments are taking action to combat false self-employment (see Box 3.6).

Box 3.6. Combatting "false" self-employment in the Netherlands

Description: The Netherlands is using regulatory and tax measures to clarify the differences between employees and the self-employed to fight false self-employment.

Problem addressed: Since 2004, self-employed workers submit an Employment Relationship Declaration (VAR) to the Tax Service that describes their work status. Those who hire the self-employed can then assume that the relation is not an employer-employee relationship. Consequently, the hiring company or individual does not have to pay any wages or cover the employee-insurance premiums for services purchased. This offers companies an incentive to work with the self-employed, especially since the self-employed person is held accountable for the accuracy of the VAR. However, this has led to an increase in false self-employment. A second problem that has arisen is that the confusion surrounding VAR-certified workers has led to some occasional conflicting decisions from the tax and social insurance authorities (Westerveld, 2012[25]).

Approach: To combat false self-employment, the government has adopted both short-term and long-term approaches. In the short term, one of the main actions has been to clarify the differences between employees and the self-employed by moving away from the VAR. As of April 2016, the Tax Authority now uses a model contract for the self-employed to help clarify their regulatory obligations and those of the company or individual hiring them *(DereguleringBeoordelngArbeidsrelaties).* This also attempts to remove the incentives for setting up false self-employment arrangements by shifting to a joint-accountability approach where both the employer and employee are legally responsible and accountable. In the longer term, the government is working to increase the attractiveness of hiring employees. Incentives have also been introduced for the self-employed to avoid false self-employment relationships, including the provision of access to a public pension (AOW), exemptions of pension savings in means-tested social assistance, improved access to sectoral training funds and voluntary insurance against sickness and/or disability.

Impact: Many of these measures are still being implemented so the scale and scope of their impact is unclear. However, in the longer term, the government is considering further changes to the tax and social security systems to remove differences in how the self-employed and employees are treated. For example, studies are underway to assess the effects of decreasing tax benefits for the self-employed vs. decreasing labour costs for employees, and increasing social security coverage for the self-employed vs. decreasing social security coverage for employees

Source: (OECD/European Union, 2017[26]).

Non-standard work can provide employment opportunities during the COVID-19 crisis but it might raise challenges in terms of job quality and job security. In times of economic crises, non-standard work can offer flexible employment arrangements as employers hesitate to create new full-time standard employment. Lower costs and greater flexibility can encourage employers to offer non-standard employment in economically difficult periods such as the current COVID-19 pandemic. However, non-standard work can pose challenges with respect to job quality and precarious working condition. During the COVID-19 outbreak, many non-standard workers had to continue working, due to inadequate social protection mechanisms and work regulation. For example, food delivery drivers worked during lockdowns despite often lacking protection against health risks and with little support from platform providers. Workers in e-commerce, who often also have non-standard work contracts, have encountered increasing pressure and work strain as online retail soared because of social distancing rules.

Non-standard workers are more vulnerable to health and economic shocks than standard workers. They are 40-50% less likely to receive any form of income support during an out-of-work spell than standard employees (OECD, 2019[18]). In addition, access to paid sick leave is often limited for non-standard workers. Instead, it relies on voluntary employer provisions that often imply lower coverage in part-time jobs and for employees on short-time contracts. Furthermore, both coverage of many labour law protections and access to collective bargaining are limited for non-standard workers. Recent OECD estimates point out that non-standard workers are also strongly affected by the pandemic as they account for a disproportionately large share of workers in sectors that have been hit hardest. On average across European OECD countries, non-standard workers represent around 40% of total employment in sectors most affected by containment measures (OECD, 2020[27]). The UK government has responded by extending access to sick leave and exceptional income support to non-standard workers. Going forward, the introduction of more permanent social protection schemes for non-standard workers after the crisis might help prevent that a rise in non-standard work forms leads to deteriorating job quality and job security in London and the UK.

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4 Strengthening the involvement of employers in adult learning

This chapter assesses the degree to which the current supply of skills within London aligns with labour market demand. It examines available evidence on skills mismatches, employer investments in training as well as the degree to which firms embed training in their business practices. The chapter highlights the main challenges that employers report in terms of skills development. It also looks at possible opportunities to strengthen the role of employers within the overall adult learning system in London.

In Brief

Job-related training in London is falling alongside widespread reported skills gaps and skills-related vacancies. Employer ownership of skills will be critical to future proof London's economy.

- **Skills mismatches and an ineffective use of skills are widespread in London and could explain why labour productivity has not increased in recent years.** Although London has a high educational attainment rate relative to the OECD average, its labour productivity performance has been poor. Skills mismatches appear to play an important role in explaining this sub-optimal performance. Despite rising educational attainment, many Londoners lack basic literacy and numeracy skills. Furthermore, 37% of London's labour force are mismatched by qualification, working in jobs that do not correspond to their level of qualification.
- **Before COVID-19, more than 21% of firms in London had unfilled vacancies and the main reason for vacancies was a lack of qualified, skilled candidates.** Sixty-one percent of London's employers report the quality of applicants as a major problem in filling vacant positions. Hard-to-fill vacancies have a direct impact on business operations. Firms with skills-shortage vacancies struggle to meet customer demand, produce new products or services, and lose business to competitors.
- **Despite its importance for skills development, employers do not invest enough into staff training.** Job-related training has been falling in London, with less than 18% of economically active Londoners receiving such training throughout the preceding four months. Those that could benefit the most from job-related training, namely low-skill workers, are less likely to receive it. Limited financial resources are a major impediment for those firms in London that would be willing to provide more training, with almost 50% of firms citing funding as an important limitation. Online training and e-learning offer potential to increase the accessibility of training, but less than half of London firms take advantage of it.
- **Looking at vocational education and training, the apprenticeship system in London has become more important over the past two decades.** The number of apprenticeship in London more than quadrupled between 2005 and 2017, from around 11,000 to above 44,000. However, it has fallen since the introduction of the national apprenticeship levy in 2017. Because of the global pandemic, workplace learning and apprenticeships are under pressure. Just 39% of apprenticeships are currently continuing as normal and estimates predict that apprenticeship starts could fall by up to 50%.
- **High performance work practices could help foster more effective use of skills in the workplace across London**. Employees' skills are only valuable if they are put to good use and high performance work practices have been shown to achieve greater use of skills at the workplace. Many firms in London have adopted some high performance work practices but there remains room for improvement when it comes to skills- and training-related practices such as designing training plans or allocating sufficient resources to skills development.

Introduction

Successful adult learning programmes require the consultation and engagement of a diverse set of stakeholders. Besides local councils, social partners, and training providers, employers play a pivotal role in ensuring that adult learning and training are effective and targeted. Employers' experience and on the ground knowledge offer valuable information that can benefit the design of training programmes to ensure they are more likely to meet the needs of the labour market. In realising the importance of firms, the Greater London Authority (GLA) has established the Skills for London Business Partnership as one of its two constitutive partners. Despite this step in the right direction, London can further improve the extent to which firms actively contribute to adult learning. This chapter looks at available evidence on the current involvement of employers in adult learning and training. It explores the main challenges and elicits opportunities to better leverage firm's expertise in designing training for the benefit of workers and the London economy.

Evidence on skills gaps and mismatches in London

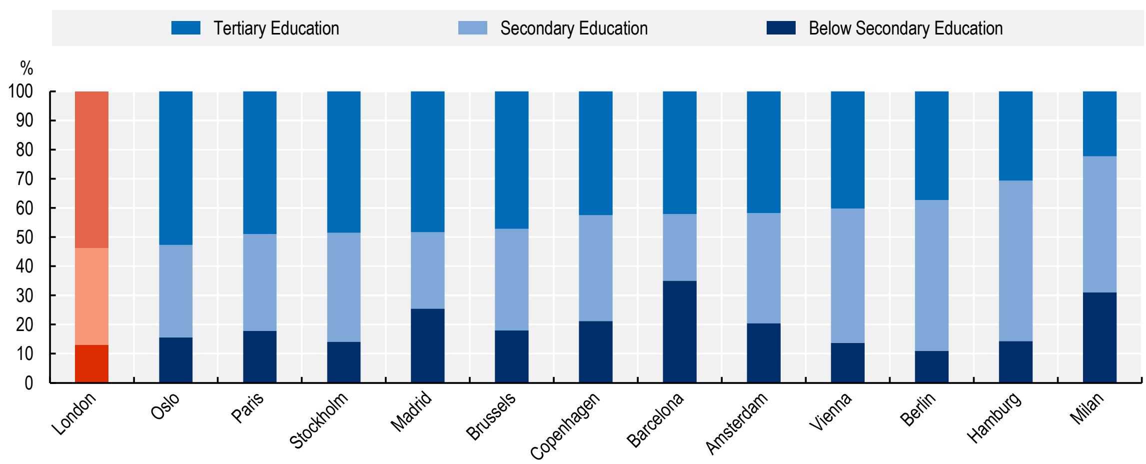
Skills mismatches hold back labour productivity in London

Skills are a fundamental driver of economic development and productivity. The proficiency and appropriate utilisation of skills are crucial determinants of labour productivity. Skills gaps help explain a significant share of cross-country variation in labour productivity (Adalet McGowan and Andrews, 2017[1]). Additionally, industry-level analysis shows that firms in industries with higher skills mismatches tend to have a lower labour productivity performance (Adalet McGowan and Andrews, 2015[2]). Additionally, skills allow workers to be more flexible to react to changing labour markets, making them more resilient to economic crises, and thus enhance well-being. Therefore, it is more important than ever to have a robust adult education and training system that provides on- and off-ramps for all individuals and firms to participate. Such a system will allow workers to gain new skills, retrain, or extend existing skills in bringing them up-to-date with recent developments.

London records a highly educated workforce, in terms of tertiary educational attainment, when compared to other OECD metropolitan areas (Figure 4.1) or UK regions. Furthermore, educational attainment of London's labour force has steadily increased over the past 20 years. Since 2000, the population share with completed tertiary education has grown by almost 18 percentage points, from 39.8% to 57.5%. Across the OECD, the share of tertiary educated workers is more than 20 percentage points lower, standing at 36.9% in 2018. Despite this rise in the supply of highly qualified labour, productivity in London has come to a standstill since the financial crisis, falling considerably behind the growth experienced across OECD countries. While other factors such as the sectorial structure of the economy, infrastructure, investments, or R&D expenditure affect labour productivity (OECD, 2017[3]), a lack and mismatch of skills appear to play a decisive role in explaining the productivity puzzle in London.

Figure 4.1. Educational attainment of labour force across OECD metropolitan areas

The share of workers with tertiary, secondary, or below secondary education, 2017

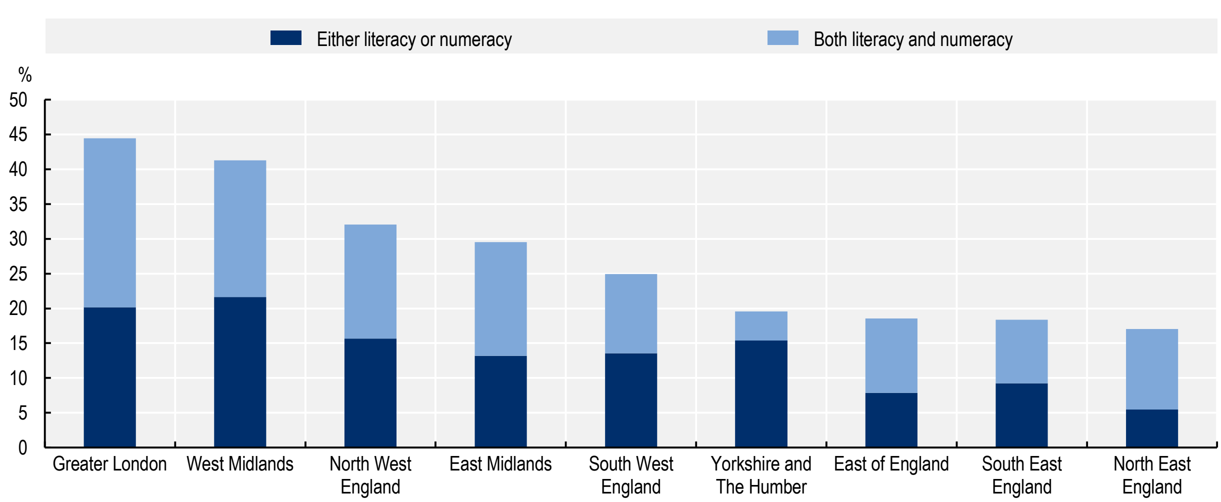


Note: Data are for corresponding TL 3 regions.
Source: OECD regional and metropolitan databases.

Despite the rise in educational attainment and an internationally large share of tertiary-educated workforce, the provision of basic and essential skills remains a problem in London**.** The lack of basic skills is particularly pronounced among young people. In London, 44% of people aged 15-24 have low literacy or numeracy levels, more than in any other region in England (Figure 4.2). Of those youth, 24% have low levels in both numeracy and literacy. The lack of basic skills severely hampers the employability of affected young people and, if they are in employment, inhibits their productivity. Compared to the OECD average, London has a significantly higher share of young people with a lack of basic skills in literacy and numeracy (OECD, 2015[4]).

Figure 4.2. Low numeracy and literacy among young people across UK regions

Share of people aged 15-24 with low literacy and/or numeracy



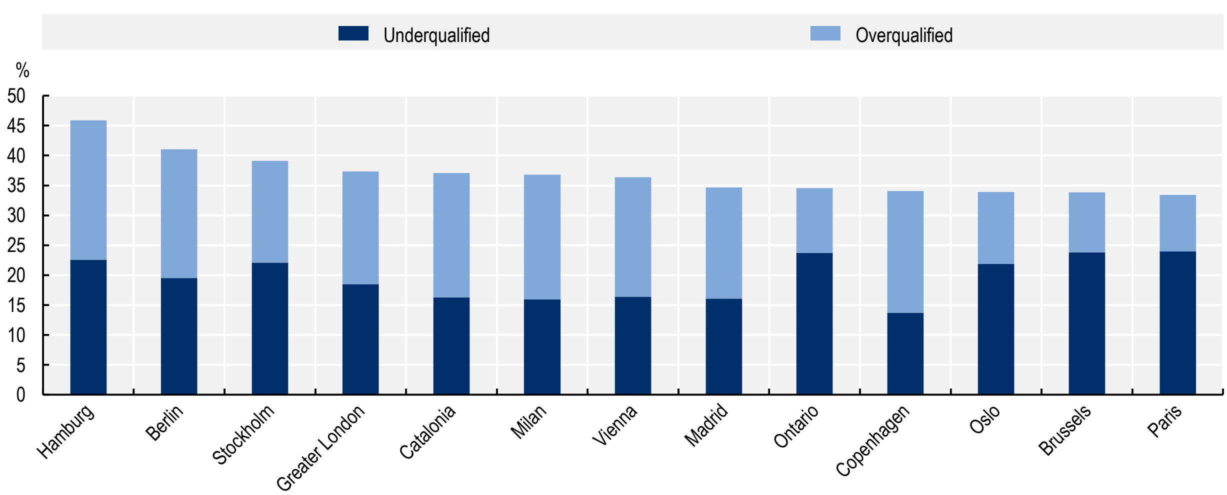
Note: The figure shows the share of young people, aged 15-25, who have reading proficiency below Level 2 and/or numeracy below level 2 based on PIAAC data. Level 2 is is considered the baseline level for these skill areas in PIAAC.
Source: OECD calculations based on the Survey of Adult Skills (OECD, 2015[5])

While London has one of the most educated workforces in OECD metropolitan areas, the fact that its labour productivity is stagnant suggests that their skills and qualifications appear not well aligned with local skills demand. Skills mismatches can arise in various ways. A local economy can have skills shortages or gaps but skills mismatches also occur when qualifications, knowledge and skills exceed job requirements. To understand the causes of skills mismatch, one needs to look at its various forms.

A crucial component of functioning labour markets is the matching of workers to jobs in which they can they can utilise their skills in the best possible way. Mismatches between workers' skills and the requirements of their jobs, on the other hand, can have negative effects, ranging from lower job satisfaction and wages for workers to lower productivity through the waste of human capital (OECD, 2018[6]). One form of mismatch is by qualification, which arises when workers have an educational attainment that is higher (over-qualification) or lower (under-qualification) than that usually required by the tasks of their job. Such qualification mismatches are widespread in London's labour market. More than 37% of workers in London have a job that does not correspond to their level of qualification (Figure 4.3). While 18% of workers in London appear to be underqualified for their job, meaning they do not have the skills and qualifications normally expected to fill out their position, another 19% have a job for which they are formally overqualified. The share of overqualified workers exceeds both the OECD-wide and the EU-wide averages, which amount to 17% and 13% respectively. When compared to other large and economically important OECD metropolitan areas, London reports the fourth highest (out of 13) degree of skills mismatch by qualification.

Figure 4.3. Skills mismatch by qualification across OECD metropolitan areas

Percentage of workers across metropolitans (corresponding TL2 regions) occupying jobs that do not match their educational attainment, 2018



Note: ISCED groups 0-2, 3, 4, 5-8. For Canada, ISCED groups 0-2, 3, 4, 5-6. ISCED groups 302, 303 and 304 are considered to be 3 according to the newest 2011 isced classification.
Source: OECD calculations on European labour force survey 2018 and Calculations based on Stats Canada Census 2016.

European migrants in London tend to be more highly qualified but are also more likely to be over-qualified for their job than UK-born workers or migrants from other parts of the world. Across London, 62% of employed EEA-migrants (European Economic Area) have obtained a qualification level of higher education compared to 59% of UK-born employees and 60% of non-EEA born workers (Rocks, 2018[7]). However, EEA higher education graduates are also more likely to work in non-graduate roles. While they play a crucial role in the supply of skilled labour, EEA migrants struggle more to find adequate jobs that correspond to their level of qualification. While this contributes to the high degree of mismatch by qualification in London, it is not its main driver as other OECD metropolitan areas with significant migrant populations such as Brussels, Copenhagen, or Paris still show markedly lower rates of skills mismatch than London.

Asymmetry of labour market information could be a core reason explaining high over-qualification in London. Better-informed individuals are better prepared to avoid over-education than less-informed ones. Therefore, stronger, more frequent, and early career advice could help alleviate this type of skills mismatch and help direct Londoners to get the education and the skills in demand by local firms (see Box 4.1 for an example of targeted and early career guidance). There is, however, some disagreement on the extent to which mismatch is a temporary or a long-term phenomenon. Nonetheless, both over-education and over-skilling may persist over long periods. The overeducated may be trapped in low-level jobs while the under-educated or under-skilled are paid more than those with the same level of education in matching jobs and, therefore, have less incentive to move jobs. The duration of skill shortages will be a function of their level and complexity, while the duration of skill gaps is linked to retraining.

Box 4.1. Rotterdam: providing careers guidance to align education with labour market needs

In 2017, Rotterdam (Netherlands) started its BRIDGE (Building the Right Investments for Delivering a Growing Economy) project to address the challenge of aligning the educational choices of young people with future labour market needs. The project's target area is South Rotterdam, an area with about 200,000 inhabitants and among most deprived areas in the Netherlands.

To address the challenge young people face in choosing their education path, the Municipality of Rotterdam, in collaboration with other partners, developed a career guidance project that enables young people to make career choices relevant to the labour market needs. The project is funded by the Urban Innovative Actions (UIA) initiatives, with budgets from the European Regional Development Fund (ERDF). The BRIDGE programme involves all primary, secondary and vocational schools in South Rotterdam encourages young people to go into careers related to major growth sectors and especially the green digital economy. The programme team works together with employers, teachers and parents to guide students from age nine until they enter the labour market.

As part of this programme, employers offer a Career Start Guarantee. Via this pivotal programme element, employers commit in advance to provide a guaranteed career start for students after graduation. This guarantee is dependent on the students choosing courses relevant to labour market needs at the start of their secondary or further education. Additionally, the programme included the use of student mentors who serve as role models to other students and advocate for the project. Finally, the programme organised an event in January 2019, which brought together employers and 1500 young people in Rotterdam. Overall, the programme has exceeded its target of establishing 600 Career Start Guarantees annually.

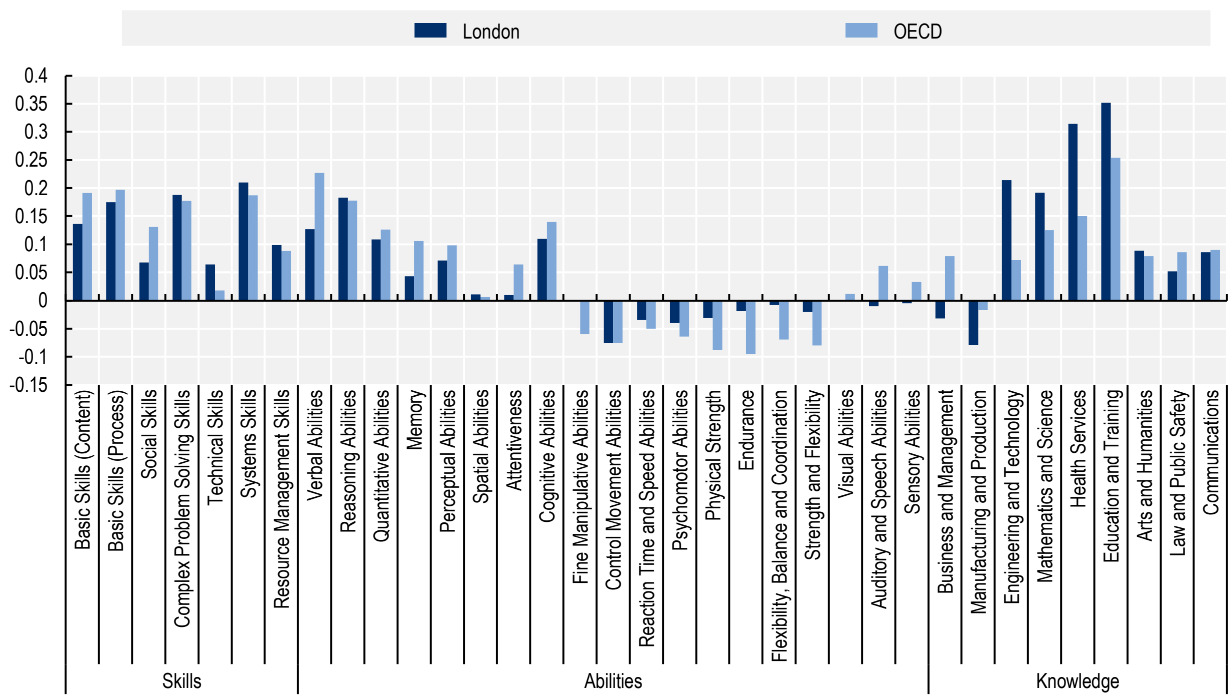
Source: (Adams, 2020[8]), https://www.uia-initiative.eu/sites/default/files/2020-08/224846_KURTH_06_-_ROTTERDAM_BRIDGE_JOURNAL_5.pdf (accessed 15 October 2020).

London experiences skills shortages and gaps skills shortages, which risk being exacerbated by COVID-19

Before COVID-19, skills shortages were widespread in London's labour market. Evidence from the OECD Skills for Jobs database shows that many types of skills and forms of knowledge are in shortage (Figure 4.4). The database defines skills as either hard-to-find (in shortage) or easy-to-find (in surplus) (see Box 4.2 for more information on the database). Skill shortages emerge when firms are unable to recruit staff with the necessary skills in the locally accessible labour market at the usual rate of pay and working conditions. Conversely, skills surpluses arise when the supply exceeds the demand for a given skill. Based on the database the following skills, abilities and forms of knowledge are of particularly short supply in London: basic skills, complex problem solving skills, systems skills (e.g. time management), reasoning abilities, as well as the knowledge areas of health services and education and training. For many categories, London seems to face similar skills mismatches as the OECD overall. However, in various knowledge areas, shortages in London significantly exceed those in the OECD.

Figure 4.4. Skills mismatches in London and the OECD

Shortage and oversupply of skills, abilities and knowledge



Note: Positive values indicate shortages while negative values indicate surpluses. The indicator is a composite of five sub-indices: wage growth, employment growth, growth in hours worked, unemployment rate and growth in under-qualification.
Source: OECD Skills for Jobs database (www.oecdskillsforjobsdatabase.org).

Box 4.2. Measuring skills mismatches through the OECD Skills for Jobs database

The OECD Skills for Jobs Database provides country-level (as well as subnational) information on shortages and surpluses of a wide range of dimensions, including cognitive, social and physical skills. Information is disaggregated into more than 150 job-specific Knowledge, Skills and Abilities and is available for 40 countries among OECD and emerging economies. Knowledge areas refer to the body of information that makes adequate performance of the job possible (e.g. knowledge of plumbing for a plumber; knowledge of mathematics for an economist). Skills refer to the proficient manual, verbal or mental manipulation of data or things (e.g. complex problem solving; social skills). Abilities refer to the competence to perform an observable activity (e.g. ability to plan and organise work; attentiveness; endurance).

Source: OECD (2018[26]), Skills for Jobs, https://www.oecdskillsforjobsdatabase.org/data/Skills%20SfJ_PDF%20for%20WEBSITE%20final.pdf (accessed on 3 September 2020).

The COVID-19 pandemic is likely to exacerbate skills mismatches across London's economy**.** As documented in Chapter 1 of this report, the economic impact caused by the pandemic is heavily concentrated on certain sectors with the possibility of further job losses. COVID-19 is changing the way people work. Teleworking and digital work tools have experienced a breakthrough. This development changes the skills that are needed to perform tasks, for instance by raising the importance of essential digital skills. Moreover, it alters economic geography of London as people's patterns of movement and travel-to-work have changed drastically, with significant repercussions for some business in the service industry.

The impact of the pandemic will make some skills more or less relevant in the future. COVID-19 is driving a transformation of the labour market in a way that could result in lasting employment shifts. This transformation is likely to require new, significant efforts of re-skilling workers as digital, higher cognitive, social and emotional skills, as well as adaptability to increase their resilience in a post-COVID labour market (McKinsey & Company, 2020[9]). All of this elevates the importance of London's adult learning system, which needs to guide workers on their reskilling journey and deliver training programmes that offer learning aligned with local skill needs.

What are the main challenges that employers in London face in terms of skills?

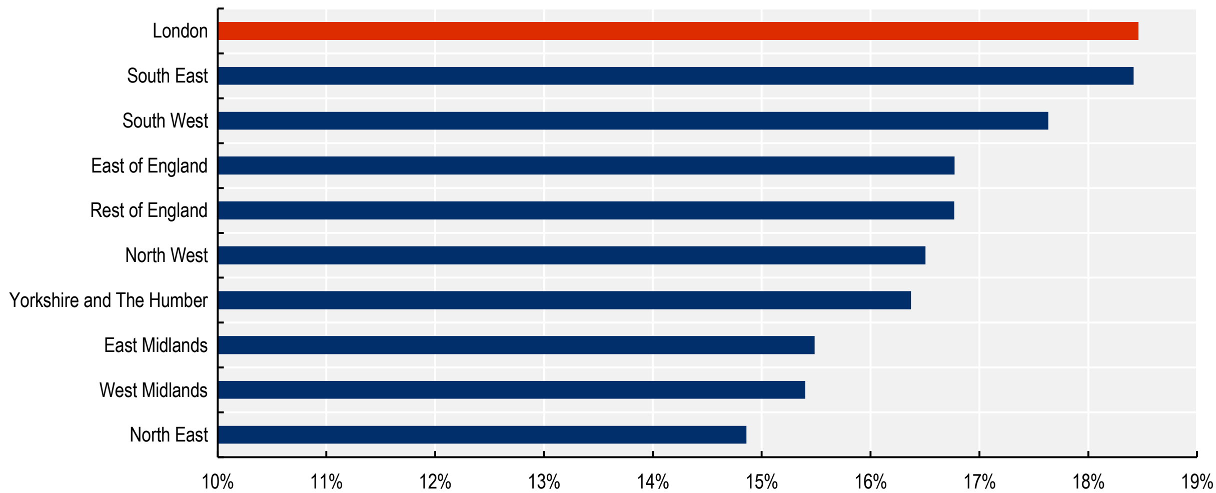
The COVID-19 pandemic has led to an unprecedented fall in vacancies in the UK and London. Most recent data show that this fall is even more pronounced in London than in the UK. As of July 2020, vacancies across London are below 50% of the average level observed throughout 2019 (see Chapter 1 for more information). Before this drastic fall in open positions, employers in London consistently struggled to find applicants with the right qualifications and skills. This section presents evidence on vacancy rates across different sectors and as well as the most important drivers and consequences of open vacancies for firms in London.

Vacancies and their main drivers

Pre-COVID evidence based on the UK Employer Skills Survey shows that many firms in London faced hiring difficulties. Slightly less than every fifth firm in London, corresponding to around 60,000 firms, has at least one unfilled vacancy (Figure 4.5). London has the highest share of firms with vacant positions across UK regions. In fact, before COVID-19 hit, vacancies affected more firms in London (18.5%) than in the rest of England (16.8%) or the UK overall (16.9%, excluding Scotland due to lack of data), pointing out the relatively high degree of labour supply shortages and skills gaps in London. Furthermore, more than 7% of London's employers reported vacancies that are hard to fill.

Figure 4.5. Vacancies in enterprises across English regions, 2019

Share of employers (%) with unfilled vacancies

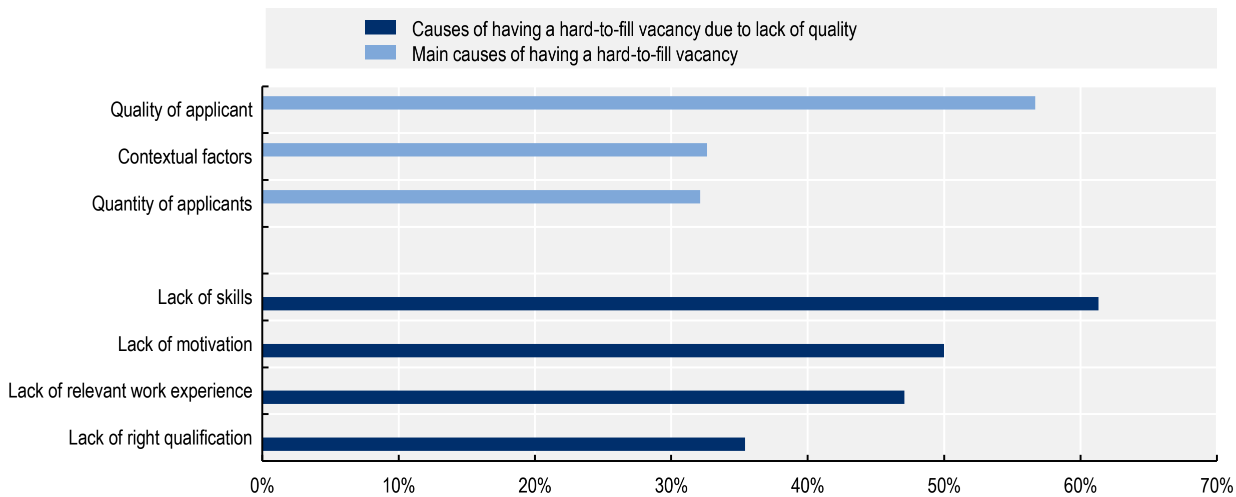


Note: The figure shows the share of employers with at least one unfilled vacancy.
Source: OECD calculation based on the UK Employer skills survey 2019 (Department for Education, 2020[10]).

A lack of skills was the main reason why London's employers do not find suitable applicants for vacancies. The most common reason why employers in London struggle to fill open positions is the quality of available applicants (Figure 4.6). While 57% of London's employers report the quality of applicants as a problem, only 32% cite the quantity of applicants as a problem, pointing out that vacancies mainly arise due to the lack of suitable candidates with the right qualifications and skills rather than simply due to a shortage of supply. In total, more than one-fifth of the around 180 000 vacancies reported in London are skills-shortage vacancies, i.e. positions that employers struggle to fill due to a lack of skills, qualifications or experience amongst available applicants (Department for Education, Jul 2020[11]). The main driver of hard-to-fill vacancies is a lack of suitable skills, which is a barrier for 61% of firms with such vacancies, rather than a lack of adequate qualifications or sufficient work experience (lower part of Figure 4.6).[1]

Figure 4.6. Reasons for vacancies in London, 2019

Main reasons for hard-to-fill vacancies and causes for the sub-set of vacancies that exist due to a lack of quality of candidates



Note: Multiple answers are possible.
Source: OECD calculation based on the UK Employer skills survey 2019 (Department for Education, 2020[10]).

In addressing their vacancies and the underlying reasons, namely the skills and quality of applicants, employers could take on a more active role in skills development. Local actions in other OECD areas provide examples of how employers can collaborate with local governments and community based organisations. For instance, in India (USA), employers engaged with multiple other stakeholders to create a network, in the form of a regional workforce programme, which aims to better connect students and workers with firms and thus employment opportunities. In particular, the initiative attempts to offer more targeted career advice to individuals while supporting firms in making their job offers more accessible, appealing, and inclusive (Box 4.3).

Box 4.3. Creating an individualised network for connecting talent with jobs in Central Indiana (USA)

Due to the COVID-19 pandemic, state and local governments are facing the double challenge of addressing high unemployment rates and the need to change career services delivery to protect public health. The crisis is forcing local areas, including Central Indiana, to modify their pre-existing workforce development programmes, increase their capabilities and implement new strategies, to connect a huge number of unemployed people to limited job opportunities. To address these unique challenges, Central Indiana, through its Regional Workforce Partnership, has developed a central online platform connecting jobseekers and employers in the region.

The Regional Workforce Partnership (RWP) formed in 2016, comprises state agencies, municipalities, employers, non-profit, and community-based organisations, who collaborate their efforts to create a robust economic environment for businesses, individuals and the Central Indiana Community. The RWP, which was already tackling the region's long-standing employment challenges, developed a Rapid Re-employment Response (RRR) Plan, with a 1.05 million USD funding, to address the impacts of the COVID-19 pandemic on employment. For this cause, the RRR expanded and updated an existing online platform known as the Ascend Network, which connects students graduating from Indiana universities with employers. The updated platform, managed by Ascend and EmployIndy, members of the RWP, allows jobseekers to create accounts based on their needs, interests and capabilities. Subsequently, the RRR team supports them to find job opportunities posted by local employers.

To ensure that the jobs in the database are of good quality, the RRR team vets and recruits employers (the RRR defines quality jobs as full time job opportunities that pay at least 13 USD an hour as well as jobs that have the potential for upward mobility). The team guides employers on how to make their job descriptions more appealing, accessible and inclusive. In addition, they maintain regular contact with employers to keep track of demand. To serve the needs of jobseekers effectively, the RRR has personalised, one-on-one job support which complements the online platform's skills-based matching algorithm. The focus on skills instead of background enables employers to be more inclusive in their hiring processes. The one-on-one support on the other hand, helps job seekers to identify their competencies and find the best-fit job and upskilling opportunities. Ascend provides this personalised support in the form of phone calls for jobseekers without internet access. Furthermore, the RRR directs jobseekers in need of upskilling to suitable local career services programmes, public adult education programmes or other relevant community-based organisations.

Since the launch of the RRR, about 100 new employers have started the process of sharing job opportunities on the network, in addition to the over 400 existing employers on the Network. In the first week of the site going live, over 400 job seekers created accounts on the network. Despite these positive results, there are some challenges such as the need to support jobseekers who lack access to internet services and devices, job seekers who have low digital literacy skills, and providing more remote working opportunities while the pandemic remains a health threat. Nevertheless, this collaborative effort provides a one-stop shop that tackles the region's severe unemployment crisis.

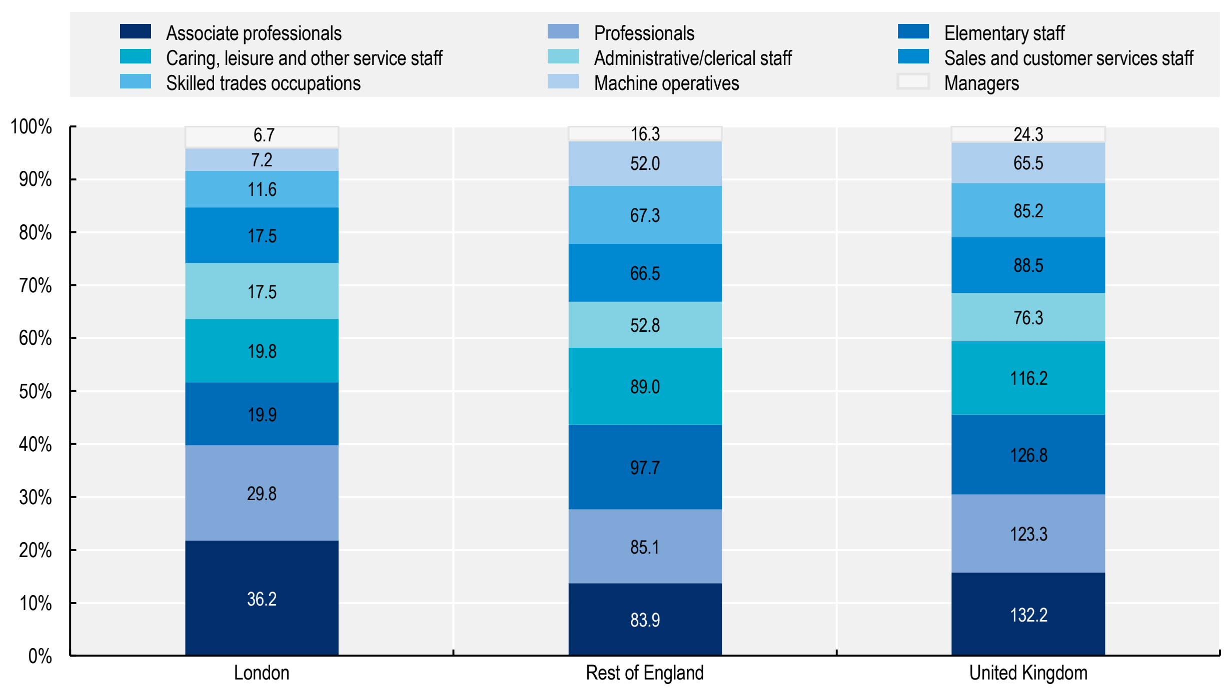
Source: (Brookings Institute, 2020[12]), www.brookings.edu/research/central-indianas-rapid-re-employment-response (accessed 09 November 2020).

Skill-shortage vacancies and their consequences for firms

The most recently available evidence shows that occupations with vacant positions tend to have higher skill requirements in London than elsewhere in the UK. In 2019, the two occupations for which most enterprises in London declared vacancies were associate professionals and professionals. Around 65,000 of vacancies, corresponding to 40% of all occupation-specific vacancies, existed for professionals and associate professionals in London (Figure 4.7). In the rest of England and the UK overall, these mainly high-skill jobs accounted for less between 28% and 31% of occupation-specific vacancies. In general, high-skill occupations account for a larger share of vacancies in London (44%) than the UK overall (33%) (Figure 4.8). In contrast, low-skill occupations make up a smaller share of vacancies in London (39%) than in the UK (47%).

Figure 4.7. Vacancies by occupation in London and the UK, 2019

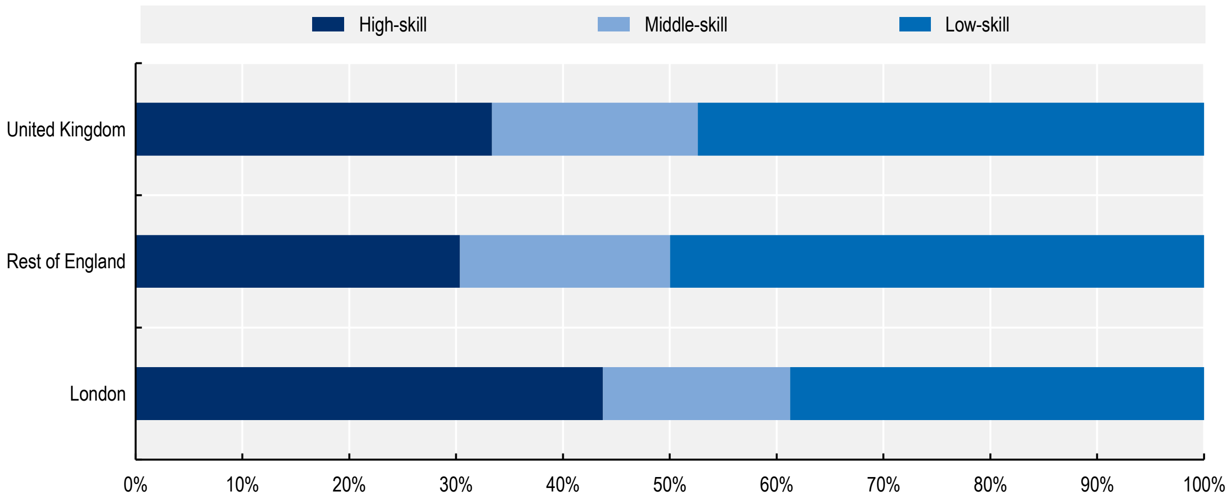
Share of vacancies by occupation groups and total number of vacancies for each occupation in thousands



Note: Enterprises can declare vacancies for multiple occupations. Thus, the total number may exceed the number of firms with vacancies.
Source: OECD elaboration of data from the UK Employer skills survey 2019 (Department for Education, 2020[10]).

Figure 4.8. Vacancies by skill level, 2019

Share of vacancies in London, the UK, and Rest of England by skill requirements

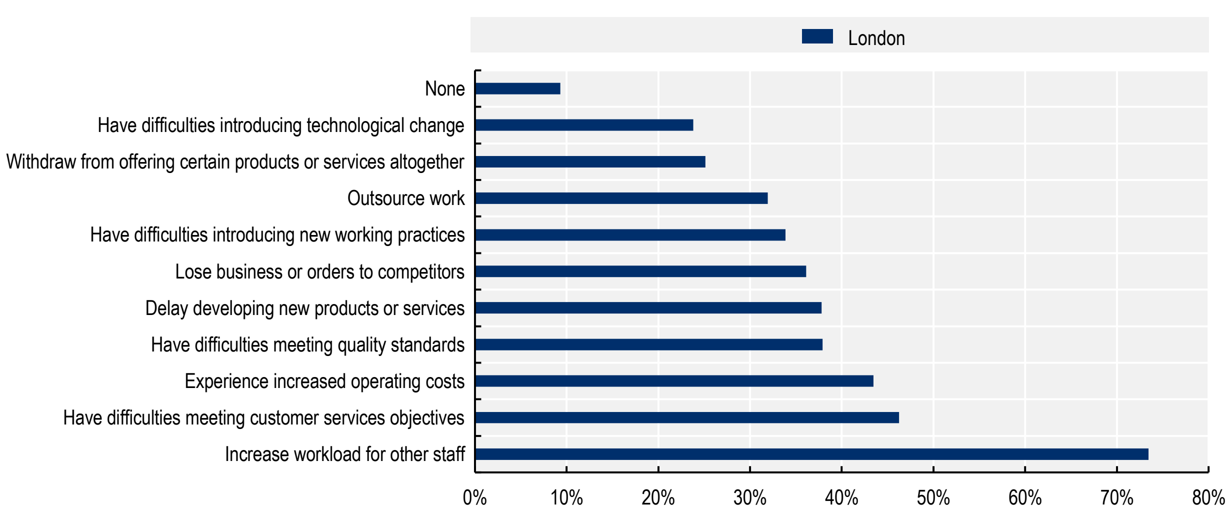


Note: High-skill occupations include managers, professionals, and associate professionals. Middle-skill occupations include administrative and clerical jobs and skilled trades. Low-skill occupations contain all other occupations identified in the UK Employer Skills Survey.
Source: OECD elaboration of data from the UK Employer skills survey 2019 (Department for Education, 2020[10]).

Unfilled vacancies impair the business operations of London's firms. Although only a small share of London's employers (5%) report skill-shortage vacancies, for those firms that have them the impact can be significant. Having unfilled vacancies has a direct impact on the business operations of firms (Figure 4.9). Vacancies increase the workload of existing staff, which can lower their productivity and performance. Almost 50% of London's firms with hard-to-fill vacancies encounter difficulties in meeting customer demand. Another 40% or more have difficulties in meeting quality standards or experience increased operating costs. Furthermore, a third of enterprises or more report that unfilled vacancies delay the development of new products or services and drive the loss of business to competitors

Figure 4.9. Implications of hard-to fill vacancies in London, 2019

Share of firms that list specific implications of hard-to-fill vacancies



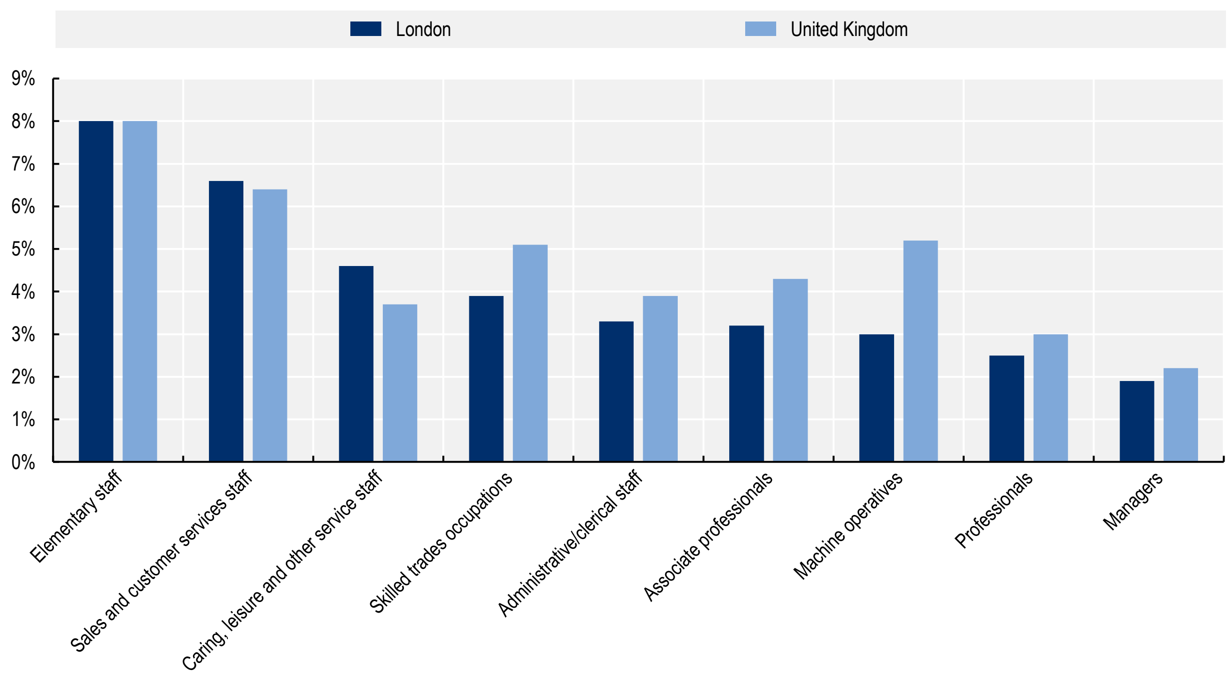
Note: Firms can list multiple implications.
Source: OECD calculation based on the UK Employer skills survey 2019 (Department for Education, Jul 2020[11]).

Skills gaps in firms in London

Apart from skill-related vacancies, firms in London also experience skills gaps among existing staff. The UK Employer Skills Survey defines skills gaps as employees not being proficient to do their tasks and responsibilities (Department for Education, 2018[13]). In London, 5% of enterprises report skills gaps. In comparison to documented skills-related vacancies, skills shortages in London affect more middle-skill and low-skill jobs (Figure 4.10). Around 8% of elementary staff have insufficient skills, followed by employees in sales and customer service and caring, leisure and other service staff, among which 6.6% and 4.6% of all employees in those occupations have skills shortages.

Figure 4.10. Incidence of skills gaps

Share of all employment in an occupation with skills gaps in London, 2019

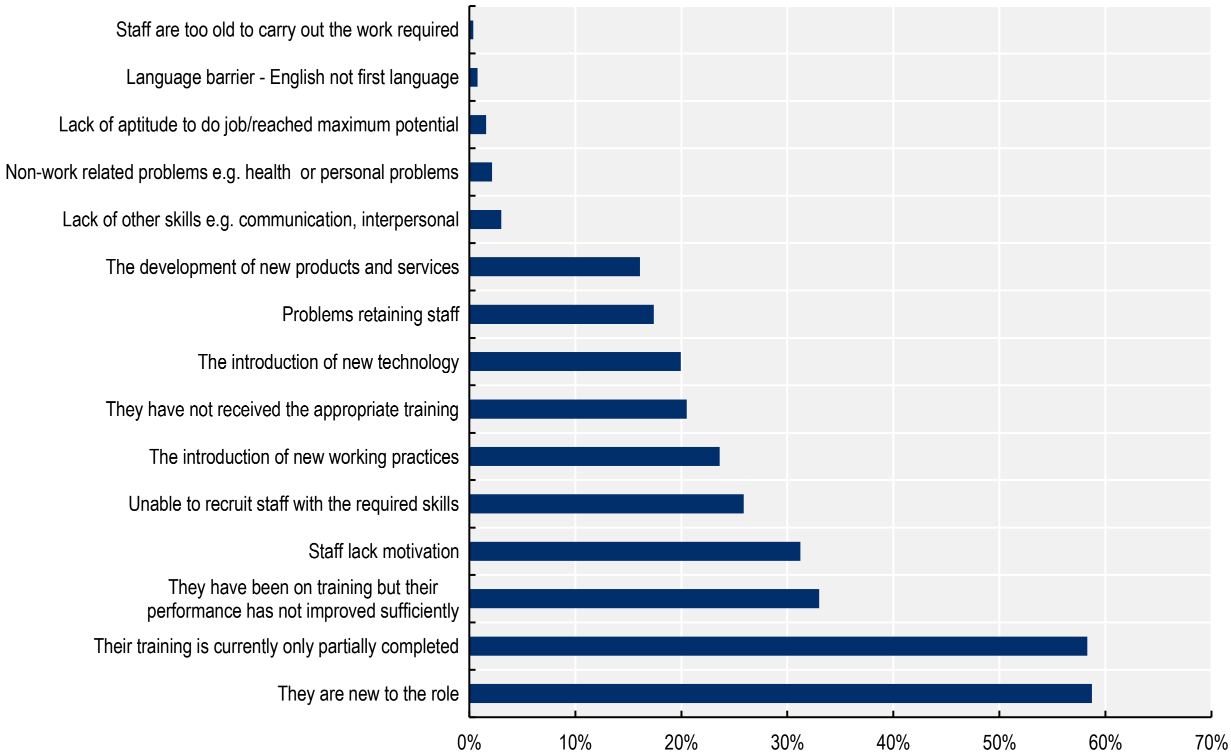


Source: OECD calculation based on the UK Employer skills survey 2019 (Department for Education, Jul 2020[11]).

Various reasons explain why employers report skills shortages among their staff. Besides a lack of experience and partial completion of training, other structural issues appear to drive skills shortages (Figure 4.11). For instance, adequate and effective training seems to be lacking. Thirty-three percent of enterprises in London report that their staff's performance has not improved sufficiently despite receiving training. Another 21% of firms cite a lack of appropriate training. Furthermore, more than 24% of firms state that staff have not been able to adapt to new work practices (see next Section for more details on effective work practices). Finally, firm cite a lack of motivation and a lack of suitable candidates as other important drivers of skills gaps.

Figure 4.11. Causes of skills gaps in London

Reasons cited for skills gaps, all professions and establishments, 2019



Note: Multiple answers are possible.
Source: OECD calculation based on the UK Employer skills survey 2019 (Department for Education, Jul 2020[11]).

The current employer involvement in adult learning and training in London

The next section of this report examines how employers can address the problems of skills shortages, inadequate training, and skills-related vacancies. It analyses the current involvement of employers in adult learning and training in London via three routes. First, it assesses firm's involvement in vocational education and training (VET). Second, it explores the current level of job-related training that London's enterprises offer and barriers to providing more training. Third, it discusses how operational and management practices can foster skills use and skills development in London.

Strong involvement of employers is a prerequisite for effective skills development and adult learning systems. Enterprises can offer valuable training opportunities such as formal work-place training as well as informal on-the-job learning, both of which further skills development. By embracing high-performance practices, employers can incentivise and motivate employees, offering them the space and the means to develop and use their skills in an efficient manner. Additionally, enterprises are a cornerstone of vocational education through apprenticeship programmes that allow the young to gain valuable, labour market relevant skills and knowledge. Finally, employers themselves know their skills needs and shortages best, implying that their consultation in the design of adult learning programmes can improve the effectiveness of those programmes by helping to match learning contents with labour market needs.

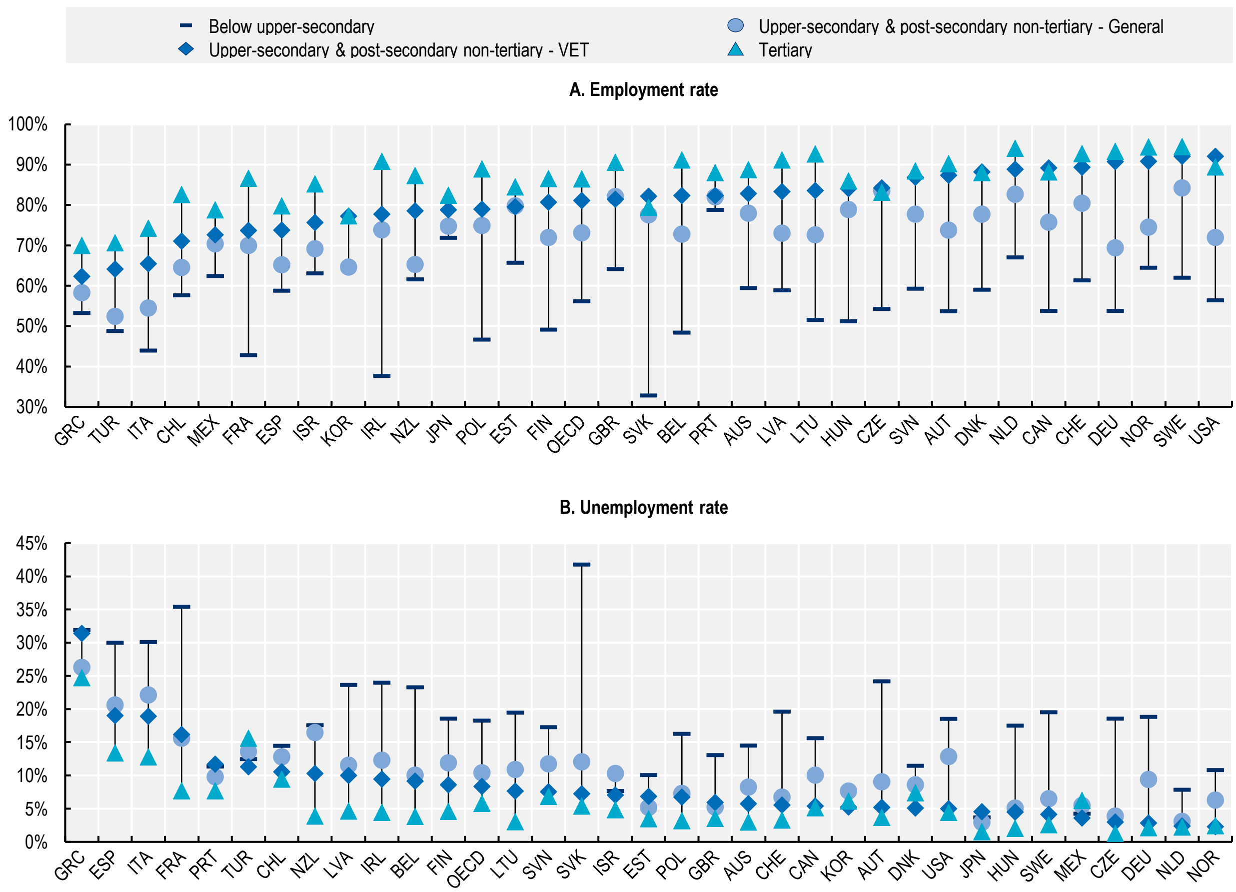
Using apprenticeship programmes and vocational education to tailor skills supply to skills needs

Vocational education and training (VET) and apprenticeship programmes are a fundamental element of the education system in OECD countries. They facilitate the transition from education to work by preparing youth and enabling them to develop skills that are relevant in the labour market. For example, upper-secondary and post-secondary non-tertiary graduates from a vocational field have slightly lower wages, but better employment outcomes than graduates from general fields, because they benefit from a higher probability of employment and spent a larger proportion of their working life in paid employment (Brunello and Rocco, 2017[14]). Overall, a high quality VET system and well-developed apprenticeship programmes can foster skills development and thus enhance opportunities to find jobs for youths, in particular disengaged youths

Across the OECD, VET is linked to higher employability rates. OECD evidences shows that among young adults with upper secondary education, those who graduated from vocational training tend to be more likely to be employed and less likely to be economically inactive (OECD, 2020[15]). In almost all OECD countries, employment rates among young VET graduates are higher than for graduates from general programmes at similar levels or for those without an upper-secondary degree (Panel A, Figure 4.12). In fact, employment rates of VET graduates are comparable to those of tertiary education graduates in several countries. Furthermore, unemployment rates are lower for young VET graduates than for graduates from general education (except in Estonia, France, Greece, Japan, Portugal and the United Kingdom; Panel B, Figure 4.12). These findings suggest that VET programmes can offer a valuable education pathway through applied and work-based learning but leave scope for improvement in some countries.

Figure 4.12. Employment outcomes of VET graduates across the OECD, 2018

Employment (Panel A) and unemployment (Panel B) rates of graduates (aged 15 to 34 not in formal education)



Note: VET: Vocational Education and Training. Panel A includes all individuals aged 15/16 to 34 who are not enrolled in formal education. Panel B includes employed and unemployed individuals aged 15/16 to 34 not in education or training. Data refer to 2018 for all countries except Australia, Canada (2019), Korea, Japan (2011/12), New Zealand, Israel, Turkey (2014/15), and the United States (2011/12-2014-17). OECD is an unweighted average of the countries shown.
Source: Figure from (OECD, 2020[15]). Data from European Union Labour Force Survey (2018), Turkish Labour Force Survey (2015), Australian Survey of Education and Work (2019), Canadian Labour Force Survey (2019), OECD Survey of Adult Skills (2011/12, 2014/15, 2017/18), Encuesta de Caracterización Socioeconómica Nacional (2017).

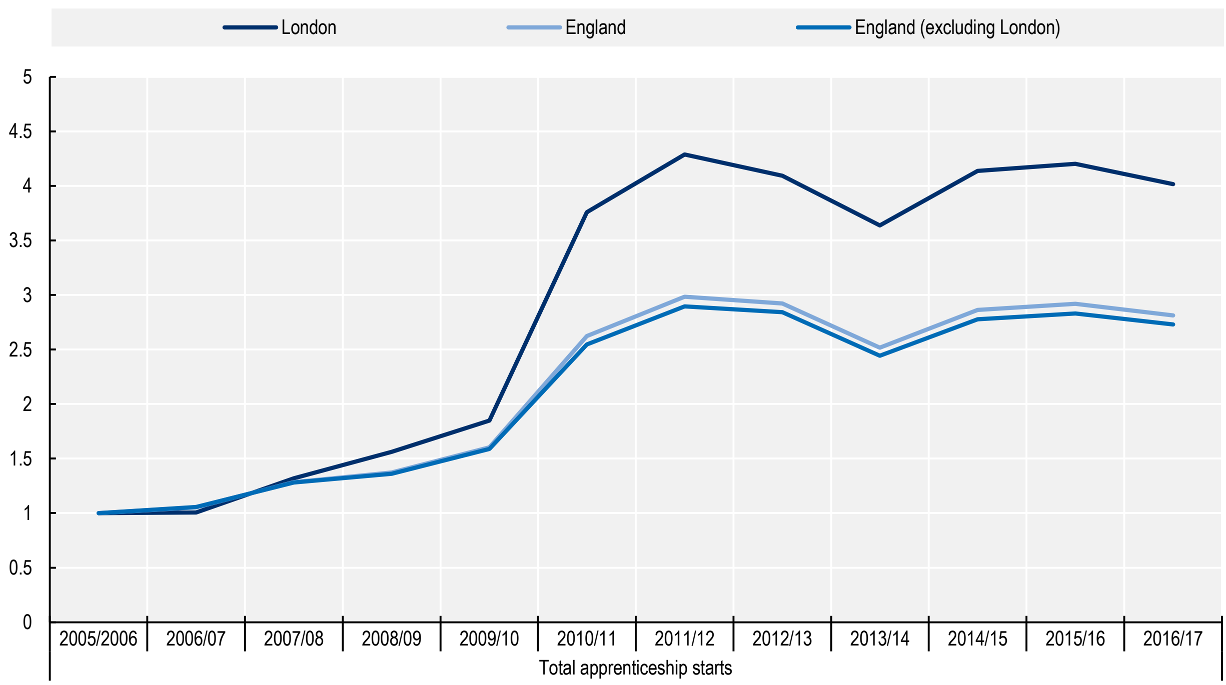
Apprenticeships, a vocational education pathway, are an important tool for skills development that combines both workplace and classroom-based learning. Effective apprenticeship systems require a broad coalition of actors and benefit from a strong involvement of employers. Across the OECD, apprenticeship systems vary significantly in terms of what level of government (e.g. national or regional) manages the overall legislative and regulatory framework. In the UK, the national government is responsible for regulating apprenticeships, including their financing. In OECD countries with large apprenticeship systems, such as Germany, Austria, Norway, Denmark and Switzerland, apprenticeships benefit from a formalised engagement with employers and other stakeholders through a dual-education system, which provides clear pathways for youth into training (OECD/ILO, 2017[16]).

The apprenticeship system in London has become more important but it faces new challenges due to COVID-19. Over the past 15 years, apprenticeships have gained in importance in the UK and especially in London, with a strong increase in apprenticeship numbers**.** Within 11 years, the number of apprenticeship starts rose by more than 300%, from around 11,000 in 2005/06 to more than 44,000 in

2016/17 (Figure 4.13). In the England overall, the number of apprenticeship starts increased from around 170,000 in 2005/06 to around 500 000 in 2016/17.

Figure 4.13. Apprenticeship starts, London and England, 2005-2017

Apprenticeship starts relative to 2005/06 (baseline marked as 1)

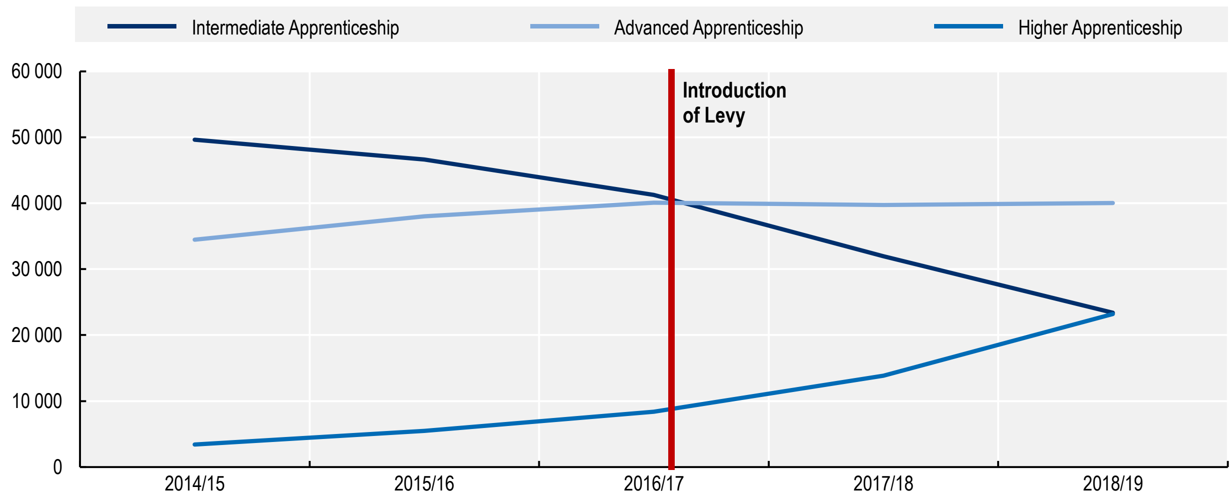


Note: The figure shows the evolution of apprenticeship starts in London and the rest of England relative to the baseline level in 2005/06.
Source: OECD elaboration based on data from ONS.

Since the introduction of the apprenticeship levy, apprenticeship participation in London has declined, especially for intermediate level apprenticeships. In 2017, the apprenticeship system in UK underwent an overhaul, consisting of reforms to its funding and delivery. From April 2017 onwards, all firms with a wage bill of at least GBP 3 million were required to allocate 0.5 per cent of the wage bill to an apprenticeship levy, which can be used to pay for apprentices' training and assessment (see Box 4.4 for more details). Delivery-related changes included new regulations to raise apprenticeship quality, such as the requirements that that programmes last a minimum of 12 months, that apprentices spend at least 20% of their time doing off-the-job training, and that apprentices take an independent end-point assessment upon completion. Following a greater emphasis on quality, the total number of apprenticeships has fallen and its composition across levels of apprenticeships. Total apprenticeship participation in London in the academic year 2018/19 was 4% below the level observed in 2015/16 (Department for Education, 2019[17]). While the number of advanced apprenticeships (Level 3 qualifications, equivalent to A levels) remained relatively stable, the number of intermediate apprenticeships (Level 2 qualifications, equivalent to GCSEs) fell significantly, halving between 2015/16 and 2018/19. In contrast, participation in higher apprenticeships (qualification levels 4 and 5), equivalent to a higher education diploma or a foundation degree, more than quadrupled (323%) (Figure 4.14).

Figure 4.14. Apprenticeship participation in London

Changes in the number and distribution of apprenticeships across levels, 2014/15 to 2018/19



Note: The apprenticeship levy was introduced in 2017. Higher apprenticeships are equivalent to a higher education diploma or a foundation degree. Advanced apprenticeships are equivalent to A levels. Intermediate apprenticeships are equivalent to GCSEs.
Source: OECD calculation based on Individualised Learner Records published by the Department for Education.

Box 4.4. The apprenticeship levy in the UK

In 2015, the government embarked on an apprenticeship reform programme to increase the number and quality of apprenticeships, and to raise employer engagement. Reforms included the introduction of an apprenticeship levy in 2017. Employers pay 0.5% of their pay bill above GBP 3 million per year. In England, this is topped up by a further 10% government contribution and made available in a digital account for levy-paying employers to spend on apprenticeship training and assessment. Up to 25% of an employer's unused funds can be transferred to other employers. If unspent after 24 months, funds expire. The system is based on an expectation that many employers will not spend all their levy funds. These unspent funds cover most of the costs of apprenticeships for small employers who do not pay the levy. The government pays 95% of the cost of apprenticeships for non-levy payers and for levy payers who have already spent their levy budget and take on more apprentices. In 2017/18, GBP 2.0 billion of apprenticeship funding was made available for apprenticeships in England, with GBP 1.6 billion of this being spent.

Source: https://www.nao.org.uk/wp-content/uploads/2019/03/The-apprenticeships-programme-Summary.pdf.

Most recent data indicate that the number of apprenticeship starts in London has fallen further as expensive higher level programmes account for more of the money raised from the apprenticeship levy. In the three months to the end of October 2019, the start of the academic year, the number of new apprentices fell 4.7 per cent to 125,800 compared with the year before, the Department for Education said. The one area of growth was a 29.1 per cent rise in levy-funded higher level apprenticeships, equivalent to a higher education diploma or a foundation degree. Such apprenticeships now represent 23.7 per cent of all new workplace-training starts, compared with 5.3 per cent in 2015/16, the year before the levy was introduced (Department for Education, 2019[17]).

Apprenticeships, and VET in general, can be effective tools to enhance socio-economic mobility but the apprenticeship levy appears to support non-disadvantaged apprentices more. Following the levy introduction, levy-paying employers recorded a lower proportion of apprenticeship starters from disadvantaged backgrounds, suggesting that the levy might exacerbate labour market inequality. This disadvantage gap, measured by the number of starts by learners originating from the 20% most deprived English neighbourhoods (disadvantaged) and from the other 80% of English neighbourhoods (non-disadvantaged), was most severe in London and south-east England (Social Mobility Commission, 2020[18]).

The concentration of large employers and higher levels of pay in the capital, mean that London-based employers make substantial contributions towards the apprenticeship levy. In contrast, the number of apprentices in London has historically been low, with half as many apprenticeships per capita as the national average. As a result, much of the levy funding paid by London-based employers are not spent in the capital. While specific data on levy spent in London are not available, given the capital accounts for around 10 per cent of apprenticeship starts – and a large proportion of the more expensive higher and degree level apprenticeships (Department for Education, 2019[17])– it can be estimated that at least GBP 160 million of levy funding was spent on apprenticeships in London in 2017/18.

The COVID-19 pandemic puts the apprenticeship system in London and the UK under severe strain. Apprenticeships are vital in providing clear long-term paths to skilled employment, but as a result of the coronavirus pandemic, just 39% of apprenticeships are continuing as normal (Sutton Trust, 2020[19]). Around 36% of apprentices have been furloughed and a further 8% were made redundant. Additionally, 17% of apprentices had their off-the-job learning suspended. Around a third (31%) of enterprises report that they are likely to hire fewer apprentices over the coming year, or none at all (Sutton Trust, 2020[19]). Additionally, most recent data from the Department for Education showed that the number of new apprenticeship starts between 23 March and 30 June 2020 declined by 52.3% compared to the previous year (Department for Education, Jul 2020[11]). Among SMEs with limited financial resources and capacity to administer apprenticeships, the impact of COVID-19 on apprenticeships might be even more pronounced (see Box 4.5 for targeted support on apprenticeships in SMEs). In this context, DfE introduced additional flexibility for apprentices and employers to continue with or complete their programmes. Measures include greater flexibility in terms of remote training and changes to end-point assessments, allowing furloughed apprentices to continue their apprenticeships and undertake end-point assessments, and enabling employers and providers to initiate breaks in learning for apprentices where training could not continue (Department for Education, 2021[20]).

Box 4.5. Glasgow: Boosting apprenticeships by supporting SMEs in administrative and human resources functions

In 2015, the City of Glasgow in Scotland, established a rebranded employment programme known as the Glasgow Guarantee, to support the city's residents in training and employment opportunities. The programme also supports local businesses in recruiting the needed talent, provides additional funds for training and helps manage the apprenticeship-related administrative and human resource (HR) functions of employers.

The City Council's service of managing the administrative and HR functions of employers includes advertising vacancies, handling recruitment and sometimes managing shortlisting of applicants. Young residents interested in apprenticeships with companies apply to the City Council rather than to employers and the council manages the recruitment process, giving feedback to both successful and unsuccessful applicants.

The city's review of the programme showed that Small and Medium Enterprises (SMEs) are more interested in the service, because of the recruitment support they receive. SMEs are able to actively participate in the city's employment strategies. The service places the City Council in a crucial position where they can steer trainings, recruitment and employer practices towards the goals and objectives of the city council. Moreover, as an intermediary, the city council gains access to relevant labour market information to improve skills development in the city.

Source: (Thomas, Williams and Serwicka, 2016[21]), www.centreforcities.org/reader/delivering-change-making-apprenticeships-work-cities/challenge-4-small-medium-sized-enterprises-fall-behind-offering-apprenticeships/ (accessed 26 October 2020).

In recognition of the difficulties small businesses encounter, both national and London-specific initiatives are trying to extend support for SMEs in taking advantage of apprenticeship opportunities. London has set up a pilot initiative, the *London Progression Collaboration*, to support small businesses in offering apprenticeship opportunities (Box 4.6). As SMEs often lack the internal HR and organisational capacity to manage an apprenticeship programme and struggle to identify a levy-payer who is willing to transfer their funds, the initiative provides valuable support in enhancing apprenticeship uptake among SMEs. Nationally, the new government white paper *Skills for Jobs* outlines proposals for supporting SME's and strengthening the apprenticeship system by facilitating unspent levy transfers and enlarging funding entitlements for education and training via the *Lifetime Skills Guarantee* (Department for Education, 2021[22]).

Box 4.6. The London Progression Collaboration

The GLA and IPPR examined how to improve progression opportunities for those in low-paid and low-skilled work in London. London faces several challenges in terms of progression and apprenticeships. It has (i) poor rates of progression from low to mid skills levels, (ii) low levels of apprenticeships compared to other regions, and (iii) high levels of low pay. Therefore, the GLA and IPPR assessed whether targeted support for businesses could increase apprenticeship levy spending in London and improve prospects for Londoners in low skilled work.

As a result, the London Progression Collaboration (LPC) was launched with the financial support of JPMorgan in February 2020 with the objective of supporting in-work progression through the creation of new apprenticeships. The LPC offers supports in accessing apprenticeship levy funds, aiming to include individuals and businesses where it can make the most difference. The initiative focuses on SMEs by facilitating the transfer of unspent levy funds to small businesses in London. In response to the COVID-19 pandemic, the LPC launched *Reskilling the Recovery* – a campaign asking London's apprenticeship levy payers to pledge unspent funds for transfer to small businesses in the capital. To date, the campaign has secured pledges of over GBP 3.5 million, and received requests for levy transfer totalling over GBP 2.5 million.

Source: (IPPR, 2020[23]).

While London's employers might encounter limited financial resources due to the COVID-19 pandemic, investing in apprenticeships can offer significant rewards for employers. Involving and training young people in an existing business is an effective mechanism for training future workers with the specific requirements in terms of skills, knowledge and experience that are most important for a business. Although apprenticeships require setting aside time to training inexperienced people, many employers recoup the cost of training before the completion of the apprenticeship and others within 1-2 years' time, depending on the extent to which apprentices are engaged in productive activities (OECD/ILO, 2017[16]).

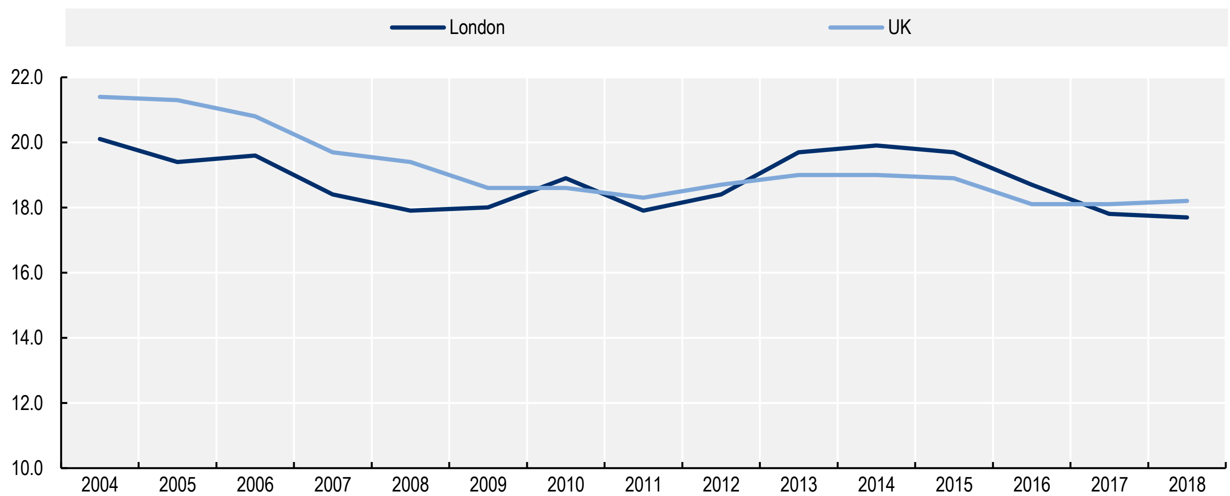
Job-related training has fallen in London, especially since 2015

Despite a need for training and job-related learning in a world of work that is constantly change, employer investment in training has experienced a sustained and significant fall in the UK. Between 1997 and 2012, the average volume of training per worker nearly halved (Institute for Public Policy Research, 2017[24]). According to the Eurostat survey of continuing vocational training, employer investment in the UK fell by 29.3 per cent between 2005 and 2010 (Green et al., 2013[25]). Furthermore, the number of employees who worked fewer hours than usual in a reference week due to training attendance fell from over 180,000 to less than 20,000 between 1999 and 2014 (Department for Business, Innovation and Skills, 2015[26]). Finally, employer investment in training has fallen significantly in recent years. Across England, employer spending per employee declined by around 17% in real terms between 2007 and 2013 and only slightly recovered thereafter, meaning that it remains considerably levels observed in 2005-09 (Institute for Public Policy Research, 2017[24]).

As of 2018, less than one in five economically active Londoners received job-related training in the last three months. Compared to 2004, this share has fallen by 2.4 percentage points from 20.1% to 17.7% (Figure 4.15). Due to a significant fall since 2014, the share of economically active Londoners receiving job-related training is now below the UK average (18.2%). The proportion of those who have undertaken job-related training in the last three months varies considerably across different groups of London's population. Londoners of Pakistani and Bangladeshi (9.3%) descent were less than half as likely to have received training as Londoners of Mixed descent (20%) or White Londoners (19.2%) (Figure 4.16). Among other ethnic groups, job-related training rates were 18% for Londoners of Indian origin, 17.9 for Black Londoners and 14.7% for Londoners of other Asian origin. Disabled people (13.9%) were less likely to have had training than non-disabled (18.4%). Similarly, those aged below 25 (12.8%) or those over 55 (14.4%) received less training their counterparts between 25 and 55.

Figure 4.15. Job-related training in London and the UK

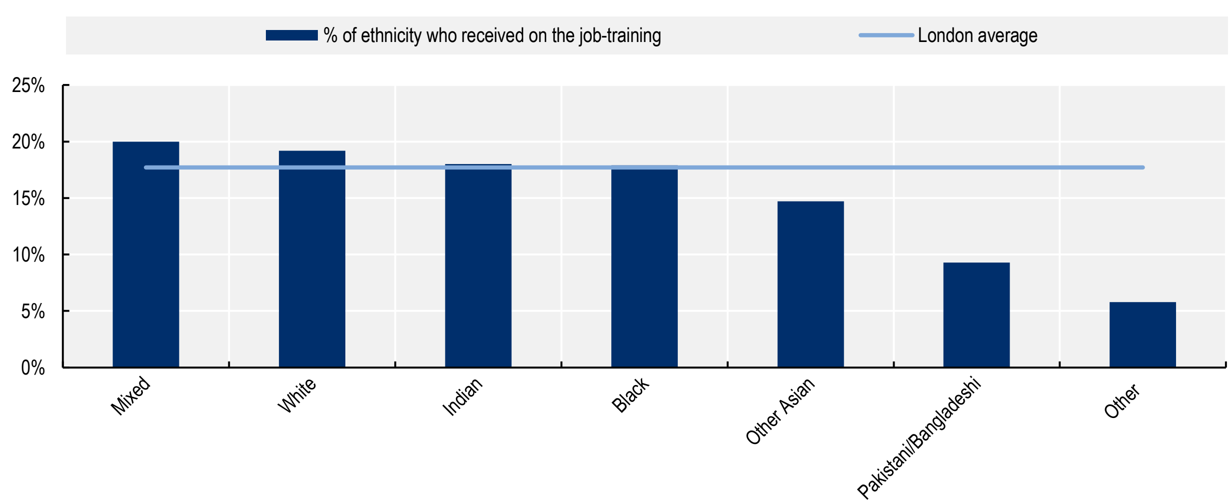
Share (%) of all who received job related training in last 13 weeks - aged 16-64



Note: Number and rate of economically active residents aged 16-69 who have received training in the last 3 months.
Source: OECD calculation based ONS Annual Population Survey.

Figure 4.16. Job-related training in London by ethnicity

Share (%) of all who received job related training in last 13 weeks by ethnicity - aged 16-64

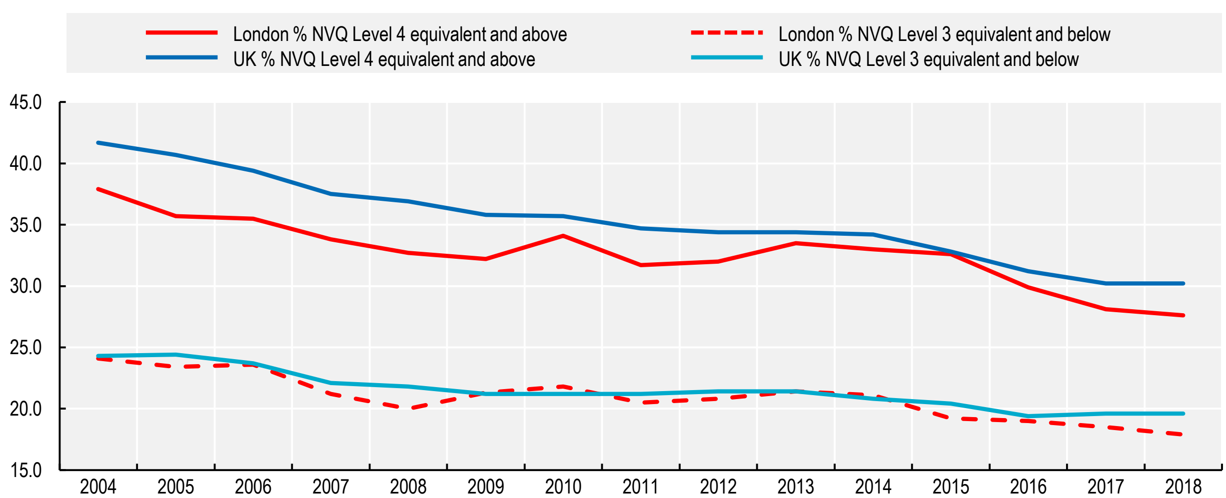


Note: Number and rate of economically active residents aged 16-69 who have received training in the last 3 months by ethnicity.
Source: OECD calculation based ONS Annual Population Survey.

Those that could benefit the most from job-related training, are less likely to receive it**.** As documented in Chapters 1 and 2, low-skill workers face higher risk of job loss due to the economic crisis caused by the COVID-19 pandemic and are also more at risk of automation. However, across London, people with higher levels of education are much more likely to receive job-related training. While the share of workers who received job related training during the last four months has fallen across all educational levels, Londoners with lower educational qualifications are much less likely to receive such training (Figure 4.17). Among Londoners with a national vocational qualification (NVQ) level equivalent or below A levels (level 3), 17.9% received job-related training in the preceding 4 months. In contrast, almost 28% of Londoners with NVQ level 4 or above (i.e. those with a certificate of higher education, a higher apprenticeship, or a university degree) participated in job-related training over the same period. For both individuals below or above NVQ level 4, job-related training in London is below the national average.

Figure 4.17. Job-related training in London and the UK by level of qualification

Share (%) of all who received job related training in last 13 weeks - aged 16-64



Note: Number and rate of economically active residents aged 16-69 who have received training in the last 3 months. NVQ 3 corresponds to levels. NVQ 4 corresponds to a certificate of higher education or a higher apprenticeship.
Source: OECD calculation based ONS Annual Population Survey.

Training provision by employers in London is below the UK average. Around 42% of employers in London did neither fund nor arrange on-the-job or off-the-job training of their employees in 2019 (Figure 4.18). For comparison, in Belfast and South East Wales, only 30% and 36% of firms did not support their employees' training via funding or arranging it. In terms of training intensity, the establishments in London that do provide training, are comparable to establishments in the UK overall. On average, they offer 3.5 training days per staff member, down from four trainings days per staff member in 2017. Across the UK, training varies substantially by firm size, with smaller enterprises such as SMEs significantly less likely to fund or arrange training for their staff (IFF Research, 2018[27]). Although London has more large employers than most places in the UK, training provision appears to be at best average in the national context.

Figure 4.18. Training provision and intensity across UK regions, 2019

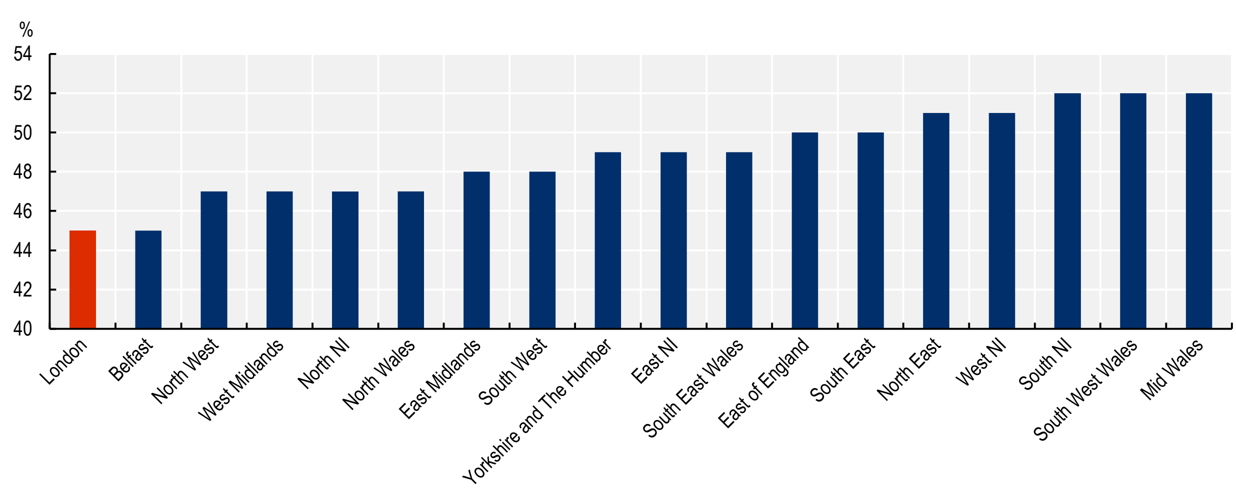
% of firms with funding or arrangement of training in the past 12 months and average number of training days

Source: OECD elaboration based on data from (Department for Education, 2020[10]).

One in two firms in the UK does not have a proper training plan and almost two-thirds have no dedicated training budget (IFF Research, 2018[27]). In London, limited financial resources are one of the major impediments for training provision. Almost every second firm who wants to provide more training in London cites a lack of funds or costs as an impediment (Figure 4.19). The lack of internal resources points out the need for better access and greater availability of public funds to support firm-based training. As discussed in Chapter 1, adequate funding for adult learning and closer co-operation of training providers and enterprises could alleviate this problem and help address skills gaps in London.

Figure 4.19. Funding as a barrier to providing more training in London and the United Kingdom, 2019

Percentage of firms who cited lack of funds or cost as an impediment to providing more training

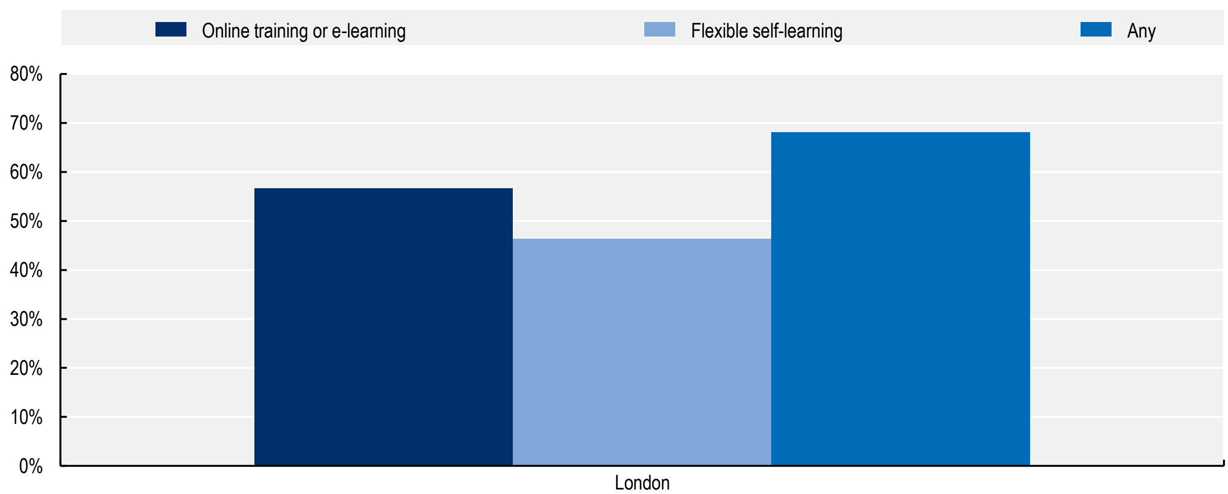


Note: The sample only includes businesses that wanted to provide more training in the past 12 months.
Source: OECD elaboration based on data from (Department for Education, 2020[10]).

Online learning could provide more accessible options for more training in firms. However, many firms in London do not yet take advantage of the potential of online or e-learning. Before the COVID-19 pandemic, 57% of London's employers used online learning and training opportunities (Figure 4.20). Notably, the share of firms in London that use online learning has increased by five percentage points since 2017 and might increase further with the current pandemic. E-learning or online training can be effective means of delivering training at relatively low costs and can also be undertaken in different spells, enhancing a greater compatibility of work responsibilities and business needs on the one hand and dedicating time to learning on the other. One option to encourage employees to participate in training opportunities and to take ownership of such training is to grant participants flexibility and autonomy. As of 2019, only 46% of enterprises in London offered their employees flexible self-learning opportunities.

Figure 4.20. Online and flexible learning across firms in London, 2019

Share of firms that have funded or arranged online training or e-learning, or other self-learning, over the past 12 months



Source: OECD elaboration based data from (Department for Education, 2020[10]).

Box 4.7. Example of promoting employer investment in training: The Humber Skills Pledge

In 2013, The Humber LEP launched its Skills Pledge to promote the value of investing in skills and training and demonstrate the significant benefits that such investment can bring to businesses, employees, the local community and economy. As part of the pledge, businesses sign up to one or more of the following:

- Invest in increasing the skills off their workforce
- To mentor a budding entrepreneur
- Offer a work placement to a young person or adult
- Employ a graduate
- Offer an Apprenticeship or Traineeship
- Support the development of Employability Skills

The Skills Pledge has been widely welcomed by businesses as a single contact point for information about training and skills and offers guidance, resources, and related initiatives to support business growth. It has played an important role in enabling the LEP to support businesses to become more competitive, more resilient, and ready for economic change. In the first 2 years, more than 300 businesses signed up to offer hundreds of opportunities to young people and adults. This number continues to grow.

The COVID-19 pandemic illustrates that London's firms need to rethink their training strategies. The sudden breakthrough of remote working and digital services indicate that online solutions can provide meaningful answers to many problems firms face. The pandemic and resulting lockdown and social distancing measures make traditional forms of learning and training more difficult. By enabling online training and encouraging flexible forms of self-learning, London's employers can enhance the skills development of their employees and thus address pressing skills shortages (see Box 4.8 for an example of publicly supported online learning).

Box 4.8. Vienna: Enhancing online learning among apprentices

As part of Vienna's efforts to tackle youth unemployment, which has worsened following the COVID-19 pandemic, the Austrian capital purchased 1000 laptops and tablets in October 2020 for apprentices in company training. Vienna's local government implemented this measure to ensure that education and training would continue despite the pandemic. This digital intervention aims to improve Vienna's COVID-19 responses and contribute towards creating more learning opportunities for the youth in Vienna.

Facing a significant deterioration of learning and training opportunities for the young, Vienna recognises the need to support apprentices and other young learners during the COVID-19 pandemic. As part of those efforts, Vienna is making an investment of EUR 17 million via its COVID training package to tackle youth unemployment in the city. Furthermore, the Vienna City Council is collaborating with AMS Vienna (Austria's public employment service in Vienna) to increase the number of apprenticeships in the city.

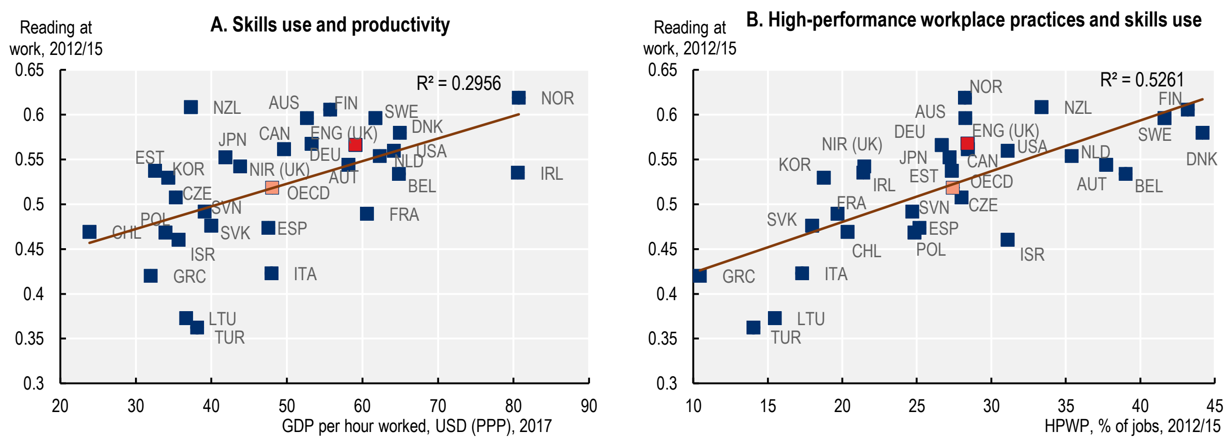
Source: (Stoyanov, 2020[28]), www.themayor.eu/en/vienna-provides-1000-laptops-and-tablets-to-local-apprentices-in-inter-company-training (accessed 20 October 2020).

Raising the standard by enhancing and expanding high performance work practices

Besides formal learning and training, on-the-job learning allows workers to strengthen their skills and increase enhance abilities. To strengthen their skills, employees require a work environment that allows them to make best or full use of their skills. High Performance Working (HPW) practices help to achieve this. In general, High Performance Working refers to managing enterprises in a way that fosters more effective employee involvement and commitment, to ultimately improver worker and firm performance (Belt and Giles 2009). HPW can create significant benefits for firms and local economies because it raises productivity by allowing employees to use and apply their skill sets in the workplace in an effective manner (UK Commission for Employment and Skills, 2013[29]). According to the UK Commission for Employment and Skills, HPW includes a wide range of areas such as employment relations, management and leadership, or organisational development.

Recent evidence suggests that the effectiveness of using employees' skills in the workplace may be as relevant as the skills workers possess. Merely increasing the supply of skills does not automatically yield higher productivity; those skills also need to be used appropriately. Analysis on data from the OECD Survey of Adult Skills highlights the positive links between the effective use of skills, the economy and the performance of employees. Across OECD countries, skills use is positively correlated with labour productivity (Panel A, Figure 4.21). Many factors affect how employees use their skills at the workplace but among the most important ones are factors related to the organisation of workplaces. Management and organisational practice that directly influence how and to what extent employees use their skills, and that are recognised as performance enhancing, are often referred to as high-performance work practices (HPWP).

Figure 4.21. Correlations between skills use, productivity and the adoption of high-performance workplace practices (HPWP) in OECD countries, 2012/15



Note: Skill use indicators show how often skills are used, scaled from 1 "Never" to 5 "Every day".
Source: From (OECD, 2020[30]), calculations based on (OECD, 2019[31]) Survey of Adults Skills (PIAAC) (2012, 2015, 2018) (database), www.oecd.org/skills/piaac/.

High performance work practices foster skills use at work. HPWPs include aspects of work organisation - teamwork, autonomy, task discretion, mentoring, job rotation, applying new learning - and management practices – employee participation, incentive pay, training practices and flexibility in working hours (see Box 4.9 for a more detailed list of HPWPs in the UK context). Across OECD countries, high performance work practices appear to lead to more skills use at work (Panel B, Figure 4.21). Furthermore, workers with higher exposure to HPWPs often benefit from higher wages, higher job satisfaction, lower job-related stress, all of which ultimately contributes to higher labour productivity (OECD, 2016[32]).

Box 4.9. Definition and categories of High Performance Working in the UK

The table below provides an overview of the high performance work practices included in the UK Employer Skills Survey. It consists of five HPWP categories, which in turn entail various practices.

Table 4.1. Overview of High Performance Working practices by factor grouping

Categories of HPWs and their practices, UK Employer Skills Survey

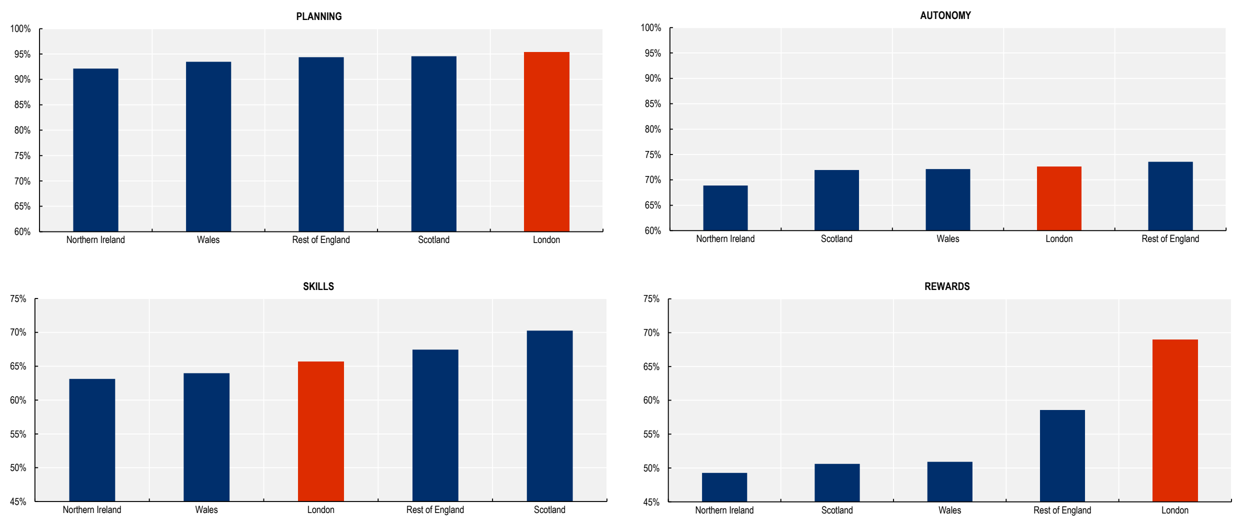
Factor grouping	Practices
Planning	Training plan Annual performance review Training budget Work shadowing Business plan Equal opportunities policy Training needs assessment
Organisation	Investors in People (IIP) ISO 9000 (Quality Management) Trade union consultation Employee consultation Creates teams to work on projects Process to identify talented individuals
Skills	On or off the job training Formal performance review after training
Rewards	Bonus scheme Performance related pay Flexible benefits
Autonomy	Task variety Task discretion Flexible working

Source: UK Employer Skills Survey, (Department for Education, 2018[13]).

London recognises the importance of skills and their use as set out in the Mayor of London's new skills strategy (Greater London Authority, 2018[33]) but it can do more to encourage the adoption of high performance work practices among its employers. London fares relatively well in terms of the pervasiveness of HPWs in firms compared to other parts of the UK (Figure 4.22). Almost all firms (95%) utilise HPWs in the area of planning. In terms rewards, around 70% of London's employers have adopted high-performance work practices compared to less than 60% in the rest of England and 50% or less in Wales, Scotland, and Ireland. However, HPWs related to skills and employee autonomy leave room for improvement.

Figure 4.22. High performance work practices across London and the UK

Share of firms that adopt at least one high performance work practice in each category, 2017



Note: Questions on high performance work practices were not included in the 2019 wave of the UK Employer Skills Survey.
Source: OECD calculations based on data from (Department for Education, 2018[13]).

Promoting the adoption of high-performance work practices could be a tool for making skills use more effective and enhancing workplace skills development in London. By adopting and strengthening HPWs, London employers cannot only ensure better skills use among their employees but also limit depreciation and obsolescence of unused or under-utilised skills. Furthermore, the adoption of HPWP (especially learning and training) can drive innovation. For example, SMEs that adopt a “learning organisation” form – i.e. high levels of self-planning of tasks by employees, teamwork, knowledge exchange, on-the-job training and employee performance incentives – are more innovative than other SMEs, shown by more frequent development of new services and products as well as new work processes (Lorenz and Potter, 2019[34]). London has established the Good Work Standard, which aims to encourage employers to adopt high employment standards, notably on fair pay, workplace wellbeing, skills and progression and diversity and recruitment (Box 4.10). While this initiative is an important step in the right direction, it leaves room for improvement. So far, is has only accredited 90 employers in London. To reap the benefits of HPWs, the scheme requires further uptake among employers. Establishing peer-learning platforms that allow different employers to learn from each other could provide valuable impetus in spreading good workplace practices. Finally, the initiative lacks a peer network that selects mentors, drawn from exemplary firms, that can help provide mentoring support and advice, particularly for SMEs and start-ups, as well as within industries and supply chains.

Box 4.10. The Mayor's Good Work Standard in London

In 2019, the Mayor of London launched the *Good Work Standard*, which sets the benchmark for high employment standards for London's employers. The Good Work Standard has four pillars – fair pay and conditions, workplace wellbeing, skills and progression and diversity and recruitment. Employers that meet the benchmark are recognised by the Mayor and have the option to become a Good Work Champion, with the aim of supporting and encouraging other London employers tow work towards and achieve best practice. By motivating employers to pursue the inclusive employment and workforce development practices in the Mayor's Good Work Standard, the programme sets out to ensure that employers achieve high standards in areas such as working conditions, diversity and inclusion, flexible working, health and wellbeing, apprenticeships and training, and communication with employees.

As of February 2021, there are 90 accredited Good Work Standard employers, employing over 200,000 Londoners. To achieve the Mayor's Good Work Standard, employers have to take a simple online assessment of employment practices, ranging from foundation to excellent, and fulfilling as many criteria as possible. To develop the Good Work Standard, the Mayor and his Economic Fairness team consulted with London businesses of all sizes and sectors, as well as civil society, trade unions, the Living Wage Foundation and employee representation groups. The self-assessment allows employers to test and challenge their organisations to strive towards best practice, while enabling them to signal to employees that they are committed to staff wellbeing, work-life balance, a diverse workforce and a decent standard of living for all employees.

The Good Work Standard is part of the Mayor's commitment to a fairer and more inclusive economic recovery. The Mayor of London supports a suite of complementary programmes, including the London Healthy Workplace Award, the Inclusive Employers Toolkit, and the Living Wage Foundation's campaign. The free-to-access programme website hosts free resources and information to support employers in adopting high standards for workplaces and working conditions such as a guide to each criteria and signposting to other relevant and supportive tools.

Source: (GLA, 2021[35]).

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Note

[1] During the UK Employer Skills Survey, employers are first asked if their vacancies were proving hard to fill, then asked to give their reasons for not being able to fill vacancies spontaneously (i.e. without being presented with a list of possible reasons). Any employers not reporting skills-related issues are then prompted on whether any of their hard-to-fill vacancies were proving hard-to-fill due to a lack of skills, experience or qualifications among applicants. These spontaneous and prompted responses combine to give a total number of skill-shortage vacancies.

OECD Reviews on Local Job Creation

Future-Proofing Adult Learning in London, United Kingdom

Cities are not only home to around half of the global population but are also at the forefront of the transformation of jobs, skills and labour markets. Furthermore, cities play a leading role in the COVID-19 response, as the pandemic is not only accelerating megatrends such as digitalisation and automation that change the world of work, but is also challenging city economies. In London, COVID-19 has caused an unprecedented labour market shock, with several service sectors having been devastated. The crisis and its impact on employment and firms make skills development and adult learning more important than ever. London is the first major city within the OECD to introduce a comprehensive skills strategy. The report *Future-Proofing Adult Learning in London, UK* analyses London's capacity to design effective adult learning programmes, which are critical for a strong and sustainable economic recovery and for preparing for the future of work. The report sheds light on major challenges facing London, especially in light of COVID-19, while also pointing to opportunities for London to design a future-ready adult learning system that responds to the impacts of the pandemic and aligns training to rapidly evolving labour market demands.

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PRINT ISBN 978-92-64-80177-6
PDF ISBN 978-92-64-48707-9

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