

# Inequalities in education, skills, and incomes in the UK: The implications of the COVID-19 pandemic

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An IFS initiative funded by the Nuffield Foundation





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# **Executive summary**

The changes that British society and the economy have experienced since the start of the Covid-19 pandemic are some of the most unexpected and profound seen since World War II. This report seeks to set out the potential effects of the Covid-19 pandemic on inequalities in the UK. The pandemic has affected inequalities in education, training, wages, employment and health, including how these vary by gender, ethnicity, and across generations. It has also opened up new gaps along dimensions that were not previously widely considered, such as the ability to work at home.

In this briefing note, we focus on two types of inequalities: first, inequalities in education and skills; second, inequalities in the labour market and household incomes. For each of these broad areas we highlight the challenges posed by inequalities between different groups and the opportunity for an integrated policy response. We examine inequalities in education and skills by gender, ethnicity, region and between people from different socio-economic backgrounds. In our analysis of inequality in labour markets and household incomes, we examine inequality across the income distribution, and again consider inequalities between the aforementioned groups.

We find evidence that three particular inequalities are likely to have risen because of the crisis: income inequalities between richer and poorer households, socio-economic inequalities in education and skills, and intergenerational inequalities between older and younger people. The key drivers of these are the fall in employment resulting from the pandemic, which fall harder on younger and less well-educated people, and the massive decline in face-to-face learning that school children have faced. We discuss opportunities for an integrated policy response to these interrelated problems.

### **Key findings**

Prior to the Covid-19 pandemic, a range of economic inequalities had become more salient. Income inequality was higher than in most other developed countries. The 'gender pay gap' had stopped falling. There were large differences in the prosperity of different groups in society (such as between people of different ethnicities) and between different regions. Educational performance also varied significantly based on socio-economic backgrounds and paths into good jobs were much less clear for those not going to university.

The Covid-19 pandemic and the public health response to it have radically changed life in the UK. There are two particular trends that have been responsible for changes to inequalities in education, skills, and incomes. First, the shutting down of many sectors of the economy during in lockdowns and social distancing measures have led to stark changes in the labour market. Second, the lack of face-to-face teaching in Spring 2020 and again in early 2021 has massively disrupted the education of all children. The immediate effects of the pandemic are particularly likely to increase three types of inequalities: income inequality, socio-economic inequalities in education and skills, and intergenerational inequalities. Income inequality is likely to be pushed up by higher rates of unemployment and underemployment, which will leave more families reliant on benefits. The huge disruption to schooling has affected all children, particularly those from poorer families, with long-term effects on their educational progression and labour market performance. Younger generations have experienced disrupted education and they face a tougher labour market than that seen prior to the pandemic. The effects on inequalities between the genders, regions, and people of different ethnicities are more mixed.

In the longer run, we identify factors that are important for inequalities that have been brought about or accelerated by the pandemic. One is a further shift towards online retail instead of in-store purchases. Another is the potential for increasing numbers of office-based jobs to be undertaken at home or remotely at least part-time. This could have implications for people's location decisions, their ability to search for and find work. In addition, changed expectations about the probability of future pandemics could change people's and firms' investment decisions.

We consider a number of possible policy options for a government concerned about the inequality implications of rising unemployment and disrupted schooling. Most of these options would require higher public expenditure or lower taxes that would need to be funded by more borrowing, raising (other) taxes, or cuts to public expenditure elsewhere.

Potential options to address the effects of rising unemployment that we consider include: reducing the cost of employing people using the tax system; raising public service expenditure and public sector employment; increased funding of (re-)training programmes; welfare reforms to lessen "conditionality"; boosting out of work benefits; or more fundamental changes to introduce more social insurance into the welfare system. Options for addressing the challenges from missed schooling include: higher funding of remedial tuition; extending the school day or year; increasing use of technology in education; greater funding and flexibility in vocational education; and greater government support for apprenticeships. We suggest that policies directed at employment, training and welfare should be considered alongside each other so as to explicitly consider spillovers and to ensure that goals are aligned.

# 1. Introduction

The changes that British society and the economy have experienced since the start of the Covid-19 pandemic are some of the most unexpected and profound seen since World War II. In addition to critical public health challenges, the government has had to respond to the huge economic and social changes as a result of social distancing and other policies aimed at reducing transmission of Covid-19. This includes the furloughing of millions of workers, huge numbers of businesses that are unable to operate at all, and the cancellation of face-to-face teaching at schools, colleges, and universities for most young people between March and September 2020, and again in early 2021. And people's daily lives are changing radically. For most white-collar jobs, work has been undertaken from home rather than in an office. Shopping has been increasingly done online rather than in store. The withdrawal of government support is expected to trigger a rise in unemployment that will affect people across the country.

In this briefing note, we set out the potential effects of the Covid-19 pandemic on inequalities in the UK. Prior to the pandemic, there were already large differences in the economic outcomes of richer and poorer people, between different groups in society, and between different parts of the country. We argue that the nature of these pre-existing inequalities is key to understanding the longer-term impact of Covid-19. The pandemic has affected inequalities in education, training, wages, employment, health, gender, ethnicity, and across generations. It has also opened up new gaps along dimensions that were previously less significant – working at home and home schooling, for example. Our aim is to examine the inequalities that the country faced prior to the pandemic, analyse how they have changed since March 2020, and draw out implications for the potential future path of these inequalities in the years to come.

We focus specifically on two types of inequalities: first, inequalities in education and skills; and second, inequalities in the labour market and household incomes. Within each of these broad areas, we examine inequalities between different groups. We examine inequalities in education and skills between people from different socio-economic backgrounds, and the differences between the genders, different ethnicities, and regions. In our analysis of inequality in labour markets and household incomes, we examine inequality across the income distribution, as well as the aforementioned issues of gender, ethnicity and region. We also consider intergenerational inequalities. In each area, we summarise what social science research knew prior to this crisis, and subsequently what we know about the implications of the pandemic.

This report ends by drawing together the potential longer-term implications of Covid-19 and sets out potential policies that the government could consider in response to these challenges. We identify clear opportunities for an integrated policy response across government departments to address the challenges in education, skills, labour market opportunities and social security provision that are likely to face the United Kingdom in a post-pandemic world.

# 2. Challenges in education and skills

The UK faces significant challenges to improve education. Although a high proportion of young people go to university, there are also many people with low basic skills and few with high-level vocational skills (Musset and Field, 2013; Wolf, 2011). These are weaknesses that hold back productivity and hinder efforts to reduce inequality and improve social mobility (Bagaria, Bottini and Coelho, 2013). Investment in education and skills has always been vital to improve these different dimensions of economic performance. The global pandemic has mostly accentuated pre-existing inequalities. Addressing rising inequalities may require significant investment in remedial education and a fresh look at transitions between different stages of education. For those missing out on work experience and training during furlough and subsequent unemployment, a redoubling of investments in skills that can match the post-pandemic economy is needed.

# Socio-economic inequalities

There is a substantial gap in educational achievement between people from different socioeconomic groups. This gap is evident even before the start of school and widens throughout their years of education (Feinstein 2003; Hansen and Dawkes 2009). Although there is evidence that investment in early years is especially important, this needs to be reinforced with human capital investments through the lifecycle as learning is cumulative (Heckman 2004). Children from poorer backgrounds are much less likely to do well at school and progress to higher education. The relatively low educational performance of children from poorer backgrounds – which results in lower earnings – has been identified as an important reason for the fall in intergenerational income mobility. Intergenerational income mobility has been found to be low in the UK compared to most other industrialised nations (Jerrim and Macmillan 2015).

Socio-economic inequalities in schooling are compounded by structural problems in post-16 education which tends to track people into narrow subject areas. There are particular issues with vocational education (pursued by over half the cohort) with a complicated and overly specialised system that does not have clear pathways (Hupkau et al., 2017). The near-absence of tertiary education outside of university degrees contributes to this problem (Augar Review, 2019), and reductions in government spending since 2010 have been much larger in further education than in schools or universities (Britton et al., 2020). All of this has a disproportionate impact on those from lower socio-economic groups because they are more likely to pursue vocational education.

Although apprenticeships in England are very different to those in most European countries (being shorter and more specialised), they do attract a return in the labour market, at least in the short-term (Cavaglia, McNally and Ventura, 2020b). Apprenticeships provide an opportunity for those with lower GCSE grades who are less likely to go to university. However, access to apprenticeships is unequal, as those from low socio-economic groups are less likely to commence an advanced apprenticeship.

Addressing the challenges of low productivity as well as inequality and social mobility require sustained investments and careful attention to the structures within further education that may be creating barriers to progression and to lifelong learning (Augar Review, 2019).

#### Implications of the Covid-19 pandemic: schooling

Socio-economic differences in the amount of schooling young people received during the first period of national lockdown are well-documented (Andrew et al. (2020), Benzeval et al. (2020a), Elliot Major et al. (2020)).

Elliot Major et al. (2020) show that during the lockdown in Spring 2020 nearly three quarters (74 percent) of private school pupils were benefitting from full school days – almost twice the proportion of state school pupils (38 percent). A quarter of pupils had no formal schooling or tutoring during lockdown. Andrew et al. (2020) show that during the first lockdown children from higher income households are more likely to have online classes provided by their schools, spend much more time on home learning, and have access to resources such as their own study space at home. Benzeval et al. (2020a) find that children whose parents are out of work are much less likely to have additional resources such as computers, apps, and tutors. Figure 1 replicates the statistics shown in Andrew et al. (2020) to illustrate variation in children's learning activities (hours per day) conditional on socio-economic background. Children in better-off families spent more on nearly every educational activity than their peers from less well-off families.





Source: Andrew et al (2020).

Estimates of lost learning conducted mostly during the autumn 2020 term found that primary school children were around two to three months behind previous cohorts in reading and maths

(Rose et al., 2021; Renaissance Learning and Education Policy Institute, 2021; Blainey and Hannay, 2021). While there is less evidence about the impact in secondary school, some studies suggest that secondary school parents are even more concerned about lost learning than primary school parents (Farquharson et al., 2021). However, consistent with the large inequalities in learning time and other home learning inputs during the 2020 school closures, these studies all find that learning loss has been greater among more disadvantaged pupils; for example, Blainey and Hannay (2021) find that disadvantaged Year 6 pupils were around seven months behind their peers in autumn 2020, compared to five months in previous years.

So far, there is much less evidence about the impact of the second round of school closures in early 2021. While there is little evidence that schools and families adapted to home learning as the first set of school closures wore on (Cattan et al., 2021), survey data suggests that home learning looked quite different during the second round of school closures. Policy interventions such as delivering laptops to disadvantaged pupils, more clarity about how much content teachers were expected to cover, better resources such as the Oak National Academy online lessons, and a greater number of key worker and disadvantaged children attending school in-person all suggest that home learning might have been more effective during the second round of school closures. However, even a better experience overall does not mean that the impacts on inequalities will have been erased: Montacute and Cullinane (2021), for example, find that over half (55%) of teachers at the least affluent state schools report a lower than normal standard of work returned by pupils since the shutdown, compared to 41% at the most affluent state schools and 30% at private schools.

It is hard to quantify how to what extent this loss of instruction time will translate into a change in educational performance. But we know from much other literature (for example, studying other events that cause schools to shut like teacher strikes) that the loss of instructional time is likely to have significant adverse effects on pupils' educational outcomes (Burgess and Sievertsen, 2020; Eyles, Gibbons and Montebruno, 2020; The Delve Initiative 2020; Lavy 2015). In addition, evidence using standardised tests from the Netherlands before and after lockdown (Engzell et al. 2020) found that primary school pupils lost on average 3 percentile points in the national distribution relative to a normal year, equivalent to 8% of a standard deviation. Losses are concentrated among pupils from less educated homes where the learning loss is up to 55% larger than there more advantaged peers.

In addition to the effects of school closures on learning, there is also evidence that school closures negatively impacted children's mental wellbeing. Blanden et al. (2021) compared the mental wellbeing of primary school children who were, and were not, prioritised for a return to school in summer 2020. Children in Reception, Year 1, and Year 6 were prioritised compared to other school years and therefore benefited from six more weeks in school in Summer (between 1 June 2020 and the end of the school year in mid-July) compared to other year groups. Blanden et al (2021) find that children not prioritised to return to school had behavioural and emotional difficulties 40% of a standard deviation higher than year groups who were prioritised for school return.

The fact that children from lower income households had much less overall learning time during lockdown is bound to have serious effects in the long-term (both in terms of educational progression and in the labour market) unless there is very significant investment in remedial education and a relaxation of the usual standards that enable children to transition between different stages of education (i.e. from GCSE to post-16 courses; from upper secondary courses to tertiary education). Of course, this involves less discrimination about who is truly able for different

courses/institutions and requires more intensive help for affected cohorts, especially if they come from low-income backgrounds.<sup>1</sup>

#### Implications of the Covid-19 pandemic: Apprenticeships and training

The number of people starting apprenticeships has been severely affected by the pandemic. Research from the Sutton Trust (2020) shows that, on average, only 40% of apprenticeships continued as normal with the rest facing learning disruptions or being furloughed or made redundant. Figures from the Department for Education show that during the period of the first lockdown (23 March to 31 July 2020), the number of apprenticeship starts fell by 45.5%, with more recent figures (from August to October 2020) showing a fall of 27.6% compared to the same time periods in 2019.<sup>2</sup>

Training providers also reported to be under great financial strain. The future is uncertain for existing apprentices as this depends on them keeping their job or being able to transfer to a new employer. Ventura (2020) reviews the prospects for future apprenticeships. Provision of apprenticeships is likely to be in short supply for as long as the economic outlook looks negative and uncertain. It is very unlikely that apprenticeship incentive payments will have much impact in this environment, especially as a similar scheme (the Apprenticeship Grant for Employers) was not successful at increasing uptake (Cavaglia, McNally and Overman, 2020a). As apprenticeships are an important source of training for those unlikely to go to university, one would expect decreased opportunities to give rise to greater economic inequality between those from low and high socio-economic backgrounds.

Job loss more generally has an impact on training because work is an important source of learning in itself (i.e. on-the-job learning as well as direct training activities provided by employers) and skills can also depreciate if people have long periods of inactivity. In this regard, people with lower socioeconomic statuses are likely to be worse hit: Blundell et al. (2020a) show those people working in "shut-down" sectors are much more likely to have low earnings.

### **Gender inequalities**

Across most industrialised countries, including the UK, women's educational attainment has increased massively over recent decades and women go on to tertiary education in greater numbers than men. However, women are much less likely to choose science, technology, engineering and maths (STEM) subjects in upper secondary or tertiary education, and they are less likely to pursue apprenticeships.

Cavaglia et al. (2020) document these issues for England and show how the gender gap has evolved over time. Figure 2 illustrates a high gap in literacy at the end of primary school which is also apparent in English grades at the end of secondary school and an overall indicator of

<sup>2</sup> <u>https://explore-education-statistics.service.gov.uk/find-statistics/apprenticeships-and-traineeships/2019-20</u> <u>https://explore-education-statistics.service.gov.uk/find-statistics/apprenticeships-and-traineeships/2020-21</u>

<sup>&</sup>lt;sup>1</sup> Note that there is evidence that when French students were enabled to enter and remain in university because of the cancellation of exams and relaxation of standards in 1968, they were shown to do well in the labour market in later years (relative to adjacent cohorts not affected in this respect); Maurin and McNally (2008). Although a different time and context, this example shows that 'weaker students' might have some long-term benefit to entry barriers being temporarily relaxed if this enables them to pursue more years of education and gain a qualification.

performance in GCSE exams. The gender gap in maths is very small. Over time, there had been a narrowing of the gender gap in achievement in secondary school, and to some extent in primary school, up to the point when standards were raised in England (2016).

The raising of standards is associated with an increase in the achievement gender gap favouring girls. It is not surprising to see that the lower performing group (boys) are disproportionately affected by the raising of standards. This is not necessarily a bad outcome if it leads to increased attention on the group of pupils who fail to meet the standard. However, because educational progression within the English system is so contingent on performance at GCSEs, there may be unintended consequences for those in the weaker group if there are implications for what courses they pursue within post-16 education. Because boys are more likely to enter vocational education and higher-earning options within that (such as STEM subjects), they are likely to benefit disproportionately from efforts to improve the vocational education system in England.

Cavaglia et al. (2020c) show that there are very pronounced gender differences within apprenticeships. With regard to intermediate apprenticeships, the most popular sectors for men are Construction, Planning and the Built Environment, Engineering and Manufacturing Technologies, Retail and Commercial Enterprise and Business, Administration and Law. There is even more concentration within advanced apprenticeships (where most do Construction / Engineering). For women, the most important sectors are Retail and Commercial Enterprise, Business, Administration and Law and Health, Public Services and Care. They show that the average earnings return to starting an apprenticeship is positive (at least up to age 28) when compared to classroom based vocational education at the same level. But the earnings return is much smaller for women and this appears to be mainly driven by women specialising in sectors that have lower earnings on average.



Figure 2. Gender gap in educational achievement at the end of primary (top panel) and secondary

#### (bottom panel) school

Notes: Own calculations based on DfE Statistics and National Pupil Database microdata. Fig. (a): indicators up to 2015: % pupils with level 2+; from 2016: % pupils achieving expected standard in a new more challenging curriculum. Writing: based on tests up to 2011 and teacher assessments from 2012. Figure (b): School Performance Tables (2000-1) and NPD microdata (2002-17). Note: (i) Wolf reform effective from 2014; (ii) new accountability measures introduced in 2016; (iii) from 2017 grades changed from letters to numbers. Also, up until 2007, performance in the indicator '5 A\*–C GCSEs' also includes GNVQs (which were subsequently abolished). Source: Cavaglia et al (2020c).

#### **Implications of the Covid-19 pandemic**

As boys are more likely to be behind at school, one would expect them to suffer disproportionately from the effects of school closures. We have seen that the gender gap widens every time the exam system is made more challenging because boys are less likely to meet important thresholds. We would therefore expect them to fall further behind girls in these times unless they are targeted by remedial measures or are more likely to benefit from them.

There are few studies that evaluate policies that specifically target the gender gap in achievement when the issue is poorly performing boys. However, there are plenty of studies of policies that target poorly performing pupils in general, and some of these disproportionately affect boys, such as increasing school resources or effective literacy interventions (e.g. Machin and McNally, 2008).

Young men will also suffer disproportionately from the lack of apprenticeship opportunities because they are more likely to pursue apprenticeships, and because they are more likely to earn higher returns from doing so due to the sectors in which they specialise.

However, women seeking work or in employment were disproportionately affected by nursery closures during the lockdown in Spring 2020. For instance, Andrew et al. (2020) find that during the first lockdown 45% of mothers' work hours and 26% of fathers were simultaneously spent taking care of children. Sevilla and Smith (2020) also find that women took primary responsibility for caring activities. More limited means to organise or pay for childcare will disproportionately influence women's ability to pursue educational or labour market activities, thus reducing the opportunities for formal and informal training. There will be an important role for investment in work-based training to offset these losses in skills (Blundell et al., 2021).

## **Regional inequalities**

There are large regional inequalities with respect to education in the UK. Agrawal and Philips (2020) draw on Department for Education data which shows the stark difference in the percentage of young people going to higher education by region and Free School Meal status (replicated in Table 1). The importance of educational levels in driving geographical inequality is emphasised by Davenport and Zaranko (2020) who use four variables to generate their 'left behind' index. With this, they find that the share of individuals with a degree is much more unequally dispersed than the other measures they use: incapacity benefit claimants, employment and weekly wages. Gibbons et al. (2013) find that 90% of the differences in area-level wages can be explained by differences in the dispersion of high skilled workers.

Region	FSM (%)	Non-FSM (%)	Gap (ppt)
East of England	19	42	23
East Midlands	20	41	21
London	45	57	12
Inner London	48	58	9
Outer London	42	57	15
North East	19	44	25
North West	23	46	22
South East	18	44	26
South West	18	39	22
West Midlands	27	45	18
Yorkshire and the Humber	22	43	21

Table 1. Percentage of young people entering higher education by region and free school meal (FSM) status

Source: Department of Education (2019) and Table 3 in Agrawal and Philips (2020)

The problem of regional inequality in post-18 education can be addressed partly by addressing inequalities at earlier stages of the educational ladder. Chowdry et al. (2013) show that the socioeconomic differential in access to university is greatly reduced by controlling for prior achievement. Another big challenge is to build a national infrastructure for tertiary education that is broader than degree-level education but well integrated with both further and higher education. The Augar Review (2019) discusses this at length. Espinoza et al. (2020) show that non-degree tertiary education is associated with high earnings differentials – although there are very few people who currently pursue such qualifications. It is also extremely important that opportunities for adult retraining are available and well-funded. This would mean a radical change from policy over the last decade, which has seen a fall in spending on adult skills of about 50% between 2010/11 and 2019/20 (Britton et al. 2020).

### **Implications of the Covid-19 pandemic**

While the first lockdown shut down schools across the country, additional restrictions during 2020 (up until the second national lockdown in November) hit the North West hardest. We can see from Table 1 that although the North West is by no means the worst for higher education participation, it is a very long way behind London. Of course, the third national lockdown has seen schools close again across the country.

Sibieta (2020) analyses school attendance rates across the UK in a week of October 2020. He found a great deal of variation across local authorities in England, with a clearer negative relationship between case numbers of Covid-19 and school attendance than in Wales and Scotland, particularly at secondary school level. For example, Liverpool and Knowsley saw case numbers of over 600 per 100,000 in this week in October and secondary school attendance rates well below

70 per cent (67 per cent for Liverpool and 61 per cent for Knowsley). However, school attendance rates in the South West of England were on average over 90 per cent.<sup>3</sup> Poor educational performance (on account of reduced learning) will feed into subsequent educational progression (if not addressed) and will thus contribute to inequalities of post-18 qualifications and skills that are already very evident.

## **Ethnic inequalities**

In the UK, research has shown that most ethnic minorities start their schooling behind White British students but catch up rapidly over time (Dustmann, Machin and Schonberg, 2010). In fact, Crawford and Greaves (2015) find that ethnic minorities are much more likely to go to university than White British pupils, with gaps between Chinese or Indian students and White British students comparable in size to the gaps between the top and bottom socioeconomic quintiles. Ethnic minority advantage is less pronounced for highly selective universities. The interaction between different characteristics is also important, with white working-class boys being particularly unlikely to proceed to higher education (Baars, Mulcahy and Bernardes, 2016).

However, ethnic minorities are under-represented among those who get on to apprenticeship programmes (Cavaglia et al., 2020b). This is especially evident for males who start advanced apprenticeships, if we compare them to those attending classroom-based vocational education at the same level. The returns to apprenticeships are particularly high for this group.

### **Implications of the Covid-19 pandemic**

The fact that ethnic minorities are more likely to be affected by COVID-19 both through health effects and economically (Platt and Warwick, 2020) means that their education is more likely to be affected, either directly or indirectly, because of the impacts on parental health or job loss. Parental job loss has been shown to have a direct impact on children's school performance (Rege, Telle and Votruba, 2011; Ruiz-Valenzuela, 2020). In contrast, the reduction of apprenticeship opportunities will affect white British individuals more severely because they have been more likely to access these opportunities up to now.

# **Children with Special Educational Needs and Disabilities**

Pupils with special educational needs and disabilities (SEND) have a learning difficulty or disability that requires special educational provision. This accounts for about 15% of pupils in England. Unsurprisingly there are large differences in the educational attainment of pupils who are classified as SEND compared with those who are not. Keslair, Maurin and McNally (2012) suggested that SEND programmes were not working well in England for children with moderate learning difficulties. Of course, there may have been improvements since then and the Education Endowment Fund suggest evidence-based programmes that help such pupils.<sup>4</sup>

### **Implications of the Covid-19 pandemic**

Sibieta and Cottell (2020) find that support for pupils with SEND was insufficient across all UK nations, with specialised educational provision required by these pupils often lacking. They report how during the lockdown in Spring 2020, England, Scotland and Northern Ireland weakened the

<sup>&</sup>lt;sup>3</sup> https://questions-statements.parliament.uk/written-questions/detail/2020-10-16/104751

<sup>&</sup>lt;sup>4</sup> https://educationendowmentfoundation.org.uk/school-themes/special-educational-needs-disabilities/

legal duties of local authorities and other bodies to provide for pupils with SEND and this could result in severe consequences for the education and development of these pupils. Wales did not alter these legal duties, but it is not yet known how this actually affected levels of provision. Although Sibieta and Cottell (2020) note that England has gone furthest in financially supporting the needs of children with SEND, overall UK nations have failed to adequately support children with SEND during the lockdown period, with provision and support patchy and highly dependent on a pupil's local authority.

Sibieta (2020) finds that across the UK, the schools with the lowest attendance rates are special schools, with attendance rates of 91 per cent in Scotland, 88 per cent in Northern Ireland and 78 per cent in England (at the most recent data point in each case). He notes that while some of this will reflect rational decisions not to attend school (on account of vulnerability to the virus), it also highlights the importance of providing extra support to such pupils.

# 3. Challenges in the labour market and for household incomes

# Wage and income inequalities

Before the pandemic hit, a number of changes to the labour market posed challenges for income inequality in the UK. These pre-existing inequalities are particularly relevant for understanding the overall impact of the pandemic and the longer-term implications for income inequality.

The 1980s saw significant increases in income inequality across the income distribution, although it was also a time of relatively high average income growth. During the 1990s and early 2000s, relatively low pay growth for poorer households was bolstered by rising employment and the introduction of tax credits by the Labour government (Belfield et al., 2017), so that household income inequality across most of the income distribution remained broadly stable over this period (though still high by the standards of most industrialised countries). However, since the 1990s there has still been a rise in income inequality at the very top of the income distribution (Burkhauser et al., 2018), a large fraction of which can be attributed to growth in pay in the financial sector (Bell and Van Reenen, 2014).

The outlook in the UK since the start of the 2008 financial crisis has been very different. As is shown in Figure 3, real incomes grew only modestly across the whole income distribution in the 10-year period since 2008. Income growth strengthened in 2014 and 2015, but this was choked off by the rise in inflation following the Brexit referendum. And unlike the pre-2008 period, there have been reductions to the generosity of working-age benefits since 2010 (De Agostini et al., 2015; Hood and Waters, 2017). Families with children have seen particularly large reductions in benefit entitlements since 2010, and relative child poverty has increased by 3 percentage points since 2011–12, the most sustained rise since the early 1990s (Bourquin et al., 2020b).

The UK benefit system is unusual among European countries in that benefit entitlements bear almost no relation to previous earnings, and replacement rates (the share of previous earnings covered by benefits) for those who fall out of work are among the lowest in OECD countries (OECD, 2020). However, the late 1990s and 2000s saw big expansions of the in-work benefit system. This means that, compared to the 1980s or 1990s, the system has become better at supporting the incomes of low-paid workers, but less able to insure people against employment shocks (Cribb, Hood and Joyce, 2017). The counterpart to this is the UK welfare system provides more incentive to get into work, though less incentive to increase hours or earnings, compared to most other OECD countries. The cuts to working age benefits in 2010 – including a number of specific policies like the benefit cap, the "two-child limit", the so-called "bedroom tax", and changes to housing benefit for private sector tenants – have decoupled benefit entitlements from the costs that many families face (Joyce 2019).

Low private liquid savings and relatively high levels of unsecured debt mean that a large share of families rely on the state to insure them against shocks (Blundell et al., 2020b). Coming into the Covid-19 crisis, around 20-30% of those in low- to middle-income households said they would be unable to manage a month if their household lost their main source of income, with around 10% spending more than a fifth of their income repaying consumer debt. The combination of weak earnings growth following the Great Recession, reductions in state benefit entitlements since

2010, and low levels of liquid savings for many left many families in with little ability to respond to a large economic shock.



# Figure 3. Change in real net incomes of working-age households before and after in-work benefits, by income 1994-2008 and 2008-2018

Source: Authors' calculations using the Family Resources Survey, 1994–95, 2008–09 and 2018–19. Notes: Household incomes calculated after taxes and benefits. Excludes households with pensioners. In-work benefits defined as any benefits going to in-work families. Percentiles 1-4 and 98-99 are excluded.

#### Immediate implications of the Covid-19 pandemic

The key force increasing economic inequalities in the coming year will likely be the expected rise in unemployment, and the resulting fall in living standards – especially once temporary employment support schemes are wound down. We are already seeing evidence of rising unemployment, from 4% in December-February 2019 to 5.1% Oct-Dec 2020, with official forecasts suggesting a larger rise to come (the Office for Budget Responsibility predicts at its latest forecast in March 2021 that unemployment will peak at 6.5% at the end of 2021). With 2 million people forecast to still be on furlough in September 2021, unemployment could easily rise higher than 6.5%, however. The sectoral nature of the Covid-19 shock means that the rise in unemployment is particularly likely to increase income inequalities as low-paid workers are much more likely to work in hard-hit sectors and to be unable to work from home (see Figure 4).

A number of studies over the course of the pandemic find larger effects on the employment working hours of low-paid workers (Adams-Prassl et al. 2020b, Bourquin et al. 2020a, Crossley et al. 2020, Gardiner and Slaughter 2020). Cribb (2021) shows that the proportion of people working at least one hour per hour week fell by almost 7 percentage points between late 2019 and late 2020 for people with at most GCSE level education, but did not fall at all for university graduates. Johnson, Joyce and Platt (2021) find that crisis has hit the self-employed and others in insecure and non-traditional forms of employment especially hard, particularly because the government's Self Employment Income Support Scheme does not cover around 2 million self-employed people.





Source: Reproduced from Blundell et al (2020b), based on analysis of Labour Force Survey Data (2019)

However, so far, the evidence does not suggest that there have been increases in household income inequality (Bourquin et al. 2020a, Gardiner and Slaughter 2020). This is partly because low-income households derive a higher share of their income from benefits, which have been significantly increased since March 2020 under policies such as the £20 per week uplift in Universal Credit.<sup>5</sup> In addition, earnings caps in the furlough scheme (Coronavirus Job Retention Scheme or CJRS) and Self-Employed Income Support Scheme (SEISS) make them proportionately less generous to high earners. Figure 5 shows analysis from the Resolution Foundation which shows that under the original CJRS, furloughed workers on very low earnings below £7,000 a year got over 90% of their previous earnings covered by the JRS and Universal Credit, whilst the replacement rate for high earners on £45,000 was much lower at 70%. For those who lose their jobs, replacement rates under Universal Credit decline even more sharply with income.

Therefore, to a significant extent the course of future income inequality will be determined by future welfare policies. One the one hand, if temporary welfare increases are indeed unwound, as is currently planned, this will act to push up household income inequality. On the other hand, if temporary benefit increases remain in place, and employees' earnings fall significantly (as they

<sup>&</sup>lt;sup>5</sup> However, data on household spending shows a somewhat different picture. Research using bank account data has shown a large rise in missed bill payments among low-income households (Bourquin et al. 2020a), and falls in saving among those with lower incomes, compared to rises for middle and high income households.

did during and after the Great Recession), this would place downward pressure on income inequality.



# Figure 5. Replacement rates for a single person home-owner without children under furlough schemes and Universal Credit

Notes: Modelled on the Universal Credit system, where adult is aged 25 or over. Source: RF analysis using the RF microsimulation model.

#### Source: Reproduced form Figure 3 of Bell et al (2020).

There are a number of policy implications of the forecast rise in unemployment. The furlough scheme has focused on freezing the labour market in its pre-pandemic state and preserving employer-employee relationships. However, some of the changes in preferences and behaviours we have seen (more online shopping – see Relihan et al. (2020) – and working from home, for example) are likely to become permanent to at least some extent, so some degree of labour reallocation will likely be needed (Costa Dias et al. 2020). Government support to help people move jobs and/or locations could potentially help minimise frictional unemployment. If private sector labour demand remains low, there could be space for the government to increase public sector hiring without crowding out of private sector jobs, at least in the short run. There is also an argument that, faced with higher unemployment, the government could consider increasing support in areas in the benefit system where support to households is relatively thin, such as out of work out-of-work support to people without children. The government could also explore how to extend forms of insurance, such as Statutory Sick Pay, to self-employed people. We discuss policy options to address unemployment in more detail in the conclusion.

#### Long-term implications of the Covid-19 pandemic

In the longer term, Covid-19 may also have further effects on the labour market and income inequality, though concrete evidence for these changes is clearly harder to come by. Changes in technology may make working from home more prevalent. Bloom (2020) suggests, among higher educated workers, whose jobs are more likely to allow working from home, the new equilibrium could result in a long-term change in the organisation of work with at least 20% of work time spent at home. Of course, this increased flexibility would particularly benefit people in professional jobs – who already have higher levels of job and life satisfaction (Clark et al. 2021) –

and may therefore increase inequalities in wellbeing. Changes in shopping preferences may lead to higher demand for (high-skilled) tech and online retail jobs, and reduced demand for (low-skilled) hospitality and in-person retail. Online firms such as Amazon have particularly benefited during the pandemic, and if these trends persist, this could cause earnings inequality at the top of the distribution to increase further.

The Covid-19 pandemic could also potentially increase market power in a way that increases economic inequalities. Previous research has found increases in product market concentration in the wake of the 2008-09 recession (Tomlinson and Bell 2018). This time, too, we may see larger firms consolidate market share as smaller firms struggle to compete in a difficult environment. This could lead to a rise in monopsony power, perhaps reducing the share of national income received by workers. Changes in relative monopsony power in the labour market could increase wage inequality, if there were to be more consolidation at the lower skilled end of the labour market, whilst high-paid professionals increasingly are able to work from home and can choose between a wider range of employers.

The crisis presents a challenge to the welfare system in the UK, with different groups calling for reforms of different kinds. With many people falling through gaps in support (Adam, Miller, and Waters, 2020), some have called for the introduction of a Universal Basic Income (UBI). And if the Covid-19 pandemic accelerates automation whilst permanently depressing demand for labour-intensive in-person services, it could lead to structural job destruction that makes a UBI more appealing (Susskind 2020). Widespread adoption of remote working could also lead more jobs to be outsourced. However, prior to the Covid-19 pandemic the UK had an employment rate at a level higher than at any point in the last 50 years despite huge technological changes (including labour-saving ones). Therefore, visions of a world without work are likely to be exaggerated, and it is probably unrealistic to provide a UBI at a high enough level to meet the needs of all families (Kay 2017).

At the other end of the spectrum, some people argue for the need for social insurance, raising the possibility of making the system *less* universal by linking benefit entitlements to contributions. Covid-19 has highlighted demands for social insurance in some circumstances, such as forms of out-of-work support that are – at least temporarily – related to previous earnings.

Major welfare reform could be challenging in the context of historically poor public finances, but the crisis has increased public awareness of the drawbacks of our means-tested system – as middle-income individuals who lose their jobs fall back on low levels of Universal Credit, for example, or are deemed ineligible for support because of their savings. This may change attitudes towards the welfare state which could precipitate reforms in this direction. Indeed, in the US, exposure to the health and economic effects of Covid-19 has been linked to increased support for expanding the welfare state (Rees-Jones et al. 2020).

### Intergenerational inequalities

Younger generations fared worse than their immediate predecessors along a number of dimensions before the start of the pandemic. Those born after 1980 saw generation-on-generation falls in their average earnings (Figure 6), which, despite higher employment rates, made the 1980s cohort the first post-war generation in Britain to not have higher average household incomes than the generation born a decade earlier (Cribb 2019). The 1980s cohort also had lower levels of average wealth in their 30s than previous generations, largely driven by a

fall in home ownership, owing to much higher house prices than 20 years ago, and (potentially) stricter mortgage lending criteria since 2008.

The slower rate of earnings growth among younger cohorts at least partly reflects sluggish overall pay growth in the UK in the years that coincide with the start of their careers. Given the lack of wage growth since the 2008 financial crisis, it is not surprising that those born in the 1980s – most of whom entered the labour market between 2000 and 2010 – have seen little wage growth over their early careers. However, recent research shows that younger cohorts have also been starting their careers in lower-ranking *occupations* than their predecessors (see Figure 7, reproduced from Blundell et al. 2021).





Source: Cribb (2019) Figure 3, based on analysis of the Family Resources and Family Expenditure Surveys.



Figure 7. Mean occupation pay rank of UK employees and employees in initial jobs

Note: Dashed lines indicate changes in occupational classifications. We identify initial jobs in the LFS by restricting the sample to full-time employees aged between 22 and 25 and comparing respondent's age against the age at which they report leaving full-time education.

Source: Labour Force Survey, 1979, 1981 and 1984-2018.

Source: Reproduced from Blundell et al (2020).

Until the 1980s cohort, the rate of occupational progression had been increasing, so that younger cohorts caught up with the position of their predecessors at the same age despite starting from a lower position. But this trend came to an end for men born in the 1980s, who both started lower down the occupational ladder than previous cohorts and climbed it more slowly.

### **Implications of the Covid-19 pandemic**

The sectoral nature of the Covid-19 shock means that young people have been particularly hard hit. They are disproportionately likely to work in the retail, hospitality and leisure sectors (Joyce and Xu 2020), and so are much more likely to have been furloughed or laid off than older workers (Adams-Prassl et al 2020a, Gardiner and Slaughter 2020), with the exception of workers around/past retirement age who have also been relatively badly affected (see Figure 8, from the Resolution Foundation). The U-shaped pattern in the probability of losing work (shown in Figure 8) has been persistent throughout the pandemic, with the latest data on the furlough scheme from HMRC in January 2021 showing high rates of furloughing for under 25s (particularly women) and slightly higher rates for those aged 65+ than middle aged workers.

Coile and Levine (2011) found that during the Great Recession, many older unemployed people did not effectively search for work when made unemployed, but instead left the labour force entirely. The large drop in vacancies, especially in the low-paid service sectors in which young people increasingly start their careers, means that new cohorts entering the labour market are likely to struggle to find work.



# Figure 8. Proportion of pre-pandemic employees who have been furloughed during the coronavirus outbreak or are now out of work, by age, June 2020

NOTES: Base = all UK adults who had an employee job prior to the coronavirus outbreak. The furlough variable in Understanding Society is absorbing, meaning we can't completely identify those who had previously been furloughed but had come off furlough by June. Data labels include those who have both been furloughed and are currently out of work (the shaded areas).

Source: Reproduced from Gardiner et al (2020) Figure 14 based on analysis of Understanding Society.

A great deal of research exists on the scarring effects of entering a weak labour market, which has been shown to depress earnings and employment for up to ten years into people's careers (Altonji et al. 2016, Oreopoulos et al. 2012). The Covid-19 shock could be more damaging than previous recessions, as the sectors that have been worst affected are those in which young people often start their careers. The key unknown is what will happen to young people's employment prospects when it is much harder to get onto the first rung of the career ladder.

Research on "scarring" typically finds larger negative effects on low-educated young people than their more highly educated peers. This is likely to hold in the current crisis, where the drop in vacancies has been far sharper among low-skilled than high-skilled jobs. Without significant policy intervention, this is likely to act to increase labour market inequalities within the younger generation, as well as between generations.

# **Gender inequalities**

Prior to the coronavirus pandemic, some labour market inequalities between men and women had been falling. In particular, there had been large rise in the proportion of working-age women who have been in paid work (Bourquin and Waters 2020). Women with either a low-paid partner or a very high paid partner are much less likely to be in work (Roantree and Vira 2018), as are single parents, though their employment rates have risen rapidly, in large part driven by reform a reform introducing job-search requirements for many lone parents (Avram et al. 2018).

Consistently over (at least) the last 25 years the weekly earnings of women have grown faster than for men. In part this is a result of rising hours of work for women (Belfield et al. 2017), particularly for part-time workers (Connolly et al. 2016). Between the mid-1990s and mid-2000s, it was also the result of a fall in the difference in average *hourly* pay between men and women (Costa Dias et al. 2018), though reductions in this gender pay gap in the UK have stalled since

then. Reasons identified for the gender pay gap include different occupational choices (Blau and Kahn 2017), lower bargaining power for women (Card et al. 2016), the high penalty for flexibility in some occupations (Goldin 2014), low returns to part-time work (Blundell et al 2016), lower work experience due to time caring for children (Harkness et al. 2019; Costa Dias et al. 2018), and less choice over firms due to the need to work closer to home (Petrongolo and Ronchi, 2020). With lower pay and employment than men, and much higher probability of being a single parent, women are more likely than men to be living in income poverty (Women's Budget Group 2018).

#### **Implications of the Covid-19 pandemic**

The Covid-19 pandemic has particularly affected the economic activity of women as opposed to men. Women are more likely to work in a "shut-down" sector (Alon et al. 2020; Blundell et al. 2020b) and have been more likely have lost their job or been furloughed (Adams-Prassl et al. 2020a, 2020b; Sevilla and Smith 2020), though by the end of 2020, the falls in paid work for men and women were not dramatically different (Cribb 2021). The gender differences in employment are particularly large for people with school-age children during periods when schools are closed, with mothers 1.5 times more likely to have stopped work than fathers during the Spring 2020 lockdown (Andrew et al 2020). Women's mental health deteriorated twice as much as men's in the initial phases of the pandemic (Banks and Xu 2020, Etheridge and Spantig 2020).

The disruption to women's careers reduces their effective 'work experience', which may hamper their earnings progression in coming years. To the extent that higher rates of furloughing translate into higher redundancies when government support is wound down, we may also see higher rates of unemployment among women. This is especially the case for low-paid women who often work in the severely affected sectors of retail and hospitality. The consequences of job loss are more severe, on average, for single parents who have children to support and no partner's earnings to rely upon than for women who have a working husband or partner.

In the longer term, there are two key trends that could have important implications for gender inequalities in employment and income. First, if, as seems likely, the increased ability of many people to work from home is persistent, this could make it easier for women to fit their family lives around their work lives, therefore encouraging more of them to work (or to work full-time) and easier for them to have significant career progression. Increased ability to work from home may also allow women for search for jobs over a wider geographical area than before, increasing their job opportunities. Second, whilst women bore the brunt of additional housework and childcare during lockdown, men also increased the amount of time they spent on these activities (Hupkau and Petrongolo 2020). There is some evidence that increased childcare provision by men has a longer-term effect boosting father's time undertaking housework and childcare (Tamm 2019). If more men do spend more time doing these activities, this could also make it easier for women to undertake paid work and to have higher earnings as their career progresses, thereby reducing gender inequalities in earnings.

### **Regional inequalities**

A wide range of research has found significant economic inequalities between different parts of the UK. Productivity, incomes and wealth all differ significantly across the UK, with London and the South East having the highest levels. In contrast, Wales has the lowest earnings and the lowest productivity of all regions and nations of the UK (Agarwal and Philips 2020). Regional

inequality in the UK is high by international standards (McCann 2020). The large differences across the UK are well illustrated by Blundell et al. (2020) who show large differences in the proportion of people with post A-level qualifications across the country (Figure Whereas in large parts of the country less than a quarter of the population have post A-level qualifications, in large parts of London and the Home Counties, and in and around Cambridge and Oxford, close to half of people have a post A-level education.





Source: Reproduced from Figure 1 of Blundell et al. (2020b).

Regional economic inequalities are not new. Geary and Stark (2016) show that the South East has been the richest region of the UK since at least the 1860s, though regional inequalities reduced gradually between the 1860s and the 1970s, since when they have increased again. As Cribb et al. (2017) show, in terms of average household incomes, the big winner since the 1970s has been the South East – moving further ahead of the UK average, while the Midlands in particular have fallen back. Stewart (2011) finds that the performance of the financial sector has been very important in driving the strong performance of London since the mid-1990s.

There are two key caveats to these findings of significant regional inequalities. First, the cost of living varies significantly across the country, with Rienzo (2017) finding that adjusting for cost-of-living differences reduces measured differences in regional incomes – the cost of housing is particularly high in London and the South East. Second, the vast majority (95%) of household income inequality is explained by differences within regions, rather than across. That is in part because there are clusters of very poor areas in almost all regions. For example, deprived coastal areas such as Great Yarmouth, the Isle of Wight, and Thanet, exist in the relatively prosperous South and East of England.

#### **Implications of the Covid-19 pandemic**

Some parts of the UK have been hit harder economically by the pandemic than others. While Covid-19 infections and deaths were clustered in the North West, North East, and London in the first wave (Davenport et al 2020), McCurdy (2020) found that jobs in the South West and Scotland were most disrupted. Davenport and Zaranko (2020) found that in general, those areas who have been most economically affected by the pandemic are not those that are "left behind", although some deprived coastal towns and Northern inner cities have been particularly badly hit by the pandemic.

In the short term, the effects of the pandemic on regional inequalities are likely to be driven by which areas see the largest job losses as government support winds down. Areas where hospitality and "non-essential" retail, which have now been shut down again in early 2021, are important employers are particularly likely to struggle. For example, McCurdy (2020) shows that coastal areas are particularly reliant on tourism. In contrast, areas with large public sectors (such as Northern Ireland) or high productivity services (such as the South East) may do better relative to the average.

In the longer run, an important impact on regional economic inequalities may well be determined by the extent to which people are able to shift towards remote working part-or-full time. Longer commutes may be more acceptable if only done a few days per week. This may mean that highly educated people are less likely to cluster in high-cost areas like London, or that people try to move to lower cost parts of their regions. However, Winters (2011) has found that living in an area where lots of people are highly educated boosts the quality of life in that area. To the extent that it is the "amenities" of more wealthy areas that people enjoy (see Gibbons et al. 2011), highly educated people may be more reluctant to leave London and the South East for less prosperous areas. Persistence in the geographic concentration of educated workers may also have adverse implications for attracting new firms to already deprived areas facing additional pressure on jobs following the pandemic.

One final effect of more remote working may that it allows people to search more widely for work – this could mean that living in an area with particularly low employment may be less damaging if people can now easily search for work to be done remotely. However, more remote work could also facilitate outsourcing to countries with much lower wages, offsetting these potential gains.

### **Ethnic inequalities**

This year has brought ethnic and racial inequalities sharply into focus due to the disproportionate mortality experienced by ethnic minority communities from Covid-19. However, there are

longstanding differences between people of different ethnicities in the labour market and in average household incomes. Employment rates varied substantially by group pre-crisis, partly due to differences in participation, which is particularly low among Bangladeshi and Pakistani women (Platt, 2019). Most ethnic minorities face increased unemployment risks as well though. And evidence suggests that discrimination in hiring processes has at least some role to play (Heath and Di Stasio, 2019). Among those in work, average pre-crisis wages were higher than average for some ethnic minorities, such as Indians and Chinese, with such advantages largely (or more than) explained by educational, occupational and other observed characteristics. Substantially lower wages for Pakistanis, Bangladeshis and Black Africans, for instance, cannot be purely explained by these factors (ONS, 2020a).

#### **Implications of the Covid-19 pandemic**

While inequalities in health impacts across ethnic groups – which may in themselves have longterm effects on the incomes of affected individuals – have understandably attracted substantial attention and research, there is also evidence that the economic effects of widespread social distancing measures will have varied implications for ethnic groups.

Differences between ethnic groups in age structure and household composition mean that the Covid-19 crisis has implications for ethnic inequalities even before considering differences among those in the labour market. Almost all ethnic minority groups are much more concentrated in younger age brackets than the white British population. Thus, at the aggregate level these populations are less likely to depend on more certain retirement incomes and face exposure to educational disruption and labour market shocks. The greater prevalence of ethnic minorities in younger working age brackets suggests greater employment exposure to shut downs (Joyce and Xu, 2020) and the potential labour market scarring that may result.

Among working age adults, the prevalence of two-earner households is notably lower for Pakistanis, Bangladeshis, black Africans and black Caribbean households (Platt and Warwick, 2020). For the former two groups this is largely due to low rates of female labour force participation; for the latter two, single person and single parent households are common. Either way, this reduces the scope for within-household income insurance, and with more children per household and higher child poverty rates in ethnic minority households (ONS, 2020b), there are likely to be long run consequences for families too.

In addition, Platt and Warwick (2020) document how the occupational concentration of some minority groups in certain sectors and roles pre-pandemic implied differential exposure to the impact of lockdowns. While in the population as a whole, women are more likely to work in sectors such as hospitality that have been shut down to varying degrees, this only holds for white women. Among non-white groups, men are more likely to do so, partly due to lower labour force participation rates among some minority ethnic women. Bangladeshi and Pakistani men – heavily concentrated in restaurants and taxi driving, respectively – stand out in this regard. These groups are especially concentrated in shut down industries in older age brackets: for those with businesses that do not recover, the scope for reskilling may be limited, and the long-term effects severe. Moreover, ethnic minority groups overall are less likely to hold jobs with secure incomes (TUC 2017). Black individuals are particularly overrepresented in insecure jobs and Bangladeshis and Pakistanis are disproportionately self-employed.

On the other end of the spectrum, however, some minorities exhibit disproportionate representation in "key worker" roles, and especially in health and social care roles. Pre-pandemic,

Indian and black African men were much more likely than white British men to work in such roles; black African women were much more likely than white British women. Employment in these roles has not been directly affected by social distancing measures, implying that there is not one story for all ethnic minorities: some groups are much more exposed to the current labour market disruption than others are.

Recent data suggests that non-white ethnic minorities overall are more likely to have face reduced working hours since March 2020 (Social Metrics Commission, 2020), and more likely to have self-insured through existing savings or borrowing more in the aftermath (Benzeval et al. 2020b). Brewer et al (2020) document that among those initially furloughed, 22% of those from an ethnic minority have since lost their job, compared to 9% of all furloughed workers. While evidence pertaining to more disaggregated ethnic groups is thus far largely lacking, Piyapromdee and Spittal (2020) show that black individuals are the most likely group to have continued in work – perhaps reflecting their prevalence in key worker roles – whereas Asian and mixed ethnicity individuals have lost employment at the highest rates.

# 4. Summary and discussion of policy options

A variety of socio-economic inequalities are likely to arise or deepen as a result of the crisis. Higher rates of unemployment will leave more families reliant on out-of-work benefits, increasing income inequality – in particular because those workers more likely to be hit by the pandemic were poorer than average to start with. Over time these effects should at least partially dissipate as employment recovers. In the longer run, the implications of less teaching in schools, and lower educational achievement will hit people from poorer backgrounds harder, with potentially longterm effects on their educational progression and labour market performance. Younger generations as a whole are likely to be badly hit by disrupted education and a labour market with reduced opportunities for training and many fewer vacancies than prior to the pandemic, reducing their prospects for career progression.

The prospects for gender, ethnic, and regional inequalities are less clear. Boys are more likely to be badly affected by reduced time in school than girls, with obvious implications for educational achievement. But it is women who have been more likely to be furloughed and missing out on work experience during the last year, and their employment has been particularly affected by school closures. In general, the areas where the labour market impact of the pandemic have been worse are not the same as those that were "left behind" prior to the crisis (with a few notable exceptions). But the North West, a relatively poor region, saw lower school attendance during the autumn of 2020 as the second wave hit that region harder. Such patterns will only make it harder for young people from these areas to progress successfully into the labour market. Young people from ethnic minority backgrounds are more likely to pursue university education than their white counterparts (a positive attribute in a time where workplace-based training is likely to shrink). Having said that lower rates of two-earner households among Black and Asian families make them more susceptible to financial difficulties following job loss.

Inequalities in the future are also likely to be driven by trends that the Covid-19 pandemic has brought about or accelerated. In particular, there could be changes as a result of changing consumer preferences, changes to the proportion of people who work from home, and changes to expectations about the future frequency of pandemics or other major shocks. The pandemic and the restrictions on non-essential retail during 2020 have driven increasing numbers of people to undertake shopping online rather than in store (Relihan et al 2020). To the extent this leads to a more permanent change, this could potentially increase demand for (often higher paid) jobs in technology sectors and reduce demand in (lower paid) retail sectors, and could increase market concentration, both of which could increase income inequalities. They could also have important implications for people in communities who value having shops nearby, particularly older people who may be less familiar with technology and internet commerce.

Increased ability for people to work from home could also have important implications for a number of different inequalities. The increased ability to work from home does not affect all jobs, and is likely to favour professionals, who already have higher levels of job satisfaction. For many office-based occupations, people may be able to search for work over a wider geographical area, reducing monopsony power of employers in some areas. Women with children, who often work closer to where they live than men with children, may benefit from this ability to search for work over a larger area. And people in general may be willing to live further from their work if they only have to commute two or three days per week rather than five. This could potentially benefit areas outside London (or areas with lower housing costs within regions), which many educated people

may see as a better option to live in the long term if they are not as tied to a particular location by work. Having said that, an increased ability to work remotely could also lead to more jobs being outsourced to countries where wages are lower than the UK.

The Covid-19 pandemic could also change people's expectations about the probability of future pandemics and societal shocks more generally. It is not clear what effects such changing expectations might have. One might speculate that they could include people being more likely to invest in education or to undertake other investments that allow them flexibility to change careers in response to future shocks. For business owners, higher expectations of future pandemics or other major shocks could increase expectations about the probability of business failure or bankruptcy and therefore lower the probability of investing in their businesses. The pandemic could also focus the public's attention on other major risks, most notably climate change, with potential implications on attitudes towards the welfare system and social insurance. Finally, there may be long run implications for productivity and inequality given that a significant fraction of the population have caught Covid-19, with evidence emerging of the prevalence of "long Covid" among those who have had the virus (e.g. Yelin et al, 2020).

# Potential implications for policymakers concerned by changing inequalities after the Covid-19 pandemic

The changes in inequalities that we can be most confident in predicting are: those driven by the expected higher rates of unemployment (which particularly hit younger people and those with lower earnings), and those driven by reduced levels of education and training as a result of the pandemic. In this last section, we focus on potential options for a government that wanted to act against these trends. It should be noted that many, or indeed most, of these potential options would lead to increases in public spending and/or reductions in tax revenues. They would therefore be funded by a potential combination of increases in public borrowing, increases in (other) taxes, or reductions in other areas of public expenditure. We think that it is important for the government to consider an **integrated approach** to these problems. This is an issue we discuss at the end of this section.

The prospects for increased unemployment could lead to governments considering policies to act against these trends. Possible policy options that the government could consider are:

**Policies aimed at reducing the cost of employing people** – such as a reduction in employer's National Insurance, or by funding apprenticeships through general taxation rather than the apprenticeship levy – could encourage firms to employ more people. The government could also pause the planned increases in (or reduce the level of) the National Living Wage in order to the reduce the cost of hiring relatively low skilled workers.

**Increased funding towards (re-)training schemes** would be appropriate to try to encourage people who have been made unemployed from shrinking sectors of the economy to try to gain skills that are valued in the labour market after Covid-19. There are many policy changes that might be considered including making adult re-training less costly by permanently removing rules restricting loan eligibility and also by enabling more flexibility on what public subsidies can

cover.<sup>6</sup> Retraining also generally needs an employer contribution too with a focus on skills and matches that deliver earnings progression and opportunities for mobility. Polices such as 'human capital tax credits' might help incentivise firms to undertake more training than currently (see Costa et al 2020).

**Central and local government could increase the number of employees it employs** to staff public services. One argument in favour of this is that following reductions in most departmental budgets since 2010, public service quality has declined (see Institute for Government 2020). In addition, missed health appointments and operations, and reduced schooling during 2020, create latent demand for more of these services in 2021 and beyond.

The effectiveness of "conditionality" in the welfare system could be lower in a situation where unemployment is driven to a much greater extent by macro-economic conditions, and where even an intensive job search may be much less likely to result in finding a job. The suspension of conditionality has occurred during the pandemic could be continued while vacancies are low (and unemployment is high or rising sharply). Alternately it could be changed to give the welfare claimant a greater "benefit of the doubt" compared to the pre-pandemic system. There could also be a shift in focus from sanctions to helping claimants identify opportunities in alternative sectors and occupations and providing retraining (as above). The generosity of many out-of-work benefits, particularly for families without children, has grown much more slowly than earnings over recent decades. While changes to out-of-work benefits have effects on welfare budgets and work incentives, it could be a good time for the government to consider whether it believes it is providing enough support to people who are made unemployed, or remain unemployed, after the end of the pandemic.

The government could (re)introduce a greater element of social insurance into the welfare system to help families deal with economic shocks. This would follow on from the furlough and self-employed income support schemes (SEISS) which provided much higher replacements rates to furloughed employees and negatively affected self-employed people than does Universal Credit. Counter-arguments to making large changes to the welfare system are, first, that the existing Universal Credit system has handled well the large increases in numbers of claims that occurred in Spring 2020 (Handscomb and Brewer, 2020), and second, that the government was able to introduce increases to Universal Credit and set up the JRS and SEISS to support workers (though the SEISS is poorly targeted). Therefore, if similar schemes could be re-introduced quickly in future crises, there is arguably less of a need for such a radically different welfare system to be in place during more normal economic times.

The government should also consider the extent to which it can address the consequences of large amounts of missed school by children, and the likely increased difficulty of finding workplace-based vocational training in the coming years. Potential policy options that the government could consider include the following:

<sup>&</sup>lt;sup>6</sup> Typically adults do not receive public support if they want to study for a qualification at the same or a lower level than previously achieved – although there are exceptions. In view of the fact that the type of study matters at least as much as the level (e.g. for earnings), this rule seems misplaced. Also, there is a need for more simplification around these rules so that people can more easily find out about their eligibility.

**Increasing funding towards their remedial education through small group tuition**. However, programmes like this alone are unlikely to completely close the socio-economic gap in learning that has opened up for the following two reasons: (a) there are so many children who are disadvantaged in various ways that the scale of the programme required is enormous and there is bound to be variation in the quality of delivery and the appropriateness of the targeting; (b) the learning loss is in multiple subjects over a long period. It does not seem possible for small-group tuition to compensate entirely for the loss of instructional time.

**The options to increase the number of hours of schooling pupils receive** include repeating school years, cancelling the summer holidays and extending hours on regular school weeks. Of these, the latter seems most reasonable. On the basis of Lavy (2015), well over two additional hours per week might be needed over a year to compensate for each week lost to the Covid-19 pandemic. This would come with the need for significantly increased resources for schools (and potentially pay for teachers).

Addressing learning loss is not only about targeting disadvantage but also about trying to offer much broader-scale remedial help to the whole cohort of pupils affected by the Covid-19 pandemic. The fact that educational inequalities have different dimensions (not all reflecting socio-economic background) and that these will be differently affected by the Covid-19 pandemic suggests that direct targeting of particular groups is not sufficient on its own to make up for the damage caused by the pandemic.

The government needs to assess how to deal with the fact that pupils facing assessment for qualifications such as GCSEs, BTECs and A-levels will have had much less preparation than previous cohorts, and that poorer pupils will, on average, have received much less schooling that richer ones as a result of the pandemic. Teacher assessment in 2021 will make it harder to ensure the comparability of results across schools and other providers than in the case of exams. There might well be grade inflation even despite huge learning loss. Grades will not measure the same thing as in previous years. Immediate issues are ensuring the integrity of the system as a whole (i.e. a level of quality assurance such that confidence is maintained in the assessments and grades); identifying courses in further and higher education that may be over-subscribed in the event of grade inflation and considering how to respond (e.g. a temporary expansion of courses); how to support students in their ongoing education due to learning loss during the pandemic.

The government could provide funding to buy poorer school children technology (such as laptops or tablet computers) that could allow all pupils to harness the benefits of technology in schools. This would allow institutions to learn how to use online resources more effectively for teaching (drawing on their experience during the pandemic) in a way that all pupils could access online resources. Technological advancement might also help if it enables people to access training opportunities that are a long way from where they live (as academic studies often find distance to education provider to be an important predictor of educational engagement).

**Improving access to, and the quality of, vocational education** has been a priority from before the pandemic, but is brought into sharp relief for young people facing a much more difficult labour market due to the pandemic. There is no silver bullet to address all the problems and some of them require long-term, strategic policy changes. For example, better-resourced and sign-

posted pathways are important for those entering Further Education Colleges – especially if they have poor GCSE results. It is also important that there is enough flexibility to allow young people to change courses and to spend longer in College than might be expected for other cohorts. For example, this might mean lifting the funding rate for 19-year olds for a number of years. As disadvantaged students are more likely to go to Further Education Colleges, there is some justification for additional resources allocated to these institutions to enable these flexibilities as well as providing for additional remedial tuition for entry cohorts most affected by Covid-19

A focus on training that is oriented toward new technologies and toward the demands of the health and care sectors is likely to be important. It was already apparent that investing in 'soft skills' especially for those with lower formal qualifications, is likely to produce better longer-term career profiles (Aghion et al 2020). Likewise there is likely to be a higher pay-off to investments in skills among those with lower formal education qualifications that complement green technologies, Stern (2020).

With regard to apprenticeships, it is important that any one-off incentive payments are wellintegrated with other schemes (such as Kickstart) if they are to stand any chance of success. More generally, it is important to understand the broader considerations employers face when deciding to take on apprenticeships and to consider other possible assistance. For example, it might be possible to develop a tool that would help firms make the cost-benefit decision (see Wolter and Joho 2018).

### An integrated approach to policymaking in a post-pandemic world

Different government departments have responsibility for broad areas of public policy, and even within departments, there are teams of civil servants who focus on different particular policies or policy issues. However, the interaction of different inequalities and the complexity of our public policy challenges implies that it will be increasingly important for there to be strong co-ordination both within and across departments for policy to be successful in the aftermath of the pandemic, with an integrated approach to policymaking. Of course, this is not to say that this does not happen on some issues already. While a comprehensive set of integrated policy recommendations is beyond the scope of this report, we draw attention to a few example areas where joined-up policy will be crucial to undoing the damage of the pandemic.

One key policy challenge in the coming months and years will be how to get jobseekers (especially young adults) into jobs, and specifically into jobs with good progression prospects. How people interact with the benefit system (e.g. via job centres and work coaches) needs to be considered alongside labour market policies, and the availability of training. For example, policies regarding public funding of courses at FE colleges should be considered not only by the Department for Education in isolation, but alongside civil servants in the Department for Work and Pensions when they are thinking about how to combat rising unemployment. And the setting of minimum wages and in-work benefit levels could be considered alongside each other as potentially complementary policies, rather than being considered substitutes for one another. In general, more opportunities for training for those in receipt of Universal Credit and/or on the minimum wage could improve earnings and labour market outcomes.

Apprenticeships policy is a second area that could benefit from increasingly joined up thinking. Apprenticeships are not only important as a source of education and training but are intimately linked to the government's concerns on in-work wage progression, social mobility, and levels of labour market inequalities. Good apprenticeships, particularly in areas such as skilled trades, can be effective forms of training for many without tertiary education. However, with at least 600 current apprenticeship standards, there is a risk that apprentices learn skills that are too specific to particular firms, rather than broad – and accredited – skills that are useful to workers across different firms. In the longer-term, a broader suite of portable skills may provide access to a wider range of firms and sectors, and potentially provides a form of insurance against large-scale shifts in the labour market from technological change, for instance.

Addressing low pay in specific sectors of the workforce is another area to consider. The social care sector, for example, provides valuable services to many people, especially elderly people. However, it is also a sector where the workforce is predominantly low paid. Policies aimed at recruiting more people into this sector need to consider how to incentivise entry. This requires considering both pay and training (or re-training).<sup>7</sup> This might involve more subsidised places at Further Education Colleges as well as additional resources for Local Authorities to pay for higher quality care on behalf of older people. And with a workforce with a high share of immigrants working in it, policies in this area need to be considered alongside the status of social care workers in the points-based immigration system.

Regional policy is also important in this respect, especially given the government's current priority of "levelling up" less prosperous areas of the country. Here it is important to remember that policies that improve both the supply of skilled labour and the demand for skilled labour (from firms) in an area are likely to be more successful than those that focus only on the supply or demand. In the absence of skilled labour, encouraging firms to locate in particular areas could lead to other higher skilled people moving from other parts of the country, or abroad. Conversely, increased training or education (e.g. through the location of universities) in a local area might boost the number of educated people, but if they have to move to a more prosperous part of the country to find a job that matches their skills, this will lead to little benefit for the local area. Instead, policies that increase both the demand and supply of skills in local areas look more likely to achieve desired results.

Looking across the challenges facing education, skills and employment, a key area for joined-up policy making will be in building the digital infrastructure to help facilitate people's efforts to engage in the post-pandemic economy and in society more generally. This will be highly complementary to other government policies and would enhance their effectiveness. For schools, extra tuition for students is likely to remain an important part of efforts to make up for lost learning during the pandemic, and perhaps become a permanent feature of the educational landscape. But one aspect of poverty is lack of access to technology either because of poor broadband services or the lack of means to purchase computers and other devices. Surveys during the first lockdown shows that lack of access to digital technology is one of the reasons children from lower socio-economic groups were unable to access remedial tuition. For training,

<sup>&</sup>lt;sup>7</sup> While it is possible for people without a Level 3 qualification to retrain in adult social care at Level 3, this is of no use to someone who already has a Level 3 qualification and would like to retrain to work in this sector.

on account of the pandemic and increased unemployment, we have argued that more people will need to retrain. The possibility of online training enables people to overcome barriers arising because of distance to an educational provider and potentially enables greater flexibility. The provision of better digital infrastructure would thus facilitate training both directly (i.e. enabling people to do this online) and indirectly (i.e. removing costs associated with having to attend inperson). For employment, a long-term legacy of the pandemic is likely to be increased working from home among many occupations. To the extent that there is a digital divide in terms of infrastructure and access to technology, this will penalise those without good access.

A final area that certainly will require a joined-up approach to policy is the transition to a 'Net Zero' economy, with the UK committed to reducing net greenhouse gas emissions to zero by 2050. It is not yet known how this transition will be achieved but it will require large-scale and wide-ranging changes to the country's energy and transportation systems, for instance, as well as interventions to shift demand away carbon-intensive activities and to increase uptake of resource- and energy-efficient technologies. Such policies will clearly cut across the mandates of many government departments; they also may provide opportunities for addressing some of the challenges discussed in detail in this report. For instance, there may be opportunities for new vocational or technical educational qualifications that provide a route into parts of the energy of construction sectors that might be expected to grow in the move towards Net Zero. At the same time, this transition will undoubtedly have important costs for some sectors and this will only sharpen the need for effective joined-up labour market and educational policies that allow displaced individuals to transition into new types of work.

Of course, there are many areas across government that could benefit from a more holistic approach to policymaking. We have mentioned just a few. Government priorities will change over time, but by considering the wide range of effects that public policies can have, and the wide range of potential levers that government has at its disposal all together, we think this is likely to lead to more effective policies and better outcomes in the longer term. This will be particularly important when confronted by the potentially long-lasting effects on employment, education, and skills that the Covid-19 pandemic has had on our society.

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