



OECD Economic Surveys

United Kingdom

October 2020

OVERVIEW



<http://www.oecd.org/economy/united-kingdom-economic-snapshot/>

This Overview is extracted from the 2020 Economic Survey of United Kingdom. The Survey is published on the responsibility of the Economic and Development Review Committee of the OECD, which is charged with the examination of the economic situation of member countries.

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

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

Note by Turkey

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

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

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

Photo credits: Cover © Helen Hotson/Shutterstock.com.

OECD Economic Surveys: United Kingdom© OECD 2020

You can copy, download or print OECD content for your own use, and you can include excerpts from OECD publications, databases and multimedia products in your own documents, presentations, blogs, websites and teaching materials, provided that suitable acknowledgement of OECD as source and copyright owner is given. All requests for public or commercial use and translation rights should be submitted to rights@oecd.org. Requests for permission to photocopy portions of this material for public or commercial use shall be addressed directly to the Copyright Clearance Center (CCC) at info@copyright.com or the Centre français d’exploitation du droit de copie (CFC) at contact@cfcopies.com. of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

Table of contents

Executive summary	8
1 Key policy insights	13
The COVID-19 crisis is having a major social and economic impact	15
The United Kingdom was significantly affected by the COVID-19 pandemic	15
The COVID-19 crisis has hit some sectors disproportionately	16
The COVID-19 shock led to market tensions but banks have proved resilient so far	18
Activity is set to reach pre-crisis levels only gradually	20
Managing the risks of a disorderly Brexit	23
Moving from crisis management to recovery	24
Monetary policy has eased	26
Fiscal policy should support the recovery	27
The anti-corruption drive is strong	53
Seeking a close trade relationship with the European Union	55
The United Kingdom has been deeply integrated with the European Union	55
Maintaining a close trade relationship would help limit the costs of exiting the EU Single Market	56
The impacts of the new trade arrangements will vary across sectors and regions	58
Ensuring market access in services is key to a good outcome	59
Making sure the immigration system remains flexible	61
Keeping the global financial role of the City	62
Bibliography	65

Tables

Table 1. Activity will stay below pre-crisis levels	9
Table 1.1. Past recommendations on macroprudential policies and financial markets regulations	19
Table 1.2. Short-term economic projections	21
Table 1.3. Main measures of the emergency package and fiscal costs	25
Table 1.4. Main measures of the Plan for Jobs and additional measures	26
Table 1.5. Main elements of the UK Industrial Strategy	30
Table 1.6. Past recommendations on infrastructure and innovation	31
Table 1.7. Impact of selected reforms on growth and inequality	32
Table 1.8. Past recommendations on regional development	33
Table 1.9. Past recommendations on labour markets and skills	45
Table 1.10. Past recommendations on green growth	49
Table 1.11. Past recommendations on fiscal policy and tax	52
Table 1.12. Long-term fiscal costs of selected recommendations	53

Figures

Figure 1. Most UK households report lower income since the crisis started	9
Figure 2. Services play a key role in UK exports	10
Figure 3. Productivity growth has been weak	10
Figure 1.1. Output has fallen dramatically with the COVID-19 crisis	14
Figure 1.2. Containment measures slowed the spread of cases	15
Figure 1.3. Output fell dramatically, especially in some services sectors	16
Figure 1.4. Claims for universal credit surged in March	17
Figure 1.5. Most UK households experienced an income reduction in the aftermath of the coronavirus outbreak	18
Figure 1.6. Stress in financial markets has eased	19
Figure 1.7. Capital buffers and macroprudential caution have increased resilience	20
Figure 1.8. The fiscal position would deteriorate markedly further in the event of a no-deal exit	22
Figure 1.9. A no deal would predominantly affect manufacturing industries	23
Figure 1.10. Monetary policy has eased	27
Figure 1.11. The emergency package and the fall in GDP will raise the public debt-to-GDP ratio	28
Figure 1.12. Investment has been lower than in many other leading economies	29
Figure 1.13. Risk of automation is higher in lower-earning regions	33
Figure 1.14. Lower-earning regions have been hit harder	34
Figure 1.15. The demographics and labour market situation are different across regions	35
Figure 1.16. A large majority of firms applied for the Coronavirus Job Retention Schemes	37
Figure 1.17. Participation in lifelong learning has been decreasing	41
Figure 1.18. Minimum wages in the United Kingdom are among the highest in the OECD relative to productivity	42
Figure 1.19. Poverty rates are highest among households out of work and single parents	43
Figure 1.20. Job creation was strong prior to the COVID-19 shock but inclusiveness is more challenging	44
Figure 1.21. Women participate less in the labour force than men and are more likely to work part time	45
Figure 1.22. Average hours in early childhood education and care are short	46
Figure 1.23. Some self-employed enjoy important tax incentives compared with employees	47
Figure 1.24. CO ₂ intensity is lower in the United Kingdom than in the OECD average	48
Figure 1.25. Public health spending has risen	50
Figure 1.26. Tax revenues are lower than in peer countries	51
Figure 1.27. Corruption is perceived to be low in the United Kingdom	54
Figure 1.28. Tax transparency is largely compliant and anti-money laundering measures are effective	54
Figure 1.29. Services play a key role in UK exports	55
Figure 1.30. Higher non-tariff barriers and barriers to service trade under a free trade agreement will lead to lower incomes than under EU membership	57
Figure 1.31. Export and import losses vary across sectors	58
Figure 1.32. UK regions have different export and employment exposure	59
Figure 1.33. Work-related immigration from the European Union has fallen sharply	62

Boxes

Box 1.1. Containment and economic response to the outbreak of coronavirus	24
Box 1.2. The Industrial Strategy	30
Box 1.3. GDP and inequality impact of selected recommendations to support the recovery	32
Box 1.4. The COVID-19 crisis could hit lower-earning regions hardest	34
Box 1.5. Selected policies to support the recovery in OECD countries	38
Box 1.6. Recent trends in on-the-job training	42
Box 1.7. Prudent debt in New Zealand	49
Box 1.8. 21 st Century Trade Agreements	60

Follow OECD Publications on:



http://twitter.com/OECD_Pubs



<http://www.facebook.com/OECDPublications>



<http://www.linkedin.com/groups/OECD-Publications-4645871>



<http://www.youtube.com/oecdilibrary>




<http://www.oecd.org/oecddirect/>

This book has...

StatLinks 

A service that delivers Excel® files from the printed page!

Look for the *StatLinks*  at the bottom of the tables or graphs in this book. To download the matching Excel® spreadsheet, just type the link into your Internet browser, starting with the *http://dx.doi.org* prefix, or click on the link from the e-book edition.

This *Survey* is published on the responsibility of the Economic and Development Review Committee of the OECD, which is charged with the examination of the economic situation of member countries.

The economic situation and policies of the United Kingdom were reviewed by the Committee on 8 September 2020. The draft report was then revised in the light of the discussions and given final approval as the agreed report of the whole Committee on 28 September 2020.

The Secretariat's draft report was prepared for the Committee by Annabelle Mourougane, with contributions from Mark Baker, Tim Bulman, Andres Fuentes and Jon Pareliussen, under the supervision of Sebastian Barnes. Statistical research assistance was provided by Eun Jung Kim and editorial assistance by Michelle Ortiz.

The previous Survey of the United Kingdom was issued in October 2017. Information about the latest as well as previous Surveys and more information about how Surveys are prepared is available at <http://www.oecd.org/eco/surveys>.

Basic statistics of United Kingdom, 2019

(Numbers in parentheses refer to the OECD average)^{1,2}

LAND, PEOPLE AND ELECTORAL CYCLE				
Population (million)	66.8		Population density per km ² (2018)	274.7 (38.0)
Under 15 (%)	17.7	(17.9)	Life expectancy at birth (years, 2018)	81.3 (80.1)
Over 65 (%)	18.5	(17.1)	Men (2018)	79.5 (77.5)
Foreign born (% , 2018)	13.8		Women (2018)	83.1 (82.8)
Latest 5-year average growth (%)	0.7	(0.6)	Latest general election	December-2019
ECONOMY				
Gross domestic product (GDP)			Value added shares (%)	
In current prices (billion USD)	2 829.8		Agriculture, forestry and fishing	0.7 (2.6)
In current prices (billion GBP)	2 216.5		Industry including construction	19.5 (26.8)
Latest 5-year average real growth (%)	1.8	(2.2)	Services	79.8 (70.5)
Per capita (000 USD PPP)	48.7	(48.3)		
GENERAL GOVERNMENT				
Per cent of GDP				
Expenditure	40.9	(41.7)	Gross financial debt (2018, OECD: 2017)	116.6 (108.9)
Revenue	38.7	(38.5)	Net financial debt (2018, OECD: 2017)	82.3 (69.0)
EXTERNAL ACCOUNTS				
Exchange rate (GBP per USD)	0.78		Main exports (% of total merchandise exports)	
PPP exchange rate (United States = 1)	0.68		Machinery and transport equipment	36.6
In per cent of GDP			Miscellaneous manufactured articles	15.0
Exports of goods and services	31.6	(54.2)	Chemicals and related products, n.e.s.	14.3
Imports of goods and services	32.7	(50.5)	Main imports (% of total merchandise imports)	
Current account balance	-4.0	(0.3)	Machinery and transport equipment	33.2
Net international investment position	-25.9		Miscellaneous manufactured articles	14.4
			Commodities and transactions, n.e.s.	13.0
LABOUR MARKET, SKILLS AND INNOVATION				
Employment rate (aged 15 and over, %)	60.9	(57.5)	Unemployment rate, Labour Force Survey (aged 15 and over, %)	3.7 (5.4)
Men	65.5	(65.6)	Youth (aged 15-24, %)	11.1 (11.7)
Women	56.4	(49.9)	Long-term unemployed (1 year and over, %)	0.9 (1.4)
Participation rate (aged 15 and over, %)	63.2	(61.1)	Tertiary educational attainment (aged 25-64, %, 2018)	45.8 (36.9)
Average hours worked per year (2018)	1,538	(1,734)	Gross domestic expenditure on R&D (% of GDP, 2018)	1.7 (2.6)
ENVIRONMENT				
Total primary energy supply per capita (toe, 2018)	2.7	(4.0)	CO2 emissions from fuel combustion per capita (tonnes, 2018)	5.3 (8.6)
Renewables (% , 2018)	11.5	(10.5)	Renewable internal freshwater resources per capita (1 000 m ³ , 2014)	2.2
Exposure to air pollution (more than 10 g/m ³ of PM 2.5, % of population, 2017)	65.0	(58.7)	Municipal waste per capita (tonnes, 2018)	0.5 (0.5)
SOCIETY				
Income inequality (Gini coefficient, 2017, OECD: 2016)	0.357	(0.310)	Education outcomes (PISA score, 2018)	
Relative poverty rate (% , 2017, OECD: 2016)	11.9	(11.6)	Reading	504 (487)
Median disposable household income (000 USD PPP, 2017, OECD: 2016)	23.9	(23.9)	Mathematics	502 (489)
Public and private spending (% of GDP)			Science	505 (489)
Health care (2018)	9.8	(8.8)	Share of women in Parliament (%)	32.0 (30.7)
Pensions (2015)	7.3	(8.5)	Net official development assistance (% of GNI, 2017)	0.7 (0.4)
Education (% of GNI, 2018)	5.5	(4.5)		

1. The year is indicated in parenthesis if it deviates from 2019.

2. Where the OECD aggregate is not provided in the source database, a simple OECD average of latest available data is calculated where data exist for at least 80% of member countries.

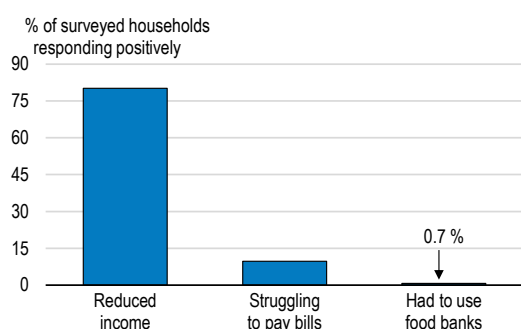
Source: Calculations based on data extracted from databases of the following organisations: OECD, International Energy Agency, International Labour Organisation, International Monetary Fund, World Bank.

Executive summary


The United Kingdom is at a critical juncture

Like many countries, the United Kingdom has been hit severely by the COVID-19 outbreak. A strict lockdown, was essential to contain the pandemic but halted activity in many key sectors. While restrictions have eased, the country now faces a prolonged period of disruption to activity and jobs, which risks exacerbating pre-existing weak productivity growth, inequalities, child poverty and regional disparities (Figure 1). On-going measures to limit a second wave of infections will need to be carefully calibrated to manage the economic impact. The country started from a position of relatively high well-being on many dimensions. But productivity and investment growth have been weak in recent years and an ambitious agenda of reforms will be key to a sustainable recovery. Leaving the EU Single Market, in which the economy is deeply integrated, creates new economic challenges. Decisions made now about management of the COVID-19 crisis and future trade relationships will have a lasting impact on the country's economic trajectory for the years to come.

Figure 1. Most UK households report lower income since the crisis started



Source: ONS (2020), "Coronavirus and the social impacts on Great Britain", June.

StatLink  <https://stat.link/k9e0lx>

The Government has moved quickly to support the economy, while continuing to prepare the exit from the EU Single Market and the Customs Union and to pursue policies to address weak productivity and investment. Since March, monetary and fiscal policies have eased

significantly and major programmes were implemented to protect workers and firms to prevent long-term economic scars. Since July 2020, the Government has moved to a new phase of support with the Plan for Jobs and the Winter Economic Plan. It has phased out some emergency measures, extended and introduced others, including programmes to help people get back to work, incentives to promote social consumption, and temporary reductions in VAT rates for the hospitality sector and stamp duty on property transactions. The Industrial Strategy, a multidimensional approach intended to foster productivity growth in place since 2017, includes measures that will also help to boost investment, innovation and skills.

Activity is set to reach pre-crisis levels only gradually

The economy contracted sharply in Spring 2020 and unemployment is likely to increase (Table 1). The COVID-19 crisis occurred against the background of subdued growth and investment since 2016. Many activities fell sharply during the lockdown, but some have since picked up substantially. Nevertheless, overall demand is set to recover only gradually as consumer-facing sectors remain disrupted and due to higher unemployment and business closures leaving scars on the economy.

Table 1. Activity will stay below pre-crisis levels

Annual percentage change

	2019	2020	2021
Gross domestic product (%)	1.5	-10.1	7.6
Unemployment rate (%)	3.8	5.3	7.1
Fiscal balance (% GDP)	-2.2	-15.2	-8.4
Government gross debt (% of GDP)	116.2	138.2	140.1

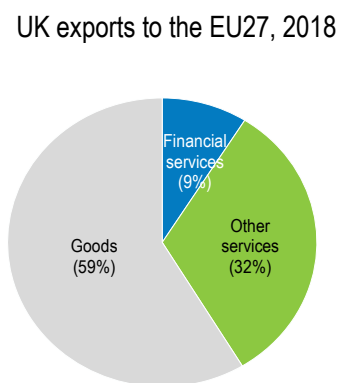
Source: OECD (2020), OECD Interim Economic Outlook.

The outlook is exceptionally uncertain. A resurgence of COVID-19, leading to further lockdown measures would lead to weaker growth, higher unemployment and even greater pressure on balance sheets. A disorderly exit from the EU Single Market, without a trade agreement with the European Union, would have a major negative impact on trade and jobs.

Agreeing a close trade relationship with the European Union would support recovery, productivity and employment for both parties.

While negotiations have focused on maintaining low trade frictions on goods, trade in services is crucial for a service-based economy such as the United Kingdom (Figure 2). Following exit from the Single Market, UK-based financial institutions will lose their passporting rights. Keeping close relationships with the European Union will help to limit costs.

Figure 2. Services play a key role in UK exports



Source: ONS (2019), "UK Balance of Payments, The Pink Book".

StatLink <https://stat.link/k321ha>

Moving from crisis management to achieving recovery

Implementation of a multifaceted package will help support a sustainable recovery following COVID-19 and raise growth potential. The supportive fiscal policies already in place will hasten the recovery but further measures will be needed to mitigate scarring. The scope for further monetary easing is limited but low interest rates provide fiscal space. A key challenge will be ensuring that people in activities that are lastingly impacted by the COVID-19 crisis are able to move to new activities and do not become detached from the labour market.

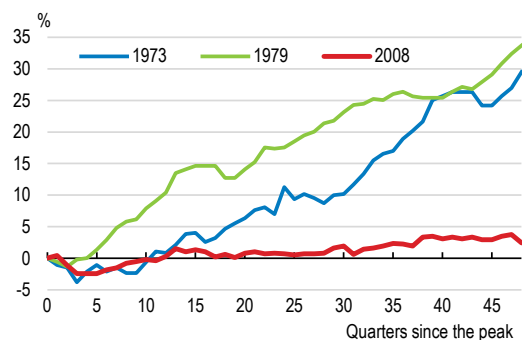
Well-directed good-quality public investment and higher private investment are needed to strengthen the recovery and boost productivity.

Low investment and innovation rates have been key factors behind the weak productivity performance of past years (Figure 3). Adoption

rates of complex technologies lag best performers. The competition framework is well designed but will need to be adapted to changes in business models triggered by digitalisation. Land-use restrictions impede effective competition. The Government has accelerated the substantial increase already underway in funding to housing, transportation and R&D investment. Policy continuity in other areas of the Industrial Strategy should be ensured to sustain progress in economic development. The long-standing challenge of narrowing regional differences, which may be exacerbated by the COVID-19 crisis, requires investing in the capacity of lagging regions. There is a commitment to invest 0.2% of GDP in broadband infrastructure by 2025. Emergency support to firms has prevented business failures but will need to be better targeted to viable firms.

Figure 3. Productivity growth has been weak

Real output per hour, change from start of recession



Source: OECD calculations based on ONS (2020), Labour productivity database, July.

StatLink <https://stat.link/yelurx>

The Government has started to exit from emergency employment measures, while implementing new measures with the Plan for Jobs and the Winter Economic Plan to support low-income and youth workers. The Job Retention Scheme has helped to prevent massive layoffs during the lockdown. It is being phased out and will be replaced by a new six-month wage subsidy programme at the end of October. A bonus was introduced to encourage firms to continue to employ furloughed workers through to 2021. Although unemployment benefits remain low by international standards, the Universal Credit and Working Tax Credit payments temporary increase

has supported incomes in response to the crisis. A temporary wage subsidy scheme, Kickstart, has been introduced to encourage the hiring of young people. Resources were also allocated in July for job search and training. Additional spending on active labour market measures are welcome and further increases would help to accompany unemployed workers in their job search and ease adjustment to new working arrangements, alongside measures to strengthen adult education and training.

Expanding efforts now to provide good-quality ICT training to low-skilled workers would help adapt to the changes in the labour market, while boosting productivity growth and reducing inequality. The proportion of under-qualified workers is one of the highest in OECD countries. Public and corporate spending on adult learning has declined, alongside participation in lifelong training. Additional support for job search, skills and apprenticeships was set out in July 2020. Further measures should prioritise schemes to develop digital skills and to improve access for low-wage, low-skilled workers. Better targeting of the apprenticeship system would also help.

Very low-income households are mostly those out of work or single-parent families, groups particularly affected by the crisis. The minimum wage has risen rapidly to one of the highest levels in the OECD. While past rises had a negligible impact on employment, a further sharp rise in the minimum wage now could have harmful impacts on youth and low-qualified workers. In-work benefits and tax credits are more effective tools to support low-income households as they can be targeted without harming employment.

The COVID-19 crisis may have exacerbated gender inequality. Prior to the crisis, the share of women in work had increased, but was still significantly lower than for men. The high share of women with a part-time job resulted in a large gender pay gap. Precarious female employment is often associated with child poverty. Increasing support for good-quality childcare would help women to take up full-time jobs.

The crisis provides an opportunity to encourage more environmentally-sustainable growth. The United Kingdom was in 2019 the first G7 country to legislate a target of zero net

emissions by 2050. Despite more rapid falls in carbon emissions than in other OECD countries, the country is not on track to meet its target. The Plan for Jobs includes measures to increase the carbon efficiency of the public sector and social housing, together with subsidies to improve home insulation, complementing measures taken over the years. Further concrete actions are needed to reduce emissions in the transport sector. Policy coherence would be improved by equalising carbon pricing across sectors and fuels and by ending incentives to oil and gas field development, while taking action to address fuel poverty.

Ensuring long-term sustainability in the post-pandemic world

Once the recovery is firmly established, addressing the remaining structural deficit and putting the public debt-to-GDP ratio on a downward path should come to the fore. In responding to the COVID-19 crisis, the public debt-to-GDP ratio will reach a historically high level, despite low interest rates, and a structural deficit is likely to emerge. Population ageing is putting pressure on public finances. Indexing state pensions to average earnings rather than using the “triple lock” (the maximum of earning growth, inflation and 2.5%) would improve sustainability. Pension reforms should ensure that adequate support is provided to poorer pensioners. Once growth has firmed, broadening the tax base would support social objectives, such as health, while raising equity.

The current fiscal framework combines three targets and provides little effective medium-term guidance, particularly given the major changes to the wider economic and fiscal outlook. A review of the fiscal framework and a spending review are planned for the autumn. A more credible and stable medium-term framework would provide a better guide to policy, recognising the trade-off facing the United Kingdom, and other economies, in balancing responding to the immediate crisis whilst maintaining the sustainability of the public finances.

MAIN FINDINGS	KEY RECOMMENDATIONS
Moving from crisis management to achieving recovery	
<p>The economy contracted sharply during the COVID-19 crisis. While some activities have now picked up, overall demand is expected to recover only gradually.</p> <p>There are major downside risks related to COVID-19 and a disorderly exit from the EU Single Market.</p> <p>Monetary policy has eased. The Government rapidly put in place a range of substantial economic support measures to firms and workers. Since July 2020, policies have been adjusted or phased out and new measures introduced.</p>	<p>Ensure support is available and adapted as needed based on epidemiological and economic developments, while not hindering the reallocation of resources towards firms and sectors with better growth prospects. Consider introducing more targeted measures.</p> <p>Further increase active labour market spending to displaced and low-skilled workers.</p> <p>Prioritise digital infrastructure, particularly in deprived regions, in the allocation of the planned increase in public investment. Ensure sound governance of infrastructure investments.</p> <p>Keep monetary policy accommodative until there are clear signals of price pressures.</p>
<p>The UK economy is deeply integrated with the European Union and leaving the EU Single Market will hamper trade. Services account for a large share of trade, but negotiations have focused mostly on goods.</p>	<p>Keep low barriers to trade and investment with the European Union and others, particularly market access for the service sectors including financial services.</p> <p>Enhance communication on a no-deal exit from the European Union.</p> <p>Prepare targeted support to firms and workers that may suffer the most.</p> <p>Put in place trade facilitation measures to smooth disruptions at the border.</p>
Supporting a sustainable recovery	
<p>Productivity growth has underperformed compared to past business cycles and other OECD countries. Low investment and slow innovation rates contribute to weak productivity performance.</p> <p>The competition framework is well designed, and the United Kingdom is currently one of the least restrictive countries in terms of business regulations. The framework will need to be refined to adapt to a fast changing environment. Stringent land-use regulations prevent an efficient allocation of housing supply.</p>	<p>Ensure continuity in government support through the Industrial Strategy, a multidimensional approach to boost investment, innovation and skills intended to foster productivity growth.</p> <p>Refine the competition framework to adapt it to the digital economy: enable greater personal data mobility and systems with open standards; adopt a broader approach to merger assessment including an evaluation of the overall economic impact of mergers.</p> <p>Ease-land use regulations to seek the right balance between improving resource allocation, and environmental and social concerns.</p>
<p>The proportion of under-qualified workers is one of the highest in OECD countries. Although it is higher than the OECD average, participation in lifelong learning has been declining. Spending allocated to adult training is low. Despite a new apprenticeship system, there has been a drop in the number of total apprenticeship starts.</p>	<p>Develop digital skills of low-skilled workers, including through further increasing public spending on training.</p>
<p>The COVID-19 crisis is a shock to employment and incomes. The minimum wage has been increasing at a fast pace and is now one of the highest in OECD. Poverty is concentrated in out-of-work and single-parent households.</p>	<p>Use well-designed in-work benefits to support low-income earners.</p>
<p>The COVID-19 crisis may have increased gender inequality. The female labour force participation rate is depressed by high costs of childcare.</p>	<p>Strengthen efforts to make good-quality childcare less costly.</p>
<p>Carbon emissions have fallen significantly and the crisis provides an opportunity to accelerate the move toward a decarbonised economy. The United Kingdom has set an ambitious zero net emissions target by 2050, but further efforts are needed to meet it. Limited green spending has been announced to support the recovery.</p>	<p>Continue effort to reduce emissions in the transportation sector. Align carbon pricing across sectors and fuels and eliminate incentives to develop oil and gas fields. Continue to give fuel poverty full consideration.</p>
Ensuring long-term sustainability in a post-pandemic environment	
<p>The public debt-to-GDP ratio is expected to reach historically high levels. Age-related pressures are rising. The current pension uprating (triple lock) will be costly in the future.</p> <p>There is scope to improve the efficiency and fairness of the tax system. A spending review has been launched and the last tax review dates back 2011.</p>	<p>Once the recovery is firmly established, address the remaining structural deficit and put the public debt-to-GDP ratio on a downward path.</p> <p>Replace the pensions “triple lock” by indexing pensions to average earnings and ensure adequate income is provided to poorer pensioners.</p> <p>Carry out comprehensive tax and spending reviews and broaden the tax base to fund social objectives, once the recovery is fully entrenched.</p>
<p>Fiscal rules are complex and fail to provide medium term guidance, particularly given major changes to the wider economic and fiscal outlook. A review of the fiscal framework is planned for this Autumn.</p>	<p>Set a stable medium-term framework to improve guidance to policy and markets.</p>

1 Key policy insights

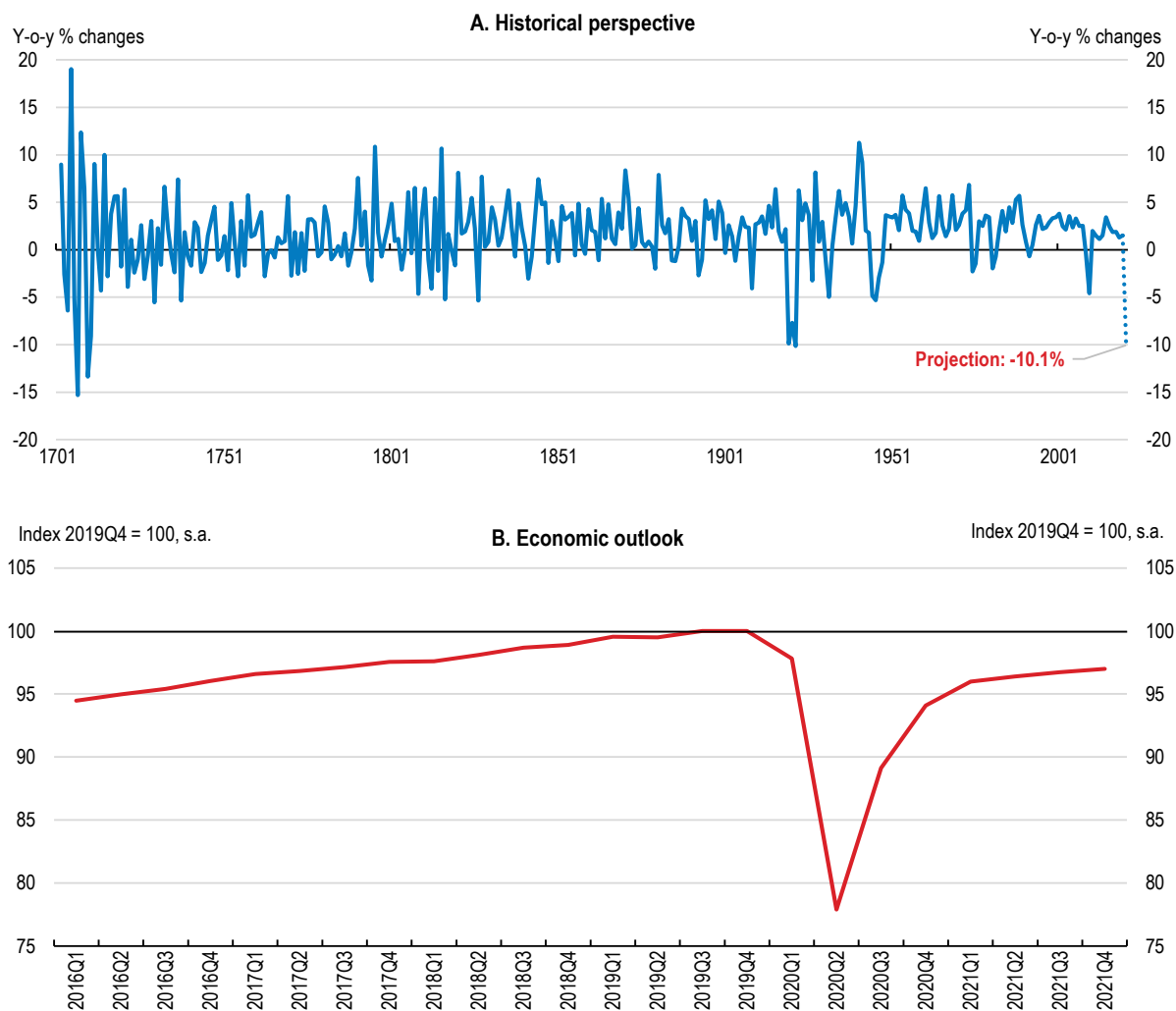
Like many countries, the United Kingdom has been hit hard by the outbreak of COVID-19 and the measures taken to contain the pandemic have triggered the most severe fall in output since the 1920s (Figure 1.1). As the public health situation improves, the economic consequences will come to the fore. While some activities are picking up as restrictions ease, overall demand is expected to recover only gradually and unemployment will increase and remain high for some time. The service sectors, particularly those involving face-to-face interactions, bore the brunt of the COVID-19 shock, affecting many lower-skilled and more vulnerable workers. A rapid and massive emergency policy response, including extra funding to the health system and massive support to workers and firms, helped steady the economy. Policies moved to a second phase since July with the Plan for Jobs and the Winter Economic Plan, winding down some emergency measures, extending some support and introducing new measures focused on buttressing demand and jobs. A sustained and strong recovery will depend heavily on the resilience of the economy and the effectiveness of Testing, Tracking and Tracing (TTT) measures to limit the spread of the virus until a vaccine or an effective treatment are available. Fostering productivity growth in the service sectors, which has been flat-lining since the financial crisis and is lagging behind its main trading partners, will be key to support a long-lasting and sustainable recovery and deliver prosperity for all.

The United Kingdom left the European Union on 31 January 2020 and is due to leave the EU Single Market at the end of 2020. This will be a major change in trade relationships with Europe, in which the economy is deeply integrated, and other countries, where market access arrangements as an EU Member will need to be rebuilt. The nature of the future relationship between the United Kingdom and the European Union is still uncertain, as is the transition path toward this new regime. This Survey assumes a smooth transition to a new Free Trade Agreement, which will have a significant negative impact on the economy, but a more costly and disruptive disorderly exit remains a risk.

The economy also faces several significant longer-standing challenges, including poor productivity performance compared to past business cycles and to peer countries. In the years ahead, it will have to adapt to changes in business models, consumption habits and trade patterns, triggered by demographic ageing and digitalisation. Prior to the COVID-19 crisis, well-being was relatively high but some dimensions could be improved upon, in particular work-life balance, adult skills, housing affordability, air and water quality, according to the OECD Better Life Index. The COVID-19 crisis is expected to increase regional disparities given the differences in sectoral activity and may have exacerbated inequalities, which both were already high relative to other OECD countries. The income share of the top 1% households has remained relatively high by international standards in recent years (Balestra and Tonkin, 2018). However, severe material deprivation has been high for out-of-work and single-parent households. Real wage stagnation has resulted in falling absolute social mobility with many people's living standards being no better than their parents were in the previous generation (Major and Machin, 2019). Policy changes will be needed over time to raise living standards across the population, while also making the economy more environmentally sustainable and keeping a sound macro-economic framework, resilient labour markets and a favourable business environment. Decisions made at this juncture will have a lasting impact on the country's economic trajectory for many years to come.

Figure 1.1. Output has fallen dramatically with the COVID-19 crisis

Real GDP



Source: Bank of England Millennium of Macroeconomic Dataset, ONS and OECD (2020), OECD Interim Economic Outlook, September.

StatLink  <https://stat.link/9nf24j>

Against this background, this assessment focuses on ways to ensure a strong, inclusive and sustainable recovery from the COVID-19 crisis, in a context where leaving the EU Single Market and Customs Union and megatrends are altering the structure and the functioning of the economy. The three main policy messages of this Economic Survey are the following:

- Fiscal measures, adapted as needed, and monetary policy support will be key to foster a sustainable recovery. The opportunity should be seized to foster digitalisation and accelerate the shift to an environmentally sustainable economy.
- Getting people back to work in good-quality jobs and supporting low-income households following the COVID-19 crisis require implementation of short-term incentives and measures to support job search, training and childcare.
- A close trading relationship with the European Union and other countries, particularly with high access for services trade including financial services, would support the recovery.

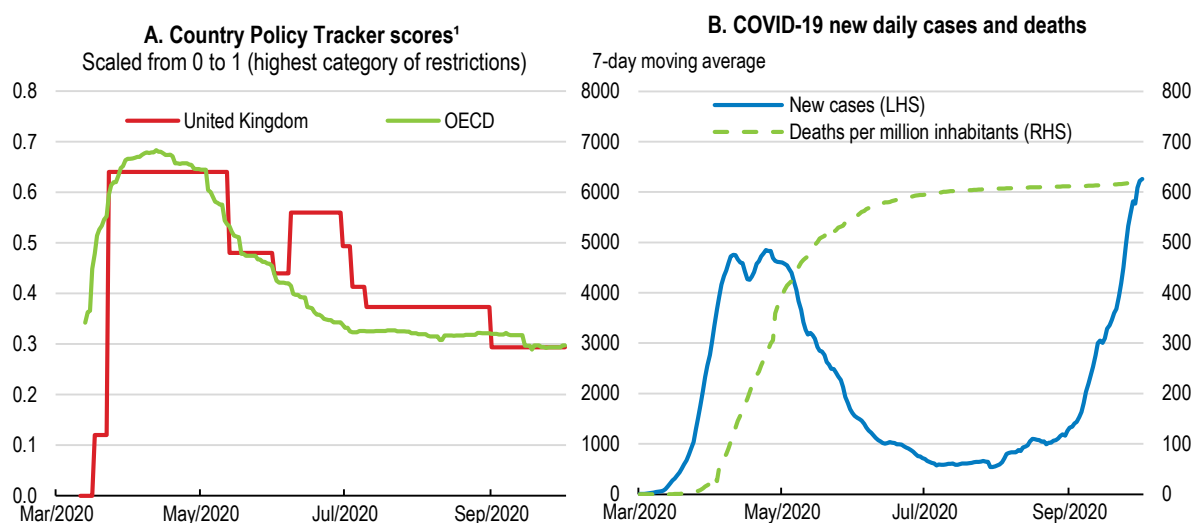
The COVID-19 crisis is having a major social and economic impact

Like most countries, the United Kingdom had to face a major health emergency and responded by imposing measures to contain the spread of COVID-19. These necessary measures have succeeded in slowing the spread of infections and reducing the death rate, but have resulted in large short-term economic disruptions and job losses, compounded by falling confidence. In addition, while the crisis hit many economies in a period of solid growth, growth in the United Kingdom had been relatively sluggish since the 2016 Brexit Referendum on the UK's membership of the European Union as a result of lower investment and high uncertainties.

The United Kingdom was significantly affected by the COVID-19 pandemic

The COVID-related death toll has been high, with the number of daily confirmed deaths peaking in mid-April (Figure 1.2). Transmission within the United Kingdom was first documented on 28 February. Since containment measures were implemented on 23 March, the infection rate fell to a low level. However, infections have risen again from August and new restrictions were introduced in September.

Figure 1.2. Containment measures slowed the spread of cases



1. The OECD COVID-19 Country Policy Tracker score is an index averaged across five containment policy components and scaled from 0 (no restriction) to 1 (highest category of restrictions). The containment policies include domestic quarantine and movement restrictions; travel restrictions; closure of educational facilities; closure of public events and places; and obligatory closure of economic activities.

Source: OECD calculations based on OECD Key country policy tracker <https://www.oecd.org/coronavirus/country-policy-tracker/> and European Center for Disease Prevention and Control (ECDC) through Our World in Data.

StatLink  <https://stat.link/cs0ih6>

The virus has had a proportionally higher impact on the most deprived areas (ONS, 2020a). From March to mid-April, the coronavirus-related death rate for the most deprived area was 118% higher than for the least deprived area. The virus has been more deadly for people aged 80 and above and for men (Public Health England, 2020). Among the most affected were people in nursing homes. People of black African, Asian and minority ethnic origin have also experienced higher COVID-19 related death rates (ONS, 2020b). Only part of the differences between ethnic groups in COVID-19 mortality can be explained by socio-economic disadvantages and occupational exposure (ONS, 2020b; Platt and Warwick, 2020).

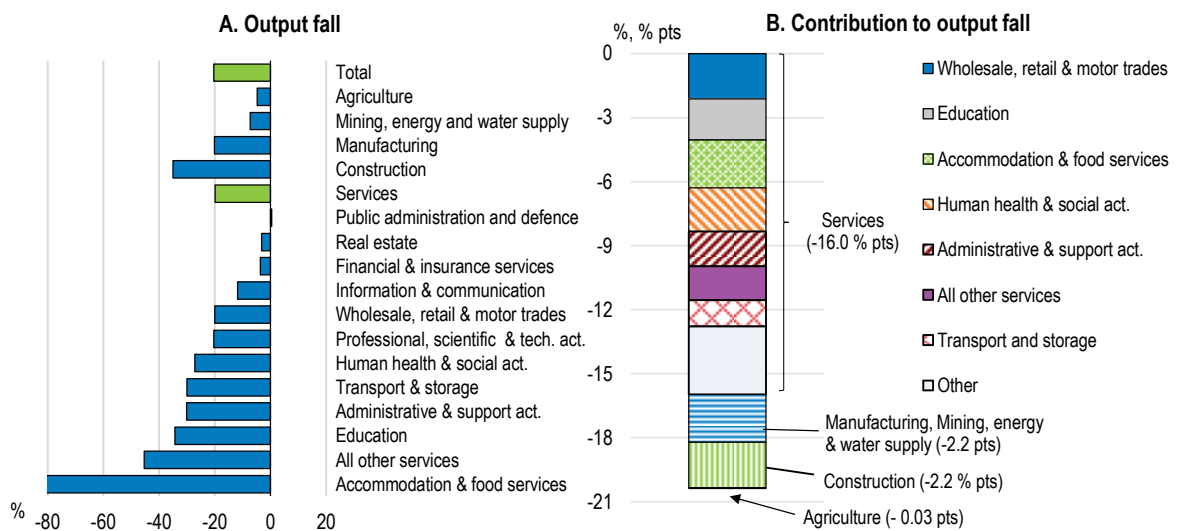
COVID-19 has underlined existing pressures in social care, particularly for the elderly. These services are largely delivered through local authority budgets but have placed an increasing burden on the NHS and on informal, family carers. At the same time, population ageing has increased demand for social care services. Unmet need for social care services affects hospital bed use, with a significant proportion of delayed patient discharges caused by the unavailability of social care services (NHS England, 2019). In the four nations of the United Kingdom, short-term funding injections have been regularly provided to local Councils to finance care services. Additional funding for adult social care has been granted to tackle COVID-19 pressures. However, the additional funding has been piecemeal, limiting the ability to plan and to build capacity in the care provider market (Cromaty, 2019).

The COVID-19 crisis has hit some sectors disproportionately

Containment measures shut down production in specific sectors, notably service sectors which require face-to-face interactions, such as the hospitality sector, or were subject to travel restrictions such as air transportation (Figure 1.3). The lockdown measures led to a dramatic drop in activity in the UK property market. Other services, where face-to-face interactions are less critical and where teleworking is possible, have not been affected to the same extent. This is the case of the information and communication industry, where 53% of employees reported having worked from home in 2019, as opposed to only 10% of employees in the accommodation and food services industry (ONS, 2020c). Heightened uncertainty and depressed confidence amplified the direct impacts of lockdown measures on spending and production.

Figure 1.3. Output fell dramatically, especially in some services sectors

Sectoral breakdowns of GDP, growth rates and contributions to output fall, April to June 2020



Note: Based on rolling three-month estimates. GDP from April to June 2020 compared with GDP from January to March 2020. Growth for aggregate sub-sectors is a weighted average of components. Component contributions may not sum exactly to the total.
 Source: ONS (2020), "GDP monthly estimate, UK: June 2020", August.

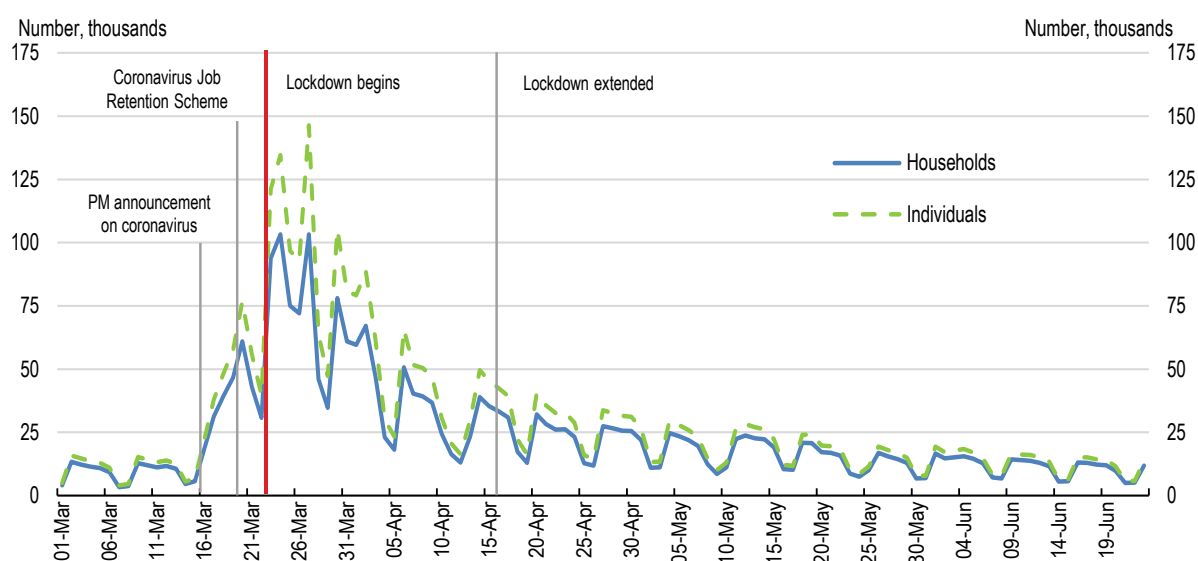
StatLink <https://stat.link/u1fmer>

Many workers have been furloughed or lost their jobs. About 19% of the workforce of firms which continued trading was furloughed by late June/early July, with the proportion reaching 64% in arts, entertainment and recreation and 45% in accommodation and food services. Only a small proportion of the workforce has so far returned from furlough after restrictions eased (HM Revenues and Customs, 2020). New claims for Universal Credit, a single means-tested benefit for low-income people, which consolidates and simplifies the pre-existing system of benefits and tax credits, surged when containment measures were announced, signalling the extent of job losses (Figure 1.4). Overall, hours worked fell a record 18.4% from January to June (ONS, 2020d).

Increased joblessness, reduced hours, and enforced self-isolation for multiple vulnerable groups have led to an increase in UK food insecurity and growing poverty. A large share of households reported income losses, struggled to pay bills or had to resort to food banks (Figure 1.5). There are signs that the crisis hit vulnerable groups more, exacerbating pre-existing and relatively high inequalities. Employees who were working in occupations with a higher propensity for homeworking were on average more likely to have higher household disposable income (ONS, 2020e; Eliot Major and Machin, 2020). By contrast, low-income and younger earners have been and will be hit the hardest (Adam-Prassl et al., 2020). Increases in welfare spending since March are expected to mitigate some of the rise in inequality.

Figure 1.4. Claims for universal credit surged in March

New declarations for Universal Credit



Source: ONS (2020), "Coronavirus and the latest indicators for the UK economy and society: 2 July 2020".


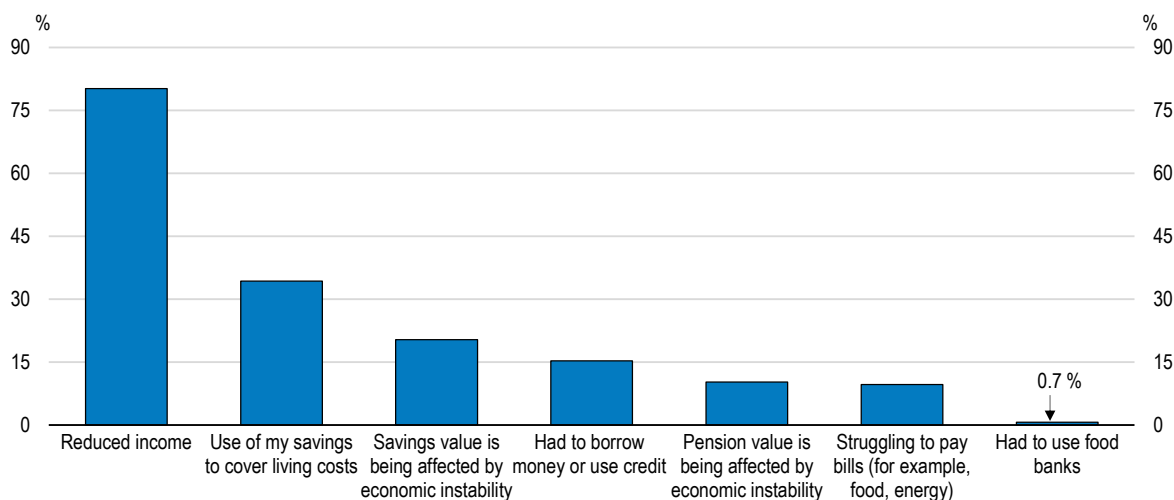
StatLink  <https://stat.link/pin5qv>


Figure 1.5. Most UK households experienced an income reduction in the aftermath of the coronavirus outbreak

Impact of COVID-19 on household finances



Note: Based on ONS Opinions and Lifestyle Survey (COVID-19 module), 4 to 17 May 2020. Respondents were asked to choose more than one option answering a question: "In the past seven days, how have your household finances been affected?"

Source: ONS (2020), "Coronavirus and the social impacts on Great Britain", June.

StatLink  <https://stat.link/78njow>

The COVID-19 shock led to market tensions but banks have proved resilient so far

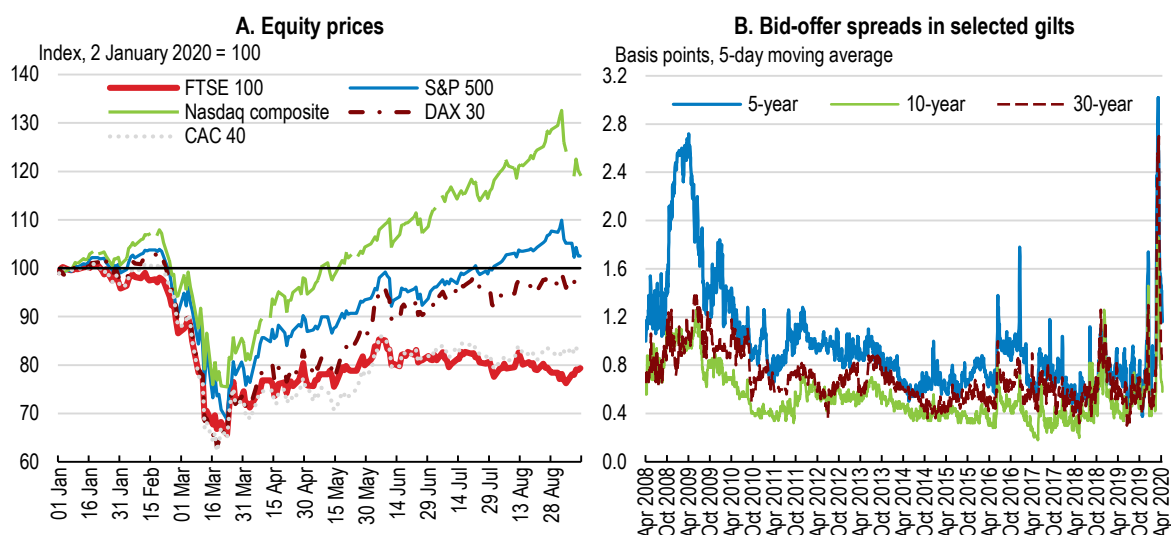
Financial markets reacted to the COVID-19 shock in early March, triggering large and sudden price falls across a range of assets and market tensions (Figure 1.6). Money market rates spiked in a sign of serious market dysfunction and bid-offer spreads on gilts also widened considerably. In an unprecedented liquidity injection, the Monetary Policy Committee decided on 19 March to purchase an additional GBP 200 billion gilts and corporate bonds, later expanded by a further GBP 100 billion, and on 24 March decided to lend unlimited amounts of sterling at close to Bank Rate, against a broad range of collateral in the Contingent Term Repo Facility (CTRF) (Cunliffe, 2020). Gilt markets have since normalised but financial asset prices have only partly recovered.

Banks have weathered the COVID-19 crisis well so far, entering with Regulatory Tier 1 Capital ratios twice as high as before the financial crisis (Figure 1.7, Panel A). Net lending to the corporate sector spiked to over GBP 30 billion in March, up from an average of just over GBP 1 billion per month over the past three years, as companies drew down existing facilities to boost liquidity. Stress tests suggest that bank capitalisation will stay well above regulatory requirements as the crisis and aftermath unfold (Bank of England, 2020a). Timely and sizeable liquidity support to the private sector has been important to avoid unnecessary bankruptcies. However, substantial losses could still be expected as the economy remains weak and many firms have suffered from a sharp loss of income.

Going into the crisis, the household debt-to-disposable income ratio was around the OECD average, after having fallen since 2007 (Figure 1.7, Panel B), with historically low servicing costs. Growth in consumer credit had also come down and corporate debt to GDP was slightly below the OECD average. Macroprudential recommendations on mortgages in place since 2014 have helped dampen housing price growth and debt accumulation. These include recommendations that most new loans should be less than 4.5 times the borrower's income (DTI) and that lenders stress-test new loans to ensure they would also be affordable if interest rates were to rise. Even though risks to financial stability from the mortgage market

seem to be limited at the current juncture according to the Bank of England, the macroeconomic risk that leveraged households reduce consumption as unemployment increases remains (Bank of England, 2019 and 2020b). A plunge in construction activity during the crisis has exerted a drag on GDP, and may accentuate long-standing housing shortages and affordability concerns.

Figure 1.6. Stress in financial markets has eased



Source: Calculations based on Refinitiv and Bank of England (2020), "Interim Financial Stability Report", May.

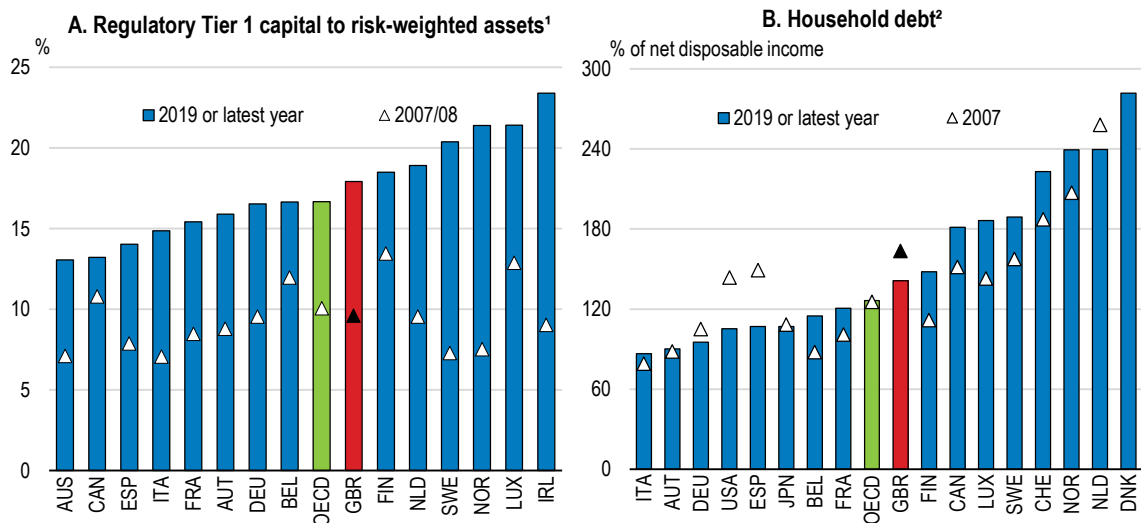
StatLink  <https://stat.link/cak62b>

Some households will experience difficulties having been furloughed or lost their jobs, despite increased savings in the household sector as a whole. The Bank of England (2020a) estimates that the proportion of households with high debt servicing costs compared to their income could increase from around 1% in 2019 to around 2% at the height of the current crisis. Interest- and down payment- holidays will help in the short term, but some households may struggle to service their debt at a later stage.

Table 1.1. Past recommendations on macroprudential policies and financial markets regulations

Recommendations in previous Surveys	Actions taken and current assessment
Introduce debt-to-income ratios for borrowers depending on their exposure to shocks.	In 2015 HM Treasury legislated to give the Financial Policy Committee (the UK macroprudential authority) with powers of direction over debt-to-income ratios for mortgage lending. In June 2014, the FPC made the following Recommendation (14/Q2/2): The Prudential Regulation Authority (PRA) and the Financial Conduct Authority (FCA) should ensure that mortgage lenders do not extend more than 15% of their total number of new residential mortgages at loan to income ratios at or greater than 4.5. This Recommendation applies to all lenders which extend residential mortgage lending in excess of GBP 100 million per annum. The FPC reviewed this Recommendation in December 2019 and decided not to amend the calibration.
Consider higher leverage ratios for global systemic banks to complement risk-weighted capital ratios.	The FPC implemented higher leverage ratio buffer requirements for global systemic banks in 2016 and for domestic systemic banks in 2019.
Encourage the development of new credit providers and gradually extend regulatory instruments beyond the banking sector.	The Government launched Open Banking in 2018 and made refinements to the regulatory regime for alternative finance providers.
Collect and share credit information on businesses through credit reference agencies or directly through the regulator.	The Commercial Credit Data Sharing scheme, which went live in 2017, improves credit access for SMEs. The largest UK banks are required to share data on their SME customers with designated credit reference agencies.

Figure 1.7. Capital buffers and macroprudential caution have increased resilience



1. 2008 data are used for countries with no available data in 2007. Unweighted average of 32 countries.

2. Includes non-profit institutions serving households. Unweighted average of 31 countries for the OECD aggregate.

Source: OECD (2020), OECD National Accounts Statistics (database) and IMF (2020), IMF Financial Soundness Indicators Database.

StatLink  <https://stat.link/7riosv>

A range of policy interventions have encouraged banks to keep lending and helped firms to borrow. The Financial Policy Committee responded to the crisis by reducing the countercyclical buffer from 2% to 0% and communicating clearly that existing buffers are meant to be used to support lending in the current situation. Large-scale government guaranteed loan facilities have played an important role in allowing banks to lend to the corporate sector without tying up regulatory capital. In the COVID Corporate Financing Facility (CCFF), the Treasury lends via the Bank of England to predominantly large companies that had investment grade rating before the crisis. Private banks lend to SMEs with Government Guarantees under the Bounce Back Loan Scheme (BBLs) and the Coronavirus Business Interruption Loan Scheme (CBILs), and to larger enterprises under Coronavirus Large Business Interruption Loan Scheme (CLBILs). The Bank of England's Term Funding scheme with additional incentives for SMEs (TFSME), provides a cost-effective source of funding for banks and building societies to support additional lending to the real economy, particularly SMEs (Bank of England, 2020). Monitoring the situation carefully, and gradually reducing state guarantees on new lending is needed to return to prudent credit standards. Improving credit standards is necessary to allow structural change to go ahead, and a mechanism to quickly resolve bad debt covered by state guarantees should be put in place to speed up such reallocation.

Activity is set to reach pre-crisis levels only gradually

The initial downturn was more severe in the United Kingdom than in most OECD countries, reflecting that it was hit hard by the virus and had to keep the lockdown in place for a relatively long time, its higher reliance on service sectors and its integration in the world economy. The projections assume that sporadic local outbreaks will continue, but that these will be addressed by targeted local interventions and less stringent policies than national lockdowns. It further assumes that the United Kingdom smoothly leaves the EU Single Market and Customs Union at the end of 2020 to enter a Free Trade Agreement (Table 1.2).

GDP is projected to decline by 10% in 2020. While many activities fell sharply during lockdown, some have since picked up substantially as lockdown measures have eased. Nevertheless, overall demand is set to remain well below previous levels in the coming quarters. Consumer-facing sectors remain disrupted and

business and consumer confidence depressed with high joblessness uncertainty about the evolution of the pandemic. Economic measures to tackle the crisis and the sharp fall in revenues will lead to a large fiscal deficit. Uncertainties are high around epidemiological developments and how the virus will spread in the next few months, and a scenario where a second wave of contagion imposes stricter restrictions than envisaged cannot be ruled out.

The COVID-19 crisis is likely to reduce productivity and employment for several years, although the extent is hard to gauge. Scarring effects are likely to affect long-term output significantly, as job losses have been massive, firms have held back investment and many will exit the crisis with a debt overhang (Demmou et al., 2020). Demand in some sectors, such as tourism, may be lower for a long time. An unwinding of global value chains would further hamper efficient resource reallocation. However, the crisis may also trigger shifts in production process and working arrangements towards more teleworking. Consumer preferences could also change permanently, accentuating the transition in retail towards greater use of e-commerce and the digital delivery of services.

Table 1.2. Short-term economic projections

Annual percentage change, volume (2016 prices)

	2016 Current prices (billion GBP)	2017	2018	2019	Projections	
					2020	2021
Gross domestic product (GDP)	1,995.5	1.9	1.3	1.5	-10.1	7.6
Private consumption	1,299.1	2.2	1.6	1.0	-9.2	10.2
Government consumption	381.5	0.3	0.4	3.4	-6.9	6.4
Gross fixed capital formation	343.7	1.6	-0.2	0.7	-16.4	5.5
Total domestic demand	2,027.8	1.2	1.3	1.6	-11.7	8.2
Exports of goods and services	567.5	6.1	1.2	5.0	-12.4	1.4
Imports of goods and services	599.8	3.5	2.0	4.6	-16.9	4.0
Net exports ¹	-32.3	0.7	-0.3	0.1	1.6	-0.8
<i>Other indicators (growth rates, unless specified)</i>						
Employment		1.0	1.2	1.1	-1.1	-2.5
Unemployment rate (% of labour force)		4.4	4.1	3.8	5.3	7.1
Consumer price index (harmonised)		2.7	2.5	1.8	0.8	0.7
Core consumer prices (harmonised)		2.3	2.1	1.7	1.2	0.8
Household saving ratio, gross (% of disposable income)		5.3	5.8	5.8	17.5	4.7
Current account balance (% of GDP)		-3.5	-3.9	-4.0	-3.3	-4.0
General government financial balance (% of GDP)		-2.4	-2.2	-2.2	-15.2	-8.4
General government gross debt (% of GDP) ²		119.9	116.6	116.2	138.2	140.1
General government net debt (% of GDP) ²		85.4	82.3	81.8	103.9	105.8
Public sector net debt (% of GDP) ³		82.9	82.4	80.7		
Three-month money market rate, average		0.4	0.7	0.8	0.5	0.4
Ten-year government bond yield, average		1.2	1.5	0.9	0.4	0.3

1. Contribution to changes in GDP.

2. Projections for 2019.

3. Based on Office for Budget Responsibility (OBR). It is defined as public sector's consolidated gross debt, less its liquid assets. Data refer to the fiscal year. For example, the year 2019 corresponds to 2018-19.

Source: OECD (2020), OECD Interim Economic Outlook: Statistics and Projections (database), September and Office for Budget Responsibility, April 2020.

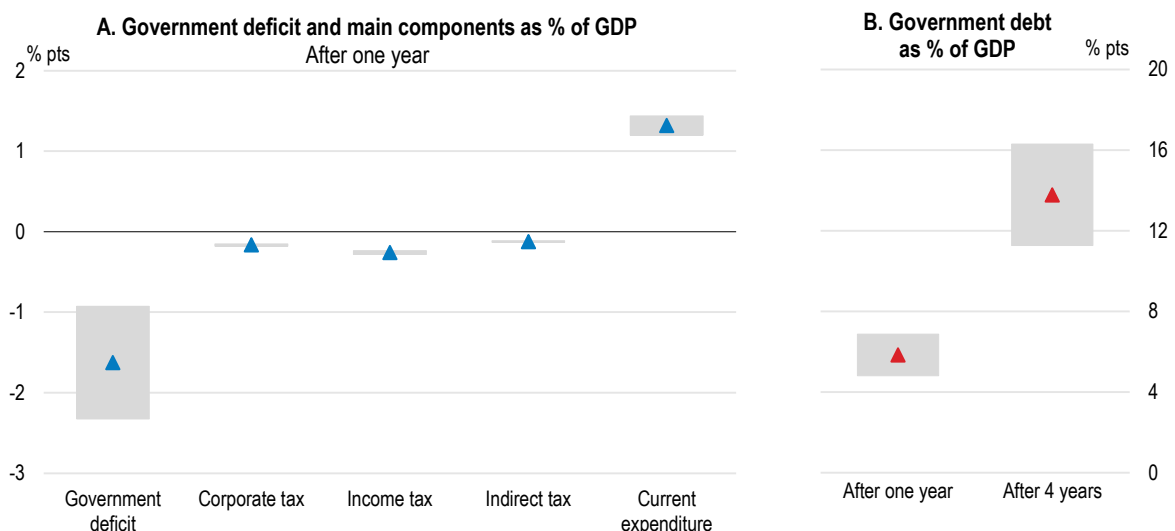
The main risks facing the economy are uncertainty related to the future course of the COVID-19 crisis, including the development of a vaccine and the effectiveness of confinement strategies, and its economic impact together with risks around exit from the EU Single Market at the end of 2020. A failure to provide credit to capital-weak small enterprises would result in higher business failures and unemployment, while a large fall in house prices might weigh on banks' capital buffers and reduce their lending capacity at a critical time. Other risks relate to the international trade and financial environment. As an open economy deeply integrated in global value chains, the United Kingdom would be affected markedly should tariffs and/or non-tariff barriers increase. The United Kingdom is also exposed to risks in financial markets given high asset valuations and indebtedness globally.

A disorderly Brexit as the result of a failure to conclude a Free Trade Agreement before the end of 2020 would have a strongly negative effect on trade and jobs and entail physical and financial disruptions. The transitional impacts of a hard Brexit are estimated to be of the order of 4-5% of GDP after 2 years (Bank of England, 2018; OBR, 2019). Assuming no fiscal response and based on the macro-economic assumptions underlying the OBR fiscal stress test, the government deficit would deteriorate markedly, as tax revenues decline and spending, notably in the form of unemployment benefits, increases (Figure 1.8). Automatic stabilisers would offset some of the downturn but only marginally. The ratio of public debt as a percentage of GDP could rise between 4.8 and 6.8 percentage points after one year. Such a situation would likely be transitory, as the United Kingdom has indicated it will seek out WTO-consistent regional agreements with its main trade partners.

A disorderly Brexit would affect UK sectors differently in the medium term. OECD simulations using the METRO model suggest that motor vehicle and transport, meat and textile sectors would be the most affected, with exports falling by over 30% (Figure 1.9). However, minimising barriers to services trade and investment should be a priority, given the importance of services in the UK economy and the integration of services in supply chains in other sectors.

Figure 1.8. The fiscal position would deteriorate markedly further in the event of a no-deal exit

Difference to a remain baseline, percentage points



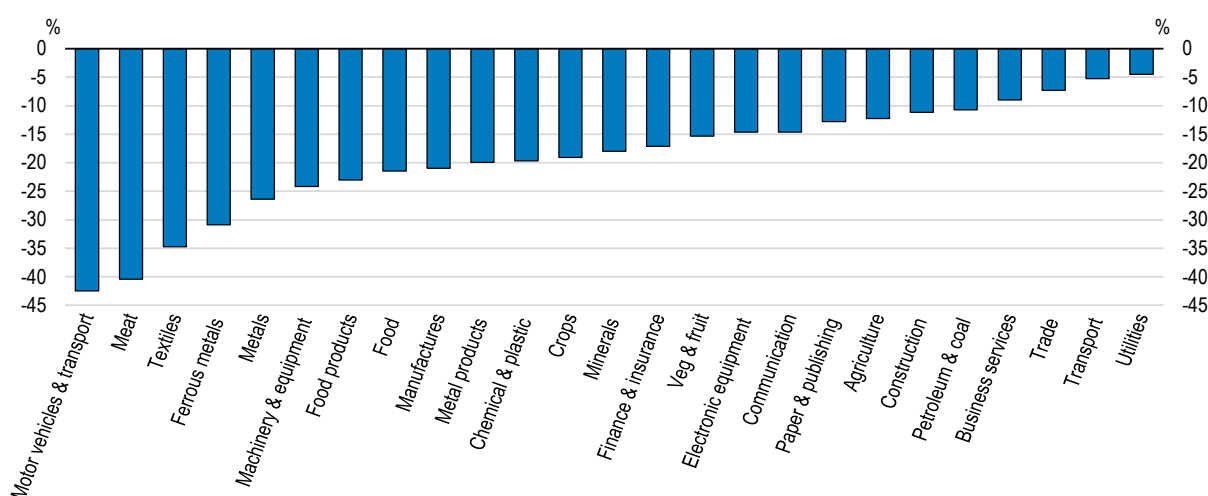
Note: The computation replicates the GDP impact of no-deal scenario used in the OBR fiscal stress tests. Assumptions on customs duties, fuel duties, national insurance contributions, property transaction and capital taxes are taken from OBR (2019). Confidence bands are computed using different assumptions on monetary policy reaction and on whether automatic stabilisers are free to operate. The model accounts for the feedback effect between output and public finances and uses the fiscal elasticity estimated in Price, Dang and Botev (2015).

Source: Calculations using UK fiscal model.

StatLink  <https://stat.link/txrbz>


Figure 1.9. A no deal would predominantly affect manufacturing industries

% reduction in exports compared to a remain baseline in the medium term



Note: The METRO model is a computable general equilibrium model (CGE) and is described in detail in Arriola et al. (2020). The simulations represent medium-term shocks where production factors are mobile, but there is no capital accumulation. The estimate for Finance & insurance imperfectly captures the true impact and is probably a lower bound.

Source: OECD METRO model.

StatLink  <https://stat.link/zc4t8n>

Managing the risks of a disorderly Brexit

The COVID-19 crisis would further complicate the management of a disorderly Brexit. Firms have diverted attention away from Brexit and towards the crisis, likely reducing preparedness, although some, in particular in service sectors with stringent regulations, had advanced preparation in the run-up to a potential no-deal in 2019. Evidence suggests that, as of June 2020, more than half (61%) of British businesses had made no preparation for leaving the EU Single Market (House of Commons Northern Ireland Affairs Committee, 2020). Containment measures have negatively affected firms' balance sheets and reduce the resources available to them to invest in new systems, staff and training. Many businesses, for instance in pharmaceutical industries, have run down stockpiles to mitigate the disruption in supply chains caused by the coronavirus (House of Commons Committee on the Future Relationship with the European Union, 2020).

According to the European Central Bank and the European Commission, financial firms have started to take a number of necessary steps to prepare for an absence of agreement in the short term, although it remains crucial that banks and other participants use the remaining time to implement their EU exit plans so they are prepared to changes in the regime after the transition period (European Central Bank, 2020; European Commission, 2020). The United Kingdom has put in place a temporary permission regime for EU passporting firms and investment funds operating in the United Kingdom, which should help smooth the transition. A number of Memoranda of Understanding have also been signed to allow certain financial activities to continue and minimise disruptions in the event of a no-deal exit.

Policies can help mitigate the economic damages in case of a no-deal exit. Introducing trade facilitation measures would help firms' adjustments to new trade relations. Disseminating information on future border procedures, through the existing online information portal, will allow firms to prepare and adapt their operating systems. The Government needs to anticipate which type of support would be needed at the end of the year and factor it into any economic package to support the recovery. The focus should be on preparing small firms which lack resources and access to information, and on firms that have been made fragile by the COVID-19 crisis. Options include adopting a consistent approach to customs declarations

and border processes across all ports of entry (including on temporary storage facilities) and setting out a regulatory framework that allows systems already in place in UK Customs and other border agencies to continue coordinating and sharing information. The Government should communicate on which of the measures prepared in 2019 would be put in place.

Moving from crisis management to recovery

In the aftermath of the COVID-19 outbreak, the Government moved quickly to put in place a package of emergency measures in the March 2020 Budget to preserve existing businesses and jobs, and support incomes (Box 1.1). Soon after, the Government put in place a substantial set of economic measures, amounting to 5.5% of GDP in discretionary spending, to support businesses and households. This has helped mitigate the economic impact of lockdown measures and the virus outbreak. As conditions develop, policy support should be available as long as needed, while ensuring that it encourages firms and jobs moving towards activities with the best prospects.

Large-scale effective “tracking, tracing and testing” (TTT) programmes constitute an essential part of a successful strategy as long as no vaccine or treatment is available. The Government has committed GBP 10 billion (0.5% of GDP) to finance such a programme in the United Kingdom. This is key to suppress local outbreaks and contain the spread of the virus by testing more people to identify who is infected; tracking and isolating them to make sure they do not spread the disease further; and tracing others they have been in contact with (OECD, 2020a). In event of a further general virus outbreak later in the year, such programmes would allow to apply more targeted measures than in the first outbreak, limiting the economic fallout of a new lockdown.

The Government moved to a second phase of support in the July 2020 Plan for Jobs with a package that extends some existing measures, winds down others and introduces new measures targeted at getting back to work and supporting demand. Additional measures were announced in the Winter Economic Plan in September. Further support and adaptation of policies may be needed depending on epidemiological and economic developments. Policy support should not hinder the reallocation of resources, which will be essential to foster productivity. Monetary policy should remain very accommodative and ensure that interest rates remain low to prevent the crowding out of private spending.

Box 1.1. Containment and economic response to the outbreak of coronavirus

An economy-wide lockdown was introduced on 23 March. All social events and gatherings were banned, and all shops selling non-essential goods were closed. The Government announced a gradual easing of restrictions in England on 13 May. A second phase saw the reopening of non-essential retail stores on 15 June. It was followed by the hospitality and part of the entertainment sectors in July. Since national restrictions were eased, local restrictions have been put in place to manage outbreaks in Leicester and the Greater Manchester area amongst others. The Government responded to an increase in new cases by implementing a general limit on six people meeting for social gatherings from 14 September. Further measures announced 22 September included advice to telework when possible, tighter rules on the use of face coverings, limiting opening hours for restaurants and pubs and strengthening enforcement.

In Budget 2020, the UK Government committed over GBP 6 billion (0.3% of GDP) of new healthcare funding over this Parliament. The health system was scaled up, doubling the number of critical care beds within a month and expanding its testing and tracing capacity, which has helped keep the health crisis under control.

The Government put in place a substantial set of economic measures, corresponding to 5.5% of GDP in discretionary spending, to support businesses and households (Table 1.3). The Coronavirus Job Retention

Scheme has provided employers with grants to pay 80% of the wages of furloughed employees up to a cap of GBP 2500. In addition, the self-employed can receive a taxable grant of up to 80% of their previous earnings over the past three years. The Government also temporarily increased basic unemployment support, raising levels of net income that a worker maintains when falling out of work from 56% to 63%.

Support has also been targeted directly to firms. The Government has waived business rates, a tax charged on most non-domestic properties, for the whole of 2020-21 for most businesses in the retail, hospitality and leisure sectors. Grants have been made available to businesses, with eligibility depending on the rateable value of the properties they occupy, their sector and other factors. Furthermore, GBP 40 billion of tax deferrals have been set aside. The GBP 330 billion COVID Corporate Financing Facility, run jointly with the Bank of England, provides state loans and guarantees for businesses affected by the crisis. However, co-financing requirements of 20% limit the take-up among smaller businesses.

Monetary policy has further eased in the context of increased market stress. The Bank of England cut interest rates from 0.75% to 0.10% and announced an increase of its bond-purchasing programme by GBP 200 billion (9% of GDP), to a total of GBP 645 billion. The programme was expanded in June by an additional GBP 100 billion through December. The Bank of England reduced the counter-cyclical capital buffer to preserve banks' capacity to lend to households and firms.

Additional measures were announced in the Plan for Jobs for a total amount of 0.9% of GDP (Table 1.4). They include a new Job Retention bonus to encourage employers to bring furloughed employees back to work, a wage-subsidy scheme (Kickstart Scheme) targeted on 16-24 year olds, who are claiming Universal Credits, an increase in the number of work coaches, a temporary cut in VAT rates for the hospitality and the tourism sectors, a temporary cut in the stamp duty on residential transactions, a 'Eat Out to Help Out' grant and a GBP 3 billion package to retrofit homes and decarbonise public buildings.

Table 1.3. Main measures of the emergency package and fiscal costs

GBP billions, 2020-21

Spending		Fiscal costs (GBP billion)	% of GDP
Public spending		18.8	0.8
Employment support			
	Job Retention Scheme	52	2.3
	Self employed	15.2	0.7
Welfare support		8	0.4
Support to firms			
	Small businesses grants	14.8	0.7
	Business rate holiday	12.2	0.6

Source: OBR Monitoring policy database, 14th July. <https://obr.uk/coronavirus-analysis/>

The Job Retention Scheme is being gradually phased out and will close on 31 October. The new Job Support Scheme will open on 1 November. It is designed to protect viable jobs in businesses who are facing lower demand over the winter months due to COVID-19 and to help keep their employees attached to the workforce. Under the scheme, the Government will pay a third of hours not worked up to a cap, with the employer also contributing a third, and employees will need to work a minimum of 33% of their usual hours. The scheme is targeted to small and medium-sized firms, and large firms whose turnover has fallen during the pandemic.

Table 1.4. Main measures of the Plan for Jobs and additional measures

GBP billions, 2020-21

Spending	Fiscal costs (GBP billion)	% of GDP
Plan for Jobs	19.8	0.9
Job retention bonus	6.1	0.3
Kickstart scheme	0.7	0.0
Boosting worksearch, skills and apprenticeships	1.6	0.1
Reduced rate of VAT for hospitality, accommodation and attractions	2.5	0.1
Eat out to help out	0.5	0.0
Infrastructure package	4.0	0.2
Public sector and social housing decarbonisation and green homes grants	3.1	0.1
Stamp Duty Land Tax temporary cut	1.3	0.1
Other measures	30.4	1.4
Additional health spending	25.1	1.1
Local Government	1.5	0.1
Other measures	3.8	0.2

Source: OBR Monitoring policy database, 14th July. <https://obr.uk/coronavirus-analysis/>

The speed and strength of the recovery from the COVID-19 crisis will largely depend on a rebound of the service sectors that have been hit hard by the crisis, and higher productivity will play a key role in the recovery. UK productivity growth has underperformed in recent years compared to past business cycles and to developments in other OECD countries (Chapter 2). Leaving the EU Single Market is also expected to dampen productivity in some sectors (Chapter 2). The digitalisation of the economy offers an opportunity to revive productivity growth, but requires a whole-of-government approach combining actions in a range of areas: raising investment rates and enhancing skills. Policy measures as set out below will be key to support growth and inclusiveness, given the effects of the COVID-19 crisis and of leaving the EU Single Market on the supply side of the economy.

Monetary policy has eased

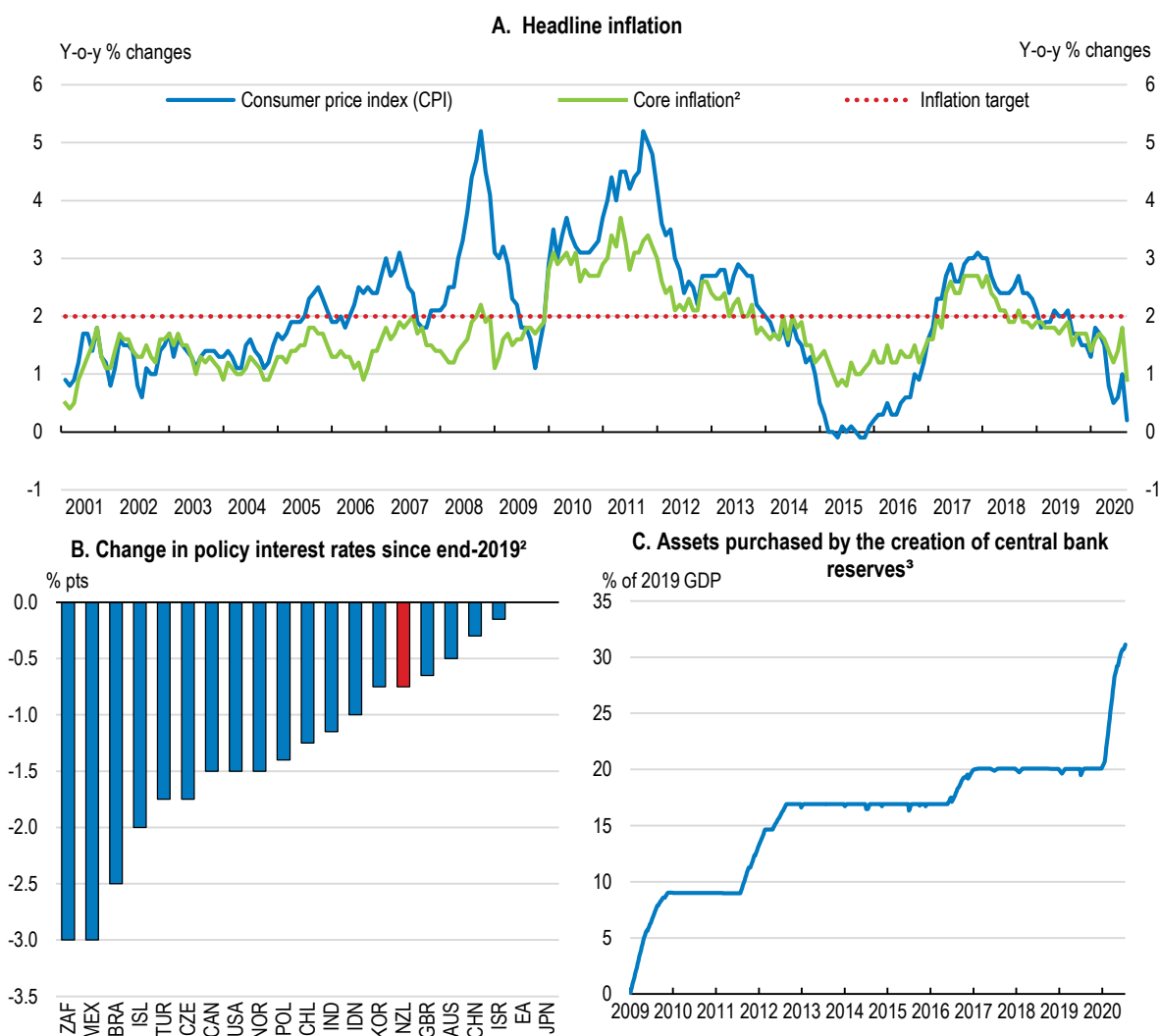
Monetary policy has further eased since the start of the pandemic in the context of increased financial stress (Figure 1.10). The Bank of England cut interest rates and expanded its bond-purchase programmes. While important to avoid a deterioration in financial conditions, these exceptional measures are not likely to raise borrowing or demand much (OECD, 2020b).

The monetary and fiscal authorities have worked together in some areas. HM Treasury and the Bank of England agreed to temporarily extend the Ways and Means overdraft facility, but at the time of writing, the Government has not made use of the extended facility. Those arrangements are consistent with the law and were used in early 2009. At that time, the Treasury made a small and short-lived drawing on the Ways and Means facility, increasing the advances for three months from GBP 370 million to nearly GBP 20 billion (1% of GDP) at the peak.

Current very low interest rates create substantial headroom if maintained (Blanchard, 2019; OECD, 2016). Despite the sharp rise in the public debt-to-GDP ratio, the UK Government is borrowing at negative rates for horizons of up to three years and can currently borrow at 50-year maturities for less than half a per cent annually. The Debt Management Office is planning to raise a minimum of GBP 385 billion from April to November 2020 through the issuance of conventional and index-linked gilts. The United Kingdom has a large share of its public debt has a very long maturity. In March 2020, 42% of the debt portfolio had a long

maturity (over 15 years), 21% an ultra-short maturity and the average maturity of gilts and T-bills was 15 years. Locking in the low rate with long-term borrowing to finance the emergency spending will help lower the sensitivity of public debt to an increase in interest rates in the medium to long term.

Figure 1.10. Monetary policy has eased




1. Excludes energy, food, alcohol and tobacco.

2. Between end-2019 and 1 October 2020.

3. On a settled basis. The first data point refers to 12 March 2009 and the last point refers to 23 September 2020.

Source: OECD (2020), Economic Outlook: Statistics and Projections (database), ONS (2020), Inflation and price indices (database), and Refinitiv.

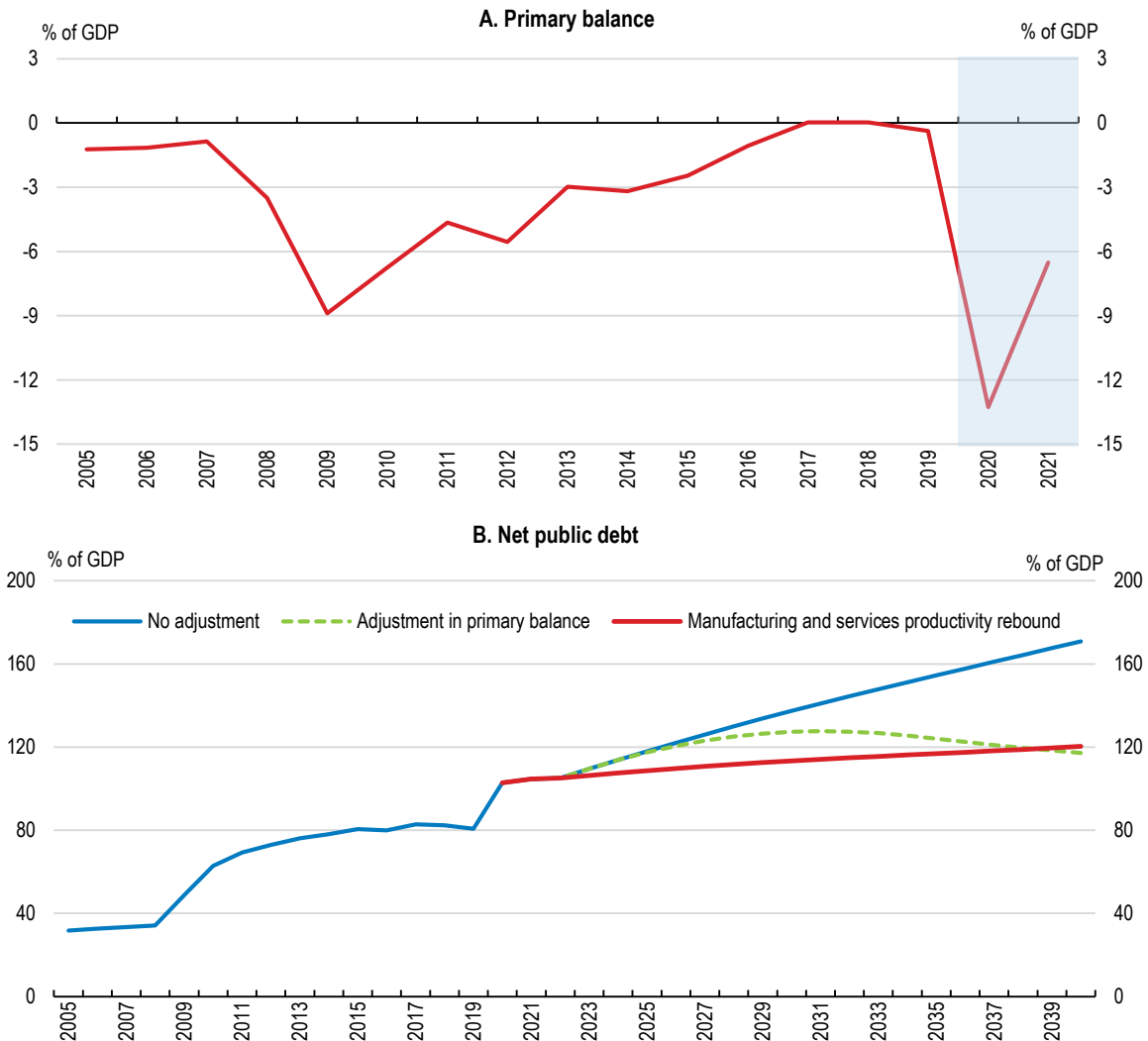
StatLink  <https://stat.link/wt2q1e>

Fiscal policy should support the recovery

Given the unprecedented nature of the crisis and the large uncertainties regarding future prospects, fiscal policy will have to remain agile and to adapt swiftly to changes in the economic environment. At the start of the health crisis, the priority was to provide emergency support measures for workers and firms, together with health measures. In the recovery phase, a sizeable fiscal stimulus is warranted to boost anaemic

growth, likely over several years. Once the recovery is firmly established, addressing the remaining structural deficit and putting the public debt-to-GDP ratio on a downward path should come to the fore.

Figure 1.11. The emergency package and the fall in GDP will raise the public debt-to-GDP ratio



Note: The "No adjustment" scenario has been derived using the OBR measure for net public debt for historical data and OECD Interim Economic Outlook data. It accounts for ageing costs. The primary balance is assumed to stay constant in terms of GDP after 2021. In this scenario, productivity is assumed to grow at rate experienced since the financial crisis, and the nominal interest rate would stay constant. The "Adjustment in primary balance" scenario assumes that the primary balance improves by 0.5% of GDP per year over 2025-2035 and remains unchanged after 2035. The "Manufacturing and services productivity rebound" scenario assumes no adjustment in the primary balance and that productivity growth in the service sector will rebound to 2% and to the 1995-2005 average in manufacturing.

Source: OECD (2020), OECD Interim Economic Outlook database and calculations using data from Office for Budget Responsibility (OBR) and OECD (2020), OECD Economic Outlook: Statistics and Projections (database).

StatLi <https://stat.link/e594c1>

The public finances have supported the economy through discretionary spending and tax measures and the automatic stabilisers. In the March 2020 Budget, before the impact of COVID-19 became clear, the Government was running an ongoing deficit that would broadly stabilise the public debt-to-GDP ratio over the medium term rather than reduce it (OBR, 2020). As the extent and the severity of the pandemic became clearer, policies have been redirected with an emergency package, estimated at around 5.5% of GDP. Additional measures announced in the Plan for Jobs in July will increase public spending corresponding

0.9% of GDP. A temporary VAT rate cut from 20% to 5% was announced to support the hospitality and tourism sectors, with an estimated fiscal cost of GBP 2.5 billion (0.1% of GDP). This could shape consumers' expectations and encourage them to consume. But the final impact on consumption remains uncertain in a context where many firms are financially constrained and may increase their margins. From a political economy point of view, VAT cuts are often difficult to revert once the situation normalises. There are also more transparent instruments to support struggling sectors. For instance, the cash transfer ('Eat Out to Help Out') scheme announced in July, although small in scale is probably a more transparent way to support these sectors. Take up for the scheme has been higher than expected, and helped to support restaurant booking during the Summer. Measures were complemented by the Winter Economic Plan. The plan introduced the new Job Support Scheme and the SEISS Grant Extension, and also included more flexibility in loans repayments and extended the VAT cut for the hospitality and tourism sectors to March 2021.

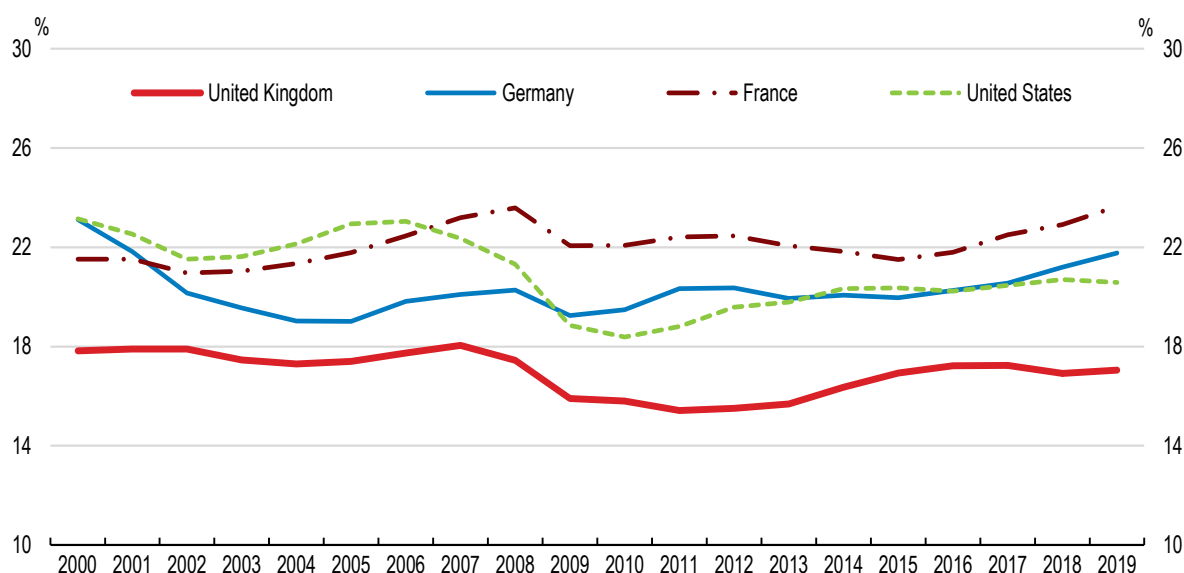
The deterioration in public finances in the current year will be offset to some extent in 2021 by a cyclical budget improvement and the scaling down of emergency measures. Still, based on policies announced prior to the Plan for Jobs, public debt would be around 20 percentage points higher in 2021 than in 2019. Over the longer term, the COVID-19 crisis will likely leave a structural budget deficit that would need to be narrowed or closed to stabilise the public debt-to-GDP ratio, albeit at a high level by historical terms. Raising productivity growth, in particular in the service sectors, would bring significant output gains but further policy measures will be needed to bring the public debt ratio onto a declining path (Figure 1.11).

Strengthening investment

Stronger public investment should play a key role in boosting demand in the short term and addressing the sluggish private and public investment of recent years (Figure 1.12).


Figure 1.12. Investment has been lower than in many other leading economies

% of GDP



Note: Investment refers to gross fixed capital formation.

Source: OECD (2020), OECD Economic Outlook: Statistics and Projections (database).

StatLink  <https://stat.link/sguc3x>

Investment in fixed capital has been consistently lower as a share of GDP in the United Kingdom than in the United States, Germany and France. Business investment collapsed after the financial crisis. It

subsequently recovered but markedly slowed after the 2016 Referendum. Firms were around 11 % less likely to increase expected expenditure on IT, vehicles, plants and machinery and on land and buildings in the period after the Referendum (de Lyon and Dhingra, forthcoming). There is increasing evidence that the sluggishness in investment reflects to a large extent Brexit-related uncertainties (Meloninna, Miller and Tatomir, 2018; Bloom et al., 2019). After decades of public under-investment, the Government started to deal with the infrastructure deficit through the Industrial Strategy and set out ambitious plans to remedy shortfalls in network infrastructure (Box 1.2, Table 1.6). Some public investment plans have been accelerated in response to the COVID-19 crisis.

Box 1.2. The Industrial Strategy

Since 2017, Governments have detailed and pursued the implementation of the Industrial Strategy, which regroups a range of measures to foster productivity growth (Table 1.5). Some of the financing has been clarified in recent Budgets. Action plans have been signed in key sectors and four grand challenges have been identified (Artificial Intelligence, Ageing, Green Growth and Future of Mobility) in September 2019. An independent Council oversees and assesses progress in implementation.

Table 1.5. Main elements of the UK Industrial Strategy

Ideas	Places
Raise total R&D investment from 1.7% to 2.4% of GDP by 2027 Increase the rate of R&D tax credit to 12%	Agree local industrial strategies Create a Transforming Cities Fund providing GBP 1.7 billion for intra-city transport Provide GBP 42 million to pilot a Teacher Development Premium
Infrastructure	Business environment
By the end of the Parliament, public sector net investment will be triple the average over the last 40 years in real terms Around GBP 640 billion of gross capital investment by 2024-25 (on average 5.8% of GDP per year) with GBP 88 billion for 2020-21 will be provided for roads, railways, communications, schools, hospitals and power networks across the country	Launch and roll out sector deals. 8 deals have been signed: aerospace, artificial intelligence, automotive, construction, creative industries, life sciences, nuclear, offshore winds and rails Drive over GBP 20 billion of investment in innovative and high potential business including through the establishment of a GBP 2.5 billion Investment Fund Launch a review to identify the most effective actions to improve productivity in small and medium enterprises
People	
Establish a technical education system that rivals the best in the world, invest GBP 406 million in maths, digital and technical education and create a national retraining scheme	

Source: UK Industrial Strategy website: <https://www.gov.uk/government/topical-events/the-uks-industrial-strategy>

The Industrial Strategy is a step in the right direction, which allows to focus on long-term investment planning. It will be important to maintain such a focus and ensure policy continuity. It would be useful to focus action more tightly on a set of core policies that have sufficient scope to deliver sizeable results. Long-standing investment gaps have been identified in a number of areas including education and skills development (Boshoff et al., 2019), infrastructure (Jones and Llewellyn, 2019) and digital infrastructure (Aitken et al., 2019). Large investment spending will also be needed to move toward a low carbon economy (OECD, 2017a).

While the current low-interest environment and easy financing conditions have been favorable to business investment, investment decisions have weakened further since the outbreak of the coronavirus. Policy can create favourable firms to invest. The United Kingdom is currently one of the least restrictive countries in terms of business regulations and the competition framework is well designed, but the latter will need to be refined to adapt to a fast changing environment and new working arrangements and consumption

patterns (Chapter 2). In addition, stringent land-use regulations prevent an efficient allocation of housing supply and hamper effective competition, driving up costs.

In the March 2020 Budget, the Government announced that around GBP 640 billion of gross capital investment by 2024-25 (on average 5.8% of GDP per year) with GBP 88 billion for 2020-21 will be provided for roads, railways, communications, schools, hospitals and power networks across the country. It also announced a yet to be published National Infrastructure Strategy (Table 1.6). Some of the infrastructure and maintenance spending has been brought forward since then and GBP 5 billion (0.2% of GDP) have been committed to fund digital infrastructure in the most remote regions by 2025. Overall, this would mean that the United Kingdom could exceed by 2024-25 the public investment rates in France, Germany and the United States observed in 2019. The allocation and the timing of most of these investments are expected to be set out in the forthcoming Spending Review.

An increase in good-quality investment, including soft investment, could boost output in the short and long term without endangering fiscal sustainability in a low-growth environment (Mourougane et al., 2016). In particular, it is expected to bring higher short and long-term output gains than untargeted tax cuts or an increase in public consumption. OBR estimates that a permanent rise of public investment to 3% of GDP by 2022-23 would add 2.5% to potential output in the long term. OECD estimates also found that a sustained increase in public investment could bring sizeable long-term output gains, and would help to reduce inequalities (Box 1.3). Sound governance of infrastructure will be key to reap those gains. Despite some good cross-departmental coordination through the Infrastructure Project Authority and the set-up of a National Infrastructure Commission in 2017, there is scope to improve governance related to appropriate planning and management and coordination across government levels. Moving to infrastructure governance best practises (such as those observed in the Netherlands) is estimated to boost productivity growth for an average firm in an average downstream sector by 0.7 percentage point after a year, and by an average yearly 0.2 percentage point over a 10-year period (Demmou and Franco, 2020).

Table 1.6. Past recommendations on infrastructure and innovation

Recommendations in previous <i>Surveys</i>	Actions taken and current assessment
<i>Infrastructure</i>	
Continue to build on the progress made with the National Infrastructure Plan to further enhance long-term infrastructure strategy and planning.	In December 2017 the Infrastructure Projects Authority (IPA) outlined the Transforming Infrastructure Performance (TIP) programme. The National Infrastructure Commission (NIC) published their first National Infrastructure Assessment (NIA) in July 2018, which set out their assessment of the UK's long-term infrastructure needs.
Champion the recently created strategic planning and delivery agencies for transport infrastructure to achieve a stable and more efficient long-term investment framework.	In October 2018, the Government announced that the National Roads Fund will be GBP 28.8 billion between 2020 and 2025. The Rail Network Enhancements Pipeline was established in 2018.
Develop further the use of public-private partnerships (PPP) and public guarantees for privately financed infrastructure projects, recording the associated assets and liabilities in the government fiscal accounts. Enhance the provision to investors and the public of comparable data about public guarantees and the financial and operational performance of PPP projects.	The Government has a range of tools to support private investment, including the GBP 40 billion UK Guarantees Scheme. The Government has taken measures to improve the transparency of existing PPP projects and analyse the performance of existing PFI projects.
Improve the use of roads by introducing user-paid tolls, and of railways by ensuring the arms-length responsibility for awarding rail franchises.	Levy rates for the cleanest (EURO VI) lorries were reduced by 10% on 1 February 2019 and increased by 20% for other trucks.
<i>Innovation</i>	
Continue to increase direct and indirect support for private and public R&D.	The Government increased tax credits and direct spending in 2020.

Box 1.3. GDP and inequality impact of selected recommendations to support the recovery

This box presents estimates of the impact on GDP and inequality of selected recommendations to support the recovery formulated in this Survey. Some measures will be win-win policies. Increasing public investment is expected to bring sizeable output gains in the short and long term, while reducing inequality (Table 1.7). In the same vein, stepping up active labour market policies and upgrading technical skills would also foster long-term output and lower inequality. These estimates come with very strong caveats. First, the short-term impact of measures is imperfectly captured as it does not account for the position in the cycle. Second, the impact of measures has been estimated in isolation, leaving aside possible synergies or trade-offs, so the impact of the measures cannot be added up.

Table 1.7. Impact of selected reforms on growth and inequality

	Magnitude	Effect on GDP (per cent)		Effect on inequality (Gini, percentage point)
		After 3 years	Long term	Long term
Increase public investment	1% of GDP	0.8	4.5	-2.5
Increase active labour market policies	0.5% of GDP		0.2	Negative
Upgrade skills (technical and managerial)	closing one-fourth of the gap to best performers	1		Negative (for technical skills)
Ease financing for young innovative firms	closing one-fourth of the gap to best performers	0.9		
Make higher use of e-government	closing one-fourth of the gap to best performers	0.7		
Reduce barriers to digital trade	closing one-fourth of the gap to best performers	0.2		
Reduce regulatory barriers to competition and reallocation	closing one-fourth of the gap to best performers	0.1		

Note: Only the impact of selected recommendations could be quantified given the tools available. Estimates of long-term impacts of measures to boost digital adoption are not available.

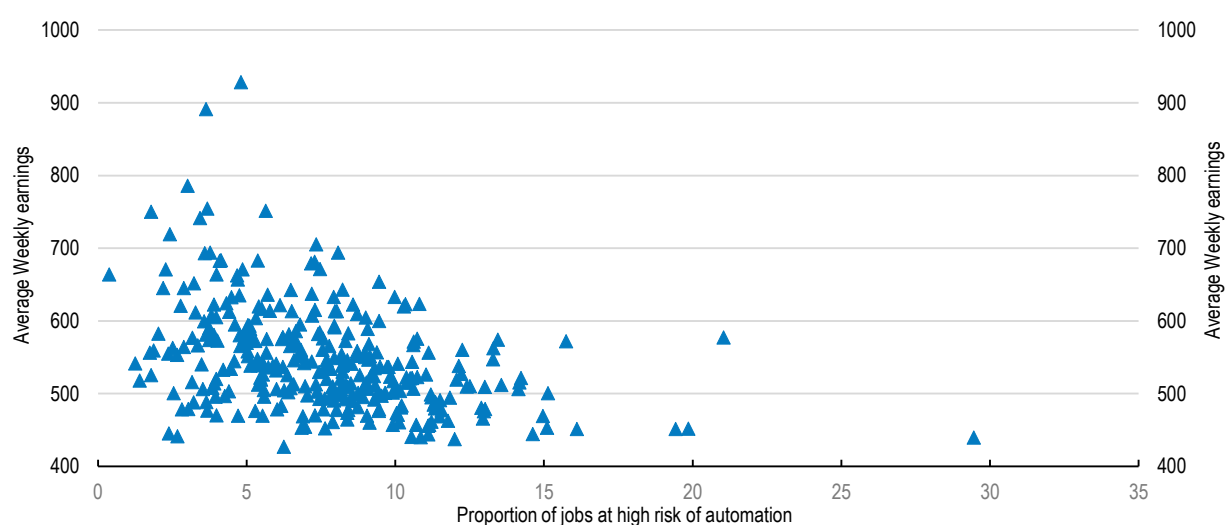
Source: Fournier and Johanssen (2016), Cournède, Fournier and Hoeller (2018), Egert and Gal (2017), Sorbe et al. (2019).

Investments in sustainable transport systems and digital infrastructure are key to addressing the long-standing issue of the falling behind of some regions in terms of productivity and well-being, a problem which may be made more acute by the COVID-19 crisis (Table 1.8). Lower-earning regions appear to have been hit harder economically (Box 1.4) and the number of COVID-19 related deaths has been much higher in the most deprived regions (ONS, 2020a). Managing the impact on jobs may be more difficult in areas already lagging behind in terms of employment and incomes. Both productivity and earnings in London are more than 30% higher than the national average, but in Wales they are 15% lower (Zankaro, 2020). Lower-earning regions also face long-term challenges such as a higher risk of automation (Figure 1.13), and vulnerability to Brexit (HM Government, 2018). Climate change may in some cases add to these problems as some of the most affected communities are already socially vulnerable (UK2070 Commission, 2020).

The local dimensions of the Industrial Strategy could also play a key role in addressing short- and long-run regional disparities, but there is at the moment little information on how the Government intends to allocate funding to reduce regional disparities. One avenue to consider would be to prioritise public funding on investment projects in the most deprived regions, while ensuring that good value-for-money projects are selected and local authorities have the capacity to manage those projects. GBP 900 million (0.04% of GDP) have been announced for 'shovel ready' infrastructure projects, through the Getting Building Fund,

over the course of this year and next. The majority of this funding will be directed to areas outside of London and the South East. This is a step toward a rebalancing of investment away from London and the South East, where public investment spending per head is higher than anywhere else in the country (Zankaro, 2020). Following the exit from the EU Single Market, it will also be important to clarify what kinds of new systems will be in place to ensure that the most deprived regions receive the support they need, in the absence of EU funds. Those funds have helped to sustain employment and development in the poorer regions, particularly in West Wales and the South West of England (University of Sheffield, 2016). The Government has committed to replace EU structural funds with the UK Shared Prosperity Fund.

Figure 1.13. Risk of automation is higher in lower-earning regions



Note: The average weekly earnings are based on data in April 2018, whereas the automation data is in 2017.

Source: ONS (2019), "The probability of automation in England: 2011 and 2017", and "Employee earnings in the UK: 2018".

StatLink  <https://stat.link/0z2khu>

Table 1.8. Past recommendations on regional development

Recommendations in previous Surveys	Actions taken and current assessment
Develop integrated, regionally focused policy packages based on current and emerging regional strengths. Prepare impact assessments of the EU departure and climate change objectives.	In England, local areas have worked with the Government to publish Local Industrial Strategies. The first strategy was published in June 2019 and to date, seven Local Industrial Strategies have been published including the West Midlands, Greater Manchester, Buckinghamshire, Cambridge and Peterborough, Oxfordshire, South East Midlands and the West of England.
Continue decentralisation by concluding deals with all city-regions.	The Government, together with the devolved administrations, local authorities and partners, has concluded a number of City and Growth Deals. Eight English city regions have now elected Metro Mayors, following devolution deals which have included significant devolved powers and responsibilities, as well as new funding for local priorities. In March 2020, Government agreed a devolution deal with West Yorkshire Combined Authority, which is expected to be implemented later this year. The previously-agreed deal with Sheffield City Region is also now progressing to consultation following local agreement.
Allow local authorities to retain more revenues from locally levied property taxes.	The Government's aim is to increase the proportion of business rates retained by local government from 50% to 75% by devolving grants of equivalent value. The Government will continue working with Local Authorities in order to determine the best approach to implementing changes to business rates retention. Since 2017-18, some areas have been piloting 75% or 100% Business Rates Retention.

Box 1.4. The COVID-19 crisis could hit lower-earning regions hardest

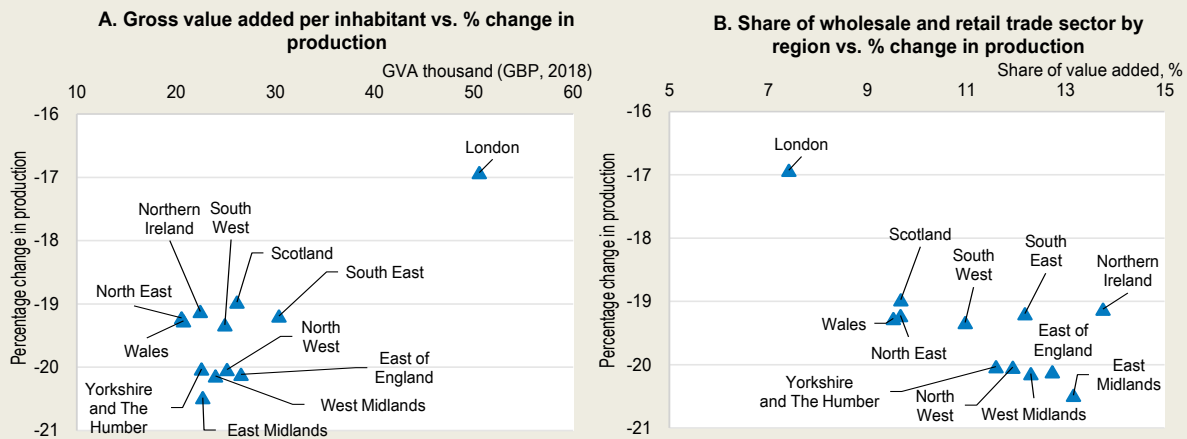
During the lockdown period, in the three months to May 2020, nearly all UK regions are estimated to have experienced severe output losses of 19-20% (three months on previous three months). However, output reductions were more pronounced in lower-earning regions (Figure 1.14, Panel A), although differences across regions are small relative to the size of the COVID shock.

Regions with a higher share of wholesale and retail trade activities tended to have a larger reduction in their total output (Figure 1.14, Panel B). Furthermore, manufacturing is estimated to be a main contributor to the output falls in the hardest-hit regions and Wales, while, in London, accommodations and food services as well as professional, scientific and technical activities sectors were the most important drivers. The impact on labour markets is mixed. London, Scotland and Northern Ireland experienced the largest falls in employment, while Wales registered an increase in employment during the period.

Looking ahead, there may be longer lasting regional impacts if there are persistent weaknesses in some sectors such as tourism or specific manufacturing activities. Higher unemployment may be more difficult to reverse in areas with less dynamic labour markets. Some of these effects may be localised. For instance, coastal areas are very dependent on tourism and with relatively limited alternative activities. Given the regional diversity in labour markets dynamics and demographics, the persistence of the shock is likely to differ across regions (Figure 1.15). London and South East's labour-market resilience is estimated to be the highest among the UK regions, while Wales and North-East of England would have the least resilient markets (Whiteshield Partners, 2020).

Figure 1.14. Lower-earning regions have been hit harder

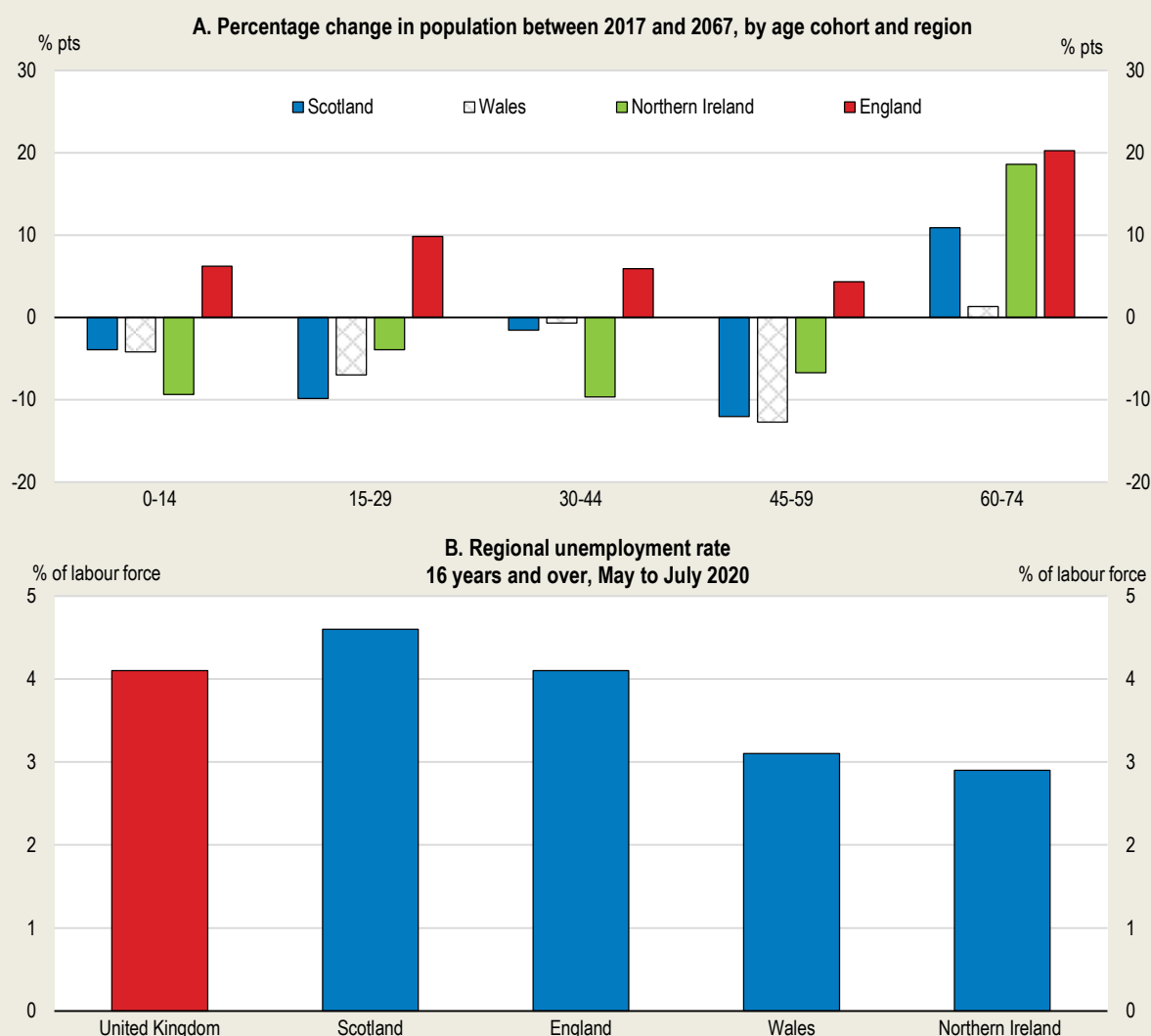
Percentage changes in production to UK output fall, by regions, March to May 2020




Note: Regional changes in production are calculated as the average of nation-wide sectoral effects on output, weighted with the shares of sectoral value added in each region. NUTS1 areas of the United Kingdom are Wales, Scotland, Northern Ireland, and the nine English regions. Source: Calculations based on ONS (2020), "GDP monthly estimate, UK: May 2020", July, ONS (2019), "Regional gross value added (balanced) by industry: all NUTS level regions (database)", December, and ONS (2020), "Population estimates for the UK, England and Wales, Scotland and Northern Ireland: mid-2019", June.

StatLink  <https://stat.link/htoa4l>

Figure 1.15. The demographics and labour market situation are different across regions



Source: OBR (2018), Fiscal Sustainability Report, July, and ONS (2020), "Regional labour market statistics in the UK: September 2020".

StatLink  <https://stat.link/7bwafp>

Supporting viable firms

One challenge is to help firms overcome temporary liquidity difficulties in the current business environment, while facilitating the exit of firms that were either not viable even before the COVID-19 crisis or which are unlikely to return now to profitability. This will be particularly important as those firms may face additional difficulties to cope with the exit from the EU Single Market. The COVID-19 crisis has caused sharp reversals in non-financial company performance expectations worldwide and worsened the situation on the market for corporate debt, following a period of a marked rise in borrowing by businesses with low credit scores prior to the COVID-19 crisis (OECD, 2020c). Like most other OECD countries, the United Kingdom introduced several programmes to support firms through the COVID-19 disruption, including tax deferrals and government-backed loans. These measures have prevented firms' liquidity problems from turning into immediate solvency issues. However, they may turn out to be costly and ineffective if support

is provided to firms that are not viable (OECD, 2020d). To minimise the risks, the programmes should be evaluated over time and adjusted if needed. More generally a review of the many support programmes that have been introduced over the years and reprioritisation toward firms, such as young innovative firms, that suffer from severe temporary financing constraints is necessary (Chapter 2).

Fast resolution of insolvent firms would support a speedy recovery. Streamlined debt resolution schemes may be helpful to minimise barriers to corporate restructuring and spur productivity-enhancing capital reallocation (Adalet McGowan et al., 2017). The Corporate Insolvency and Governance Act, passed in June 2020, introduces tools similar to the US's Chapter 11 scheme. It provides greater flexibility in the insolvency regime and gives companies a moratorium to explore options for rescue whilst supplies are protected. This is particularly important for small businesses (Financial Conduct Authority, 2020). To avoid otherwise solvent firms going bankrupt, the Government could also consider improving access of capital-weak SMEs to existing loan schemes by temporarily easing co-financing requirements, while keeping strict monitoring in place.

Like many other OECD countries, there are calls to take equity stakes in firms experiencing difficulties. Such an approach should be limited to firms where this support is necessary, whose financial distress is linked to the downturn and which are likely to return to profitability once economic conditions improve (OECD, 2020f). In addition, in order to contain costs to taxpayers and minimise moral hazard risks related to the expectations of future bailouts, strict recovery plans should be imposed on the firms benefiting from these interventions. Clear conditions for exit from state ownership should also be set, relying on independent advice to ensure sound valuations of investments and divestments. Improving governance will help to maximise the benefits of such measure. While governance of state-owned entities is generally high in the United Kingdom, some SOEs operating in competitive markets benefit from a legal status that may shield them from the full application of private company law.

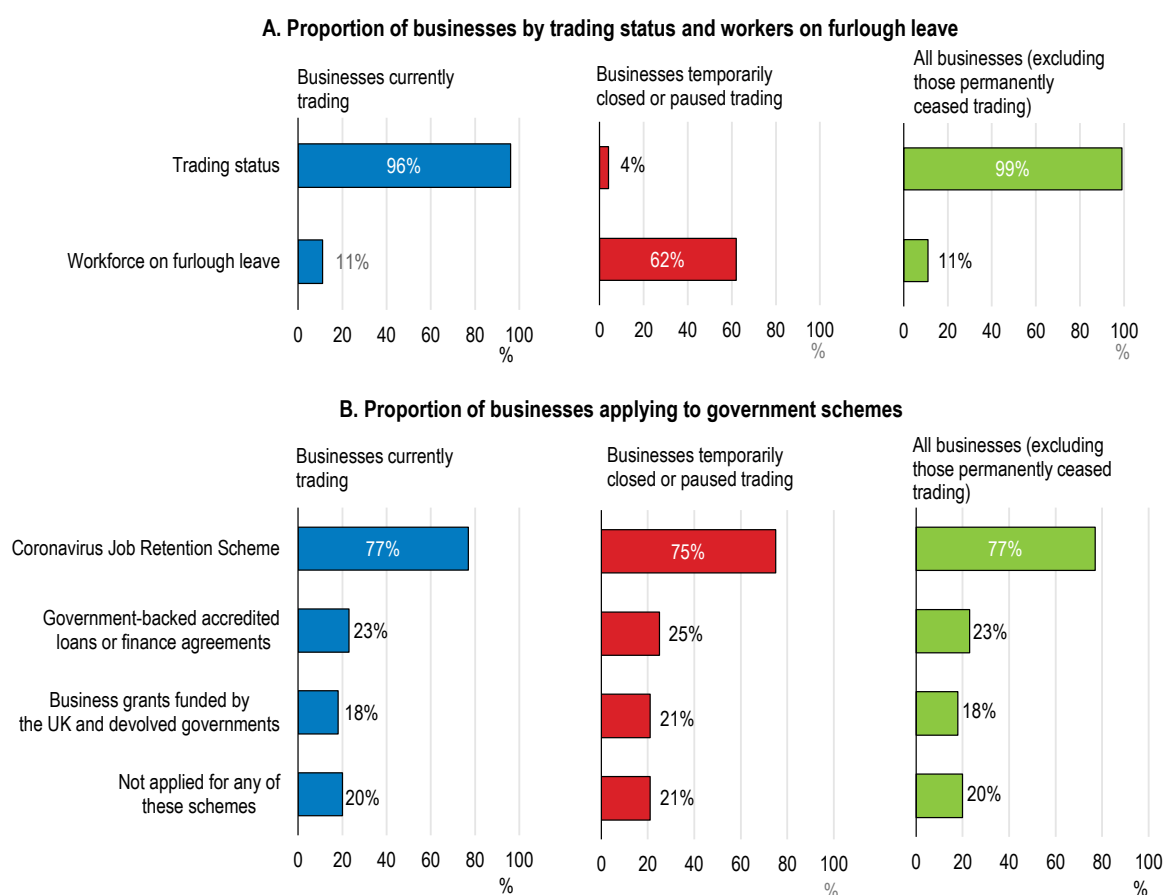
Supporting workers

The COVID-19 crisis has led to substantial disruptions to employment during the lockdown phase and on-going job losses, leading to risks of rising poverty, despite substantial support measures. Leaving the EU Single Market is also expected to increase the unemployment rate to a various degree across sectors (see below). Protecting vulnerable households should continue to be a priority during the recovery phase, including ensuring that those who lose their jobs are able to move to new activities and do not become detached from the labour market.

The Job Retention Scheme (JRS, “furlough”), which was implemented in March, has helped mitigate the crisis impact on labour markets. Its take-up was massive (Figure 1.16). It was complemented by a similar scheme for the self-employed. According to official data, by mid-July 2020, around 9.6 million workers, or 43% of private sector employees, had received wage subsidies through the furlough programme with a further 3 million receiving income support through the self-employment scheme. Similar measures were also put in place in other European and OECD countries, following Germany’s positive experience during the financial crisis (Box 1.5). The unemployment rate would have been much higher in the absence of these measures.

Figure 1.16. A large majority of firms applied for the Coronavirus Job Retention Schemes

Headline indicators from the Business Impact of Coronavirus Survey



Note: Based on ONS Business Impact of Coronavirus (COVID-19) Survey. Businesses were asked for their experiences for the reference period 10 August to 23 August 2020. All percentages are a proportion of the number of businesses who responded apart from the percentages on furlough leave which are a proportion of the workforce apportioned by workforce size.

Source: Office for National Statistics.

StatLink  <https://stat.link/nk6xrl>

The Government has implemented a gradual phase-out of the JRS, raising employers' financial contributions to the scheme gradually. The Government has also announced the Job Support Scheme, to open on 1 November and run for 6 months. The scheme aims at protecting viable jobs in businesses who are facing lower demand over the winter months due to COVID-19, to help keep their employees attached to the workforce. In principle, it is appropriate over time to move from supporting all jobs to a more targeted approach to limit fiscal costs and avoid supporting jobs that are no longer viable (OECD, 2020b; 2020g). With emergency support being wound down, the UK Government also introduced in July a Job Retention Bonus (GBP 1000 per furloughed employee) to encourage employers to retain furloughed employees. This measure is likely to limit the expected increase in unemployment. However, this untargeted measure carries some deadweight loss as support goes to firms which were planning to bring back their employees anyway. As the crisis progresses with some sectors recovering and others not, it will be important to ensure support is available and adapted as needed based on epidemiological and economic developments, while not hindering the reallocation of resources towards firms and sectors with better growth prospects. The effects on the labour market should be closely monitored. It could be useful in this second phase to explore job support on a targeted basis (OECD, 2020g). France applies different rules with respect to the cost of firms for the job retention scheme between sectors that are open for business and sectors that remain subject to health restrictions.

The COVID-19 crisis has pushed up youth unemployment. In May 2020, over 500 000 people aged 16 to 24 claimed unemployment related benefits, double the number in March. The situation is expected to deteriorate further when new graduates enter the labour market after the summer. The Plan for Jobs announced the Kickstart Job Scheme, which will include a subsidy of 100% of the minimum wage for each young employee hired, for 25 hours a week and for six months. It is estimated that about 300 000 16-24 year olds at risk of long-term unemployment will benefit from the scheme and that the fiscal cost will be GBP 2 billion (0.1% of GDP). Such time-limited hiring subsidies targeted at low-paid workers can promote job creation, especially during downturns (OECD, 2020g). A somewhat similar scheme, the Future Job Fund, was introduced in 2009 in the United Kingdom. An *ex post* evaluation suggests that, after six months, this programme resulted in a net benefit for participants and employers and had a fiscal cost that was lower than the net benefits for society (Department of Work and Pensions, 2012). Long-term impacts remain uncertain, however.

Box 1.5. Selected policies to support the recovery in OECD countries

This box reviews policies that are starting to be put in place in countries which have moved to a second phase of support, from emergency action to recovery. The challenge for policy will be to strike the right balance between providing needed support to workers and firms still affected by restrictions, while helping viable businesses in need but also permitting necessary restructuring. The box builds extensively on the July *Employment Outlook* and on recent OECD policy briefs.

Securing income and improving job matching

Unemployment benefits are among the key instruments providing protection against earnings falls resulting from job losses, while allowing for a sufficient degree of reallocation. Combining generous unemployment benefits with rules that provide subsidies or tax relief for firms that recall previously dismissed workers could support workers and preserve job matches to a similar extent as short-time work schemes (Schwellnus et al., 2020). Israel, for instance, introduced a recall subsidy of around USD 2100 at the end of May 2020.

In a few countries, the focus has also been on encouraging hiring of young workers who are likely to be massively affected by the crisis (United Kingdom, France). Such schemes could prevent long-term scarring (OECD, 2020g). France introduced new one-year (or more) hiring subsidies for workers younger than 25, with lower social contributions worth EUR 4000, up to 1.6 times the minimum wage. The subsidy is conditional on new hiring on permanent contracts or on temporary contracts of more than six months.

Countries have also increased funding of active labour market policies, in particular the budget of public employment services (PES) to cope with higher volumes of services (Finland, United Kingdom). Finland assigned preliminary budget increases to the PES offices for the next years already in early April 2020 and further increases are under discussion (OECD, 2020h). Countries have also made increasing use of online and effective skills profiling tools essential to ensure that training is efficiently focused on jobseeker skill gaps (Australia, the Netherlands).

A number of countries have extended support for vocational education and training to improve job matching (OECD, 2020i). Canada or France have opted for an extension of existing skill development schemes. Pre-existing online training solutions enabled many countries to maintain some training provision with minimal investment (Austria, Belgium, Denmark, Estonia, the Netherlands and some regions of Italy). Some countries have boosted online training options (Denmark, France, Sweden).

Targeting support for firms or sectors

With the move to the second phase of support, policies have become more targeted and differentiated according to the conditions of firms and sectors. Germany introduced a EUR 25 billion loan support

programme for small firms that have seen their sales drop by more than 60% in the June to August period, with a view to help bars, restaurants, hotels and other hospitality businesses. In Japan, the “Go To Campaign” (0.3% of GDP) provides Japanese residents with domestic tourism vouchers that cover half of the travel expenses and 20% of food and entertainment expenses. Countries also used temporary VAT cuts to support struggling sectors (Austria, Germany, and the United Kingdom). Several countries have programmes targeting SMEs, including equity funding and convertible loans for tech start-ups (France, Germany and United Kingdom). Some countries have put in place measures to facilitate a fast resolution of insolvent firms, either through streamlined debt resolution or debt forgiveness (the Netherlands, United Kingdom).

Using recovery plans to protect the environment and fasten digitalisation

A number of countries increased green investments into renewable energy technologies and smart grids to raise energy efficiency (Korea), in the transport sector and in the development of a hydrogen industry (Germany) or mandatory local green recovery plans (France). In Canada, the federal government has provided funds for cleaning up inactive oil and gas wells.

Nine countries have announced public investment in digitalisation (Borowiecki and Pareliussen, 2020). An important component is the frontloading of the rollout of 5G infrastructure (Germany, Japan, Korea, and the United Kingdom) or the improvement of e-government services (Germany, Korea). Korea has brought forward investment plans for digitalisation to support private investment of low-productivity firms. Japan has increased funding to support the digitalisation of SMEs.

The COVID-19 crisis will test the responsiveness of the United Kingdom’s ambitious, ongoing welfare reform. The Universal Credit integrates a number of the legacy system’s benefits and aims at simplifying access and extending the existing activation efforts across all benefits. Those working very few hours at the minimum wage are eligible for unemployment support. Integrating benefits is improving take-up, increasing overall benefit spending. To help buffer the COVID-19 shock, the Government swiftly expanded the Universal Credit’s eligibility rules, allowing many new claimants (Figure 1.3) and temporarily somewhat raised Universal Credit and Working Tax Credit payments.

When it started to be rolled out, Universal Credit was widely seen as a very promising way to modernise activation policies and simplify the delivery of welfare benefits. There have been major implementation and administration issues, including the timing and approach to assessing and making transfers, and the stringency and penalties related particularly to job search requirements. Nonetheless, in the first months of the COVID-19 crisis the system has been robust and able to swiftly support incomes in the face of an unprecedented number of new claims. The Universal Credit’s requirements that recipients engage in labour activation support (Department of Work and Pensions, 2015a), and the credible threat of sanctions improves employment rates for many groups (Department of Work and Pensions, 2015b). However, there is evidence that for some groups, the Universal Credit’s sanctions have harmed well-being rather than supporting movement into better quality work (Watts and Fitzpatrick, 2018; Williams, 2020). Punitive conditions discourage the households with the greatest needs (the homeless, the mentally ill and those with poor literacy) from applying for or maintaining enrolment in Universal Credit (Batty et al., 2015; Wright et al., 2016; Work and Pensions Committee, 2018) and may discourage some individuals from looking for work (Immervoll and Knotz, 2018). Recognising these issues, the Government has abolished some sanctions, is reviewing others, and the share of Universal Credit recipients receiving sanctions has been declining since 2018 (Webster, 2020). It is important to ensure that job-search requirements, in the form of payment sanctions, support movement into work and do not impose unnecessary hardship to the most vulnerable workers, and that the system continues to be assessed and adjusted to improve its effectiveness.

Poverty rates are highest in the United Kingdom amongst households that are out-of-work and the severity of the crisis has increased substantially the risks of falling into poverty. Prior to the COVID-19 crisis, poverty

had increased amongst the working-age population and the share of people reporting severe low income and material deprivation increased by 2 percentage points to 5% from 2011-12 to 2018-19 (Department for Work and Pensions, 2019). Despite the temporary increase in basic unemployment support and minimum income benefits, unemployment benefits for many household types in the United Kingdom remain below levels in many other OECD countries. Depending on the latest epidemiological and economic developments, continuing to provide support to the unemployed could support demand and inclusiveness.

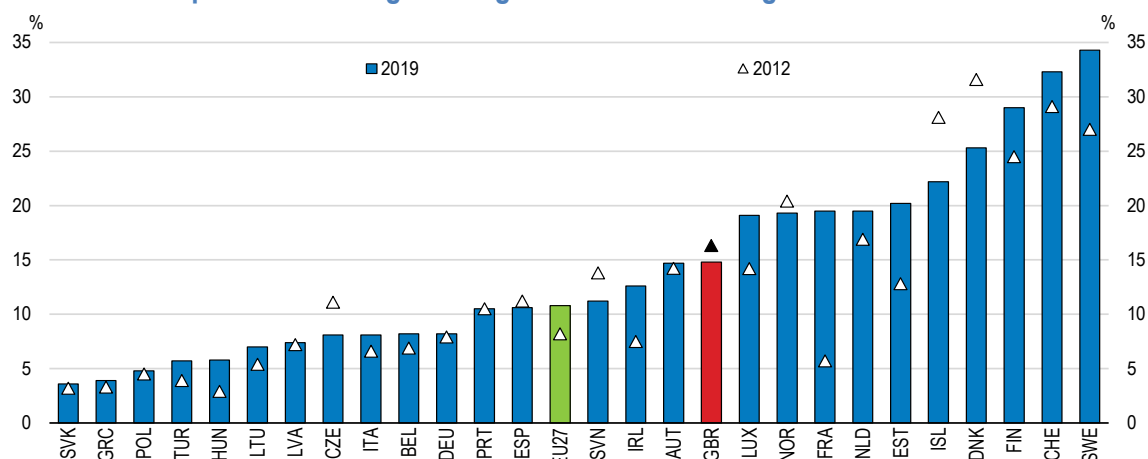
Helping people to find work and get better quality jobs

Expanding the funding and the services provided by the public employment services provider JobCentre Plus will help improve the re-employment of people who lose their jobs in the COVID-19 crisis (Desiere, Langenbucher and Struyven, 2019). In July 2020 the Government increased funding for Job Centres by GBP 1.2 billion (0.05% of GDP), including GBP 0.9 billion to double the number of staff working with job seekers, and this adds to GBP 2 billion for the 'Kickstart' programme and other programmes to support job search. Those measures are welcome, and expanding such measures further would be warranted. Spending on activation policies per unemployed person is low by international standards, even when correcting for labour market conditions, with spending on public employment services particularly weak (OECD, 2017b). There is evidence that active labour market programmes had been scaled back in recent years prior to the COVID-19 crisis (Orton and Green, 2019). Improved matching of workers' skills with employers' needs through enhanced active labour market policies would help employment to recover from the COVID-19 shock, raise workers' productivity, increase inclusion and reduce the cost of welfare. Along with strengthened skill training discussed below, further expanding JobCentres' targeted profiling facilities may be particularly fruitful.

The Government is also now increasing resources for training schemes available to the unemployed. These can improve employability for workers displaced by COVID-19 and other labour market transformations and ensure they can adapt to the constantly evolving skill requirements of the modern labour market years. Building up skills, in particular digital skills, will be key to help workers and firms adjust to the new economic environment by facilitating digital adoption, and the Government's increased support for basic digital skill training are steps in the right direction. These measures can go further, towards laying the foundations of a sustained recovery from the COVID-19 shock and reducing the number of underqualified workers in the United Kingdom, who make up a larger share of the workforce than in many other OECD economies, as underlined in the previous Survey. OECD work shows that providing good-quality ICT training to low-skilled workers could be a 'double dividend' policy (OECD, 2019a). It can boost productivity and reduce inequality by bridging the digital divide.


Although participation in lifelong learning in the United Kingdom is higher than the average of European OECD countries, it has been declining in recent years (Figure 1.17). Public funding for adult skills has fallen over the last decade (Britton, Farquharson and Sibieta, 2019). In the March 2020 Budget, the Government committed to a new GBP 2.5 billion National Skill Fund (0.1% of GDP) and funding to skills and apprenticeships has been increased in the Plan for Jobs by GBP 1.6 billion, most likely over several years. There is evidence that the quality and effectiveness of many of the training programmes offered by Jobcentre Plus have been poor (Dwyer, 2018). Research undertaken for this Survey suggests that on-the-job training expenditure planned by firms has been trending down since the financial crisis (Box 1.6). The Government has started to roll out the National Retraining Scheme, which seeks to provide financial support to firms and help their employees, who have lost their jobs because of automation or Artificial Intelligence, to seek employment elsewhere. Improving the offer of individual lifelong learning, similarly to what has been done in a number of OECD countries such as France or Finland, is important to encourage participation in training to adapt to workplace changing needs (Chapter 2).

Figure 1.17. Participation in lifelong learning has been decreasing



Note: The indicator measures the share of people aged 25 to 64 who stated that they received formal or non-formal education and training in the four weeks preceding the survey, over the total population of the same age group, excluding those who did not answer to the question. Adult learning covers formal and non-formal learning activities, both general and vocational, undertaken by adults after leaving initial education and training.

Source: Eurostat, based on the EU Labour Force Survey.

StatLink  <https://stat.link/g2stun>

Postponing future increases in the minimum wage (National Living Wage), especially for younger workers, would reduce employment and income risks given the weakening of the labour market as a result of COVID-19 and of the exit from the EU Single Market and the Customs Union. The minimum wage started in 1999 at a relatively low level but subsequent changes would sharply increase it. In 2019, the minimum wage relative to productivity in the United Kingdom was above most OECD countries (Figure 1.18). The minimum wage was increased in 2020 to GBP 8.72 per hour for adults. With the projected fall in median wages, this raises the minimum wage to around 60% of the median wage. The Government is considering increasing it to 66% of the median wage by 2024, if economic conditions allow, while reducing the age workers become eligible for the National Living Wage from 25 to 21. In October 2020, the Low Wage Commission's experts will recommend a minimum wage rate that should apply from April 2021 in light of economic conditions towards reaching the 66% of the median wage target by 2024. The Commission could also recommend a review of the 2024 target or its timeframe. Given the overall strength of the labour market prior to the COVID-19 crisis, there was a negligible impact on aggregate employment from the increases in the minimum wage (Low Pay Commission, 2019a), consistent with international experience (Dube, 2019). However, there were negative employment effects in the retail sector and also amongst women who work part-time (Aitken, Dolton and Riley, 2019). Given the weakness of demand and higher operating costs following the COVID-19 shock, especially in sectors where many employees are young or low-skilled workers, there is a risk that future sharp rises in the minimum wage harm employment more and these workers' overall incomes.

To address the problem of low incomes, strengthening the United Kingdom's in-work benefits would be more effective as it can address the gap between underlying market wages and adequate incomes without creating employment risks. As well as potentially pricing some workers out of the labour market, minimum wages are not particularly well-targeted to reduce poverty. Past increases in the minimum wage have helped to support the incomes for low-paid individuals in the United Kingdom, but the share of workers on low weekly pay has barely fallen since 2009. Higher minimum wages can reduce the incidence of low pay and wage inequality, at least in the short term, largely by the higher minimum wages 'rippling' into wages higher up the distribution (OECD, 2018a). However, poverty is concentrated among those out of work, many minimum wage workers live in households well above the poverty line, and in-work poverty is often associated with short working hours which risk being shortened further in response to the higher wage rate (Figure 1.19; Atkinson et al., 2017; OECD, 2018b; Brewer and De Agostini, 2015).

Box 1.6. Recent trends in on-the-job training

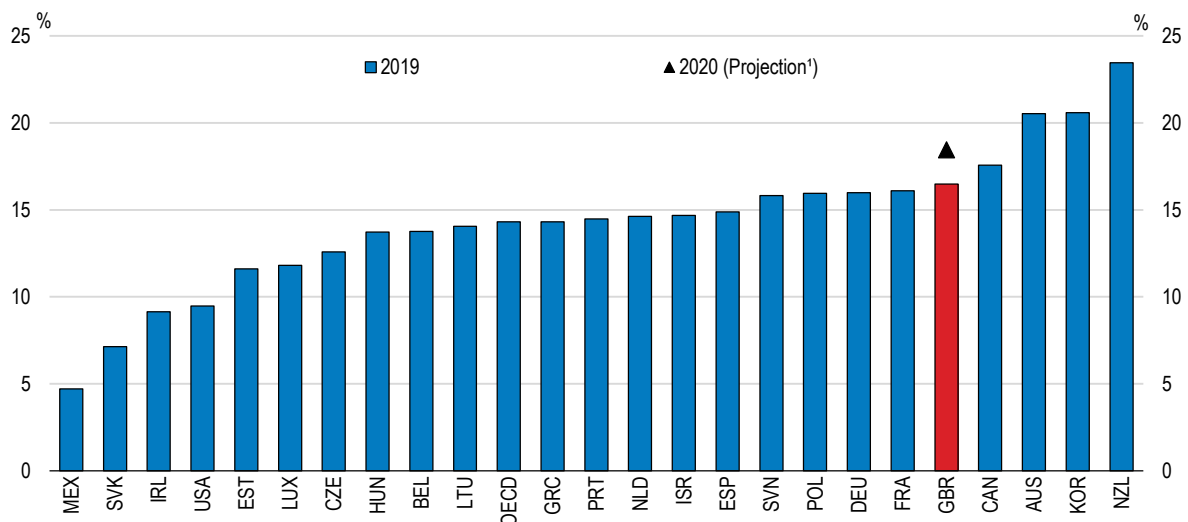
New research for this Economic Survey examines recent trends in employer-provided training. De Lyon and Dhingra (forthcoming) use firm-level survey data collected by the Confederation of British Industry (CBI) over the period 2005-2018. They identify two major changes in the trends in firms' training expenditure.

The first, most stark change, occurred in the wake of the financial crisis. Looking at within-industry changes in investments, firms were around 10% less likely to increase training expenditure during the Great Recession than in the period before, as they experienced a fall in demand for their output. The effect is likely to have been compounded by increasing uncertainty and more limited access to credit.

The second major change in training expenditure occurred immediately after the 2016 Referendum. Since 2016, firms were 7.5% less likely to increase their training than in the period before and 9% less likely when looking at within-industry changes. The combined effects of higher import costs, reduced future export demand and greater uncertainty could be the likely reasons for the cut-back in investments. The effects are strongest for larger firms, as measured by employment and turnover, perhaps because these firms initially provide more training while no significant change was observed for small and medium size enterprises.

Figure 1.18. Minimum wages in the United Kingdom are among the highest in the OECD relative to productivity

Ratio of hourly minimum wage to output per hour worked, at current purchasing power parity



Note: The 2019 data on output per hour worked are estimated based on OECD Economic Outlook 107 database, if they are not available. Unweighted average of the shown data for the OECD aggregate.

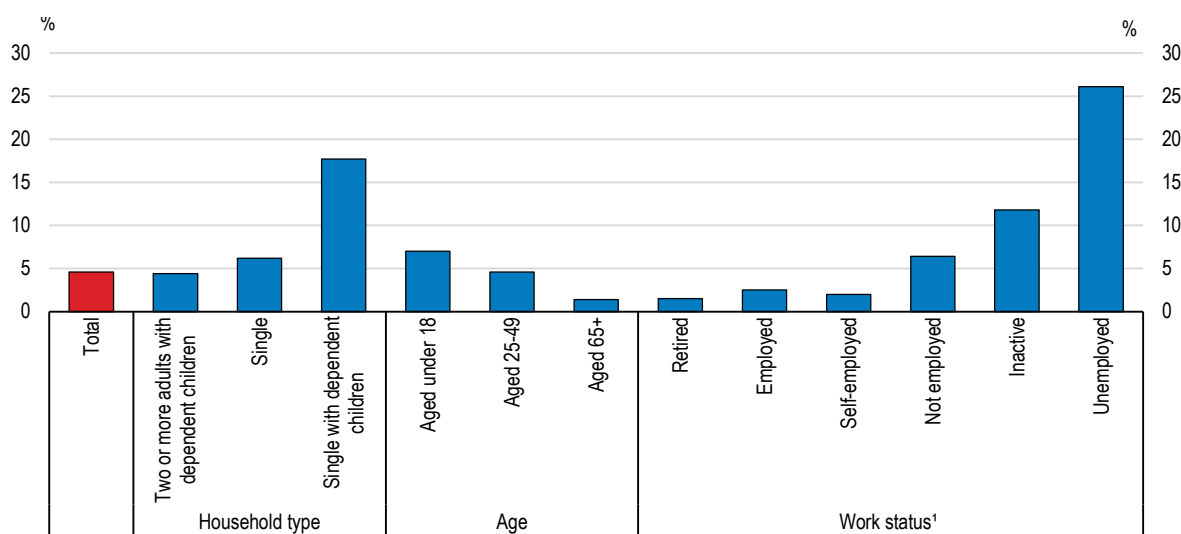
1. Based on the growth in the National Living Wage (NLW) from 1 April 2020 (6.2%) and the Economic Outlook projection of productivity.

Source: OECD calculations based on OECD (2020), OECD Productivity Statistics (database), OECD National Accounts Statistics (database) and OECD Economic Outlook 107 database.

StatLink  <https://stat.link/rxza1n>

Figure 1.19. Poverty rates are highest among households out of work and single parents


Severe material deprivation rate, 2018



Note: The severe material deprivation rate is the proportion of the population living in households unable to afford at least four of the following items: unexpected expenses, a one-week annual holiday away from home, a meal involving meat, chicken or fish every second day, the adequate heating of a dwelling, durable goods like a washing machine, colour television, telephone or car, or are confronted with payment arrears.

1. Population aged 18 years and over.

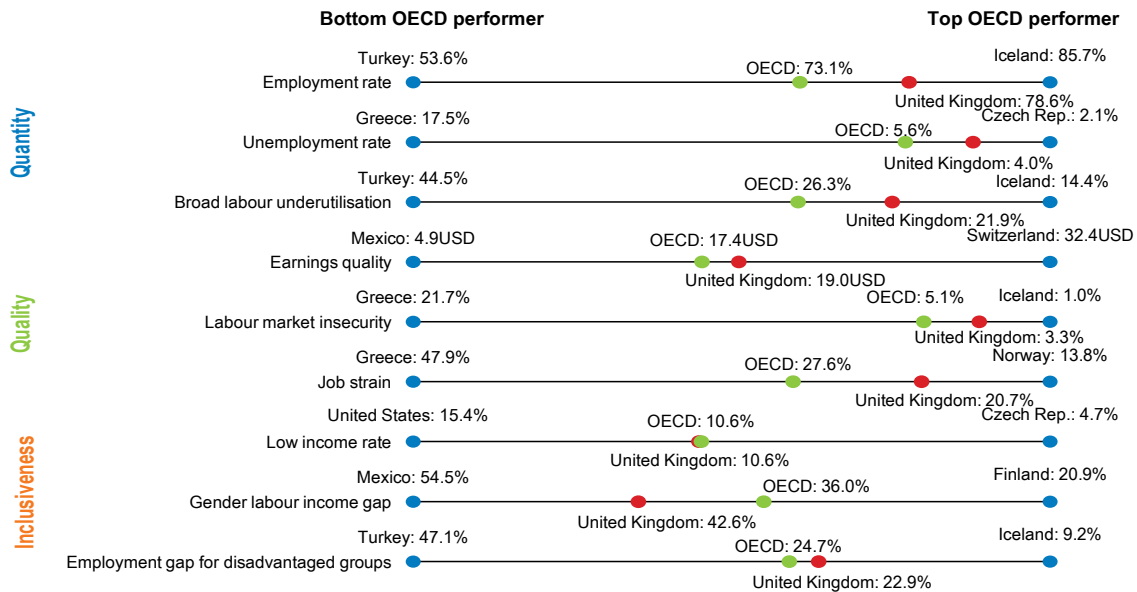
Source: Eurostat (2020), EU Statistics on Income and Living Conditions (database).

StatLink  <https://stat.link/l96q1z>

The COVID-19 crisis is likely to have affected women particularly badly, given their higher share of employment in customer-facing activities and the care responsibilities they often assume. The UK's labour market lags other OECD countries in the gender wage gap and in the share of workers earning low incomes and there are risks of a further widening in the aftermath of the COVID-19 crisis (Figure 1.20; OECD, 2018a). The female labour force participation rate has increased since 2000 but was still 8 percentage points below male rates in early 2020 (Figure 1.21). A significant proportion of inactive women (38% in 2019) have caring responsibilities that may act as a barrier to work. Surveys suggest that these responsibilities increased disproportionately for women during the COVID-19 crisis in many OECD countries, including the United Kingdom. The share of British women in employment holding a part-time job was over three times that of men in 2018, one of the highest ratios in the OECD. This results in a large pay gap: British women on average earned 43% less from working than men in 2015, compared to a gap of 39% on average in OECD countries (OECD, 2017b). Precarious female employment is also the primary cause of low incomes of poor families and of child poverty (Thévenot and Manfredi, 2018).

Figure 1.20. Job creation was strong prior to the COVID-19 shock but inclusiveness is more challenging

2019 or latest year



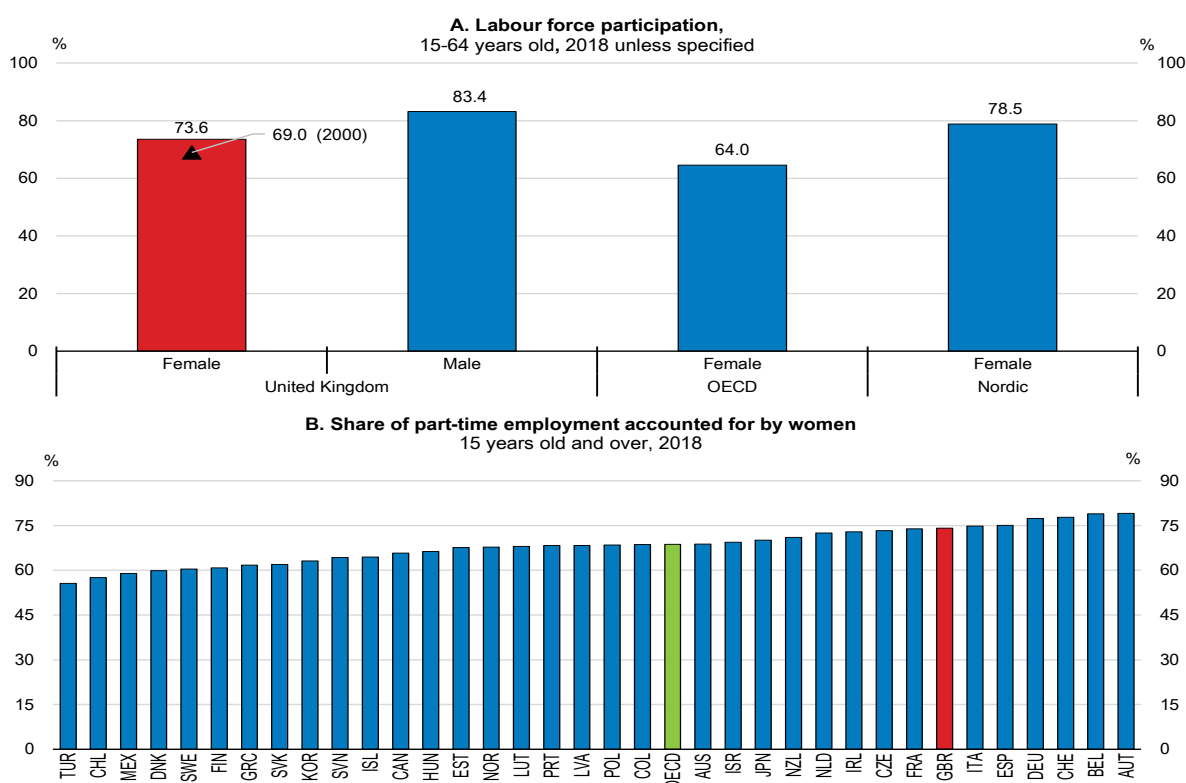
Note: Employment rate: share of working age population (20-64 years) in employment (%). Broad labour underutilisation: Share of inactive, unemployed or involuntary part-timers (15-64) in population (%), excluding youth (15-29) in education and not in employment (%). Earnings quality: Gross hourly earnings in PPP-adjusted USD adjusted for inequality. Labour market insecurity: Expected monetary loss associated with the risk of becoming unemployed as a share of previous earnings. Job strain: Percentage of workers in jobs with a combination of high job demands and few job resources to meet those demands. Low income rate: Share of working-age persons living with less than 50% of median equivalised household disposable income. Gender labour income gap: Difference between per capita annual earnings of men and women (% of per capita earnings of men). Employment gap for disadvantaged groups: Average difference in the prime age men's employment rate and the rates for five disadvantaged groups (mothers with children, youth who are not in full-time education or training, workers aged 55-64, non-natives, and persons with disabilities; % of the prime-age men's rate).

Source: OECD (2018), OECD Jobs Strategy <https://www.oecd.org/employment/jobs-strategy/country/>; OECD Employment database, www.oecd.org/employment/database/; and OECD Income Distribution Database (IDD), <http://oe.cd/idd>.

StatLink  <https://stat.link/ahu0ep>

Distancing rules due to COVID-19 are likely to reduce further scarce childcare places. Enrolment rates in childcare are close to the OECD average, but children spend less time in childcare (Figure 1.22). In recent years, high cost of childcare, rather than lack of childcare places, has held back women's participation in full-time work, and led to among the highest disincentives for women to enter work across the OECD (OECD, 2020). Childcare costs amount to a much larger share of disposable income for a low-income family than in other OECD countries. To reduce these costs, the Government has extended access to 30 hours per week of free and to tax-free childcare for some households (Table 1.9). However, the United Kingdom is still spending less than many OECD countries on 0 to 3 year olds. The United Kingdom should consider further supporting carers entering work by expanding access to full-time high-quality childcare. Limiting costs relative to disposable income, following the example of Norway's recent reforms would equitably improve access to childcare for households across the distribution (OECD, 2017c). This also favours social mobility for children from disadvantaged backgrounds. As gaps related to socio-economic status appear early, access to quality early childhood education can improve long-term educational and career outcomes and social mobility by ensuring equitable access to learning environments that help children acquire essential social and emotional skills (OECD, 2017c and 2018f).

Figure 1.21. Women participate less in the labour force than men and are more likely to work part time



Source: OECD (2020), OECD Labour Force Statistics (database).


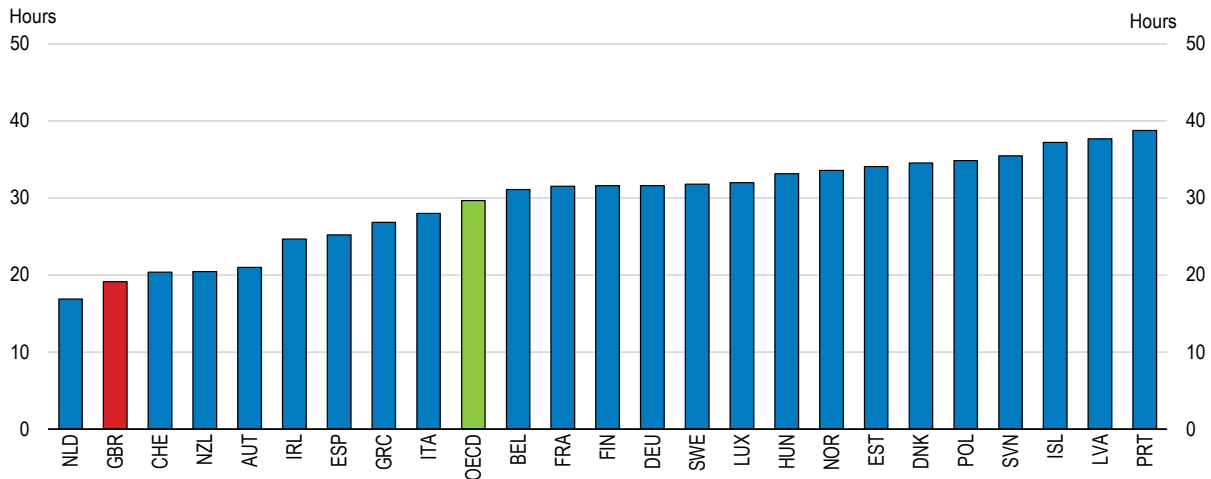
StatLink  <https://stat.link/1hak6t>

Table 1.9. Past recommendations on labour markets and skills

Recommendations in previous Surveys	Actions taken and current assessment
Prioritise funding to training and skills development of childcare staff.	The Government has introduced new criteria which will strengthen level 2 childcare qualifications for Early Years practitioners.
Use existing flexibility in reaching the National Living Wage 2020 target in case of negative economic shocks.	The Government has asked the Low Pay Commission to recommend whether economic conditions allow increasing the minimum wages from April 2020 to reach 60% of median earnings by October 2020.
Grant workers on zero-hours contracts enhanced job security rights after three months. Keep under review the interplay of taxes and welfare benefits to raise incentives to work more hours. Introduce tighter criteria to restrict self-employment to truly independent entrepreneurs.	The Government published its 'Good Work Plan' in December 2018. It sets out measures to address the issue of one-sided flexibility, promote employer transparency, increase protection for agency workers, and strengthen enforcement. The Agency Workers (Amendment) Regulations 2019 also ensured that all agency workers are entitled to pay parity with other employees. At Budget 2020, the Government increased the National Insurance contributions (NICs) Primary Threshold and Lower Profits Limit, for employees and the self-employed respectively, to GBP 9500 from April 2020. In the 2018 Budget, the Government increased support for Universal Credit. The Government has since increased work allowance to the GBP 1000. In February 2018 the Government completed the rollout of Tax-Free Childcare.
Introduce individually targeted programmes for low-wage and low-skilled workers to improve their life-long learning opportunities.	From August 2020, the Government is extending the statutory entitlements of the Adult Education Budget to fully fund all adults to take basic digital skills courses.
Increase financing and continue to promote the effectiveness of active labour market policies for youth who are neither in employment nor in education or training.	The Youth Obligation Support Programme helps young people develop the skills and experience they need to get into sustainable employment.

Figure 1.22. Average hours in early childhood education and care are short

Average usual weekly hours for children using early childhood education and care services, 0- to 2-year-olds, 2017 or latest year



Note: 2014 for Switzerland and 2015 for Iceland. Unweighted average of data shown for the OECD aggregate. With the exception of New Zealand, data are OECD estimates based on information from EU-SILC. Data refer to children using centre-based services (e.g. nurseries or day care centres and pre-schools, both public and private), organised family day care, and care services provided by (paid) professional childminders, regardless of whether or not the service is registered or ISCED-recognised. For New Zealand, data cover children using licensed centre-based and home-based services, only. All non-licensed care is excluded regardless of whether it is paid or unpaid.

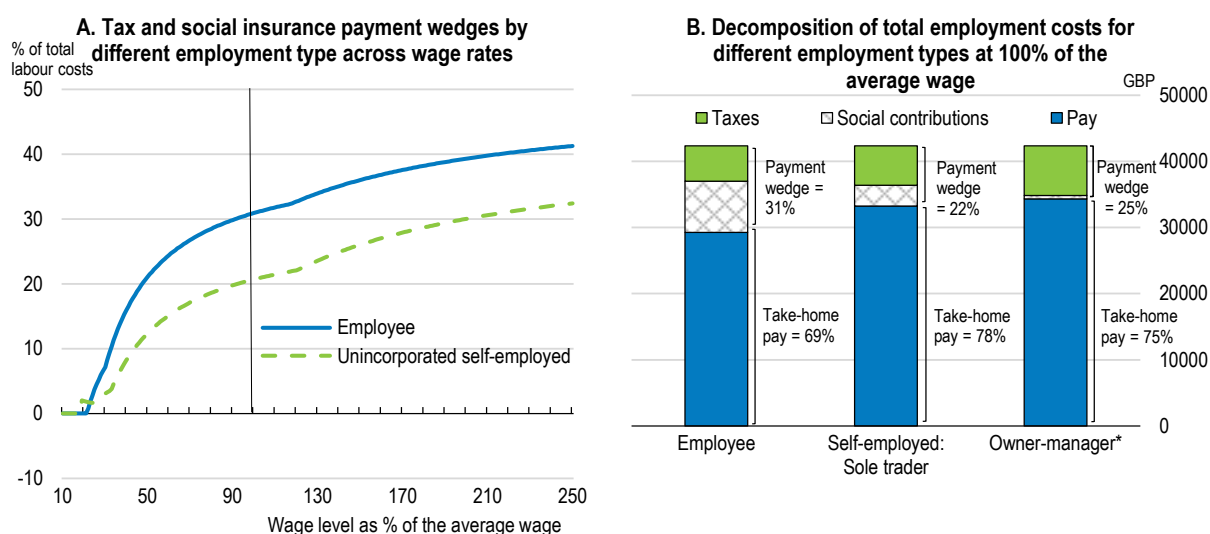
Source: OECD Family Database (<http://www.oecd.org/els/family/database.htm>).

StatLink  <https://stat.link/du4e1b>

Self-employed workers are among those who suffered the greatest losses of income from the COVID-19 crisis (ONS, 2020f). Even prior to the crisis, the self-employed without employees were at higher risk of very low income, and generally had less access to training or other means of raising their productivity and opportunities than dependent employees (OECD, 2019b, Chapter 2). Self-employed individuals enjoy considerable tax benefits compared with employees, in particular lower rates of social security contributions (Figure 1.23). Similar incentives exist in many other OECD countries and reflect fewer social benefits. However, in the United Kingdom, lower social security contribution rates for the self-employed do not translate into significantly lower contributory benefits received, which makes self-employment attractive from a tax perspective. The discrepancy between social security contribution rates should be reduced, by increasing contributions paid by the self-employed. The 2020 Budget raised the income threshold for National Insurance Contributions, benefiting employees more than the typical self-employed. This is a step towards making the tax system fairer and reducing the incentive for people to be self-employed where being an employee would be more productive and yield a higher quality job. Given the high degree of heterogeneity of the self-employed, it will be important to ensure that the low-income self-employed are able to negotiate and access decent earnings net of social contributions.

Figure 1.23. Some self-employed enjoy important tax incentives compared with employees

2017



Source: Milanez and Bratta (2019), "Taxation and the future of work: How tax systems influence choice of employment form", OECD Taxation Working Papers, No. 41, and "Annex - Taxation and the Future of Work: How Tax Systems Influence Choice of Employment Form", OECD Taxation Working Papers, No. 42.

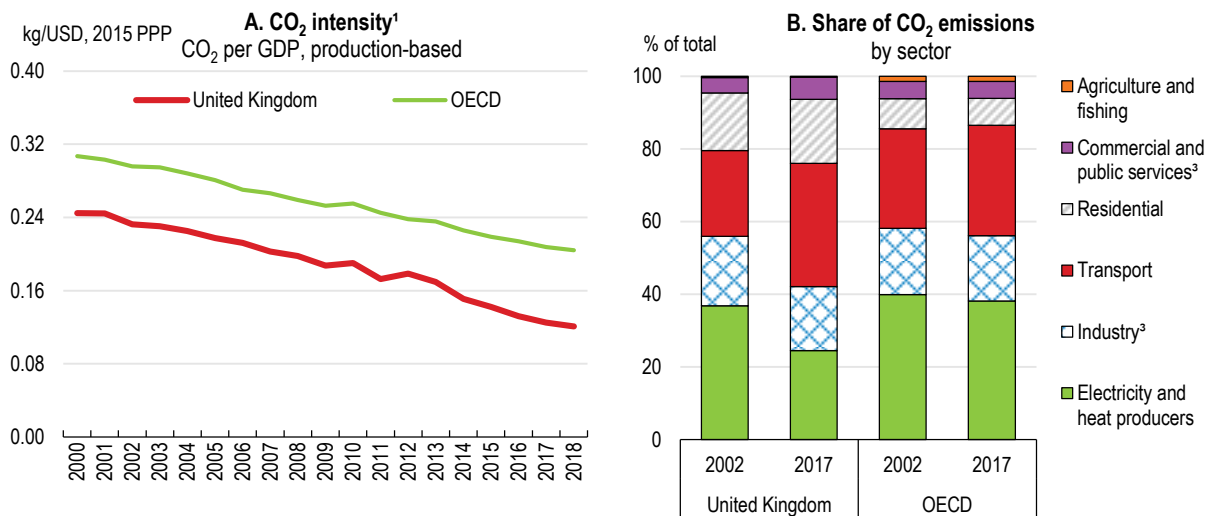
StatLink  <https://stat.link/w2ehdx>

Greening the recovery

The recovery from the crisis is an opportunity to accelerate the shift to a more environmentally sustainable model. The United Kingdom was the first G7 country to legislate a target of zero net emissions by 2050 (HM Government, 2019a). The Committee on Climate Change estimates that this would cost 1 - 2% of GDP a year, assuming no further technological cost break-through, but would result in substantial wellbeing gains. However, on current policies, the United Kingdom is not on a trajectory to meet its past, less ambitious 80% emission-reduction target (Committee on Climate Change, 2019). CO₂ emissions per unit of GDP have fallen more rapidly in the United Kingdom than elsewhere in the OECD (Figure 1.24; Table 1.10; IEA, 2019). Most of the reductions in emissions so far have reflected lower emissions in the power sector, industry and to a lesser extent in waste, with little change in the other sectors.

One lesson from the global financial crisis was that countries missed an opportunity to encourage firms to move toward a more environment-friendly production process. The United Kingdom implemented various programmes at the time to encourage the move toward green transport or renewable energy sources, but they were small in size, at less than 0.1% of GDP (OECD, 2020f). Efforts to foster the move toward a decarbonised economy have strengthened over the years. A number of measures, including an increase in the climate change levy, the introduction of a green gas levy and investment in electric cars were introduced in the March 2020 Budget. In the Plan for Jobs a GBP 3 billion (0.1% of GDP) package of green spending was announced to decarbonise public buildings and retrofit poorly insulated homes. This is welcome but insufficient given the extent of the investment needed to achieve the net zero emission target. While the primary focus of the package should be to boost growth and prevent scarring effects, other considerations such as the environmental and distributional impacts need to be considered explicitly to ensure the policy response is consistent with long-term goals. Support to firms should be made conditional on moving to cleaner production processes in pollution-intensive sectors, such as the automobile sector, that are particularly affected by the crisis.

Figure 1.24. CO₂ intensity is lower in the United Kingdom than in the OECD average



1. CO₂ emissions from combustion of coal, oil, natural gas and other fuels. Gross Domestic Product (GDP) is expressed at constant 2015 USD using PPP.

2. CO₂ Emissions from fuel combustion. Emissions are calculated using IEA's energy balances and the 2006 IPCC Guidelines. See http://wds.iea.org/wds/pdf/WorldCo2_Documentation.pdf for more details.

3. Commercial and public services include final consumption not elsewhere specified. Industry includes other energy industries.

Source: OECD Green Growth Indicators database and IEA CO₂ emissions from fuel combustion database.

StatLink  <https://stat.link/2mab0h>

Pursuing reform of transport policies will be key to reaching the 2050 emission reduction and air quality targets and can also make cities more attractive. A Transport Decarbonisation Plan to put transport on a pathway to net zero emission is under development (Department of Transport, 2020). Stronger policies to incentivise low-cost abatement options, including to boost onshore wind electricity generation and afforestation, would also have to be pursued more vigorously. The Committee on Climate Change is calling, for example, for an earlier end to the sale of diesel or petrol-fired cars, by 2030 rather than 2040 (Committee on Climate Change, 2019). A consultation on ending the sale of new petro-diesel and hybrid cars and vans by 2035 or earlier is underway.

Uneven pricing across sectors and fuels compromises cost effectiveness. The United Kingdom has become one of the OECD countries with the smallest gaps between its pricing of CO₂ emissions and international climate cost benchmarks. Nevertheless, industrial CO₂ emissions, notably from coal, are priced less than in electricity generation. Moreover, tax reductions in the form of investment allowances incentivise the development of oil and gas fields. Emissions in the household sector are priced even lower than industrial emissions (OECD, 2018d). A reduced VAT rate effectively subsidises domestic heating fuel. Setting higher prices for heating fuels would require action to compensate low and middle-income households. As the United Kingdom is scheduled to exit the EU Emissions Trading System (EU ETS) at the end of this year, the establishment of UK Emissions Trading System (UK ETS) which is currently being developed provides a good opportunity to address these issues.

Table 1.10. Past recommendations on green growth

Recommendations in previous Surveys	Actions taken and current assessment
Strengthen the Green Investment Bank and other targeted financial aids to further support the implementation of not yet commercially viable low-carbon technologies that have the prospect of becoming so in the foreseeable future.	The Green Investment Bank was moved to the private sector to allow it to raise its own finance and be free from state aid and other public-sector constraints. The Government is supporting the British Standards Institution in developing three Publicly Available Specifications in Sustainable Finance.
Evaluate the interaction between the Electricity Market Reform and existing policies to promote renewable energies.	The Department for Business, Energy and Industrial Strategy will publish an Energy White Paper, which will address the challenges arising from the transformation of the energy system out to 2050, consistent with the UK climate change objectives.

Refining the fiscal framework to prepare for future challenges

Setting fiscal goals is an important first step toward achieving long-term sustainability following the COVID-19 crisis. The UK Treasury will review the fiscal framework ahead of the next Budget 2020. Fiscal rules announced in the March 2020 Budget combined a current budget balance rule with a net investment rule and a debt-interest-to-revenue ratio trigger. There are ways to simplify these rules to improve the orientation of policy and fiscal credibility, and to reflect the changed fiscal outlook following the crisis. A simpler and promising avenue consistent with the successful experience of New Zealand, which also operates on the Westminster parliamentary model, would be to focus on a medium-term fiscal objective with clear set of operational targets for the life of each Parliament. This has the benefit of aligning the framework to a simple overarching principle and increasing transparency. While there many uncertainties about the appropriate level of debt and this should take into account other long-term pressures including ageing, research does provide some insights on prudent debt-to-GDP levels (OECD, 2015). It is also a political choice, which is made explicit by a debt target. On an operational level, this goal can be complemented by a range of more technical rules and norms as is the case in New Zealand (Box 1.7). The target could usefully be complemented by a medium-term expenditure plan, whose consistency with the target could be assessed by the OBR, which would increase transparency about the medium-term orientation of policy. Given the exceptional uncertainty following the COVID-19 crisis, it could be appropriate to set out a general framework at this time, but only fix the parameters once uncertainty has returned to more normal levels.

Box 1.7. Prudent debt in New Zealand

The Public Finance Act 1989 established the objective of reducing total debt to prudent levels so as to provide a buffer against factors that may impact adversely on the level of total debt in the future by ensuring that, until those levels have been achieved, total operating expenses in each financial year are less than total operating revenues in the same financial year.

The pursuit and the maintenance of a “prudent” level of public debt is estimated to have created a fiscal buffer that had enabled the automatic fiscal stabilisers to operate (Buckle, 2018). As a result, New Zealand entered the COVID-19 crisis with low debt levels (net debt on a national accounts basis was negative), which provided more room to support the economy. COVID fiscal support in 2020 was around 5.9% of GDP, the highest in the OECD.

While some aspects of the NZ fiscal framework may be transposable to other countries, parameters of the framework, including the level of the debt target will need to be carefully calibrated according to country specificities.

Using fiscal policies to promote inclusive growth

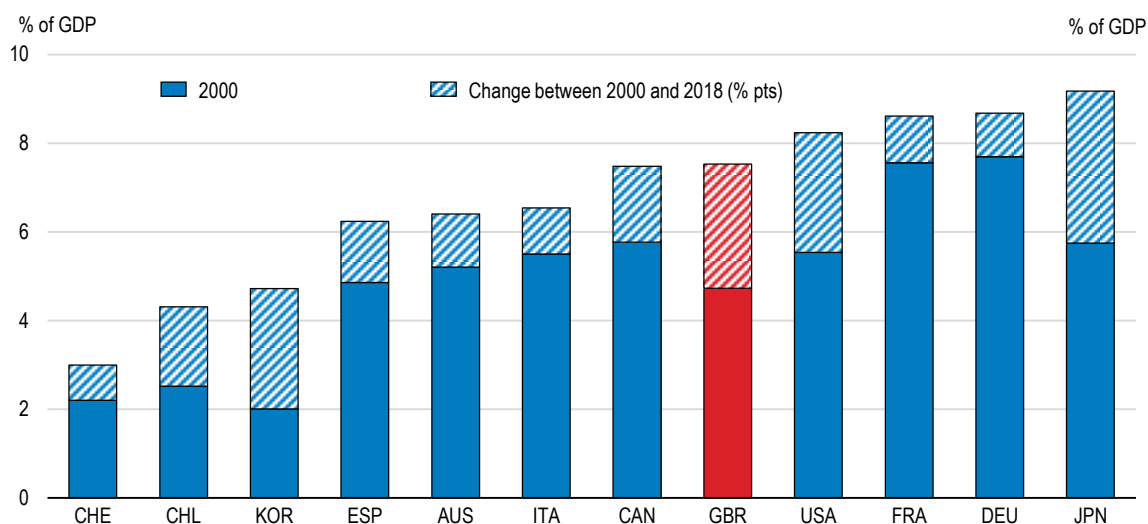
Following a period of stimulus to support the COVID-19 recovery, gradual fiscal adjustments will be required once growth has firmed up. Like other OECD countries, population ageing is going to put increasing pressure on public finances in the coming years, increasing spending and reducing revenues (OBR, 2018b and 2019). Leaving the Single Market is also expected to lower growth prospects and tax revenues. Productivity-enhancing reforms can alleviate these pressures but to some extent only. A rebalancing of the tax and spending mix will help to increase fairness and equality, while keeping public finances on a sustainable path in the face of rising health care and ageing costs.

Health, long-term care and welfare spending present clear risks in the long term. The United Kingdom faces strong pressures on health spending, which is predominantly financed from general taxation. Health spending rose from 4.5 to 8% of GDP from 2000 to 2017, moving the United Kingdom from a relatively low spender towards the mid-range of OECD countries (Figure 1.25). Looking forward, projections point to substantial increase in health spending to reach 14.4-15.3% of GDP by 2069-70, although the precise magnitude will depend on the extent of cost pressures (OBR, 2020b).

The NHS Long-Term Plan, released in 2019, set out a list of ambitions over the next 10 years. It followed up on the announcement in June 2018 of a GBP 20.5 billion increase in funding for NHS England between 2019-20 and 2023-24 in real terms (GBP 34 billion in nominal terms, 1% of GDP). The long-term focus of the plan is a welcome innovation and this new approach will help with planning and predictability compared with making such decisions on a yearly basis. However the plan was not accompanied by details on how the money will be used and how the extra funding will be financed (OBR, 2019). In addition, the funding settlement did not include key areas of health spending, such as capital investment for buildings and equipment, disease prevention initiatives and training for the healthcare workforce (National Audit Office, 2019). The COVID-19 crisis is likely to call for significant changes to these plans, but the idea of a longer term approach remains relevant.

Figure 1.25. Public health spending has risen

2000 and 2018 (or latest year)



Note: Public health spending excludes compulsory private insurance schemes.

Source: OECD (2020), OECD Health Statistics.

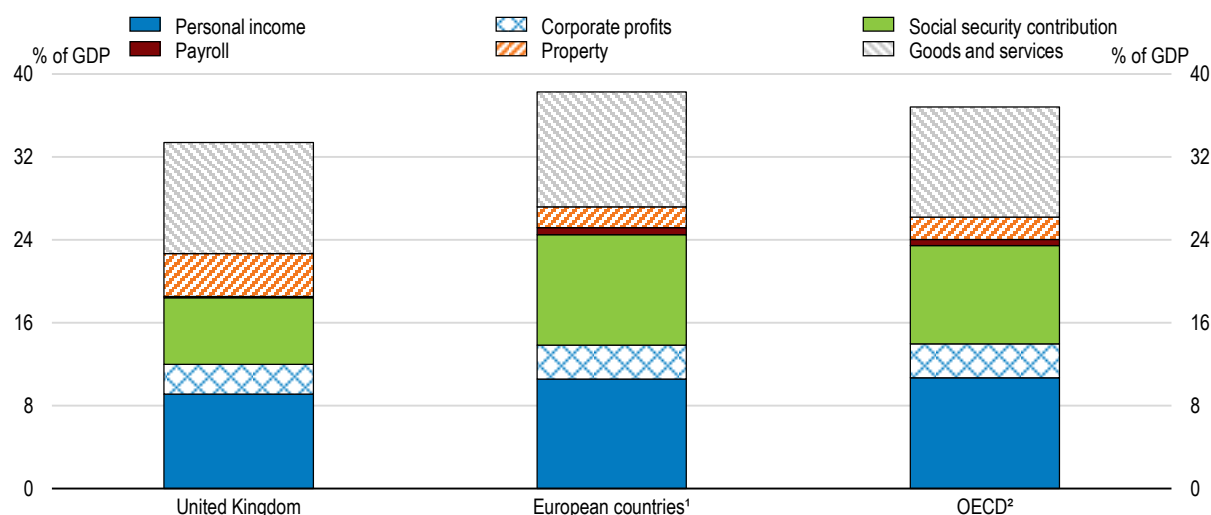
StatLink  <https://stat.link/23mrfw>

Spending on state pensions, which include pensions and pensioner benefits, is expected to increase from 4.5% of GDP in 2019-20 to 7.4% in 2067-68 (OBR, 2020b). The United Kingdom has taken steps to contain this rise. The age at which men and women can access their pensions is set to gradually increase to reach 67 years by 2028. There have also been actions to increase incentives to continue working at an older age and to ease combining care and work (OECD, 2018c). The ‘triple lock’ that relates the annual uprating of pensions to the higher of average earnings growth or consumer price inflation or 2.5% each year is expected to increase public pension spending. OBR (2020b) shows that if pensions were to be uprated by average earnings only, spending would be lower by GBP 3.2 billion (0.14% of GDP) in 2024-25 relative to a situation when the triple lock is applied. If such a change was decided, it will be important to ensure that pensions provide decent income to retirees, especially those with low pension entitlements.

As part of any future fiscal adjustment, ensuring a growth-friendly and fair, broad-based tax system is likely to become increasingly important given spending pressures, even if spending can be better targeted and made more efficient. There is room to broaden the tax base once there are clear signs that growth is firming up, while improving the efficiency of the tax system and maintaining or increasing the extent of redistribution. At 33.5%, the UK’s tax-to-GDP ratio remains relatively low compared with many European countries, although English-speaking countries also display lower ratios (Figure 1.26). Regular tax and spending reviews are essential to achieve fiscal sustainability in an efficient manner. The March 2020 Budget launched the Comprehensive Spending Review, which is expected to be concluded in Autumn 2020 (HM Government, 2020). It will set out detailed spending plans for public services and investment, covering resource budgets for three years from 2021-22 to 2023-24 and capital budgets up to 2024-25. Total departmental spending has been set to grow at 4% over the period covered by the review. Starting a review of public expenditures early is important because reallocation of spending towards priority areas is usually gradual.

Figure 1.26. Tax revenues are lower than in peer countries

Decomposition of tax revenue, 2018



1. Unweighted average of 15 European countries: Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden and Switzerland.

2. Unweighted average of 18 OECD countries: Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, and the United States.

Source: OECD (2020), OECD Tax Revenue Statistics (database).

StatLink  <https://stat.link/kuyd7c>

Table 1.11. Past recommendations on fiscal policy and tax

Recommendations in previous <i>Surveys</i>	Actions taken and current assessment
<p>Perform a tax and spending review to allow for additional productivity-enhancing fiscal initiatives, for example by raising national insurance contributions for the self-employed or indexing the state pension on average earnings only.</p> <p>Seek further efficiency gains in health and education spending</p>	<p>In 2017 the Government announced an extra GBP 1.3 billion over 2018-19 and 2019-20 to support the introduction of the national funding formula for schools. The Department for Education published a school resource management strategy in August 2018 that sets out how the Government will work with schools to identify the main drivers of effective resource management.</p> <p>The Government has prioritised NHS spending in its 10-year Long Term Plan.</p> <p>In March 2020, the Government has announced unprecedented support for public services, businesses and individuals and is monitoring the impact measures are having, keeping all policies under review. GBP 16 billion has been allocated towards public services via the COVID-19 Response Fund, including the National Health Service and local authorities involved in the fight against coronavirus.</p>

No comprehensive tax review is currently planned. It will be important to review the existing tax and spending mix with a particular view to end reliefs and exemptions that do not serve an economic or social purpose. Options to improve the tax system include :

- Reducing tax expenditures would improve resource allocation. According to HM Resource and Customs, reliefs and exemptions from personal income tax alone amounted to GBP 34.5 billion (1.7 % of GDP) in 2018-19. In particular, ending relief or exclusion from the climate-change levy and the carbon price floor and removing zero-rating on value-added tax for passenger transport would help even carbon pricing across sectors and fuels.
- The Council tax could be increased to raise tax on high housing wealth. At the moment, the tax is charged at a much lower percentage of property value for high-value properties than for low-value properties. As recommended by the Mirrlees Review (2011), it would be simpler and more efficient to use a simple percentage of property value. At the same time, this could be an opportunity to rebalance property taxes, moving away from stamp duties and transaction taxes. This would boost labour force mobility and encourage more efficient use of the housing stock. As the Council tax is local, resources could be used either to reduce the grant provided by the central Government to local authorities, or alternatively to finance services delivered at the local level which have been cut in the past years.
- Bringing accumulated pension wealth into the inheritance tax base would raise fairness. When inheritance tax is paid after a death, pension savings of the deceased person are not included in taxable base. This encourages the use of pensions as a savings vehicle for bequests and unfairly favours those who inherit pension wealth rather than other forms of wealth, while the income tax and national insurance contributions systems already provide generous tax treatment for pension savings.
- Higher social security contributions could be levied on the self-employed to level the playing field between self-employed and employees. Given the heterogeneity of the self-employed group, it will be important to calibrate the rise to prevent a marked fall in net earnings (after social contributions) for disadvantaged workers.
- Continuing to fight against tax evasion and avoidance can bring revenue gains as well. In addition to continue to actively participate in the G20/OECD initiative to tackle tax base erosion and profit shifting (BEPS), the United Kingdom could try to raise revenue by increasing the number of 'targeted' audits, to those who are most likely to misreport their tax liability or to misreport it by a substantial amount (IFS, 2018).

For illustration, Table 1.12 costs two packages of structural fiscal measures that would lead to stronger, more inclusive and sustainable growth in a way that is fiscally neutral. Scenario A shows that a permanent upward shift in the public investment rate can be financed by spending reforms and higher Council tax,

removing favourable treatment of the self-employed for social security contributions and higher carbon taxes. However, to finance a permanent GBP 10 billion increase in health spending would require further increases in taxation, for instance doubling the increase in the Council tax. The Government announced a temporary cut in the stamp duty on property transactions to bolster the housing market. There would be benefits to making this permanent as part of a package that would increase the Council tax to rebalance property market.

Table 1.12. Long-term fiscal costs of selected recommendations

	A. Higher investment scenario		B. Higher investment and healthcare scenario	
	GDP billion	% of GDP	GDP billion	% of GDP
Spending		-1		-1.5
Increase in health spending			-10	-0.5
Increase public investment	-20.3	-1	-20.3	-1
Replace triple lock by average earning	10.2	0.5	10.2	0.5
Increase ALMPs	-10.2	-0.5	-10.2	-0.5
Revenues		1		1.5
Increase social contributions paid by self-employed	5.2	0.3	5.2	0.3
Increase Council tax	8.0	0.4	17.9	0.9
Cut in stamp duties	-0.7	-0.03	-0.7	-0.03
Even carbon pricing	6.6	0.3	6.6	0.3
Gains from fight against tax avoidance and evasion	0.6	0.03	0.6	0.03
Net cost		0		0

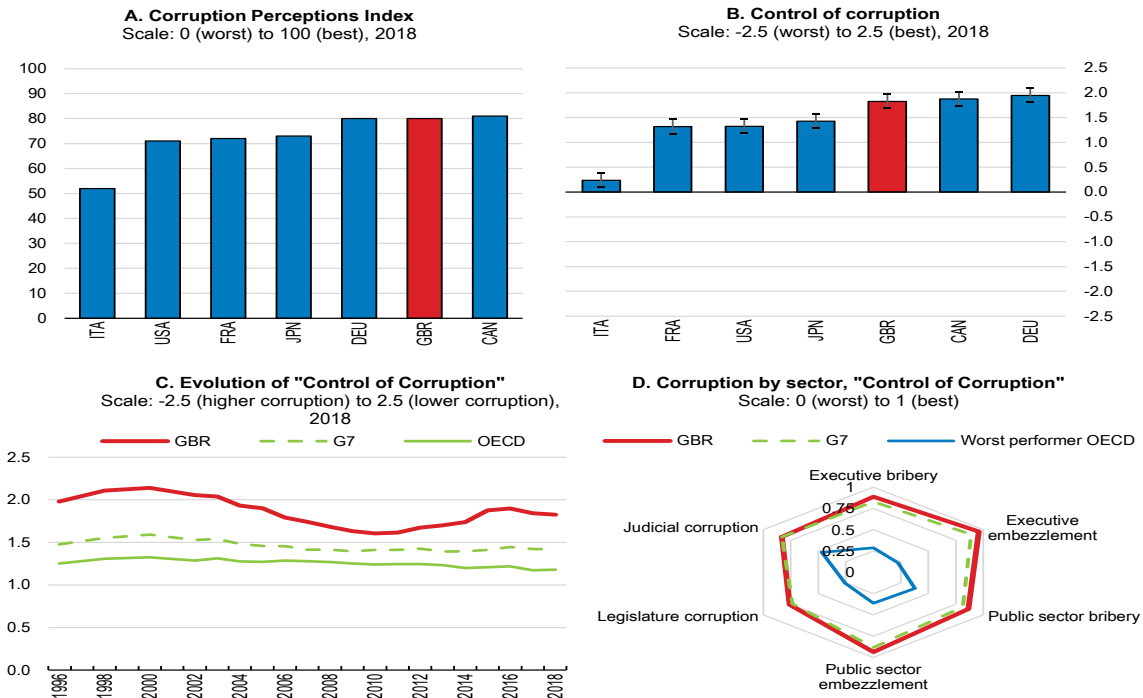
Note: A negative number represents a fiscal cost. These estimates are subject to a wide margin of error. They do not represent the actual gain if the relief were to be removed as they do not take account behavioural effects. The impact does not account for the change in GDP. The increase in social contributions of the self-employed levels the playing field with employees. The increase in the Council tax corresponds to doubling the rates for bands F, G, H and E. The cut in stamp duties corresponds to a cut of the 2% marginal rate by 1 percentage point. Gains from tax evasion are the average amounts budgeted in past budgets and are probably over-estimate the expected gains. Even carbon pricing ends tax expenditure on the carbon levy tax, the carbon price floor, the petroleum revenue tax and the zero-rating on passenger transport.

Source: OECD calculations using [estimated costs of principal tax reliefs from HM revenues and customs](#), [principal tax reliefs](#) and IFS (2018), IFS Green Budget, October.

The anti-corruption drive is strong

Indicators of perception of corruption suggest that corruption is low by international standards in the United Kingdom (Figure 1.27 and 1.28). In 2019, the OECD Working Group on Bribery in International Business Transactions considered that the United Kingdom had addressed a number of key recommendations formulated in 2017, notably asserting the Serious Fraud Office's role and generally enhancing the capacity for detection and enforcement of the foreign bribery and related offences. On the other hand, the Working Group expressed regret that no steps had been taken to address long-standing recommendations to ensure the independence of foreign bribery investigations and prosecutions or to enhance detection through anti-money laundering reporting mechanisms (OECD, 2019c).

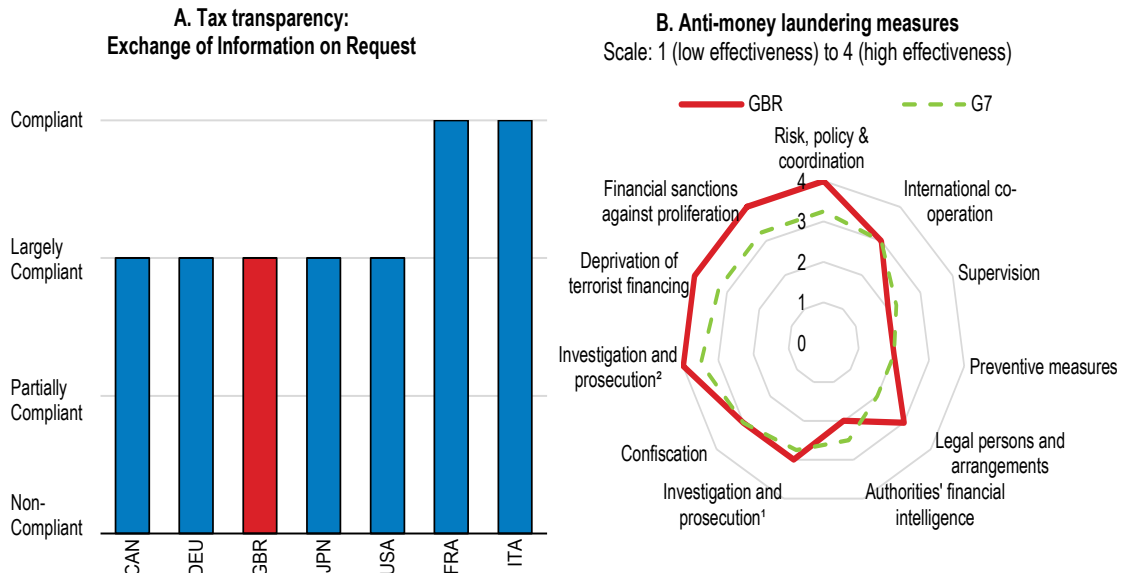
Figure 1.27. Corruption is perceived to be low in the United Kingdom



Note: Panel B shows the point estimate and the margin of error. Panel D shows sector-based subcomponents of the "Control of Corruption" indicator by the Varieties of Democracy Project.
Source: Panel A: Transparency International; Panels B & C: World Bank, Worldwide Governance Indicators; Panel D: Varieties of Democracy Institute; University of Gothenburg; and University of Notre Dame.

StatLink <https://stat.link/cs60t>

Figure 1.28. Tax transparency is largely compliant and anti-money laundering measures are effective



Note: Panel A summarises the overall assessment on the exchange of information in practice from peer reviews by the Global Forum on Transparency and Exchange of Information for Tax Purposes. Peer reviews assess member jurisdictions' ability to ensure the transparency of their legal entities and arrangements and to co-operate with other tax administrations in accordance with the internationally agreed standard. The figure shows first round results; a second round is ongoing. Panel B shows ratings from the FATF peer reviews of each member to assess levels of implementation of the FATF Recommendations. The ratings reflect the extent to which a country's measures are effective against 11 immediate outcomes. "Investigation and prosecution¹" refers to money laundering. "Investigation and prosecution²" refers to terrorist financing. Source: OECD Secretariat's calculation based on the materials from the Global Forum on Transparency and Exchange of Information for Tax Purposes; and OECD, Financial Action Task Force (FATF).

StatLink <https://stat.link/6t2b3n>

Seeking a close trade relationship with the European Union

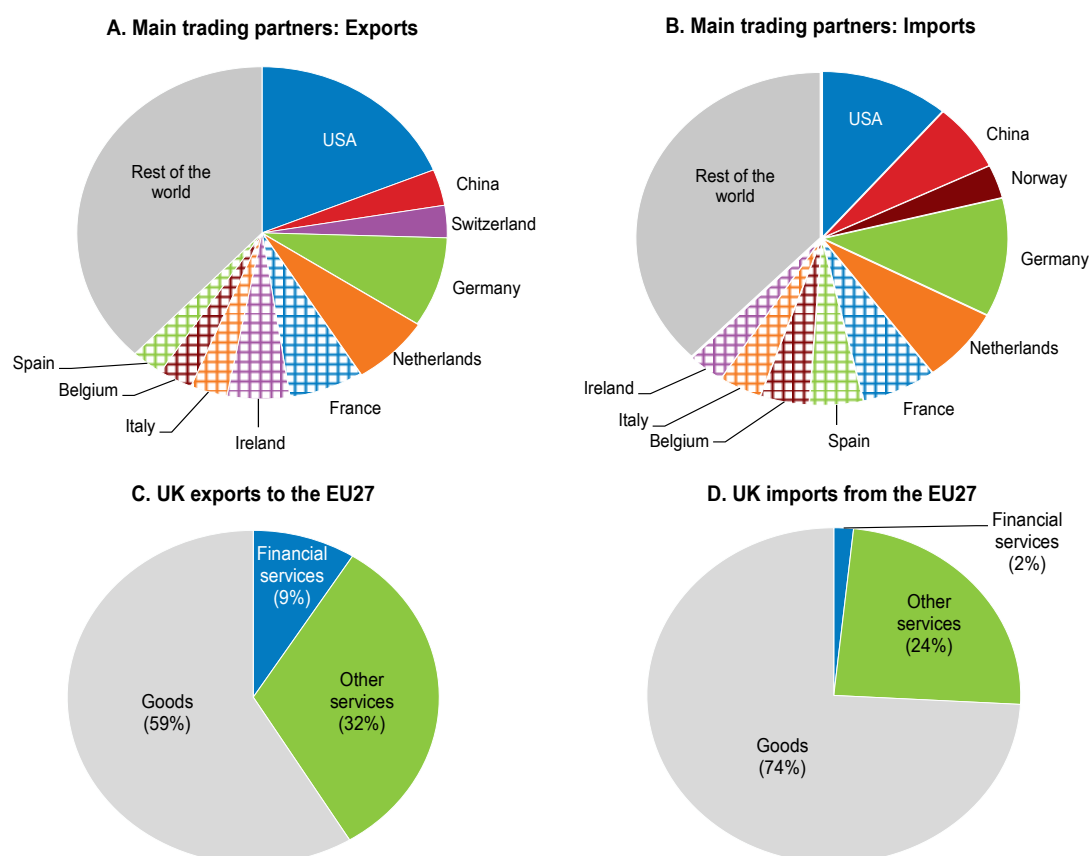
Although the United Kingdom left the European Union on 31 January 2020, the decision to leave has already had a significant impact on the economy since the 2016 Referendum. The economy rebounded immediately after the financial crisis and grew steadily in the subsequent years, but has slowed markedly since 2016, particularly as a result of lower investment growth. A key factor in the recovery will be how exit from the EU Single Market and the Customs Union is managed at the end of 2020 and beyond.

The United Kingdom has been deeply integrated with the European Union


Productivity and employment in the United Kingdom have benefitted from extensive trade with the European Union (Figure 1.29). Services account for a large share of UK exports. With service exports representing now around 45% of total exports, the country has built on its revealed comparative advantage in financial services (OECD, 2020h). The United Kingdom also exhibits strong advantages in insurance, personal services and other business services. By contrast, sectors where the United Kingdom has less revealed comparative advantages, such as agriculture or the fabrication of metal products, employ predominantly low-to-medium-skilled workers.

Figure 1.29. Services play a key role in UK exports

Exports and imports of goods and services, 2018



Source: ONS (2019), "UK Balance of Payments, The Pink Book: 2019".

StatLink  <https://stat.link/81wqfc>

Maintaining a close trade relationship would help limit the costs of exiting the EU Single Market

Trade agreements take time to negotiate. Reaching an agreement with the European Union usually takes between 4 and 10 years depending on the complexity and the depth of the agreements, given the necessity to consult with Member countries (Kierzenkowski et al., 2016). For instance CETA, the trade agreement between European Union and Canada took five years of negotiations.

Leaving the EU Single Market and the Customs Union will entail a sharp increase in trade costs and significant disruption in trade with the European Union and with other third countries, where the United Kingdom currently benefits from EU trade agreements, through rising barriers to trade and investment. Research on the likely impact of leaving the Single Market has underlined that the more integrated the United Kingdom stays with the European Union the less costly the exit is expected to be (HM Government, 2018; NIESR, 2018; Kierzenkowski et al., 2016; IMF, 2018). This is consistent with the broader literature on the benefits of trade openness in particular on productivity (Kim, Mourougane and Baker, forthcoming).

The negotiations have focused on reducing customs frictions and trade costs on goods, while the UK Government has indicated its intention to leave the EU Single Market and the Customs Union. The content of the Political Declaration between the European Union and the United Kingdom aims at providing general guidance for the future trade negotiations, although it is not legally binding (HM Government, 2019b). Since the beginning of the year both the United Kingdom and the European Union have set out their initial negotiation positions. They reflect the unprecedented nature of the forthcoming agreement, between two parties whose standards and rules are perfectly in line at the outset of the negotiations.

The UK Government has indicated its desire to move toward a Free Trade Agreement (FTA), with the European Union by the start of next year. A FTA could avoid tariffs and quotas all goods traded between the United Kingdom and the European Union. Securing a zero tariff and quota-free trade agreement with agreed standards is subject to negotiations and the interest of both the UK and EU's economies.

Even assuming a comprehensive accord, there will be rising technical barriers and sanitary and phytosanitary measures and a lower level of trade facilitation on goods as well as increased non-tariff barriers on services, as regulations between the United Kingdom and the European Union diverge over time. In addition, rules-of-origin requirements will need to be put in place to determine whether goods qualify for tariff-free entry. UK exports will thus face much higher compliance costs stemming from increased customs checks and border delays.

Although the details of any agreement are unknown, new simulations using the OECD general-equilibrium METRO model suggest that an agreement on a comprehensive FTA could still lead to a fall by about 6.1% of UK exports and 7.8% of UK imports in the medium term compared to the current situation (see Arriola et al., forthcoming for the underlying assumptions behind the simulations). The overall output loss would amount to 3.5% (Figure 1.30). Those losses are within the range of estimates reported in Kierzenkowski et al. (2016) and HM Government (2018). About two-thirds of the cost would come from rising trade costs on goods and the remaining one-third stems from rising regulations on services. Rules of origin and border transition costs would have a small effect. Calculations using an Okun Law suggest that output losses would translate into a rise in the unemployment rate by around 1 percentage point on average across sectors.

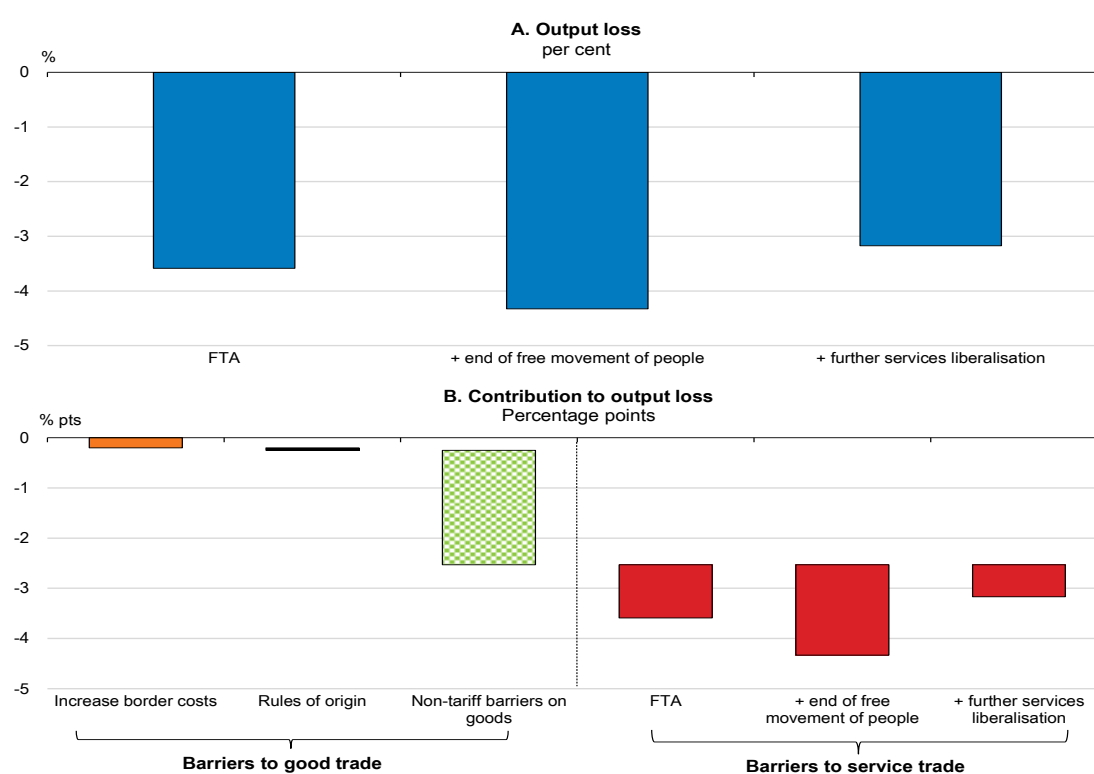
The effects of the exit from the Single Market could be accentuated by slower migration flows from EU countries. The UK Authorities have announced they will overhaul the UK immigration system, with changes expected to be put in place in 2021. They plan to end free movement of EU nationals, who will be subject to the same rules as non-EU nationals. Ending free-movement of people for EU nationals is expected to bring additional regulatory costs to the services economy. This would add some 0.7 percentage point of GDP to the cost of leaving the EU Single Market. This is a lower bound estimate as only the increase in

services regulation costs is considered while the effects on international migration and labour supply are omitted.

By contrast, losses could be partly compensated by growth-enhancing changes to UK regulations. The United Kingdom is, by international standards, performing relatively well thanks to a well-designed service regulatory regimes (excluding dimensions related to movement of people). There is some room to take action on the price and speed of visa deliverance. Other actions could be related to government procurement, screening or cross-border data flows, but some of these reforms may be more difficult to implement in the short term. Overall, the room to lower restrictions is relatively limited. Assuming all these reforms take place does not make up for the higher trade barriers with the European Union: output losses would still amount to 3.2% in the medium term.

Figure 1.30. Higher non-tariff barriers and barriers to service trade under a free trade agreement will lead to lower incomes than under EU membership

Real GDP, difference relative to the current situation in the medium term



Note: The FTA scenario considers no-tariff no quotas on goods, border, rules-of-origin and non-tariff barriers increases on goods and services. The “end of movement of people” scenario adds the regulatory impact on trade costs of those measures into the FTA. The “further services liberalisation” assumes the United Kingdom is implementing a set of reforms on visa procedure, procurement, screening and cross-border flows. Source: Arriola et al. (forthcoming).

StatLink  <https://stat.link/siv017>

Future UK growth prospects could be improved by trade deals with other non-EU countries, but in a limited way. Five trade agreements have been signed with non-EU countries or regions. Some other deals are well advanced, but most are at an early stage of negotiation. These deals are likely to bring only limited benefits relative to EU membership, given the current strong integration of the UK economy with the European Union, the distance from other countries, and the large number of preferential trade agreements the European Union has concluded in the past decade to which the United Kingdom will lose access. About

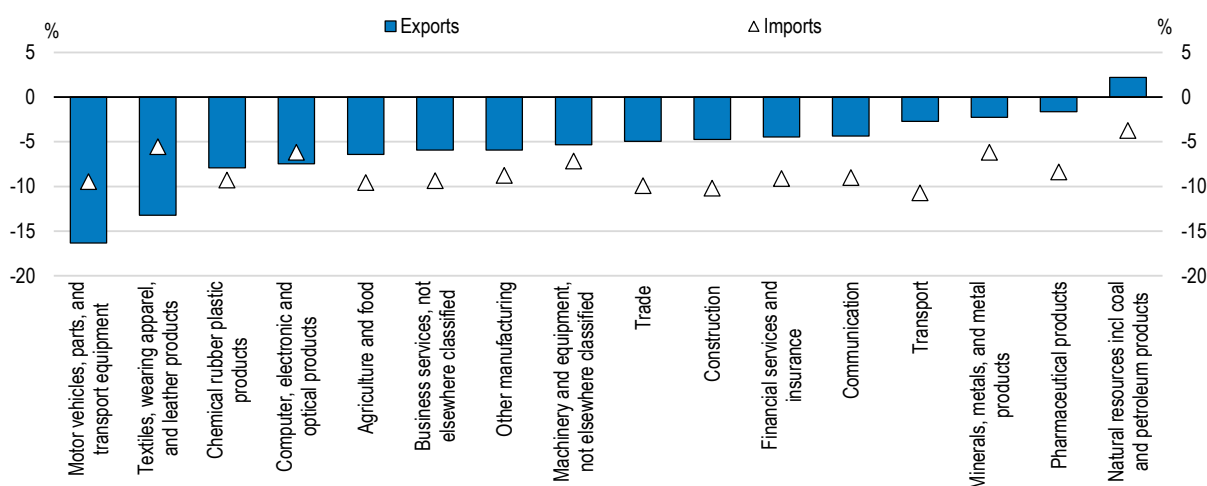
41% of EU trade in goods with the rest of the world is covered by preferential trade agreements, when including recent agreements such as Canada, Japan, Singapore, Viet Nam or the yet-to-be implemented Mercosur (European Commission, 2019).

The impacts of the new trade arrangements will vary across sectors and regions

The impact of leaving the Single Market to enter a FTA would vary markedly across sectors, reflecting their degrees of openness, sensitivity to policy changes and other structural differences. In the goods sector, motor vehicle, parts and transport equipment and to a lesser extent chemical rubber plastic products would experience the largest falls in exports (Figure 1.31). This reflects the deep integration of the United Kingdom in the EU supply chains in these sectors. Output losses in the service sectors would range from 2 to 7% in the medium term, with losses above 3% reported in key sectors, such as finances, business services, communications and construction. Although those falls are lower in relative terms, they represent large losses given the size of these sectors in the UK economy. Workers would also be unevenly affected. The unemployment rate would rise by 2.4 percentage points in the motor vehicle, parts and transport equipment sector. At the other end of the spectrum, almost no impact on unemployment would be observed in the natural resource sector.

Figure 1.31. Export and import losses vary across sectors

Difference to baseline, exports and imports in the medium term

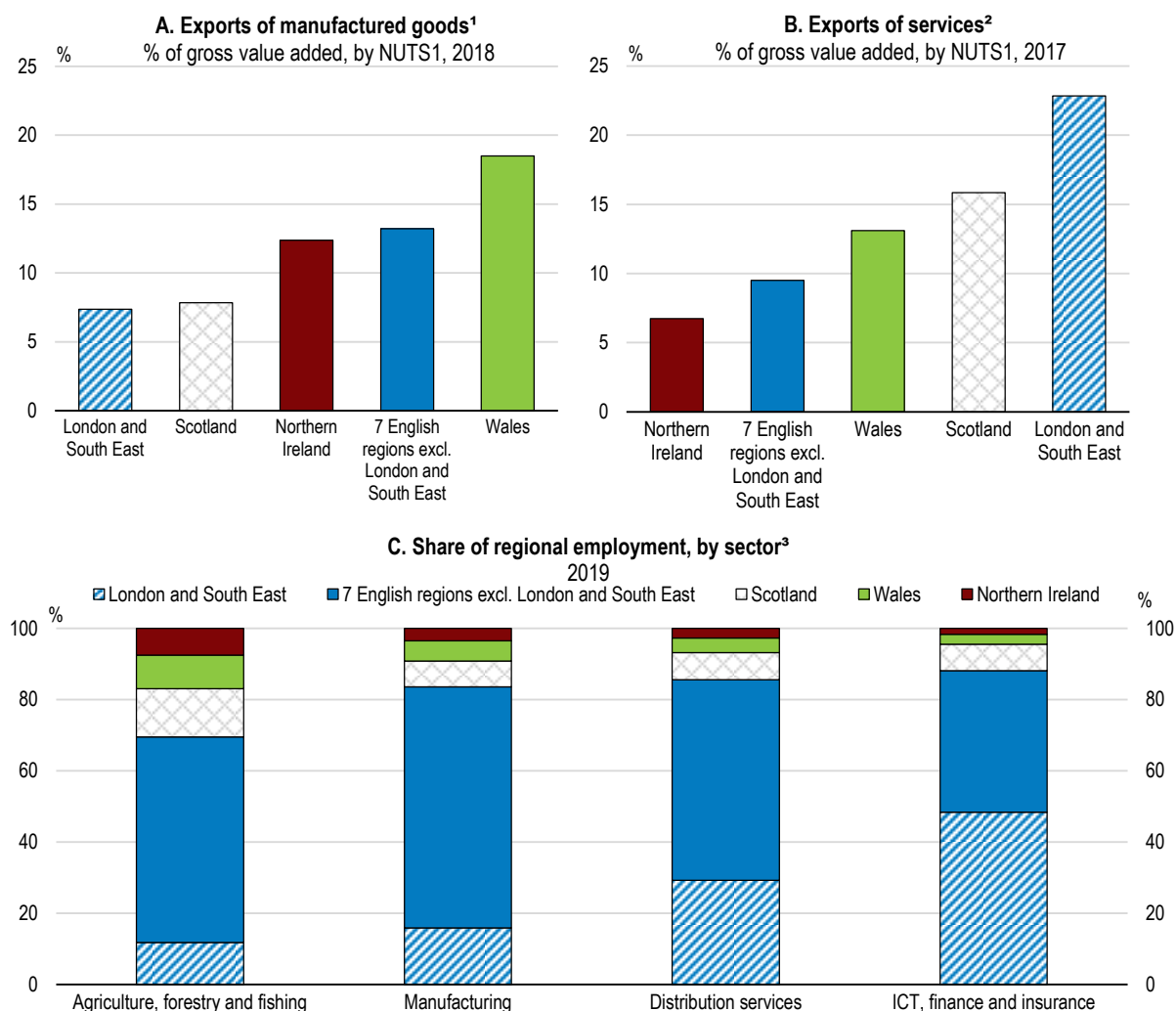


Source: Arriola et al. (forthcoming).

StatLink  <https://stat.link/pa3flb>

Leaving the EU Single Market is expected to have a differentiated impact across regions, reflecting their degree of openness, structure of trade and their job intensity (Figure 1.32). The North East and North of England and Wales will be particularly affected by the expected fall in manufacturing trade in the move to a FTA. London and Southern England are the areas most exposed to a disruption in trade in services. Those are also the regions which attract about half of the FDI projects and where jobs are concentrated. The extent of the disruption across regions will depend to a large extent on the outcomes in terms of financial services market access and equivalences. Thiessen et al. (2019) show that leaving the European Union is likely to increase regional disparities.

Figure 1.32. UK regions have different export and employment exposure



Note: NUTS1 areas of the United Kingdom are Wales, Scotland, Northern Ireland, and the nine English regions.


1. Includes machinery and transport, and miscellaneous manufactures.

2. Based on ONS's experimental estimates of international exports of services for 2017 with the use of several data sources including the International Trade in Services (ITIS) survey, the International Passenger Survey (IPS) and other non-survey national services sources.

3. Employment refers to the sum of employee and self-employment jobs, and government-supported trainees and HM forces.

Source: HM Revenue & Customs (2020), "Regional trade statistics first quarter 2020: accompanying tables", June; ONS (2019), "Regional gross value added (balanced) by industry: all NUTS level regions, December"; ONS (2019), "International exports of services from subnational areas of the UK: 2017", September; and ONS (2020), "JOBS05 Workforce jobs by region and industry (seasonally adjusted)", June.

subnational areas of the UK: 2017", September; and ONS (2020), "JOBS05 Workforce jobs by region and industry (seasonally adjusted)", June.

StatLink  <https://stat.link/5bh3yt>

Ensuring market access in services is key to a good outcome

Market access for services trade is crucial for a service-based economy such as the United Kingdom and will support job creation. Barriers to trade and to foreign entry have been generally low in the UK service sectors, especially with European countries. Research undertaken for this Survey suggests that an increase in the stringency of barriers to trade and competition by the United Kingdom from the current low levels related to intra EU trade to higher levels faced by non-EU countries could depress long-term productivity by 3% to 5% in most service sectors. The impact would vary across sectors, with transport and storage, professional scientific and technical activities and finance and insurance being the most affected (Chapter 2).

The coverage of services in trade agreements has increased over the years, especially regarding financial services (Box 1.8). Agreements on services are hard to reach because trade in services is influenced more by domestic regulation and standards than trade policy *per se* and involves long processes of mutual recognition. To be consistent with the WTO rules, regional agreements should cover substantially all services trade (i.e. a large share of trade and mode of supply and not be restricted to specific sectors), and not increase barriers to countries which do not participate in the agreement.

Alongside negotiations to get a comprehensive deal with the European Union, the United Kingdom could seek to reinvigorate the plurilateral Trade in Services Agreement (TiSA) to ease services market access. TiSA includes the key provisions of the GATS and aims at opening up markets and improving rules in areas such as licensing, financial services, telecoms, e-commerce, maritime transport, and professionals moving abroad temporarily to provide services. It covers 70% of world services trade and is currently being negotiated by 23 members, including the European Union, whose role will also be key to achieve significant progress in facilitating market access.

Box 1.8. 21st Century Trade Agreements

This box reviews selected recent preferential trade agreements to underline their innovative features rather than provide a comprehensive description. Those agreements include the Comprehensive Economic and Trade Agreement (CETA, Canada, European Union), the EU Japan Economic Partnership Agreement (EUJEP), the United States-Mexico-Canada Agreement (USMCA), the Digital Economy Partnership Agreement (DEPA, New Zealand, Chile and Singapore) and the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP, 11 countries in the Asia-Pacific region, including New Zealand, Australia, Brunei Darussalam, Canada, Chile, Japan, Malaysia, Mexico, Peru, Singapore, and Viet Nam). Those agreements go beyond the standard provisions on preferential tariff treatment and often include commitments on services and investment, public procurement, competition and subsidies and regulatory issues. Agreements usually refer to specificities of existing regimes rather than clauses from the GATS.

Sectoral coverage

While the coverage of services sectors has improved compared to the first generation of trade agreements, about half of the agreements still focus on goods trade. According to the World Trade Organisation (WTO), amongst the existing 304 agreements in place, 150 were on goods, 152 on goods and services and 2 on services only.

Both the CETA and the EUJEP secure some limited opening of services markets, in particular financial services, postal and courier services telecommunications and transport. For financial services, Canada's market access under CETA is limited to a small selection of cross-border services, which, except for insurance intermediation and portfolio management, is basically identical to the EU's Most Favoured Nations commitments that apply to services in the GATS. The EUJEP contains provisions on new financial services, self-regulating organisations, payment and clearing systems and transparency, and rules on insurance services provided by postal entities. Many of these are based on rules developed under the WTO.

Most trade agreements provide broad language that encourages countries to recognise each other's regulatory measures to co-operate and exchange information. In terms of mutual recognition, both the CETA and the EUJEP provide a framework to recognise qualifications in certain regulated professions.

The EUJEP includes the most advanced provisions on movement of people for business purposes that the European Union has negotiated so far. They cover all traditional categories such as intra-corporate transferees, business visitors for investment purposes, contractual service suppliers, and independent professionals, and newer categories such as short-term business visitors and investors.

Investment

Most agreements provide basic investment provisions. The CETA and EUJEPa build on and reinforce the commitments taken regarding intellectual property rights in the WTO, in line with the EU's own rules. USMCA extends the terms of copyright to 70 years beyond the life of the author (up from 50 in NAFTA).

Regulations

Most agreements have introduced horizontal good-regulatory practices and/or international regulatory cooperation, suggesting an increased commitment to regulatory quality and coherence (Kauffmann and Saffirio, 2019).

Progressive clauses

Major trading nations now include environmental protection and social policy provisions in their trade agreements. Those progressive provisions aim at establishing minimum standards of protection, rather than harmonising divergent legislation. In particular, the CPTPP includes legally-enforceable commitments to safeguard high labour and environmental standards. They ensure that member countries have in place laws and practices governing workers' wages and safety. The CETA also sets legally-binding commitments on environmental protection and labour rights and the EUJEPa includes a comprehensive chapter on trade and sustainable development. The United States is regarded as having set what may be regarded as a benchmark for monitoring and reporting on the implementation of environmental provisions in regional trade agreements (George and Yamaguchi, 2018).

Public procurement

The CETA provides for a significant opening of the Canadian procurement market, including at the provincial and the local levels, which represent a significant share of the public procurement market in Canada. The EUJEPa gives EU companies access to the procurement markets of 54 large Japanese cities, and removes obstacles to procurement in the railway sector at national level.

Digital trade and e-commerce

The USMCA and the CPTPP have upgraded provisions on digital trade and e-commerce. USMCA for instance prohibits duties on music and ebooks, and provides protections for internet companies so they are not liable for content their users produce. In January 2020, the European Union and Japan agreed to allow personal data to flow freely and safely between the two partners. DEPA considers all aspects of the digital economy that might support trade (e.g. consumer and data protection).

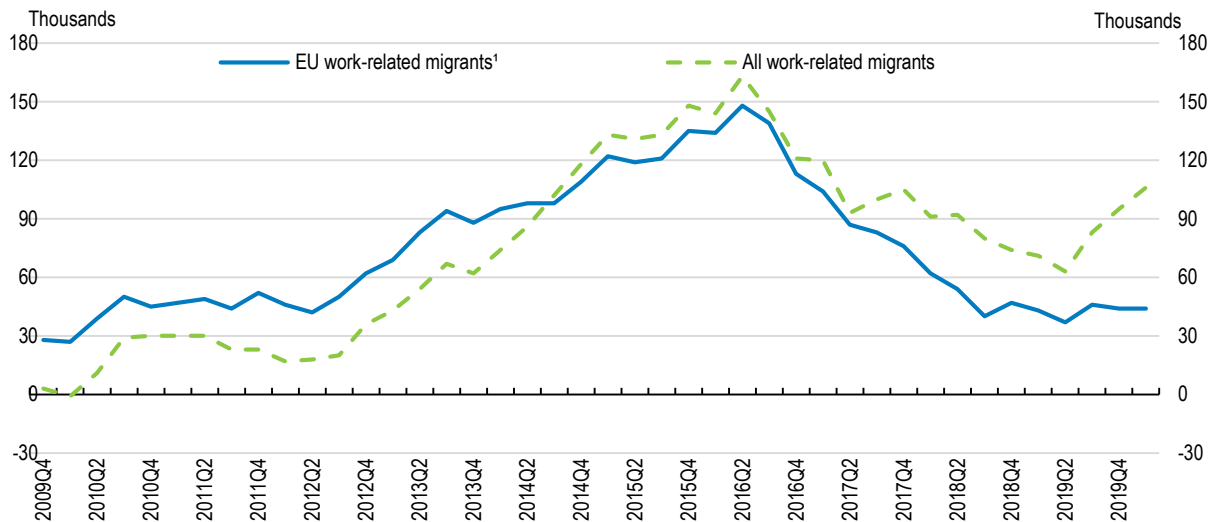
Source: European Commission (2019), USMCA, CETA, CPTPP, DEPA websites.

Making sure the immigration system remains flexible

The COVID-19 crisis has temporarily reduced movement and migration. However, in the context of the exit from the European Union, the UK Government had previously announced major plans to overhaul the immigration system by 2021. It has committed to ending free movement of EU nationals, who will be subject to the same rules as non-EU nationals. It will bring in a point-based system to cater for the most highly skilled workers, skilled workers, students and a range of other specialist work routes including routes for global leaders and innovators. The Government has reduced the general salary threshold for migrants on the skilled worker route and the skills requirement. However, there will not be a general low-skilled or temporary work route. In July 2020, the Government announced a fast-track process with reduced fees for doctors, nurses and other 'skilled' healthcare staff, but notably not for social care workers. The precise list of occupations for which there are not enough resident workers to meet demand and that will benefit from preferential treatment, has not yet been made public.

Figure 1.33. Work-related immigration from the European Union has fallen sharply

Net migration to the United Kingdom for work-related reasons, by citizenship¹



1. "Work related" includes "Definite job" and "Looking for work".

Source: ONS (2020), "Provisional long-term international migration estimates", August.

StatLink  <https://stat.link/h04ocs>

The composition of net international migration has changed since 2016 with a rise in the share of non-EU migrants for work while net migration from EU countries has slowed down and more recently stabilised (Figure 1.33). EU migrants, including students, still represent a sizeable share of the workforce in some activities. Changes to immigration rules are likely to impact regions and sectors differently. Sectors, such as the hospitality and personal care sectors, which rely disproportionately on EU migrants are also likely to be particularly affected in the short to medium term. In the event that migration from EU countries markedly decelerates, it would be useful to reactivate existing short-term schemes or create similar schemes to address labour shortages in sectors such as social care or hospitality or regions which are highly dependent on EU migration.

OECD experience suggests that there is no prevailing immigration model (OECD, 2018e; OECD, 2019d). Countries with a point system which seems to have worked well are also those that have allowed parameters of the system to be easily amended (Canada, Australia). For instance, the Canada model is reported to have ensured greater flexibility in selection and application management, better responsiveness to labour market and regional needs and quick application processing (OECD, 2019d). It will be important to ensure similar flexibility in the UK immigration system. In this regard it is useful that the policy statement detailing the main features of the new immigration system refers to the possibilities to adapt some routes (e.g. for international students), to changes in the global environment.

Keeping the global financial role of the City

London is a major global financial centre which, along with New York, has the deepest financial markets in the world. It benefits from favourable regulation, a well-qualified workforce and market size (Financial Centres Futures, 2020). It currently provides financial intermediation services to European investors and acts as an important gateway for non-EU countries to gain access to European markets. Although it remains a major hub, there is evidence that the UK financial and insurance sector has already lost some of its centrality since the financial crisis (Criscuolo and Timmins, 2018). Financial sector productivity growth has been declining since the financial crisis, but measured productivity levels remain higher than in other

service sectors. Evidence points to some reallocation toward EU countries, including since 2016, with some other European financial centres very active in attracting financial services.

Following the end of the transition period and under the envisaged Free Trade Agreement starting in 2021, UK-based financial institutions will lose their passporting rights, which allow UK-regulated firms to provide financial services anywhere in the European Union and define the prudential treatment of exposure. Their ability to access EU markets will be governed by more restrictive third-country equivalence arrangements, as stated in the Political Declaration, unless there is an enhancement in access to the EU financial markets agreed between the United Kingdom and the European Union.

Contrary to passporting rights, equivalence can be withdrawn if legislation between the European Union and the third party and supervisory practises diverge. In addition, EU legislation does not provide equivalence for all financial services (e.g. for wholesale and retail commercial banking). This creates an incentive for firms to move their operations to an EU country to continue to benefit from the passporting regime. This could have potentially large economic and fiscal implications, given that the tax revenues raised from these activities would accrue to the EU country. HM Government (2018) estimates that the loss of passporting would lead to a 13% increase in trade costs for financial services if the United Kingdom enters in an average FTA with the European Union. The City could eventually reorient its activities to adapt to a post-Brexit environment, although there seems to be very little clarity about how this would happen. Looking forward, some features of the UK regulatory and institutional framework are likely to remain attractive. This includes a well-developed legal tradition that protects creditor and shareholders' rights, as well as tax and employment regulation that are attractive to the financial industry.

Overall it is likely that the consequences of leaving the European Union will vary across activities and financial service companies. Dhingra and Simpson (2019) predict that financial intermediation will experience relatively greater losses. Wholesale banking is highly dependent on passporting, whereas insurance already operates on the basis of subsidiaries with separate legal personalities (EU Parliament, 2017). Finally, for certain financial services, the potential loss of EU-specific trading might be mitigated by the historical size and liquidity of the London market. London is one of the primary markets for over-the-counter derivatives trading, accounting for the vast share of trade in foreign exchange and interest rate derivatives. Keeping close relationships with the European Union and dispelling uncertainties on the nature of the agreement as rapidly as possible will help to minimise the costs from losing passporting rights.

MAIN FINDINGS	RECOMMENDATIONS (Key recommendations in bold)
Moving from emergency to reinvigorating growth measures	
<p>The economy contracted sharply during the COVID-19 crisis. While some activities have now picked up, overall demand is expected to recover only gradually.</p> <p>There are major downside risks related to COVID-19 and a disorderly exit from the EU Single Market.</p> <p>Monetary policy has eased. The Government rapidly put in place a range of substantial economic support measures to firms and workers. Since July 2020, policies have been adjusted or phased out and new measures introduced.</p>	<p>Ensure support is available and adapted as needed based on epidemiological and economic developments, while not hindering the reallocation of resources towards firms and sectors with better growth prospects. Consider introducing more targeted measures. Further increase active labour market spending to displaced and low-skilled workers.</p> <p>Prioritise digital infrastructure, particularly in deprived regions, in the allocation of the planned increase in public investment. Ensure sound governance of infrastructure investments.</p> <p>Keep monetary policy accommodative until there are clear signals of price pressures.</p> <p>Review support to firms and prioritise measures that are directed to firms facing temporary financing needs.</p> <p>Monitor the situation carefully, and gradually reduce state guarantees on new lending to return to prudent credit standards. Improve credit standards to allow structural change to go ahead, put in place a mechanism to quickly resolve bad debt covered by state guarantees to speed up such reallocation</p>
<p>The UK economy is deeply integrated with the European Union and leaving the EU Single Market will hamper trade. Services account for a large share of trade, but negotiations have focused mostly on goods.</p>	<p>Keep low barriers to trade and investment with the European Union and others, particularly market access for the service sectors including financial services.</p> <p>Enhance communication on a no-deal exit from the European Union. Prepare targeted support to firms and workers that may suffer the most. Put in place trade facilitation measures to smooth disruptions at the border.</p>
Supporting a sustainable recovery	
<p>Productivity growth has underperformed compared to past business cycles and other OECD countries. Low investment and slow innovation rates contribute to weak productivity performance.</p> <p>The competition framework is well designed, and the United Kingdom is currently one of the least restrictive countries in terms of business regulations. The framework will need to be refined to adapt to a fast changing environment. Stringent land-use regulations prevent an efficient allocation of housing supply.</p>	<p>Ensure continuity in government support through the Industrial Strategy, a multidimensional approach to boost investment, innovation and skills intended to foster productivity growth.</p> <p>Refine the competition framework to adapt it to the digital economy: enable greater personal data mobility and systems with open standards; adopt a broader approach to merger assessment including an evaluation of the overall economic impact of mergers.</p> <p>Ease-land use regulations to seek the right balance between improving resource allocation and environmental and social concerns.</p>
<p>The proportion of under-qualified workers is one of the highest in OECD countries. Participation in lifelong learning has been declining. Spending allocated to adult training is low. Despite a new apprenticeship system, there has been a drop in the number of total apprenticeship starts.</p>	<p>Develop digital skills of low-skilled workers, including through further increasing public spending on training..</p> <p>Better target the apprenticeship system to favour access of low-skilled workers. Introduce individually targeted programmes for low-wage and low-skilled workers to improve their lifelong learning opportunities.</p>
<p>Universal Credit intends to consolidate the welfare system, but its heavy focus on sanctions may be having a negative impact on people finding quality jobs. Some self-employed workers enjoy considerable tax benefits compared with employees.</p>	<p>Ensure that the stringency of the job-search requirements in Universal Credit, in the form of payment sanctions, are not too strict.</p> <p>Continue to reduce the tax gap between self-employed and employees.</p>
<p>The COVID-19 crisis will lead to widespread job losses and poverty. The minimum wage has been increasing at a fast pace and is now one of the highest in Europe. Poverty is concentrated in out-of-work and single-parent households.</p>	<p>Use well-designed in-work benefits to support low-income earners rather than continuing steep increases in the minimum wage.</p>
<p>The COVID-19 crisis has increased gender inequality. The female labour force participation rate is depressed by high costs of childcare.</p>	<p>Strengthen efforts to make good-quality childcare less costly.</p>
<p>Carbon emissions have fallen significantly and the crisis provides an opportunity to accelerate the move toward a decarbonised economy. The United Kingdom is not on track to meet zero net emissions by 2050. Limited green spending have been announced to support the recovery.</p>	<p>Continue efforts to reduce emissions in the transportation sector. Align carbon pricing across sectors and fuels and eliminate incentives to develop oil and gas fields. Continue to give fuel poverty full consideration.</p>

Ensuring long-term sustainability in a post-pandemic environment	
<p>The public debt-to-GDP ratio is expected to reach historically high levels. Age-related pressures are rising. The current pension uprating (triple lock) will be costly in the future.</p> <p>There is scope to improve the efficiency and fairness of the tax system. A spending review has been launched and the last tax review dates back 2011.</p>	<p>Once the recovery is firmly established, address the remaining structural deficit and put the public debt-to-GDP ratio on a downward path.</p> <p>Replace the pensions “triple lock” by indexing pensions to average earnings and ensure adequate income is provided to poorer pensioners. Carry out comprehensive tax and spending reviews and broaden the tax base to fund social objectives once the recovery is fully entrenched.</p>
<p>Fiscal rules are complex and fail to provide medium term guidance. A review of the fiscal framework is planned for this Autumn.</p>	<p>Set a stable medium-term framework to improve guidance to policy and markets.</p>

Bibliography

- [Adalet McGowan, M., D. Andrews and V. Millot \(2017\)](#), "Insolvency Regimes, Zombie Firms and Capital Reallocation", *OECD Economics Department Working Papers*, No. 1399, OECD Publishing, Paris.
- [Adam-Prassl, A., T. Boneva, M. Golin and C. Rauh \(2020\)](#), Inequality in the Impact of the Coronavirus Shock: New Survey Evidence for the UK, Cambridge-INET Working Paper.
- [Aitken, A., J. Boshoff, D. Nguyen, A. Rincon-Aznar, A. Stochino \(2019\)](#), "Places and Spaces: Mapping Britain's regional divides", in 2019 UK General election Analysis, National Institute of Economic and Social Research.
- [Aitken, A., P. Dolton, and R. Riley \(2019\)](#), "The Impact of the Introduction of the National Living Wage on Employment, Hours and Wages", *National Institute of Economic and Social Research Discussion Paper*, No. 501.
- Arriola, C., S. Benz, A. Mourougane and F. Van Tongeren (forthcoming), "The Trade Impact of the UK's Leaving the EU Single Market", *OECD Economics Department Working Papers*, OECD Publishing, Paris.
- [Atkinson, A. et al. \(2017\)](#), "Reducing Poverty and Inequality through Tax-Benefit Reform and the Minimum Wage: the UK as a Case-Study", *The Journal of Economic Inequality*, Vol. 15/4.
- [Balestra C. and R. Tonkins \(2018\)](#), "Inequalities in Household Wealth across OECD Countries: Evidence from the OECD Wealth Distribution Database", *OECD Statistics and Data Directorate Working Paper*, No. 88, OECD Publishing.
- [Bank of England \(2020a\)](#), *Interim Financial Stability Report*, May.
- [Bank of England \(2020b\)](#), *Monetary Policy Report*, August.
- [Bank of England \(2018\)](#), *EU Withdrawal Scenarios and Monetary and Financial Stability*, November.
- [Batty, E. et al. \(2015\)](#), *Homeless People's Experiences of Welfare Conditionality and Benefit Sanctions*, Crisis, London.
- [Blanchard, O. \(2019\)](#), "Public Debt and Low Interest Rate", *NBER Working Paper* No. 25621, February.
- [Bloom, N., P. Bunn, S. Chen, P. Mizen, P. Smietanka and G. Thwaites \(2019\)](#), "The Impact of Brexit on UK Firms", *NBER Working Paper*, No. 26218, September.
- [Boshoff, J., H. Espinoza, E. Lisauskaitė, S. Speckesser and L. Xu \(2019\)](#), "Education Policy Priorities and a Look into the Manifestos", in 2019 UK General Election Analysis, National Institute of Economic and Social Research.

[Borowiecki, M. and J. Parelissen \(2020\)](#), “Business Support Must now Facilitate the Recovery from COVID-19”, *Ecoscope*, 29 July.

[Brewer, M. and P. De Agostini \(2015\)](#), “The National Minimum Wage and its Interaction with the Tax and Benefits System: a Focus on Universal Credit”, *EUROMOD Working Paper Series*, No. EM 2/15.

[Britton, J., C. Farquharson and L. Sibieta \(2019\)](#), *2019 Annual Report on Education Spending in England*, IFS Report.

[Buckle, R. \(2018\)](#), “A Quarter of a Century of Fiscal Responsibility: The Origins and Evolution of Fiscal Policy Governance and Institutional Arrangements in New Zealand, 1994 to 2018”, *Victoria University Working Paper*, 13/2018, October.

Bulman, T. (forthcoming), *Universal Credit and Effective Tax Rates*, Background Paper.

[Christie, R. and T. Wieser \(2020\)](#), “The European Union’s Post-Brexit Reckoning with Financial Markets”, *Bruegel Policy Contribution Issue*, n°8, May.

[Committee on Climate Change \(2019\)](#), *Net Zero: The UK’s Contribution to Stopping Global Warming*, May.

[Courmède, B., J.-M. Fournier and P. Hoeller \(2018\)](#), “Public Finance Structure and Inclusive Growth”, *OECD Economic Policy Papers*, No.25, OECD Publishing, Paris.

[Criscuolo, C. and J. Timmis \(2018\)](#), “GVCS and Centrality: Mapping Key Hubs, Spokes and the Periphery”, *OECD Productivity Working Papers*, No. 12, OECD Publishing, Paris.

[Cromaty, H. \(2019\)](#), *Adult Care (England) Funding*, House of Commons Library Briefing Paper, February.

[Cunliffe, J. \(2020\)](#), “Financial System Resilience: Lessons from a Real Stress”, Speech, 9 June 2020, Bank of England.

[Desiere, S., K. Langenbacher and L. Struyven \(2019\)](#), “Statistical Profiling in Public Employment Services: An International Comparison”, *OECD Social, Employment and Migration Working Papers*, No. 224, OECD Publishing, Paris.

[Department for Work and Pension \(2019\)](#), *Households Below Average Income (HBAI) Quality and Methodology Information Report: 2017/18*.

[Department of Work and Pensions \(2015a\)](#), “Weekly Work Search Review Trial”, *DWP ad hoc research report* No. 59.

[Department of Work and Pensions \(2015b\)](#), *Universal Credit Extended Gateway Evaluation: Findings from Research with Extended Gateway Claimants*, December.

[Department for Work and Pension \(2012\)](#), *Impacts and Costs and Benefits of the Job Future Funds*.

[Demmou, L. and G. Franco \(2020\)](#), “Do Sound Infrastructure Governance and Regulation Affect Productivity Growth? New Insights from Firm Level Data”, *OECD Economics Department Working Paper*, No. 1609, OECD Publishing, Paris.

Demmou L., G. Franco, S. Calligaris and D. Dlugosch (2020), “Insolvency and Debt Overhang Following the COVID-19 Outbreak: Assessment of Risks and Policy Responses”, *OECD Economics Department Working Paper*, forthcoming, OECD Publishing, Paris.

De Lyon J. and S. Dhingra (forthcoming), “Worker Training in the Services Sector”, *OECD Economics Department Working Paper*, forthcoming, OECD Publishing, Paris.

[Dhingra, S. and Sampson \(2019\)](#), “CEP Elections Analysis”, *Center for Economic Performances*, November.

- [Dube, A. \(2019\)](#), *Impacts of Minimum Wages: Review of the International Evidence*, HM Treasury, November.
- [Dwyer, P. \(2018\)](#), *Welfare Conditionality Project: Final findings*, May.
- [European Central Bank \(2020\)](#), *ECB's President Hearing at the European Parliament*, June.
- [Égert, B. and P. Gal \(2017\)](#), "The Quantification of Structural Reforms in OECD Countries: A New Framework", *OECD Economics Department Working Papers*, No. 1354, OECD Publishing, Paris.
- [Eliot Major and Machin \(2020\)](#), *Covid-19 is Increasing the Divide in Life Chances between Rich and Poor*, LSE blog.
- [European Commission \(2020\)](#), 'Getting Ready for Changes Communication on Readiness at the End of the Transition Period between the European Union and the United Kingdom', COM(2020) 324 Final.
- [European Commission \(2019\)](#), *2019 Report on Implementation of EU Free Trade Agreements*, 1 January 2018-31 December 2018.
- [EU Parliament \(2017\)](#), *Implications of Brexit on EU Financial Services*, Study for the ECON Committee.
- [Financial Conduct Authority \(2020\)](#), "A Financial System to Support the Recovery", Speech by Charles Randell, Chair of the FCA and PSR, to a virtual roundtable of bank chairs hosted by UK Finance.
- [Financial Centres Futures \(2018\)](#), *The Global Financial Centres Index 24*.
- [Fournier, J.-M. and A. Johansson \(2016\)](#), "The Effect of the Size and the Mix of Public Spending on Growth and Inequality", *OECD Economics Department Working Papers*, No. 1344, OECD Publishing, Paris.
- [Jones, R. and J. Llewellyn \(2019\)](#), 'Improving Infrastructure', *NIESR Economic Review*, 250, November.
- [George, C. and S. Yamaguchi \(2018\)](#), "Assessing Implementation of Environmental Provisions in Regional Trade Agreements", *Trade and Environment Working Papers*, No. 1, OECD Publishing, Paris.
- [Hauser, A. \(2020\)](#), "Seven Moments in Spring: Covid-19, Financial Markets and the Bank of England's Balance Sheet Operations", Speech, 4 June 2020, Bank of England.
- [HM Government \(2020a\)](#), *March Budget*.
- [HM Government \(2020b\)](#), *Comprehensive Spending Review: Guidance*, March.
- [HM Government \(2020c\)](#), *The Future Relationship with the EU, the UK Approach to Negotiation*.
- [HM Government \(2020d\)](#), *The UK's Points-Based Immigration System Further Details*, July.
- [HM Government \(2019a\)](#), *Leading on Clean Growth*, The Government Response to the Committee on Climate Change's 2019 Progress Report to Parliament – Reducing UK emissions, October.
- [HM Government \(2019b\)](#), *Political Declaration Setting out the Framework for the Future Relationship between the European Union and the United Kingdom*, November.
- [HM Government \(2018\)](#), *EU Exit Long-Term Economic Analysis*, November.
- [HM Revenues and Customs \(2020\)](#), *Coronavirus Job Retention Scheme statistics: August 2020*.
- House of Commons Northern Ireland Affairs Committee (2020), *Oral evidence: Unfettered Access: Northern Ireland and customs arrangements after Brexit (HC 161)*, 18 June.
- House of Commons Committee on the Future Relationship with the European Union (2020), *Written evidence submitted by the Confederation British Industry (FRE0029)*, May.
- [IEA \(2019\)](#), *United Kingdom 2019 Review*, Energy Policies of IAE Countries.

[IFS \(2018\)](#), *IFS Green Budget 2018*.

[Immervoll, H. and C. Knotz \(2018\)](#), "How Demanding are Activation Requirements for Jobseekers?", OECD Social, Employment and Migration Working Papers, No. 215, OECD Publishing, Paris.

[IMF \(2018\)](#), *Long-Term Impact of Brexit on the EU*. In: Euro Area Policies—Selected Issues, IMF Country Report 18/224, July.

[Kierzenkowski, R., et al. \(2016\)](#), "The Economic Consequences of Brexit: A Taxing Decision", *OECD Economic Policy Papers*, No. 16, OECD Publishing, Paris.

Kim E.J., A. Mourougane and M. Baker (forthcoming), "What Drives Productivity in the United Kingdom and in Europe? Evidence from Sectoral and Firm-level data", Economic Department Working Paper, OECD Publishing, Paris.

[Low Pay Commission \(2019\)](#), "20 years of the National Minimum Wage: A History of the UK Minimum Wage and its Effects".

[Meloninna M., H. Miller and S. Tatomir \(2018\)](#), "Business Investment, Cost of Capital and Uncertainty in the United Kingdom — Evidence from Firm-Level Analysis", *Bank of England Staff Working Paper*, No. 717, March.

[Mirless Review \(2011\)](#), *Review of Tax System*.

[Mourougane, A., J. Botev, J.M. Fournier, E. Rusticelli and N. Pain \(2016\)](#), "Can an Increase in Public Investment Sustainably Lift Growth?", *OECD Economics Department Working Papers*, No. 1351.

[National Audit Office \(2019\)](#), *NHS Financial Sustainability*.

[NHS England \(2019\)](#), *Interim NHS People Plan*.

[NIESR \(2018\)](#), *The Economic Effect of the Government's Proposed Brexit Deal*, NIESR Report.

[OBR \(2020a\)](#), *Economic and Fiscal Outlook*, March.

[OBR \(2020b\)](#), *Fiscal Sustainability Report*, July.

[OBR \(2019\)](#), *Fiscal Risks Report*, July.

[OBR \(2018\)](#), *Fiscal Sustainability Report*, July.

[OECD \(2020a\)](#), "Testing for COVID-19: A Way to Lift Confinement Restrictions", Tackling Coronavirus Series, OECD Publishing, Paris.

[OECD \(2020b\)](#), *OECD Economic Outlook*, Volume 2020, Issue 1, OECD Publishing, Paris.

[OECD \(2020c\)](#), *Corporate Bond Market Trends, Emerging Risks and Monetary Policy*, OECD Publishing, Paris.

[OECD \(2020d\)](#), "Corporate Sector Vulnerabilities during the Covid-19 Outbreak: Assessment and Policy Responses", Tackling Coronavirus Series, OECD Publishing, Paris.

[OECD \(2020e\)](#), "The COVID-19 Crisis and State Ownership in the Economy: Issues and Policy Considerations", Tackling Coronavirus Series, OECD Publishing, Paris.

[OECD \(2020f\)](#), "From Containment to Recovery: Environmental Responses to the COVID-19 Pandemic", Tackling Coronavirus Series, OECD Publishing, Paris.

[OECD \(2020g\)](#), *Employment Outlook 2020: Worker Security and the COVID-19 Crisis*, OECD Publishing, Paris.

[OECD \(2020h\)](#), "Public Employment Services in the Frontline for Jobseekers, Workers and Employers", Tackling Coronavirus Series, OECD Publishing, Paris.

- [OECD \(2020i\)](#), “Skill Measures to Mobilise the Workforce during the COVID-19 Crisis”, Tackling Coronavirus Series, OECD Publishing, Paris.
- OECD (2020j), forthcoming), Services Trade in the UK Economy and in the World Economy, forthcoming.
- OECD (2020k), “Is Childcare Affordable?” Policy Brief *on Employment, Labour and Social Affairs*, Paris.
- [OECD \(2019a\)](#), *Going Digital: Shaping Policies, Improving Lives*, OECD Publishing, Paris.
- [OECD \(2019b\)](#), *OECD Employment Outlook 2019: The Future of Work*, OECD Publishing, Paris.
- [OECD \(2019c\)](#), *Phase 4 Two-Year Follow-Up Report by the United Kingdom*.
- [OECD \(2019d\)](#), “Permanent Labour Migration”, in *Recruiting Immigrant Workers: Canada 2019*, OECD Publishing, Paris.
- [OECD \(2018a\)](#), *Good Jobs for All in a Changing World*, the OECD Job Strategy, December, OECD Publishing, Paris.
- OECD (2018b), *OECD Best Practices for Performance Budgeting*, GOV/PGC/SBO(2018)7, November.
- [OECD \(2018c\)](#), *Key Policies to Promote Working Lives*, OECD Publishing, Paris.
- [OECD \(2018d\)](#), *Effective Carbon Rates 2018: Pricing Carbon Emissions Through Taxes and Emissions Trading*, OECD Publishing, Paris.
- [OECD \(2018e\)](#), “Skillselect – Australia’s Expression of Interest System”, in *Recruiting Immigrant Workers: Australia 2018*, OECD Publishing, Paris.
- [OECD \(2018f\)](#), *Equity in Education: Breaking Down Barriers to Social Mobility*, PISA, OECD Publishing, Paris.
- [OECD \(2017a\)](#), *Investing in Climate, Investing in Growth*, OECD Publishing, Paris.
- [OECD \(2017c\)](#), *Starting Strong 2017: Key OECD Indicators on Early Childhood Education and Care*, OECD Publishing, Paris.
- [OECD \(2016\)](#), *Economic Outlook*, Volume 2016, Issue 2, OECD Publishing, Paris.
- [OECD \(2015\)](#), “Achieving Prudent Debt Targets Using Fiscal Rules”, *OECD Economics Department Policy Notes*, No 28.
- [ONS \(2020a\)](#), *Deaths Involving COVID-19 by Local Area and Socioeconomic Deprivation: Deaths Occurring between 1 March and 17 April 2020*.
- [ONS \(2020b\)](#), *Coronavirus (COVID-19)-related Deaths by Ethnic Group*, England and Wales: 2 March 2020 to 10 April 2020.
- [ONS \(2020c\)](#), *Technology Intensity and Homeworking in the UK*, May.
- [ONS \(2020d\)](#), *Labour Market Overview*, August.
- [ONS \(2020e\)](#), *Effects of Taxes and Benefits on UK Household Income: Financial year ending 2019*, June.
- [ONS \(2020f\)](#), *Wealth and Assets Survey – Financial Resilience*, April.
- [Orton, M. and A. Green \(2019\)](#), Active Labour Market Policy in the UK: At a (Local) Crossroads?, *Local Economy*, Volume: 34 issue: 1, page(s): 3-9.
- [Platt, L. and R. Warwick \(2020\)](#), “Are Some Ethnic Groups more Vulnerable to COVID-19 than Others?”, *IFS Briefing Note*, May.

- [Price, R., T. Dang and J. Botev \(2015\)](#), "Adjusting Fiscal Balances for the Business Cycle: New Tax and Expenditure Elasticity Estimates for OECD Countries", *OECD Economics Department Working Papers*, No. 1275, OECD Publishing, Paris.
- [Public Health England \(2020\)](#), *Disparities in the Risk and Outcomes of COVID-19*, June.
- [Schwellnus, C., M. Koelle and B. Stadler \(2020\)](#), "Flattening the Unemployment Curve? Policies to Support Workers' Income and Promote a Speedy Labour Market Recovery", *Tackling Coronavirus Series*, OECD Publishing, Paris.
- [Sorbe, S., et al. \(2019\)](#), "Digital Dividend: Policies to Harness the Productivity Potential of Digital Technologies", *OECD Economic Policy Papers*, No. 26, OECD Publishing, Paris.
- [Thévenot, O. and T. Manfredi \(2018\)](#), "Child Poverty in the OECD: Trends, Determinants and Policies to Tackle it", *OECD Social, Employment and migration Working Paper* No. 218.
- [Thiessen, M., F. van Oort, P. MacCann, R. Ortega-Argilés and T. Husby \(2019\)](#), "The Implication of Brexit for UK and EU Regional Competitiveness", *Tinbergen Institute Working Paper*, N. 061/VIII.
- [UK 2070 Commission \(2020\)](#), *Make No Little Plans: Acting at Scale for a Fairer and Stronger Future*.
- [University of Sheffield \(2016\)](#), "UK Regions and European Structural and Investment Funds", SPERI British Political Economy Brief No. 24.
- [Watts, B. and S. Fitzpatrick \(2018\)](#), *Welfare Conditionality* (1st edn), Routledge, London.
- [Webster, D. \(2020\)](#), 'Briefing: Benefit Sanctions Statistics, February 2020', *mimeo*.
- [Whiteshield Partners \(2020\)](#), UK Regional Labour Resilience Index 2020 Policy Brief.
- [Williams, E. \(2020\)](#), 'Punitive welfare reform and claimant mental health: The impact of benefit sanctions on anxiety and depression', *Social Policy Administration*, Early View.
- [Wright, S. et al. \(2016\)](#), *First Wave Findings: Universal Credit*, ESRC, York.
- [Work and Pensions Committee \(2018\)](#), *Benefit Sanctions*, House of Commons, London.
- [Zakaro, B. \(2020\)](#), "Levelling up: What Might it Mean for Public Spending?", Institute for Fiscal Studies, March.