

**National  
Minimum  
Wage**



**Low Pay** Commission

# National Minimum Wage

Low Pay  
Commission Report  
2021



# **National Minimum Wage: Low Pay Commission Report 2021**

Presented to Parliament  
by the Secretary of State for Business, Energy and Industrial Strategy  
by Command of Her Majesty

December 2021



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# Introduction

**1** We, the Low Pay Commission (LPC), are the independent body charged with advising the Government on the levels of the National Minimum Wage (NMW), including the National Living Wage (NLW). Our remit from the Government is to recommend the rate of the NLW consistent with reaching the target of two-thirds of median earnings by October 2024. The remit asks us to *'advise on any emerging risks and – if the economic evidence warrants it – recommend that the Government reviews its target or timeframe'*. The aim of this *'emergency brake'* is to ensure the lowest-paid continue to see pay rises without significant risks to their employment prospects. For the other rates of the NMW, including the temporary 21-22 Year Old Rate, our remit is to recommend as high a rate as possible without damaging employment.

**2** Our remit this year included three additional tasks. The Government asked us to gather evidence on the exemption to the minimum wage for domestic workers; to consider the impact of minimum wages on different parts of the country; and on different groups of workers with protected characteristics.

**3** On the first of these, we heard evidence, often distressing, from individuals whose work is generally hidden and voices unheard, but whose lives are greatly affected by minimum wage regulations. We are pleased to have been able to agree a definite recommendation to the Government to remove the domestic worker exemption and hope this will be acted on promptly. We would like to express our particular gratitude to all the individuals and groups who gave evidence on this subject. Their contributions and our recommendation are presented in Chapter 8 of this report.

**4** We are a social partnership, and our recommendations reflect a consensus between representatives of workers, representatives of employers and labour market experts, reached through careful consideration and discussion of the available evidence. This annual report – our 23<sup>rd</sup> – provides the evidence and rationale behind our recommendations on the rates to apply from April 2022. We submitted our recommendations to the Government on Friday 22 October 2021, this report covers the evidence available to us up to that point. The Chancellor confirmed the Government's acceptance of our recommended rates in the Autumn Budget on Wednesday 27 October.

**5** Last year, the extent of the economic shock and uncertainty about the future led us to recommend an NLW rate below the on-course rate needed to meet the 2024 target. That was a very difficult decision to take. We also recommended modest increases in the other rates of the minimum wage. This year, our key decision was whether the NLW should get back on track for its target by 2024. For the youth rates we needed to take into account their different remit and our intention to bring 21 and 22 year olds into the NLW by 2024.

**6** Evidence is critical to our decision-making. We need to understand the labour market and economy more generally, particularly at the low-paid end. Because the NLW has a target based on average pay, we need accurate and timely measures of current pay as well as forecasts for the future. It

is also vital we hear directly from workers and employers about the impact of the rates on their livelihoods.

**7** In 2020, our evidence-gathering was significantly disrupted. The pandemic, lockdowns and social distancing all curtailed our ability to meet stakeholders in person. The unfolding crisis made it difficult for employers and workers alike to provide evidence. And even more than usual, the effects of the minimum wage were obscured by economic turmoil. In 2021, we have received more extensive evidence from a wider base of stakeholders. Online meetings have partly compensated for the continued restriction on in-person gatherings, and we have heard more testimony from workers in particular than in previous years. We received 76 written consultation responses, held oral evidence sessions with 32 organisations and had many more online meetings with businesses, workers and other bodies across the UK. As ever, we are grateful to all those groups and individuals who contributed to this year's evidence-gathering process. Appendix 1 lists those stakeholders who responded to our consultation and whom we met in the course of the year, and who agreed to be listed.

**8** Last year's economic evidence base was also compromised by a range of factors. A key source of pay data, the Annual Survey of Hours and Earnings (ASHE), was distorted by large numbers of furloughed workers. This year the issues with ASHE are lessened somewhat, but we have been presented with other problems. The ASHE only forms part of the model that estimates the required increases to meet the 2024 target. Other wage data and forecasts, which help us estimate pay growth after April each year, likely overstate underlying pay growth. Growth figures over the summer compared pay levels with their levels last year, when the economic effects of the pandemic were stark and pay was hit hard. This 'base effect' artificially raises the rate of pay growth. Similarly, the loss of low-paying jobs also artificially raises the average level of pay. While these issues complicate matters somewhat, we are confident that our recommendations get us back on track to meet the 2024 target. The full details are discussed in Chapters 1 and 9.

**9** We have continued to commission independent research looking at the effects of the minimum wage in a variety of areas. We commissioned six projects to inform this report, covering a wide range of ground. These included a comprehensive evaluation of the first phase of the NLW from 2016-20, when we were tasked with increasing the rate to 60 per cent of median earnings. We commissioned projects using novel approaches to untangle the effects of the pandemic from those of the minimum wage in more recent data, and a qualitative study of employers' responses to recent increases. Other commissioned projects looked at aspects of our remit concerning workers with protected characteristics and spatial considerations of the levelling-up agenda. The findings of these projects are set out in Appendix 2 and the reports themselves published alongside this report. Given the pandemic's ongoing disruption of data sources, we were unable to undertake our own econometric analysis this year.

**10** This report is structured as follows:

- Chapter 1 sets out the state of the UK economy at the time we made our recommendations.
- Chapter 2 considers recent developments in the labour market.
- Chapter 3 looks in more detail at who NLW and NMW workers are.
- Chapter 4 reflects on the experiences of low-paid workers during the Covid-19 pandemic.

- Chapter 5 looks at the strength of the NLW labour market following the unlocking of the economy and the uprating this year.
- Chapter 6 and Chapter 7 do the same as Chapter 5, but for younger workers affected by the age rates of the NMW and for apprentices respectively.
- Chapter 8 presents the evidence we heard about the domestic worker exemption, along with our recommendation on this subject.
- Chapter 9 considers the prospects for the economy in the coming year. This is based on forecasts and other evidence we had at the time.
- Chapter 10 sets out the rationale for our recommendations and some of their implications.

**11** Material responding to the two additional questions in our remit (on the NLW's geographical impacts; and on low-paid workers with protected characteristics) is located across several chapters. Our overall conclusions are reflected in the Executive Summary. In Chapter 3 we consider minimum wage coverage among groups with protected characteristics and stakeholder views on how the policy has affected these groups. This chapter also looks at the geography of low-paid workers and how the NLW affected pay across different areas of the country before the pandemic. In Chapter 5 we go on to look in more detail at the effects of the NLW on employment in different parts of the country. Appendix 2 sets out the details of commissioned research into the minimum wage's impacts on workers by gender and ethnicity.

## Sleep-in shifts in social care

**12** There is one issue that has been a feature of LPC discussion and evidence from stakeholders, but is not a part of our remit this year – sleep-in shifts. This year the Supreme Court judgment on *Royal Mencap Society vs Tomlinson-Blake*, found that those on sleep-in shifts in social care are not entitled to the NMW while asleep. Central to the Supreme Court's ruling were recommendations made in the LPC's First Report, published in 1998. Commissioners at the time recommended that 'For hours when workers are paid to sleep on the work premises, workers and employers should agree their allowance, as they do now. But workers should be entitled to the National Minimum Wage for all times when they are awake and required to be available for work.' This was used as a guide to the intent behind the NMW regulations.

**13** In setting the framework for the first minimum wage, Commissioners made pragmatic recommendations based on what they (then) saw as common practice. These were not infallible, nor were they intended to be unchangeable. Rather, they reflected the pragmatic view of practice at the time. The LPC and the Government in subsequent early reports and responses recognised that sleep-in shifts were a difficult area and a source of uncertainty. We received submissions which suggested workers were being treated unfairly; noted that tribunal rulings were clouding the application of the policy; and asked the Government to clarify the guidance.

**14** The care sector has changed significantly since 1998. The funding situation has tightened and the importance of the minimum wage for the sector has increased. In our reports, we have repeatedly

flagged the effects this has had for the care workforce, who have experienced deteriorating working conditions and employment practices which push the envelope of compliance.

**15** There is now no ‘standard practice’ on sleep-ins across the UK. We have heard that different commissioning bodies take different approaches, and this is likely to further fragment as local authorities alter their practices in response to the Supreme Court ruling. This makes life hard for providers, especially those who operate across several local authorities. For workers, this will represent a further deterioration in working conditions; some will find their payments reduced. Clients – and the quality of care – will also be affected. The overall trend is likely to be that workers on sleep-ins are not paid the NMW, and that it is harder to attract workers to these shifts. This will be to the detriment of people who need overnight care and could mean a move towards unstaffed systems, reliant on alarms or cameras.

**16** All parts of the sector agree there is a need for clarity and consistency. As things stand, sleep-in payments are unregulated, determined by negotiation between commissioning bodies, providers and the workforce. Some providers may pay the NLW for a shift, while others will pay a flat fee. This creates space for confusion and exploitation. And while all sides agree on the need for clarity, we suspect there may be less agreement on what the actual solution should be. Furthermore, we suspect that employers’ views on the right option for paying for sleep-ins would be heavily influenced by the funding available to them from local authorities and, ultimately, central Government.

**17** Several groups have called for us to respond to the Supreme Court’s judgement; to clarify or amend the recommendations made in 1998; or to consult and make new recommendations on the treatment of workers on sleep-ins. We have carefully considered this, conscious that the Supreme Court’s ruling was on the interpretation of regulations made in 1998 and that a statement in 2021 would not affect the Court’s judgement. The LPC’s value is in using a social partnership model to find consensus among different parties. There is currently no consensus. Any further development in the approach to sleep-ins would need to be inextricably linked to wider plans for social care’s funding arrangements, its provider base and its workforce. This suggests that the Government is better placed than the LPC to resolve the treatment of sleep-ins. Though of course, if Government does decide to act on sleep-ins, the LPC would be willing to assist where it can.

**18** Changes to the treatment of sleep-ins would require funding reform and a wider programme for the care workforce. It would not be productive to recommend extending the NMW to sleep-ins if this was unfunded and created additional stresses for an already overburdened sector. The detriment would fall – as it does now – on the workforce. An entitlement to the NMW for sleep-ins would not change the underlying issues faced by most care workers or address the fundamental problems the sector faces. The consistent picture we hear from workers and providers is of skills shortages, high turnover, low esteem and workers lost to other low-paying sectors. All parties seem to agree that in an ideal world, care would not be a minimum wage profession but at this time there is no apparent path to realise this.

**19** We note plans for a green paper for reform of the sector and that a three-year Spending Review has been completed. The next steps on sleep-ins need to be aligned with this and supported by a sustainable funding settlement. Our overall view is that all of the sector’s issues, from staff turnover and skills shortages to concerns around compliance, travel time and sleep-in shifts stem from its inadequate funding settlement.

# The Commissioners

**Bryan Sanderson (Chair)**

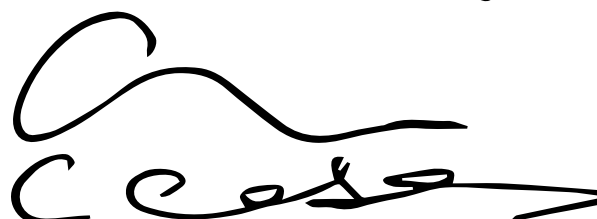
Emeritus Governor, London School of Economics

**Kate Bell**

Head of Rights, International, Social and Economics, Trades Union Congress

**Professor Sarah Brown**

Professor of Economics, University of Sheffield

**Kay Carberry**

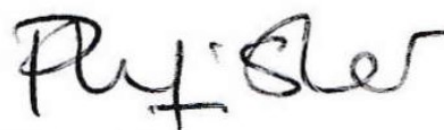
Director, TU Fund Managers  
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**Matthew Fell**

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**Louise Fisher**

Former Chair of the Board, Chartered Institute of Personnel and Development (CIPD)

**Martin McTague**

Policy and Advocacy Chairman, Federation of Small Businesses

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# The Government's Remit to the Low Pay Commission

The government wants to make the UK the best place possible to live and work. Making work pay for the lowest earners in our society is a core part of our commitment. This April, increases to the National Living Wage and National Minimum Wage rates are expected to boost the wages of over 2 million low-paid workers.

The National Living Wage was introduced in April 2016, and the government has set a target for the National Living Wage to reach two-thirds of median earnings by 2024 for workers aged over 21, taking economic conditions into account.

On 1 April 2021 the National Living Wage will increase by 2.2% to £8.91, and will apply for workers aged 23 and over for the first time, down from aged 25 and over. This is the first step towards the National Living Wage applying to workers aged 21 and over by 2024. The government is also introducing increases between 1.5% and 3.6% to each of the National Minimum Wage rates for younger workers and apprentices.

## **National Living Wage and National Minimum Wage rates**

This is an extraordinary time. Low paid workers, including many key workers, have made incredible contributions during the Covid-19 pandemic. Workers and employers alike have shown exceptional resilience in the face of continued economic uncertainty.

In this context, the government asks the Low Pay Commission to monitor and evaluate the National Living Wage and recommend the rate which should apply from April 2022 in order to reach two-thirds of median earnings (of those eligible for the National Living Wage) by 2024, taking economic conditions into account.

The government asks the Low Pay Commission to closely monitor developments in the labour market, including the impact of increases to the minimum wage rates, and advise on emerging risks. The government remains committed to the 2024 target, but if the economic evidence warrants it, the Low Pay Commission should advise the government to review the target or its timeframe. This emergency brake will ensure that the lowest-paid workers continue to see pay rises without significant risks to their employment prospects.

The government notes that the Low Pay Commission will continue commissioning minimum wage policy evaluations from leading researchers and is expanding its own use of evaluation tools, using new methods and sources of evidence for its assessment of the impact of the National Living Wage. The government asks the Low Pay Commission to continue to set out, alongside its rate recommendation, its evidence strategy for ongoing monitoring and evaluation of the impact of National Living Wage increases towards the two-thirds median target.



The government also asks the Low Pay Commission to monitor and evaluate the levels of each of the different National Minimum Wage rates (under-18s, 18-20, 21-22 age groups and apprentice rate) and make recommendations on the increases it believes should apply from April 2022, such that the rates are set as high as possible without damaging the employment prospects of each group. In addition, we ask the Low Pay Commission to recommend the accommodation offset rate that should apply from April 2022.

The government asks the Low Pay Commission to gather particular evidence on groups of low paid workers with protected characteristics. Groups more likely to be affected by changes to the minimum wage rates include younger, older, disabled, and women workers, and workers of ethnic minorities.

Additionally, to support the government's levelling up agenda we ask the Low Pay Commission to gather evidence on the differing impact across the United Kingdom of increases to the minimum wage rates, to improve understanding of what part low-paid work plays in outcomes in different parts of the United Kingdom.

In making its recommendations for the minimum wage rates, the Low Pay Commission is asked to take into account the state of the economy, employment and unemployment levels and the wider labour market, and relevant policy changes.

#### **Live-in domestic workers**

We also ask the Low Pay Commission to gather evidence on the application of the 'live in domestic worker exemption' to minimum wage entitlement (regulation 57(3) of the National Minimum Wage Regulations 2015). We ask the Low Pay Commission to present findings on which sectors make use of this exemption, how often is it used and the impact of this on the labour market, with a special focus on equalities impacts. We ask that evidence found be included in the report made by October 2021.

#### **Timing**

The Low Pay Commission is asked to provide a final report in response to this remit to the Prime Minister and the Secretary of State for Business, Energy and Industrial Strategy by the end of October 2021.

# Executive summary

**1** The task of the Low Pay Commission (LPC) is to advise the Government on the levels of the National Minimum Wage (NMW), including the National Living Wage (NLW). This report, our 23<sup>rd</sup>, contains the evidence and rationale for our recommendations to apply from April 2022. We met to agree our recommendations at the end of October 2021 and this report summarises the evidence we relied on.

**2** Our remit for the NLW is to bring the rate up to two-thirds of median earnings by 2024. In providing this advice, we are asked to ‘closely monitor developments in the labour market, including the impact of increases to the minimum wage rates, and advise on emerging risks’. The remit notes that ‘if the economic evidence warrants it, the Low Pay Commission should advise the government to review the target or its timeframe’. The Government refers to this as an ‘emergency brake’, the purpose of which is ‘ensuring that the lowest-paid workers continue to see pay rises without significant risks to their employment prospects’. For the other rates of the NMW, for younger workers and apprentices, our remit remains as always: to recommend as high a rate as possible without damaging the employment prospects of each group.

**3** Last year, uncertainty about the future course of the pandemic and the economy led us to recommend an NLW rate below our estimate of the on-course rate needed to meet the 2024 target. That was a tough decision as both workers and employers had been severely affected by the pandemic. This year our task is to decide whether to get back on track or not. For young people, we must take account of the more cautious remit but also our plans to extend the NLW to 21-22 year olds by 2024.

**4** Our evidence base has improved this year compared with 2020. Last year our main earnings source, the Annual Survey of Hours and Earnings (ASHE), was distorted by high numbers of furloughed workers. Fewer furloughed workers and more information about their pay lessens that problem this year. In addition, there are issues with other earnings data that are critical to our model, which we discuss below.

## The economy

**5** The economic situation has improved substantially since last year. With the success of the vaccine rollout and reopening of the economy, GDP is approaching its pre-crisis level earlier than predicted and relatively strong growth is expected next year. By international standards, the UK was badly hit by the pandemic, but by the second quarter of 2021 had made up some of that ground, with the overall change in GDP on a par with France and Germany.

**6** The recovery has been multi-speed with some sectors well behind others. Household incomes have been protected to a large extent, but consumers have been saving rather than spending, accumulating an excess of £180 billion in cash and other liquid assets by July 2021. Consumer spending, investment and trade continue to drag on growth so there is still ground to make up in

consumer-facing services, particularly international transport. However, output in several key low-paying sectors is now above or close to pre-pandemic levels including retail, hospitality and health and social work.

**7** As the economy has recovered so has pay, which is the key determinant of the NLW target level. But the pandemic continues to distort these measures, making underlying trends more difficult to discern. Over the summer some measures had annual wage growth as high as 8-10 per cent. These measures have been distorted by compositional effects (the loss of low-paying jobs causing the average pay level to rise), and base effects (comparisons with a year ago when wages were falling due to the impact of the furlough scheme and job losses). These issues played a key role in our deliberations.

**8** Beyond the macro indicators, the picture for businesses themselves is more mixed. Unlike consumers their debt levels have increased substantially, mainly among small and medium-sized businesses. While business confidence about these debt levels and the outlook more generally has improved, the Bank of England recently noted that insolvencies are likely to increase as Government support is withdrawn. Many have also faced rising costs, which are feeding through into inflation. The Bank of England expect inflation above 4 per cent until the middle of next year.

## The labour market

**9** The labour market has recovered rapidly with the number of payroll jobs above pre-crisis levels in September 2021. Levels of unemployment and inactivity had been rising but have now begun to decline. The improvement for employees has largely been driven by high demand for workers, illustrated by the volume of job vacancies, which reached a record high of 1.2 million in September. In addition, the levels of people moving into work and between jobs have both improved. Real time data showed that this high demand for workers continued into October, meaning we can expect employment to continue to grow in the short term at least.

**10** Alongside the welcome burst of recruitment activity, we have also seen recruitment difficulties increase for certain sectors. When asked about the causes of this, around half of firms affected mentioned a lack of qualified applicants with just under half citing a low number of applicants for the available roles. Around one in six firms said it was due to a reduced number of EU applicants.

**11** One factor that may flatter the level of payroll jobs is the shift from self-employment to employee status. Across 2020, around 1 million people changed from self-employed status to employee, a large rise on the 630-640,000 who did so in 2018 and 2019. Possible explanations for this include tax changes and movements to make use of Covid-related financial support. Levels of self-employment are still below pre-crisis levels. The ONS is looking into this shift in more detail and will provide more evidence when it becomes available.

**12** At the time of our deliberations, perhaps the most important issue for the future of the labour market was the closure of the Coronavirus Job Retention Scheme (CJRS). This took place at the end of September, so there was limited evidence at the time we made our recommendations. At the end of August 2021, there were still 1.3 million workers on the scheme, with the majority in small or micro firms. While this was concerning, there were good reasons to believe that the end of the CJRS would not lead to a substantial rise in unemployment.

**13** Firstly, there had been no repeat of the large-scale redundancies prior to the scheme's original closing date in October 2020. Most furloughed workers worked for the smallest firms, but very few of these firms were planning redundancies according to survey data.

**14** The number of workers temporarily away from work (a metric closely correlated with furlough numbers) had already returned to pre-crisis norms. This suggests that furlough may also have been covering other circumstances, for example maternity/paternity leave, or furloughed workers may have already found another job, which was allowed under the scheme. Others may be participating in education. If a furloughed worker believed they did not have a job to return to they may already have appeared in the unemployment or inactivity figures. Some of the remaining claims will be fraud or error, with HMRC estimating that 5-10 per cent of claims could be fraudulent. Finally, the strong demand for labour means furloughed workers who did find themselves without work as the scheme closes were likely to have other options.

## Low-paid workers

**15** Low-paid workers were hit hard by the pandemic. They overwhelmingly worked in shutdown sectors, but also filled many key worker roles too. Because they were more likely to be furloughed, their pay was more likely to be affected. This means it is harder to measure what their pay would have been in the absence of furlough. Despite this uncertainty, the evidence suggests pay growth has been strongest amongst low-paid workers and we see continued evidence of spillover effects for those paid above the NLW.

**16** The proportion of the workforce paid the NLW fell from 6.5 per cent (1.62 million employees) to 5.4 per cent (1.43 million employees) between April 2019 and April 2021. This is surprising given the NLW has grown faster than average earnings over the last two years and the age threshold for the rate has been lowered from 25 to 23. In part, this reflects some employers rounding pay rates up to £9 per hour, moving their workers just beyond our measure of coverage. In part, it reflects the fact that hospitality, leisure and other low-paid sectors were only beginning to reopen in April. Since then the economy has added 900,000 jobs, many of which will be low-paid.

**17** Low-paid workers were far more likely to be furloughed, particularly in the sectors most exposed to lockdown measures, such as hospitality and leisure, and especially the youngest workers. Just under a third of minimum wage workers remained on furlough in April 2021 compared with 9 per cent of other workers. Many of these individuals have since returned to work, although not necessarily in the same roles. Workers in shutdown sectors were slower in returning, as were younger workers.

**18** While the CJRS undoubtedly preserved the jobs and incomes of many millions of workers, furloughed workers have nevertheless faced considerable difficulties. We heard some struggled with the uncertainty of knowing when they would return to work, particularly those who had little or no communication from their employers. Many workers we spoke to had seen mistakes in their payments. This was worsened by the absence of payslips, making furlough payments difficult to understand and challenge.

**19** Individuals working in low-paying roles through the pandemic often faced great stress. We heard about concerns over health and safety, mental wellbeing and surviving on low levels of sick pay. We also heard of workers feeling forced to accept inferior terms and conditions, at risk to their jobs.

Insecurity was a central theme for workers this year and was felt most acutely by the youngest workers. They talked to us about concerns around the security of work and hours, unpredictable working patterns, workplace benefits and the cost of living rising. These issues generally pre-dated Covid, but it is likely that the pandemic intensified them. Hospitality workers reported regular shift cancellations with no compensation and short notice of work. We heard from hotel workers that while permanent staff could pick shifts, casual staff had to accept what they were offered, and often would be called in the morning to work in the afternoon. The pandemic had accelerated the casualisation of the hotel workforce, with increased use of agency staff to deal with unpredictable demand. In cleaning, unpaid overtime was seen as common and some workers had experienced shift cancellations without notice.

## Apprentices

**20** A year ago, we reviewed the Apprentice Rate and proposed increasing the rate substantially to align it with the 16-17 Year Old Rate over two years. This was motivated by long-standing stakeholder feedback about the level of the rate and the relatively small role it plays in employers' decisions over whether to recruit an apprentice. In this year's consultation, businesses and workers alike supported this proposal. We continued to hear that the Apprentice Rate was seldom used, that the impact of this change for the majority of low-paying sectors would be minor and that, more generally, raising the level of the Apprentice Rate was the right thing to do.

**21** Apprenticeship starts continued to be depressed throughout the 2020/21 academic year. Official statistics show that starts in England were subdued in autumn 2020 and have continued to decline year-on-year. That pattern is similar in the devolved nations. As the crucial autumn 2021 period approached, however, the vacancies picture had improved, leaving room for cautious optimism for the coming year.

**22** On pay, data sources show the Apprentice Rate continues to be used predominantly for apprentices under the age of 19. A fall in the number of apprentices doing lower-level apprenticeships has driven growth in median pay, but it is these apprentices who will be most affected by alignment with the 16-17 Year Old Rate. Underpayment continues to be a problem across all ages.

**23** Like other groups, apprentices are likely to benefit from a tightening labour market and stronger economic growth. There is nothing in the data that gives us cause to rethink the alignment with the 16-17 Year Old Rate proposed a year ago. Despite the risks of high coverage for younger apprentices, we judge that current labour market conditions will offer young apprentices sufficient insulation against employment risks.

## Recommended rates

**24** Due to the improved economic situation our aim was to recommend a rate that put us back on course to meet the NLW's 2024 target set out in our remit. Calculating this path is complex. Our starting point for doing so is the level of median hourly pay from April of this year, which we derive from the Annual Survey of Hours and Earnings (ASHE). Last year the large number of furloughed workers distorted the data we rely on for plotting the path and understanding the situation of low-paid workers. This year those issues are reduced, with fewer workers furloughed and more pay information for those who are furloughed.

**25** Overall, while we are better equipped to pinpoint where we are on the path to the 2024 target than last year, there are still some uncertainties in the pay data. Other wage data that form part of our model likely overstate underlying pay growth, because of pandemic-related base and compositional effects. This, combined with forecasts, creates a very front-loaded path for the NLW, with a larger increase required in 2022 than in 2023 or 2024. We do not believe this is the right approach in the current economic circumstances.

**26** Taking all of this into account we recommend an increase in the NLW of 6.6 per cent to £9.50. We believe this will put us back on track to reach our target of two-thirds of median earnings in 2024, with a smoother path to that target. The current headline estimates of pay and forecasts give a 2024 target of £10.70. However, because the underlying pay growth is likely overstated, we think a 2024 rate closer to £10.60 is more likely. By next spring the pandemic-related distortions should have dropped out of the data and we expect to have a clearer idea of the path to 2024.

**27** Last year the picture for young workers was bleak. They overwhelmingly worked in shut-down sectors, were more likely to be furloughed and lost pay as a result. As things stand currently, the situation is very different. Younger workers have been the fastest to move off the CJRS despite being the most likely furloughed workers last summer. At the same time, employment rates and RTI payrolled employment have recovered quickly and are now approaching their pre-pandemic levels, suggesting young workers have either gone back to their old jobs or found new ones after leaving the CJRS.

**28** This year was the first that 23 and 24 year olds became eligible for the NLW, as part of our long-term plan to bring the NLW eligibility age down to 21 by 2024 at the latest. The majority of our stakeholders continue to tell us the shift to 21 is the right move and this first step to 23 appears to have gone smoothly so far. Newly eligible 23 and 24 year olds are increasingly paid the NLW without a spike in underpayment and their employment does not appear to have been negatively affected.

**29** For 21 and 22 year olds we have seen that use of both the NMW and NLW has fallen, as a greater share of them are now paid above the NLW. Their employment rates have also improved, particularly rapidly over the summer, so that they are just below where they were at the pandemic's outset. To avoid a large step change in the year they become eligible for the NLW, we judge it sensible to reduce the gap between the 21-22 Year Old Rate and the NLW next year. For this group, we recommend an increase of 9.8 per cent to £9.18.

**30** However, for those aged 20 and below there has been an increase in the use of the minimum wage rates by their employers. This is usually a sign of pressure. And while their employment rates are recovering, they fell by more and have more ground to make up than the older age groups. For both 16-17 year olds and 18-20 year olds we recommend an increase of 4.1 per cent, taking them to £4.81 and £6.83 respectively.

**31** These increases balance our aim to stay in line with underlying wage growth and ahead of inflation while recognising the higher risk of unemployment for this group. Last year, we committed to aligning the Apprentice Rate with the 16-17 Year Old Rate over two years and, as noted above, we have no significant evidence to suggest a change in this approach. We therefore recommend an increase of 11.9 per cent, aligning it with the 16-17 Year Old Rate of £4.81.

**32** For the last few years we have made significant increases in the accommodation offset to meet our aim of aligning it with the 21-22 Year Old Rate. As this rate is being phased out, this year we have judged it best to increase the Accommodation Offset rate in line with underlying wage growth – by 4.1 per cent to £8.70. Next year we intend to review the operation of the Accommodation Offset.

## Other remit tasks

**33** This year the Government asked us to undertake several tasks in addition to our standard remit. They concerned an exemption to the minimum wage for domestic workers, the impact of minimum wages on different parts of the country and on different groups of workers with protected characteristics.

### Domestic worker exemption

**34** The remit asked us ‘to gather evidence on the application of the “live in domestic worker exemption” to minimum wage entitlement (regulation 57(3) of the National Minimum Wage Regulations 2015’. We were asked to present findings on which sectors make use of this exemption, how often is it used and the impact of this on the labour market, with a special focus on equalities impacts.

**35** We have investigated the use of the exemption across low-paying sectors. For the exemption to apply, a worker must live on their employer’s premises and be treated as a member of the family. This is not compatible with most jobs. For this reason, both awareness and use of this exemption is minimal outside of au pairs and domestic work.

**36** The exemption was introduced to facilitate au pair arrangements. Due to immigration changes there is no longer a route for most au pairs to legally enter the country. At the same time the exemption creates a loophole allowing the exploitation of migrant domestic workers. The loophole arises because the law does not define the differences between au pairs and migrant workers in domestic settings. It is hard for an individual to prove that they are not ‘treated as a family member’, particularly for vulnerable women working long hours with poor English and limited resources. The regulations do not adequately describe what an au pair is or does.

**37** Consistent with the judgement of a recent employment tribunal, our evidence shows that most individuals affected by the exemption are women. The exemption could therefore be discriminatory as it is more likely to prevent women from being entitled to the minimum wage.

**38** Our recommendation is that exemption 57(3) should be removed. If the Government wishes to retain an exemption it would need to introduce a visa route for au pairs and amend 57(3) to avoid a loophole for exploitation. The exemption should clearly state what is meant by an au pair and the scope of their duties to ensure that it cannot be applied to domestic workers, to care workers, or to au pairs who are de facto working as cleaners and nannies without adequate remuneration or genuine cultural exchange. The exemption should also expressly state that it cannot be relied upon by those employed under an overseas domestic worker visa.

## Geographical effect of minimum wages

**39** The Government asked us to ‘gather evidence on the differing impact across the United Kingdom of increases to the minimum wage rates, to improve understanding of what part low-paid work plays in outcomes in different parts of the United Kingdom’. We used pre-pandemic evidence to address this question to ensure the effects we describe are not conflated with those of the pandemic.

**40** This is not new territory for the LPC – understanding how the minimum wage works in different parts of the country is central to our overall understanding. Pre-crisis we would normally visit up to eight different locations around the UK each year, speaking with workers and employers to understand the minimum wage’s impact on their lives. Through the pandemic we have continued to ensure we hear evidence from all parts of the UK through online meetings with both employers and workers.

**41** When the NLW was introduced in 2016 we saw a jump in coverage from 1 million to 1.6 million. Though every part of the country has minimum wage workers, this increase was largely concentrated in small towns, rural areas and coastal areas. Lower-paid places, as expected, saw larger increases in coverage. Importantly, the lowest-paid part of the pay distribution within each region and nation in the UK saw its hourly pay rise faster than the average, and faster than it had done in the preceding four years. This means that inequality in hourly pay between and within different parts of the UK declined.

**42** The areas with the highest percentage of residents covered by the NLW saw the fastest growth in employment rates between 2016 and the first quarter of 2020. However, the picture differs somewhat when we instead look at where minimum wage jobs are located, rather than where minimum wage workers live. This is one of the reasons we use econometric analysis, which takes account of the various countervailing effects and relies on differing impacts in different parts of the country to measure the overall effect of the NLW. These studies find no strong evidence of large-scale adverse employment effects.

**43** Taken together this means the increases in the NLW between 2015 and 2019 reduced pay inequality between and within UK regions, with a negligible effect on jobs. The pandemic complicates any assessment of more recent increases, but we will continue to use all the available data to understand the minimum wage’s impact across the whole of the UK.

## Workers with protected characteristics

**44** The Government also asked us ‘to gather particular evidence on groups of low paid workers with protected characteristics’, noting that such groups include ‘younger, older, disabled, and women workers, and workers of ethnic minorities’. In addition to our in-house analysis, we commissioned detailed research into the NLW’s impact on groups with particular protected characteristics. This focused on the employment retention and pay progression of women, ethnic minorities and disabled workers.

**45** As the remit itself acknowledges, it has long been the case that certain groups are more likely to be low paid. Minimum wage coverage is higher for women, for disabled workers and for some (but not all) ethnic minorities. It is also higher for younger workers and for those approaching retirement age and older. This in part reflects occupational segregation, where workers from a particular group are



concentrated within a given industry. Minimum wages help to boost the pay of these groups, and as a result have contributed to reducing the ethnicity and gender pay gaps.

**46** In general, many of the employers and workers we spoke to recognised that, by boosting pay at the lower end of the distribution, the NLW had a positive impact on groups with protected characteristics. Though stakeholders also noted the limitations of minimum wages in tackling these long-standing gaps, given that they are largely occupational in nature.

**47** We have also sought to monitor the potentially greater vulnerability of these groups to employment effects as a result of the rising minimum wage. Prior to the pandemic we had seen improvements in these groups' employment rates. Our commissioned research also found the NLW had no statistically significant negative employment effects for workers with disabilities, workers from the lowest paying ethnic groups, younger or older workers. There is more mixed evidence on employment effects on women. Some studies find small negative employment effects for some groups of women at certain times, while others find no negative effects. Since 2020, it has become difficult to separate out the effects of the minimum wage from those of the pandemic.

**48** Early next year we will publish a fuller review into the NLW's impact in its first phase (up to the pandemic) considering its fuller impact on pay, employment and household incomes. This will include further geographic and demographic analysis.

# Recommendations

## The National Living Wage and other minimum wage rates

We recommend that the following rates apply from 1 April 2022:

	2022 rate	Annual increase (£)	Annual increase (per cent)
National Living Wage	£9.50	0.59	6.6
21-22 Year Old Rate	£9.18	0.82	9.8
18-20 Year Old Rate	£6.83	0.27	4.1
16-17 Year Old Rate	£4.81	0.19	4.1
Apprentice Rate	£4.81	0.51	11.9
Accommodation Offset	£8.70	0.34	4.1

## The Domestic Worker Exemption

Our recommendation is that exemption 57(3) should be removed. If the government intends to introduce a visa route for au pairs and does not wish to repeal the exemption, then 57(3) must be amended so that it does not provide a loophole for exploitation. The exemption should clearly state what is meant by an au pair and the scope of their duties to ensure that it cannot be applied to domestic workers, to care workers, or to au pairs who are de facto working as cleaners and nannies without adequate remuneration or genuine cultural exchange. The exemption should also expressly state that it cannot be relied upon by those employed under an overseas domestic worker visa.

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# Chapter 1

## The economic context

### Key findings

The pandemic-induced recession in 2020 was not typical. It was brought about by Government-enforced restrictions on people's mobility and on business activity to control the pandemic. It was the deepest recession since at least the 18<sup>th</sup> century, but also one of the briefest – just two quarters compared with around five quarters for each of the previous three recessions.

At the time we made our recommendations in October 2020, there was a great deal of uncertainty. We could not foresee sustained lockdowns across the economy for the following six months or the quick and effective vaccine roll-out that followed. Substantial government support for both businesses and workers has also been maintained over the last twelve months.

Last autumn, data issues affected our assessment of median hourly earnings, reducing our ability to plot where we were on the path to the Government's target of two-thirds of median earnings by 2024. In light of that uncertainty, and the state of the economy, we adopted a cautious approach recommending an increase in line with the forecast increase in the cost of living. While this was lower than the on-course rate, we expected the increase to keep pace with average earnings growth, so we would not lose ground on the target.

With the success of the vaccine roll-out, the economy has been re-opened but the recovery has been uneven – with sharp rises in activity followed by periods of more sluggish growth. But the UK appears to have adapted better to the second lockdown (in November 2020) and the third lockdown (January–April 2021) with GDP falling much less in those two lockdowns than it did in the first one (March–May 2020).

By international standards, the UK had a much larger shock than many comparable countries but its sharp recovery in the second quarter of 2021 puts the economy in a similar position to France and Germany with regards to output lost since the start of the pandemic.

Government schemes have supported the incomes of workers and households enabling consumer spending to hold up. However, the distribution of spending has not been even across the household income distribution. Consumers have been saving relative to the pre-pandemic norm. The savings rate increased to record levels and UK consumers have accumulated an excess of £180 billion in cash and other liquid assets.

Government schemes have also supported businesses. But firms will exit the recession with increased indebtedness, uncertainty about future demand and concerns over labour shortages resulting from the dislocation caused by the pandemic measures and other external factors, such as exiting the EU. However, their worries about financing those larger debts are currently low. They are also becoming more confident they will survive and are less concerned about insolvency.

The labour market has been resilient. Unemployment has not risen to anywhere near the levels predicted at the time of our previous recommendations (albeit those forecasts had not factored in further lockdowns and the extension of the furlough scheme) and nowhere near as high as in previous recent recessions.

Price inflation has increased faster than had been forecast as supply chain disruptions, energy supply issues and staff shortages led to prices rising both domestically and globally.

The pandemic continues to affect various economic measures making underlying trends more difficult to discern. This is particularly the case for wage growth over the last twelve months. Various official measures have suggested that annual wage growth has been as high as 8-10 per cent. But these measures have been distorted by compositional effects (the changing workforce, with many low-paid workers in locked down sectors through the pandemic but then returning as the economy has opened up), and base effects (comparisons with a year ago when wages were falling due to the impact of the furlough scheme and job losses). Despite these high measures of wage growth, pay settlements have remained at around 2.0-2.5 per cent. Other measures of underlying wage growth that take account of some of these effects suggest that wages may be growing at around 3-5 per cent.

**1.1** In writing this report and making our recommendations, we used data and information available up to 20 October 2021. These included: official data for GDP growth up to the second quarter of 2021; monthly GDP data up to August 2021; labour market data released on 12 October covering outcomes up to August or September (including Labour Force Survey microdata up to August 2021 and the RTI data up to September 2021); price inflation data up to September; Coronavirus Job Retention Scheme (CJRS) data up to the end of August; and Business Insights and Conditions Survey (BICS) data released on 7 October (the data released on 21 October came after deliberations had begun). We are again grateful to the Office for National Statistics (ONS) for granting us access to a pre-release of the 2021 Annual Survey of Hours and Earnings (ASHE), which was published on 26 October.

**1.2** The most recent forecasts available for our deliberations were from: the HM panel of independent forecasts (these included the short-term forecasts covering 2021 to 2022 released on 20 October and the medium-term forecasts covering 2021-2025 released on 25 August); and the Bank of England Monetary Policy Report August 2021 released on 5 August. The most recent forecasts from the Office for Budget Responsibility were those released on 3 March 2021 in its Economic and Fiscal Outlook. We did not have sight of the forecasts that were published on 27 October 2021 to inform the Budget.

**1.3** This chapter looks at how the economy has developed over the year since making our recommendations on the rates for the National Minimum Wage (NMW) and the National Living Wage (NLW) in the autumn of 2020.

**1.4** Much has happened since we wrote our 2020 Report. The economy has continued to grapple with Covid-19. When we sent our recommendations to the Government on 30 October 2020, we did not know that the Government would the next day announce a four-week lockdown in England from the following week. We were also unaware of how effective vaccines would become in controlling the pandemic. In addition to the uncertainty created by the pandemic, the UK started a new trading relationship with the EU after the transition period ended on 31 December 2020.

**1.5** The November lockdown was followed by a slight easing for Christmas in some areas before a more comprehensive lockdown took effect for the first three months or so of 2021. The economy gradually re-opened officially from mid-April. Despite the lockdown restrictions at the end of 2020 and early 2021, the economy was not as badly affected as it was at the start of the pandemic. Much of that was due to the successful and speedy roll-out of vaccines.

**1.6** After over a year of various Covid-19 lockdown restrictions, almost all restrictions were removed in England on 19 July 2021. The remaining restrictions were generally concentrated in international travel. The other three administrations in the UK followed similar paths to England with regards to restrictions, although they were generally slower to lift lockdown measures and have kept some mitigations in place, such as the use of masks on public transport.

**1.7** That backdrop provides the context for the current state of the economy and influences the prospects for the economy over the coming months and years. Those prospects are discussed separately in Chapter 9.

## Rationale for last year's recommendations

**1.8** In our 2020 Report, we noted that we were unable to calculate where the 2020 rate of the National Living Wage (NLW) is on the path to 2024 with our usual confidence, making it difficult to calculate the 'on-course' rate for 2021. (The on-course rate reflects our best estimate of the rate that would allow equal increases in the bite of the NLW over the target period.) We instead opted for recommendations that minimised 'significant risks' to employment prospects as per our remit. Our NLW recommendation of £8.91 was lower than our best, albeit highly uncertain, estimate of the on-course rate and represented a significant adjustment in response to economic conditions. We anticipated this increase would be modestly higher than that for prices, and so would protect workers' living standards. We did not recommend a change to the Government's target of reaching two-thirds of median earnings by 2024 and we remained fully committed to the goal of ending low pay.

**1.9** We also argued that younger workers were at greater risk in the labour market because they tended to work in those sectors and jobs most affected by the pandemic. They were also less likely to be in work in the first place. We therefore recommended lower proportionate increases for these groups. Though we maintained that the eligibility age of the NLW should reduce to 23 the following April, as the labour market continued to treat 23 and 24 year olds similarly to slightly older workers.

**1.10** As shown in Table 1.1, forecasters expected GDP to fall by around 10 per cent overall in 2020. They expected it to then rebound strongly in 2021, although not by enough to recover the lost output. Despite some divergence in the forecasts, there was a consensus that employment would be lower and unemployment higher than prior to the onset of the crisis.

**1.11** With great uncertainty about the future pace of the recovery from the pandemic and the potential impact in the change of our trading relationship with the EU, we recommended that the NLW should increase by 2.2 per cent (from £8.72 to £8.91). We expected that to be a little ahead of inflation. The Bank of England and the median of the HM Treasury panel forecasted CPI inflation to rise from around 0.6 per cent in the third quarter of 2020 to around 1.8-2.0 per cent by the end of 2021.

Table 1.1: Forecasts for the economy, 2020-2022

	Actual	OBR forecasts			Bank of England forecasts			HM Treasury panel median forecast		
	2019	July 2020 central scenario			August 2020			August/October 2020		
	2019	2020	2021	2022	2020	2021	2022	2020	2021	2022
GDP Growth (whole year)	1.3	-12.4	8.7	4.5	-9.5	9.0	3.5	-10.1	6.4	3.3
Average Weekly Earnings AWE (whole year)	3.5	0.2	3.7	2.7	-1.3	3.0	3.8	0.3	2.4	2.7
Inflation CPI (Q4)	1.4	0.7	1.3	1.9	0.3	1.8	2.0	0.6	2.0	1.9
Inflation RPI (Q4)	2.2	1.3	1.1	3.0				1.2	2.7	3.0
Employment growth (whole year)	1.9	-4.5	-1.2	4.0	-3.8	2.5	2.0	-1.2	-2.1	
Unemployment rate (Q4)	3.8	8.8	10.1	6.9	7.5	6.0	4.5	7.7	6.9	5.7

Source: Office for Budget Responsibility (2020b); HM Treasury (2020a and 2020b) and Bank of England (2020); GDP growth (ABMI), total employment as measured by workforce jobs (DYDC), unemployment rate (MGSC), quarterly, and AWE total pay (KAB9), monthly, seasonally adjusted; RPI (CZBH) and CPI (D7G7), quarterly, not seasonally adjusted, UK (GB for AWE).

**1.12** Wage growth was also expected to increase (the median forecast of the HM Treasury panel was 2.4 per cent and the Bank of England's 3 per cent) but forecasts diverged over the pace of that pick-up. The interquartile range of the HM Treasury panel wage forecasts for 2021 was much wider than usual, ranging from 1.5 per cent to 3.1 per cent.

**1.13** Although the NLW increase was a little lower than the central forecasts for average earnings growth, it was much higher than the latest official data at the time. In the three months to August 2020, average weekly earnings total pay growth, including bonuses, was just 0.1 per cent and for regular pay, excluding bonuses, it was 0.9 per cent.

**1.14** Given that the recommended increase in the NLW was below average wage forecasts, it was also expected to be below the on-course rate, which we judged (taking account of many data and pandemic-related caveats) to be around £9.06. We did not believe that we could estimate a median from the 2020 ASHE that would be consistent with our previous estimates of the median. We therefore used an adjusted method in order to project a path for the NLW to reach its target of two-thirds of median earnings by 2024.

**1.15** That path was derived using the 2019 Annual Survey of Hours and Earnings (ASHE) as the baseline for the median and projecting forward from April 2019 to August 2020 using actual earnings growth from average weekly earnings data. From then we projected out to October 2024 using the median of the wage forecasts (from the HM Treasury panel and the Bank of England).

## The current economic context

**1.16** We now turn to the state of the economy up to the point where we made our recommendations for the minimum wage upratings in 2022.

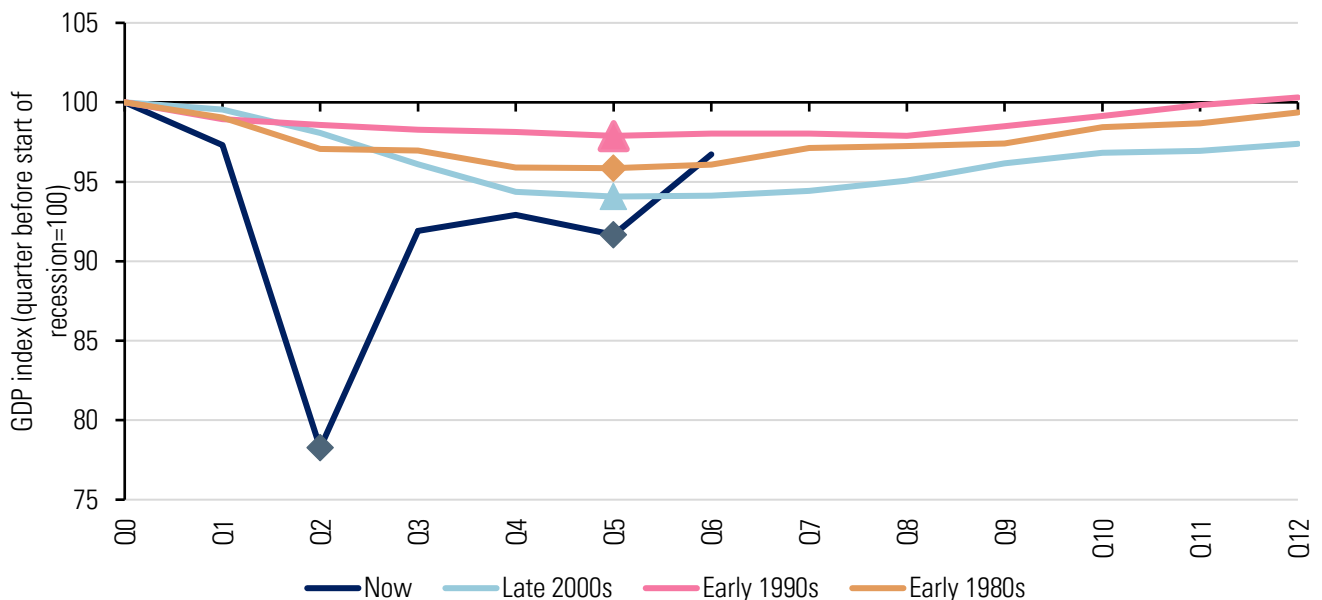
## The pandemic led to an unprecedented fall in GDP but we have also had an unprecedented recovery

**1.17** The 2020 recession was not typical. It was induced by Government-enforced restrictions on business activity and people's mobility to control the pandemic. It was the deepest recession since 'the Great Frost' of the early 18<sup>th</sup> century and GDP fell by 22 per cent in the first half of 2020. But as well as one of the deepest recessions, it was also one of the briefest. It lasted just two quarters compared with around five quarters of consecutive negative growth for the previous three recessions.

**1.18** During the pandemic recession, GDP fell by 21.7 per cent over the first two quarters, far more than in the three recessions that preceded it. As shown in Figure 1.1, output rebounded strongly in the subsequent two quarters as the economy re-opened but then fell back in the fifth quarter (the first quarter of 2021) as lockdown measures again took hold before resuming recovery as these were lifted. The strong growth in the second quarter of 2021 meant that the loss of GDP, 18 months after it began, was lower than in both the early 1980s and the financial crisis recessions (though still higher than in the 1990s).

**1.19** Quarterly and monthly comparisons give a slightly different picture of the timing and extent of the recession and recovery. Using quarterly data, GDP in the second quarter of 2021 was still 3.3 per cent lower than in the fourth quarter of 2019. However, the monthly data suggested that GDP in August 2021 was only 0.8 per cent lower than it had been in February 2020 (as shown in Figure 1.4). This was a faster recovery than had been expected last autumn.

**Figure 1.1: Change in GDP across recent recessions, UK, 1979-2021**



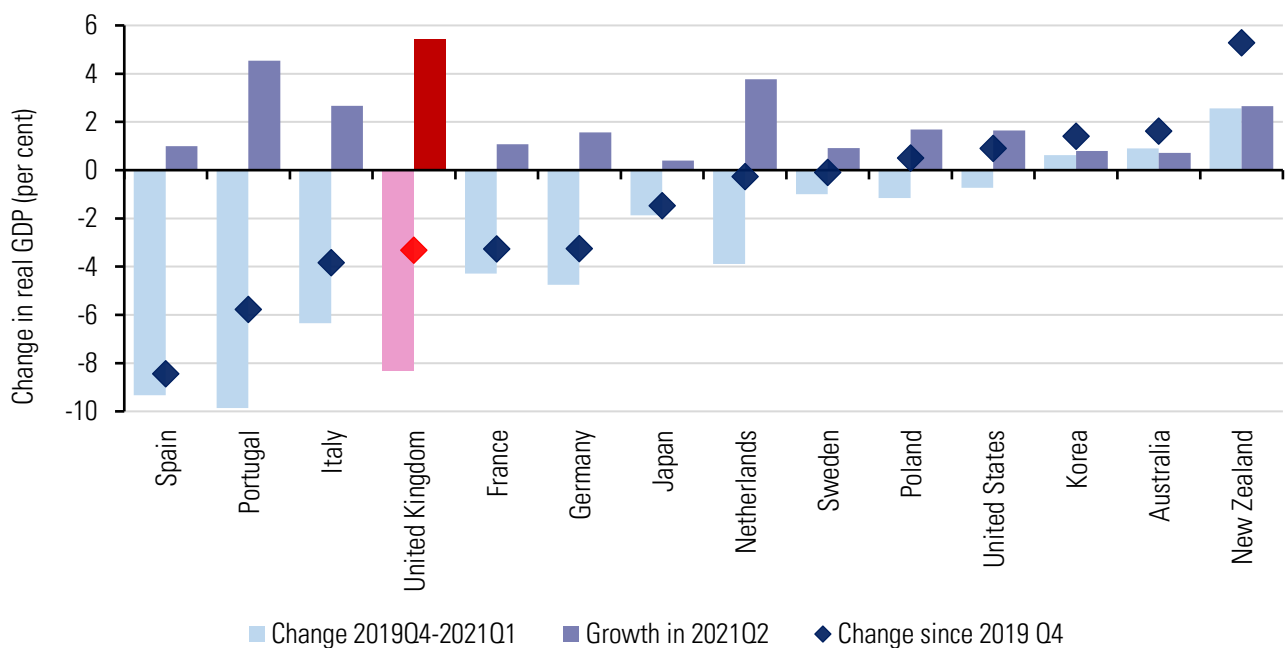
Source: LPC estimates using ONS data. Real GDP (ABMI), quarterly, seasonally adjusted, UK, 1979-2021.

Note: Q0 is 1979 Q4 in the early 1980s, 1990 Q2 in the early 1990s, 2008 Q1 in the late 2000s and 2019 Q4 now.

**1.20** The UK economy, as shown in Figure 1.2, was one of the poorest performing internationally.<sup>1</sup> Real GDP fell by 8.3 per cent between the fourth quarter of 2019 and the first quarter of 2021. Only the Iberian economies of Spain and Portugal performed worse. However, the UK rebounded strongly in the second quarter of 2021 as restrictions were eased on the back of a more successful initial roll-out of the vaccine than in many other countries.

**1.21** That rebound left the UK in a similar place to France and Germany – a reduction in GDP of around 3.3 per cent since the start of the pandemic. That was notably worse than some of those countries that had adopted a zero Covid strategy – Australia, New Zealand and Korea. But it was also worse than the United States, which has had the largest number of Covid cases and deaths in the world.

**Figure 1.2: International comparisons of GDP in the pandemic, OECD, 2019-2021**



Source: LPC estimates using OECD data. Real GDP (B1\_GE: Gross domestic product – expenditure approach): Volume index, OECD reference year, seasonally adjusted, Q4 2019-Q2 2021.

**1.22** The impact on the UK economy was felt across nearly all components of expenditure: consumer spending, investment and trade. Only substantial intervention from the Government, supporting both business and workers, contributed positively to growth. Since the start of the pandemic the Government has markedly loosened fiscal policy. While government receipts were little changed as a share of output, total Government spending rose substantially as a share of GDP as support for households and businesses topped £140 billion in 2020-21. The March 2021 Budget tax and spending measures represented a further loosening, which – excluding the impact of the CJRS and loan schemes – were expected to boost output in 2021 and 2022. Government spending in the second quarter of 2021

<sup>1</sup> The monthly GDP series only began in 1997 and is not available internationally on a consistent basis. Therefore, international comparisons and comparisons with pre-financial crisis recessions can only be made using the quarterly data. National Accounts data, including the expenditure components of GDP, are also only available quarterly.

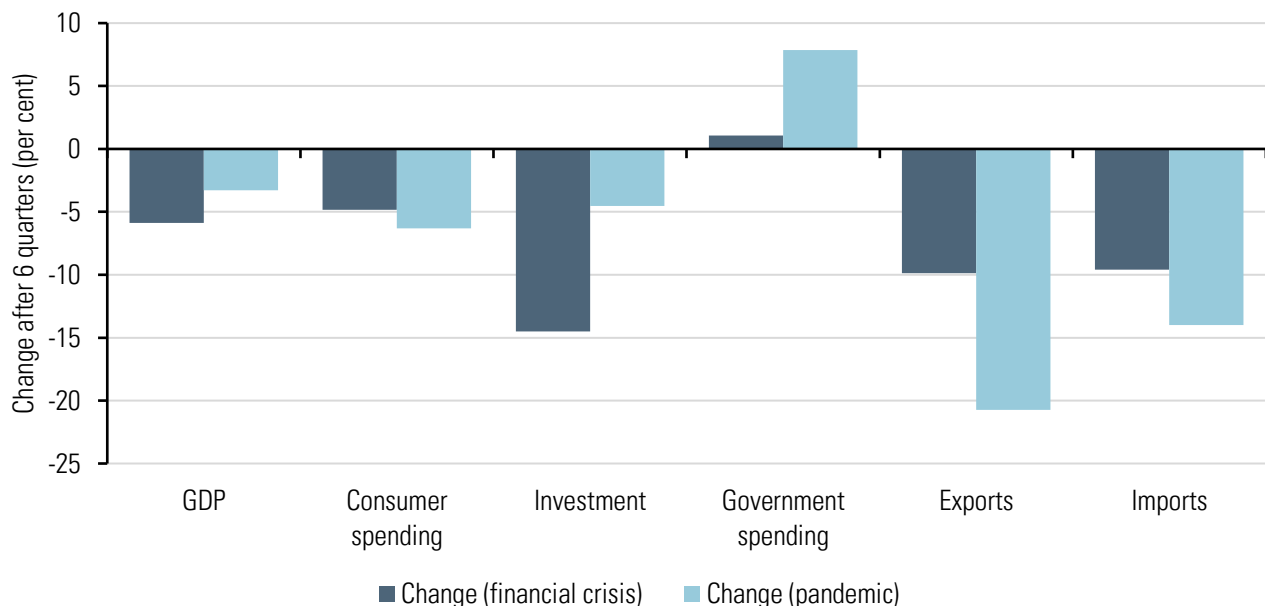
was also boosted by increased spending on education, as schools re-opened, and on health, with strong growth in GP appointments, increased use of NHS Test and Trace services and the Covid-19 vaccination programme.

**1.23** Consumer spending and investment generally followed the path of GDP: falling sharply in the first half of 2020, rebounding strongly in the second half of 2020, then falling back in the first quarter of 2021 before again rebounding in the second quarter. The easing of restrictions combined with some spending of savings accumulated over the pandemic powered consumer spending to grow by 7.2 per cent, but as shown in Figure 1.3, total consumer spending was still 6.3 per cent below its level at the end of 2019. As the economy picked up and business confidence increased, investment rebounded strongly in the second half of 2020, but further lockdowns have led to a weak investment performance so far in 2021. It grew by only 0.8 per cent in the second quarter of 2021 and remained 4.5 per cent below its level at the end of 2019.

**1.24** Trade has been particularly affected by both the pandemic and the UK leaving the EU. Both exports and imports fell sharply at the onset of the recession. Imports recovered much more strongly than exports in the second half of 2020 – perhaps driven by businesses increasing stocks before the end of the transition period. In the first half of 2021, exports have fared better than imports. However, exports remain 20.7 per cent lower than at the end of 2019, with imports 14.0 per cent lower.

**1.25** Compared with the same stage of the financial crisis, after six quarters, the fall in GDP has been less but the falls in consumer spending and trade have been much greater. In contrast, investment fell by more during the financial crisis and government spending has been much greater.

**Figure 1.3: Growth in GDP expenditure components 6 quarters from the onset of recession, UK, 2008-2021**

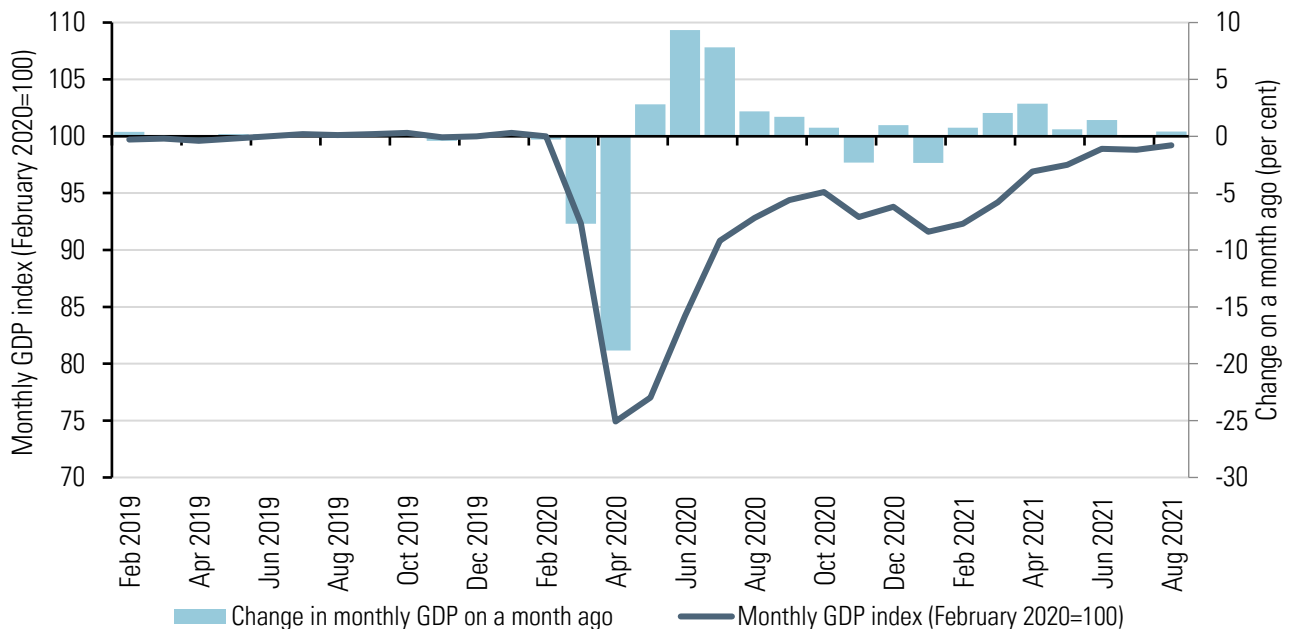


Source: LPC estimates using ONS data: Gross domestic product (ABMI), consumer spending (ABJR), total investment (NPQT), government spending (NMRY), exports (IKBK) and imports (IKBL), quarterly, seasonally adjusted, UK, 2008-2021.



**1.26** After rebounding strongly in the summer of 2020, monthly GDP weakened going into the autumn and fell back as the November and January lockdowns took effect. The easing of restrictions was again reflected in the rebound in the spring but over the summer that has weakened. However, monthly GDP is only 0.8 per cent below its pre-pandemic level.

**Figure 1.4: Monthly GDP, UK, 2019-2021**



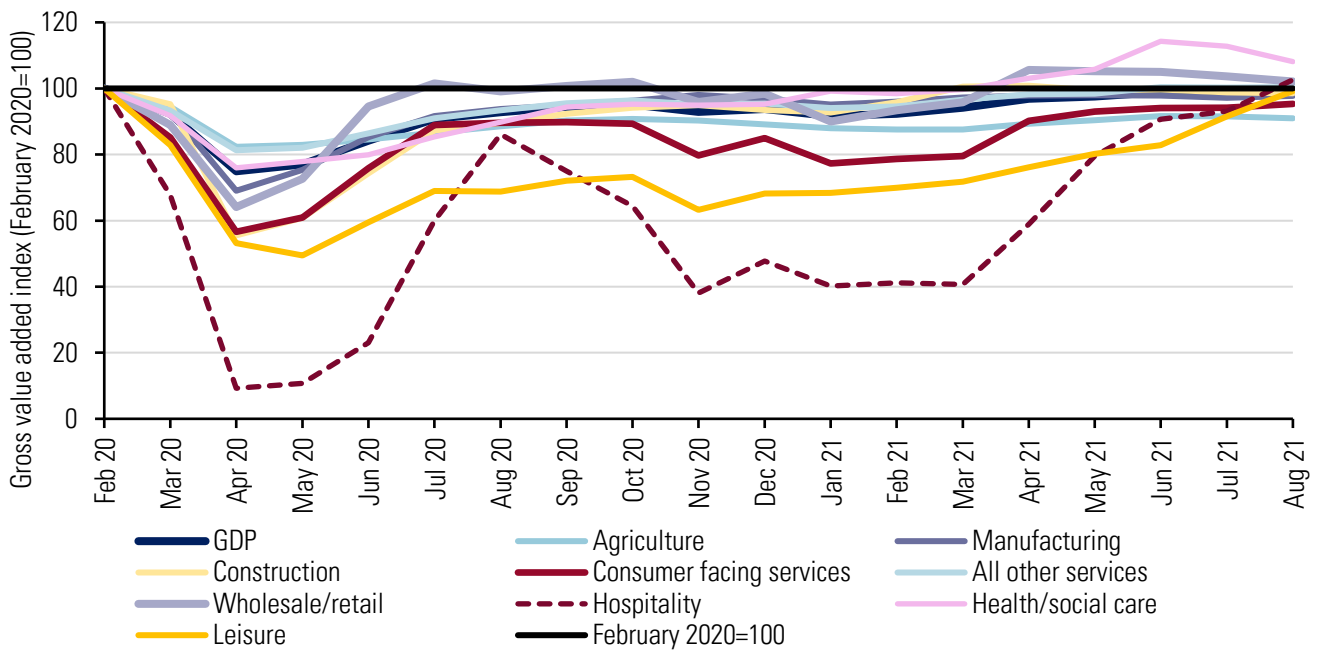
Source: LPC estimates using ONS data. Monthly GDP index (ECY2), monthly, seasonally adjusted, UK, January 2019-August 2021.

**1.27** The recovery has been multi-speed with some sectors well behind others. There is still ground to make up in consumer-facing services, particularly international transport and other service activities, as well as in agriculture. Output in several key low-paying sectors, however, is now above or close to pre-pandemic levels including retail, hospitality, leisure and health and social work.

**1.28** Figure 1.5 shows that hospitality and leisure rebounded strongly over the summer as restrictions on indoor venues were eased. Having fallen at the start of the pandemic amid concerns about shortages, retail rebounded quickly to pre-pandemic levels in the second half of 2020. That rebound was led by food retail that substituted for people eating out and drinking. After the subsequent lockdowns that saw retail fall back a little, it again rebounded as the economy re-opened, this time driven by non-essential retail. With lockdown restrictions eased, health and social care activities picked up and have been above pre-pandemic rates since March 2021.

**1.29** Retail sales volumes data support the pattern identified in Figure 1.5. Retail volumes recovered strongly after both the first and second lockdowns, surpassing pre-pandemic volumes. However, retail sales volumes have fallen in each month since the reopening of non-essential retail in April 2021. But they were still 4.6 per cent higher in August 2021 than at the onset of the pandemic.

Figure 1.5: GDP by selected sector, UK, 2020-2021



Source: LPC estimates using ONS data. Monthly gross domestic product index (ECY2); agriculture, forestry and fishing (ECY3); manufacturing (ECY6); construction (ECY9); consumer facing services (see note); all other services (ECYC minus consumer-facing services); wholesale and retail trade; repair of motor vehicles (ECYD); hospitality – accommodation and food services (ECYH); human health and social work activities (ECYS); leisure – arts, entertainment and recreation (ECYT); monthly, seasonally adjusted, UK, February 2020–August 2021.

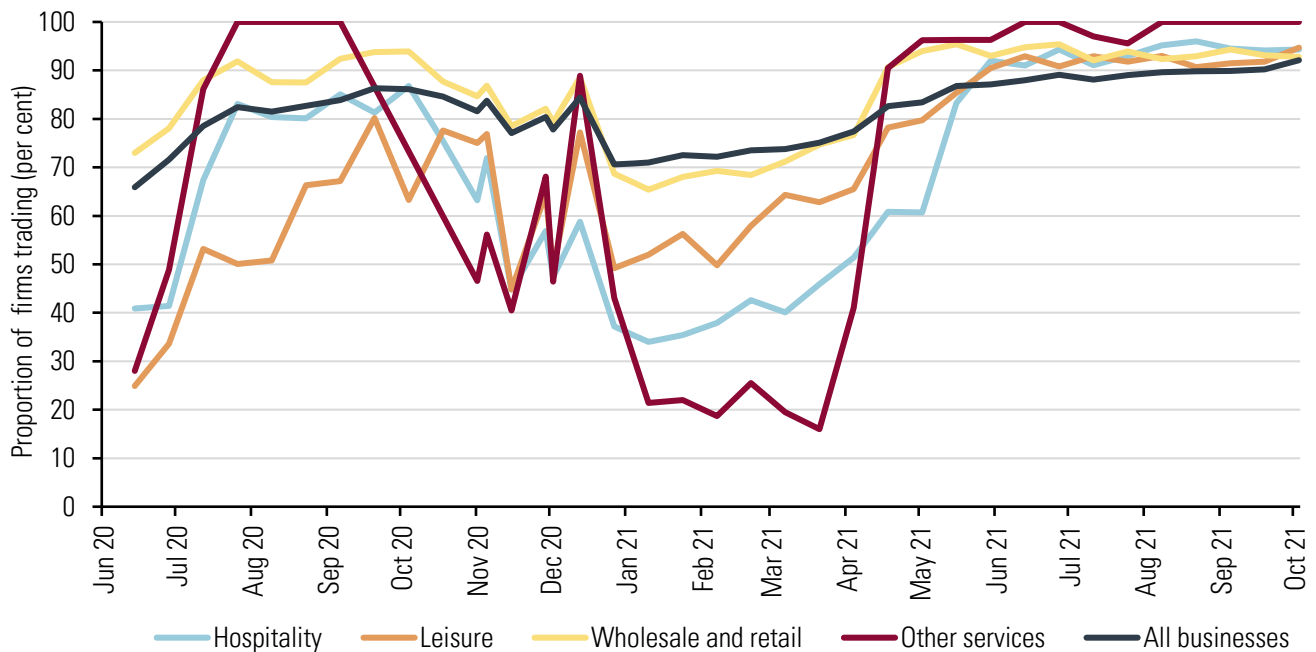
Note: Consumer-facing services refer to retail trade, food and beverage serving activities, travel and transport, and entertainment and recreation (Standard Industrial Classification 2007 codes 45, 47, 49.1-2, 56, 68.1-2, 75, 79, 92, 93, 94, 96 and 97).

## Firms took on debt to cope with the pandemic but appear to be managing

**1.30** Beyond headline GDP figures, it is important to understand conditions for businesses. As the first lockdown came into force many firms were forced to temporarily close due to loss of demand or direct instruction. As shown in Figure 1.6, fewer than two-thirds of all firms were trading at the end of June 2020. It is highly likely that this fraction would have been much lower at the onset of the pandemic before any measures had been taken to ease the restrictions. Unfortunately, the ONS did not start to gather information on this from its BICS survey until June 2020.

**1.31** Not surprisingly, the pattern of businesses open for trading tracks the easing of Covid-19 restrictions – falling back during the November lockdowns, increasing around Christmas before being affected by the January lockdown. However, that did not appear as stringent as the previous lockdowns as the proportion of businesses trading increased between January and April 2021. There is a much starker pattern for many of the low-paying sectors, which have been much more affected by the pandemic restrictions. By October 2021 however, there were few businesses not trading.

Figure 1.6: Firms trading by selected sectors, UK, 2020-2021



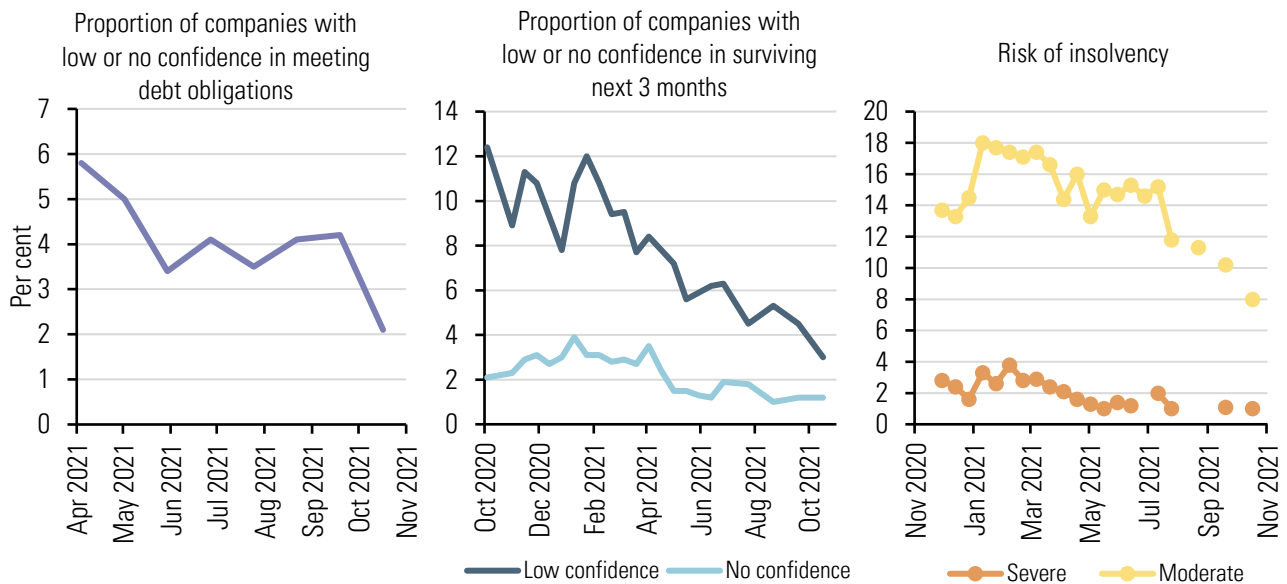
Source: ONS BICS data Waves 7-41, UK, June 2020 – October 2021.

**1.32** According to the various waves of the BICS survey, the number of businesses that had ceased trading remained low as a proportion – averaging just 2.7 per cent in each wave of the fortnightly survey between June 2020 and October 2021. It also showed little relation to the imposition of measures to control the pandemic – peaking at the end of May 2021 at 4.4 per cent and was 3.0 per cent in the first week of October.

**1.33** Many businesses took on debt to cope with the pandemic lockdowns, including from government schemes. For SME businesses with turnover below £25 million, debt levels jumped by around a quarter to almost £50 billion (25 per cent). Debt levels increased by a similar amount for larger businesses, but subsequently declined rapidly.

**1.34** Despite this, Figure 1.7 shows that just 2.1 per cent of businesses have no or low confidence they will meet their debt obligations. The share with low or no confidence in surviving the next three months has also steadily declined to less than 5 per cent. Likewise, the share of employers assessing the risk of insolvency as severe or moderate has declined.

**1.35** These figures are encouraging but they may be flattered by government policy. During the time this evidence covers, various supportive policy measures were still in place including restrictions on commercial evictions, support with business rates and measures to prevent insolvency. As these measures are withdrawn over the coming months, we will have a clearer picture of the pandemic's impact on the UK's business stock. The Bank of England (2021f) recently noted that 'although debt appears affordable in the near term, insolvencies are likely to rise from 2021 Q4 as government support is withdrawn as planned'.

**Figure 1.7: Firms expecting to meet debts and survive, UK, 2020-2021**

Source: ONS BICS data Waves 14-41, UK, 2020-2021.

## The labour market has been remarkably resilient with jobs recovering strongly since restrictions were eased

**1.36** The forecasts had suggested the labour market was likely to be weak in 2021, with employment continuing to fall or growing but too weak to recover the ground lost in 2020. That weak employment growth was reflected in the forecasts for unemployment. It was expected to rise sharply, especially as the CJRS was withdrawn in October 2020. However, that did not happen as the UK went into further lockdowns and the scheme was extended to the end of September 2021.

**1.37** The labour market has been remarkably resilient considering the shock that it faced. A fall in GDP of around 25 per cent would be expected to have had effects of a similar magnitude on employment and/or hours of work. While jobs were largely protected, hours of work adjusted sharply and almost instantaneously, supported by the CJRS. Between February and May 2020, as shown in Figure 1.8, total hours worked fell by around 18 per cent – less than the fall in output – but have recovered and followed a very similar trajectory to monthly GDP. By August 2021, hours worked and GDP were around 0.8-1.0 per cent lower than pre-pandemic.

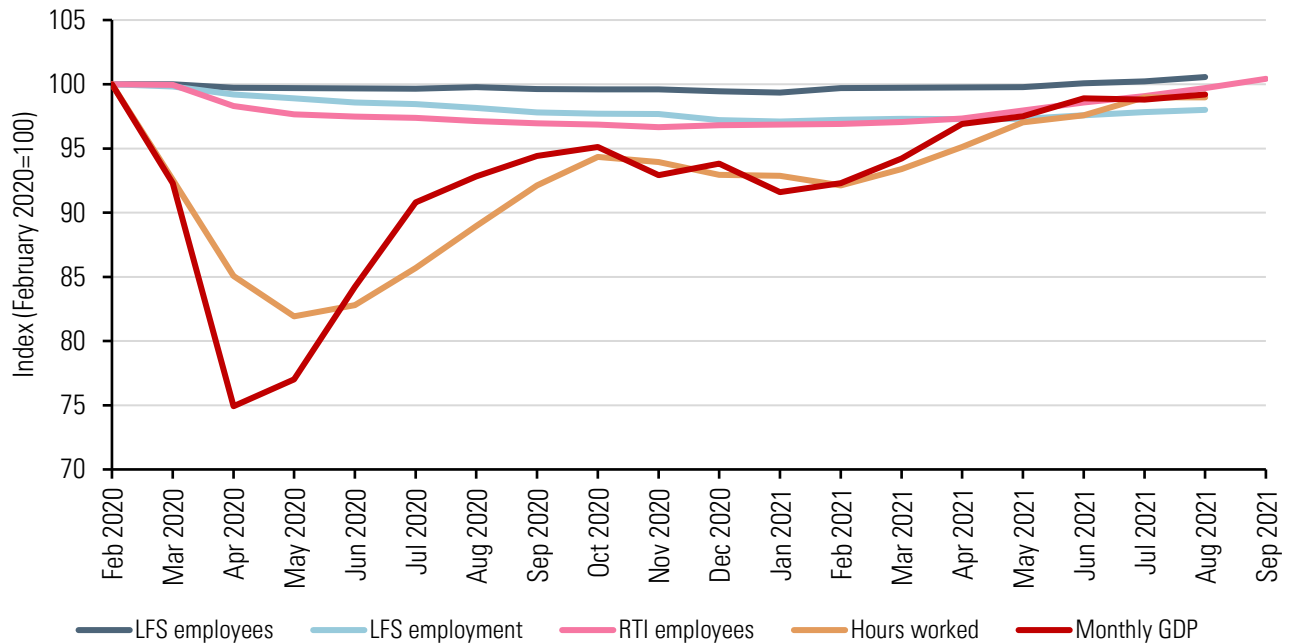
**1.38** Figure 1.8 also shows that the fall in jobs was much lower and more gradual than the fall in hours and output. We can measure employment using a number of alternative data sources: HM Revenue and Customs' (HMRC) Real Time Information (RTI) administrative data shows the number of employees payrolled through the Pay As You Earn (PAYE) system; The Office for National Statistics (ONS) Labour Force Survey (LFS) is a household survey that counts the number of individuals self-reporting as either employees or self-employed; and ONS' workforce jobs uses employer surveys to attempt to count the total number of jobs, not individuals in the economy.

**1.39** The number of RTI payroll employments had fallen by 3.1 per cent up to February 2021, before recovering sharply as the economy opened up. By September the number of RTI payroll employments was higher than pre-pandemic.

**1.40** In contrast, the number of employees barely fell over the pandemic according to the Labour Force Survey (LFS) – falling by 0.6 per cent between February 2020 and January 2021. LFS employment, though, did track RTI employments for much of the pandemic – falling by 2.9 per cent by January 2021. The recovery in LFS employment and employees has not been as strong as that according to RTI. LFS employment was still nearly 2 per cent lower in August 2021 than at the start of the pandemic. The LFS recorded a large fall in the self-employed over the pandemic – falling by 15 per cent between February 2020 and January 2021. That number has barely recovered since then.

**1.41** In contrast, the number of workforce jobs – the indicator used by most forecasters in the HM Treasury panel – fell by 1 per cent between June 2020 and June 2021 although self-employment accounted for about a third of that. Despite that fall, and in part due to the pick-up in the labour market since June, the unemployment rate has fallen. Prior to the pandemic, the working age unemployment rate had been 4.0 per cent but had increased during the pandemic to peak at 5.3 per cent in the three months to November 2020. It then fell back to 4.5 per cent in the three months to August 2021. These rates are well below those forecasted last autumn.

**Figure 1.8: GDP, employment, employees and hours, UK, 2020-2021**



Source: LPC estimates using ONS data: Monthly GDP index (ECY2); LFS total employment (MGRZ); LFS number of employees (MGRN); total hours worked per week (YBUS); and RTI payrolled employees (Table 1 from Earnings and employment from Pay As You Earn Real Time Information, UK: October 2021), monthly, seasonally adjusted, UK, February 2020-September 2021.

## Inflation has started to rise as labour shortages, supply chain and energy supply issues threaten the pace of recovery

**1.42** For much of the pandemic, official estimates of inflation remained low. As shown in Figure 1.9, CPI inflation averaged around 0.6 per cent between April 2020 and March 2021. But as the economy has re-opened, inflationary pressures have increased. The Bank of England (2021e) noted that recent monthly increases over the summer had been more pronounced, relative to historic averages, for those services most affected by the pandemic restrictions, such as restaurants, accommodation and recreation. The additional costs of Covid-related measures, supply chain constraints and labour

shortages contributed to an increase in prices. Global cost pressures and bottlenecks have continued to weigh on domestic consumer prices as have energy supply issues. The increase in the standard tariff caps on gas and electricity prices have also started to feed into this inflationary environment.

**1.43** However, base effects have accounted for a large part of the increase in inflation in August and September 2021. The Eat Out to Help Out scheme, along with the temporarily reduced VAT rate for hospitality and some leisure activities, have seen prices fall in restaurants and hotels, and in recreation and culture in August 2020. Services inflation rose to a four-year high as these temporary policy measures dropped out of the annual comparison. CPI inflation rose by 3.1 per cent in September 2021, but CPIH, which takes account of housing costs, rose by 2.9 per cent, its highest since March 2012. RPI has also risen sharply from around 1.0 per cent at the turn of the year to 4.9 per cent in September – its highest since November 2011.

**1.44** Even though core inflation (which excludes energy, food, alcoholic beverages and tobacco) fell back to 2.9 per cent in September 2021, it had risen to 3.1 per cent in August 2021 – the highest it has been since November 2011. However, many of these price pressures appeared transitory and will either fall out of the annual comparison over time or will be addressed as supply chain issues ease.

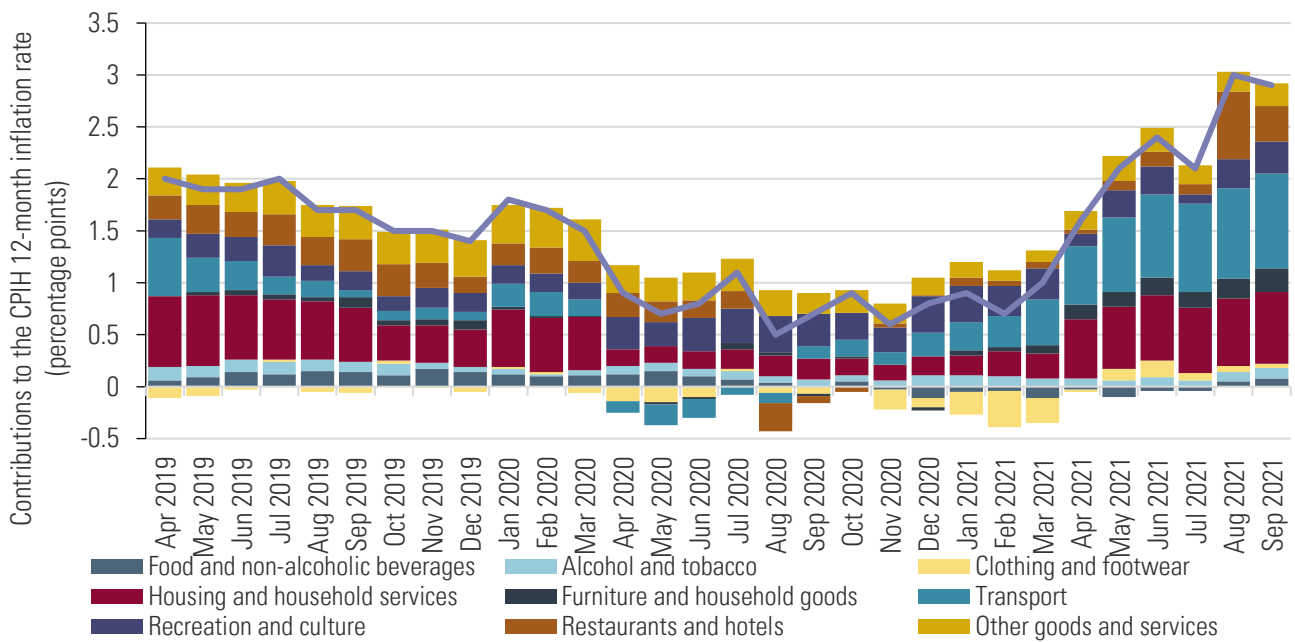
**1.45** As shown in Figure 1.10, all parts of CPIH contributed positively to inflation in August and September 2021 for the first time since before the pandemic started (January and February 2020). The largest drivers of the recent pick-up have been transport, and housing and household goods. The transport rise was driven by increases in petrol and diesel prices, air travel (with fewer restrictions this year) and the price of second-hand cars (as waiting lists for new cars grew due to supply chain problems). Housing and household goods inflation was driven in part by increases in electricity prices. As we noted above, restaurants and hotels had also boosted inflation in the last two months.

**Figure 1.9: Inflation, UK, 2007-2021**



Source: ONS. Consumer price index (CPI) annual rate (D7G7), consumer price index excluding owner occupiers' housing costs (CPIH) annual rate (L550), and RPI annual rate (CZBH), monthly, seasonally adjusted, UK, January 2007-September 2021.

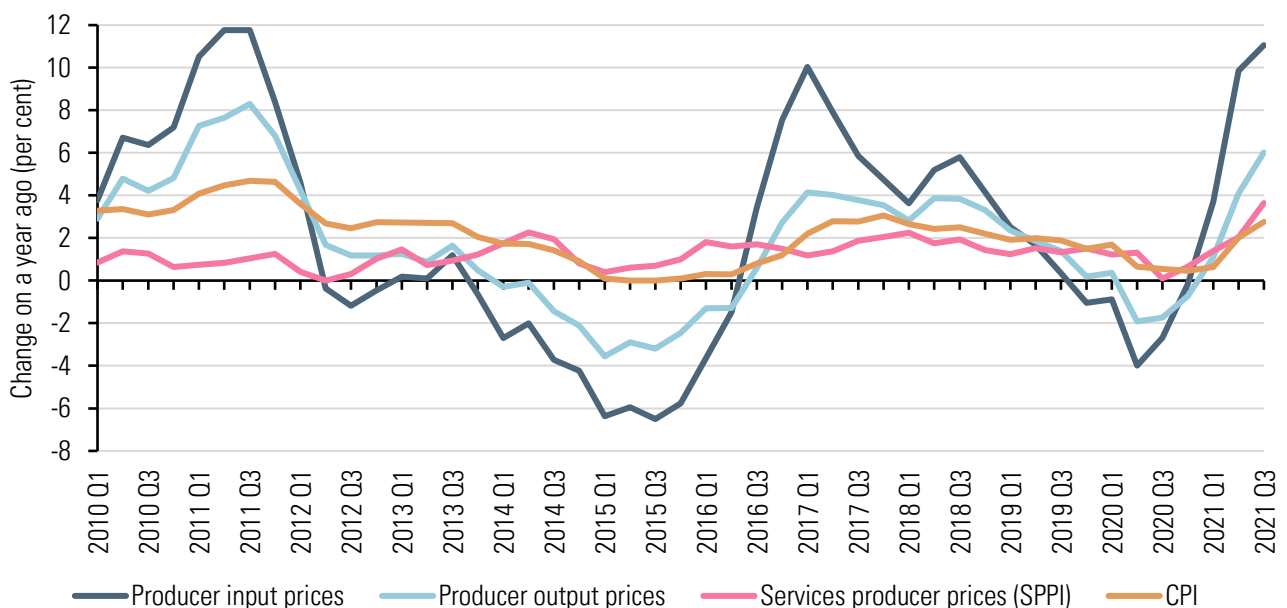
Figure 1.10: Contributions to the CPIH 12-month inflation rate, UK, 2019-2021



Source: LPC estimates based on ONS data. Consumer price inflation, UK: September 2021 Figure 2: The contribution from transport in September 2021 was last higher in October 2011, monthly, UK, April 2019-September 2021.

**1.46** The impact of supply chain issues and bottlenecks is reflected in the sharp increases in producer input prices. Figure 1.11 shows producer input prices were 11.1 per cent higher in the third quarter of 2021 than a year ago and have contributed to output price rises, which have increased by 6.0 per cent over the year to the third quarter of 2021. Those increases were higher than those generated by exchange rate movements in the aftermath of the EU Referendum, but lower than in 2011 in the aftermath of the financial crisis.

Figure 1.11: Output, input and business to business inflation, UK, 2010-2021



Source: LPC estimates using ONS data. Producer input price index (GHIP); producer output price index (GB7S); services producer price index (HQTII), and CPI index (D7BT), quarterly, seasonally adjusted, UK, Q1 2010-Q3 2021.

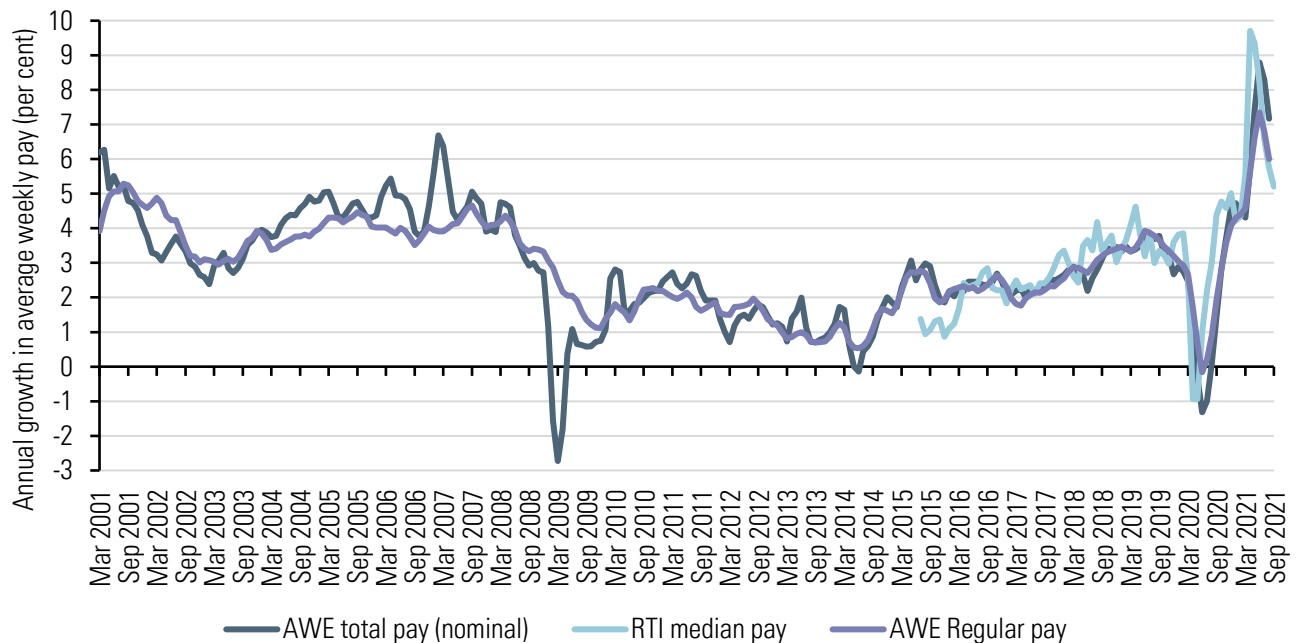
**1.47** Services producer prices are those charged for services provided to UK-based businesses. As shown in Figure 1.11, they have picked up in recent quarters, reaching 3.6 per cent in the third quarter of 2021. This is the highest rate since the third quarter of 2008, albeit partly driven by a base effect (services producer prices fell by 0.5 per cent in the third quarter of 2020). The highest increases in prices for business-to-business activities, compared with a year ago, have been in transport and storage (up 5.8 per cent), accommodation and food (up 5.1 per cent) and professional, scientific and technical activities (up 5.1 per cent).

**1.48** In summary, price inflation in 2021 has turned out to have been higher than had been forecast in the autumn of last year.

## Wage growth looks strong but is exaggerated by compositional and base effects related to the pandemic

**1.49** Annual pay growth, as shown in Figure 1.12, reached very high levels (between 8-10 per cent) on various measures over the summer of 2021. However, these high growth figures are distorted by pandemic-related effects. In spring 2020, around a third of all private sector employees moved onto the CJRS, which paid 80 per cent of the wages of employees not working, up to £2,500 a day (we analyse the CJRS in more detail in Chapter 2). This meant a significant reduction in wages and so total and regular Average Weekly Earnings (AWE) pay growth slowed sharply in the early months of the pandemic. A year later, annual growth figure comparisons are with this low point, which artificially raises the growth rate through a 'base effect'. The most recent data suggest that these effects are starting to drop out of the series as they show growth slowing after the peaks over the summer.

**Figure 1.12: Average wage growth (AWE total and regular pay and RTI median pay), UK, 2001-2021**



Source: LPC estimates using ONS data: AWE total pay growth (KAC3); AWE regular pay growth (KAI9); RTI median pay (Table 2 from Earnings and employment from Pay As You Earn Real Time Information, seasonally adjusted), monthly, seasonally adjusted, UK (GB for AWE total pay), March 2000-September 2021.



Note: RTI data series begins in July 2014 and the annual growth series in July 2015.

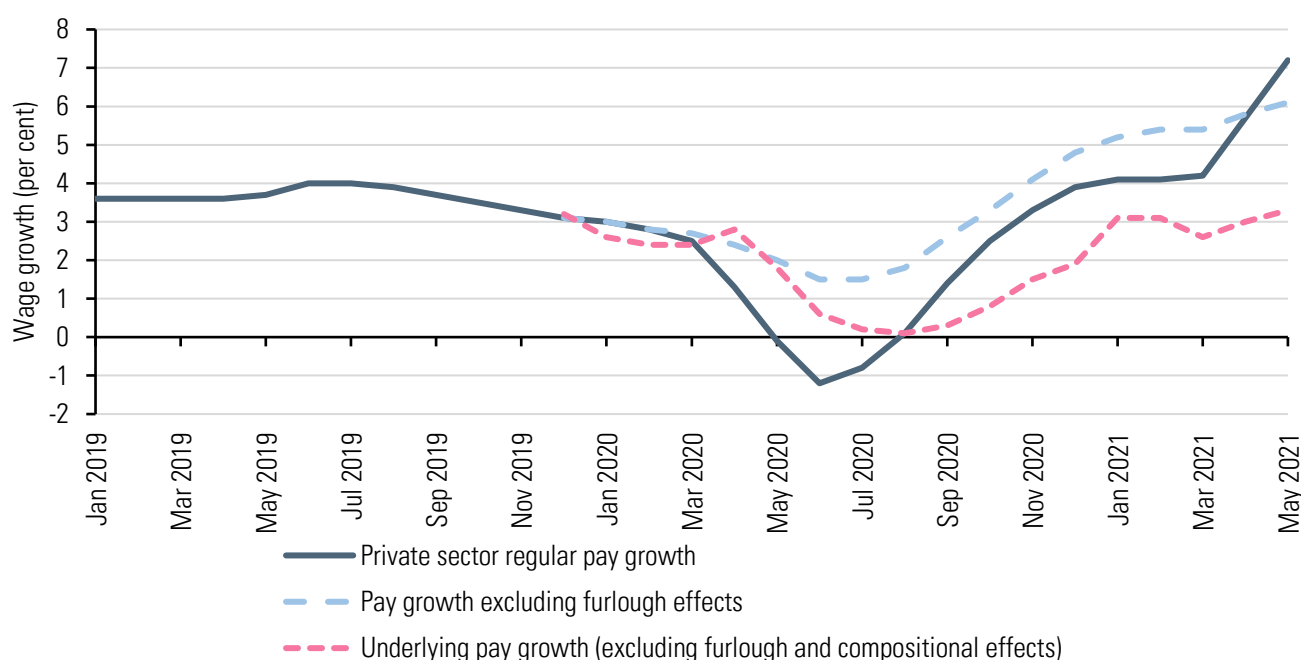
**1.50** The composition of the labour market has changed during the pandemic. Measures to control the pandemic generally affected low-paying sectors more, leading to workers in these sectors being more likely to lose their jobs or be furloughed. This, in turn, meant fewer part-time workers and young workers. These changes have affected measures of median and average pay. With fewer low-paid workers, measures of average and median pay will increase.

**1.51** In addition, there was also a reduction in flows into and out of employment. The reduction in inflows, with fewer opportunities for new entrants, also affects pay measures. New entrants to the labour market (for example, young people and people returning after care responsibilities) are likely, on average, to earn less than those currently in jobs. The reduction in outflows is likely have a similar but opposite effect on pay.

**1.52** The Bank of England (2021a) attempted to take account of some of these factors to better understand underlying pay growth. Figure 1.13 shows that without furlough, private sector pay growth would have been up to 3 percentage points higher in the first few months of the pandemic. Over time, that effect has weakened with some evidence that it started to reverse after April 2021 as the economy reopened and the numbers on furlough reduced.

**1.53** The compositional effects tend to weigh down on pay growth. The Bank of England (2021c) estimated that the furlough effects outweighed the compositional effects until about August 2020. Thereafter the compositional effects exerted greater influence. Taking these into account, it estimated that underlying private sector pay growth was around 3.3 per cent in the three months to May 2021, compared with a headline measure of 7.2 per cent. In September, the Bank of England (2021d) updated its estimate of underlying private sector pay growth to 4.0 per cent.

**Figure 1.13: Bank of England estimates of underlying pay growth, UK, 2019-2021**

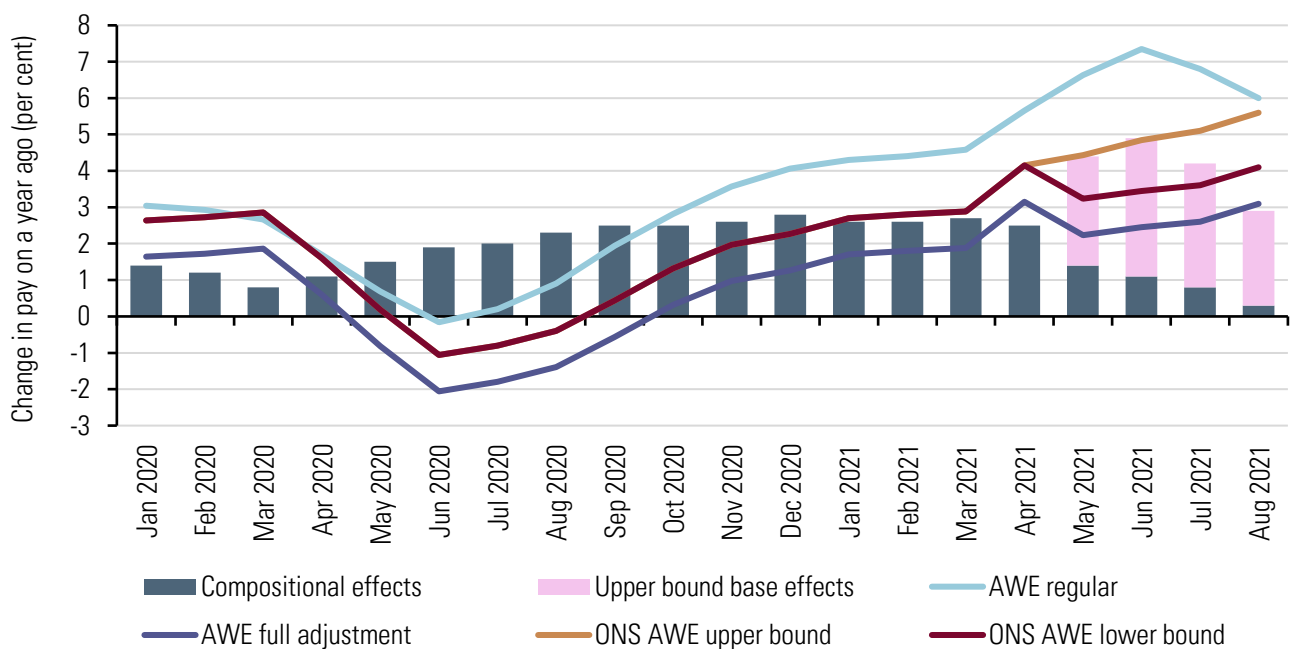


Source: Bank of England (2021b) calculations. (Bank of England, Monetary Policy Report - August 2021, 05 August 2021). Chart C: Estimated underlying pay growth is around pre-Covid rates from Box C: How strong is pay growth? AWE regular pay growth (KAI9), monthly, seasonally adjusted, GB, January 2019-May 2021.

**1.54** The ONS estimated that compositional effects accounted for about 1 percentage point of annual wage growth just before the pandemic, and 2-3 percentage points between July 2020 and April 2021. As the economy has recovered, with many low-paying sectors reopened and much of the job increase concentrated in low-paying occupations, the compositional effects have fallen away.

**1.55** The base effects, however, have become more important. As shown in Figure 1.14, the headline AWE regular pay growth was 6.0 per cent in the three months to August 2021. The ONS estimates lower and upper bounds for AWE growth using alternative methods for determining base effects. These suggest that underlying pay growth was between 4.1 per cent and 5.6 per cent in the three months to August 2021. The AWE full adjustment is derived by simply subtracting both the compositional and base effects from the AWE regular figure. Ignoring these effects gives a lower bound of 3.1 per cent in the three months to August.

**Figure 1.14: ONS estimates of underlying pay growth, GB, 2020-2021**



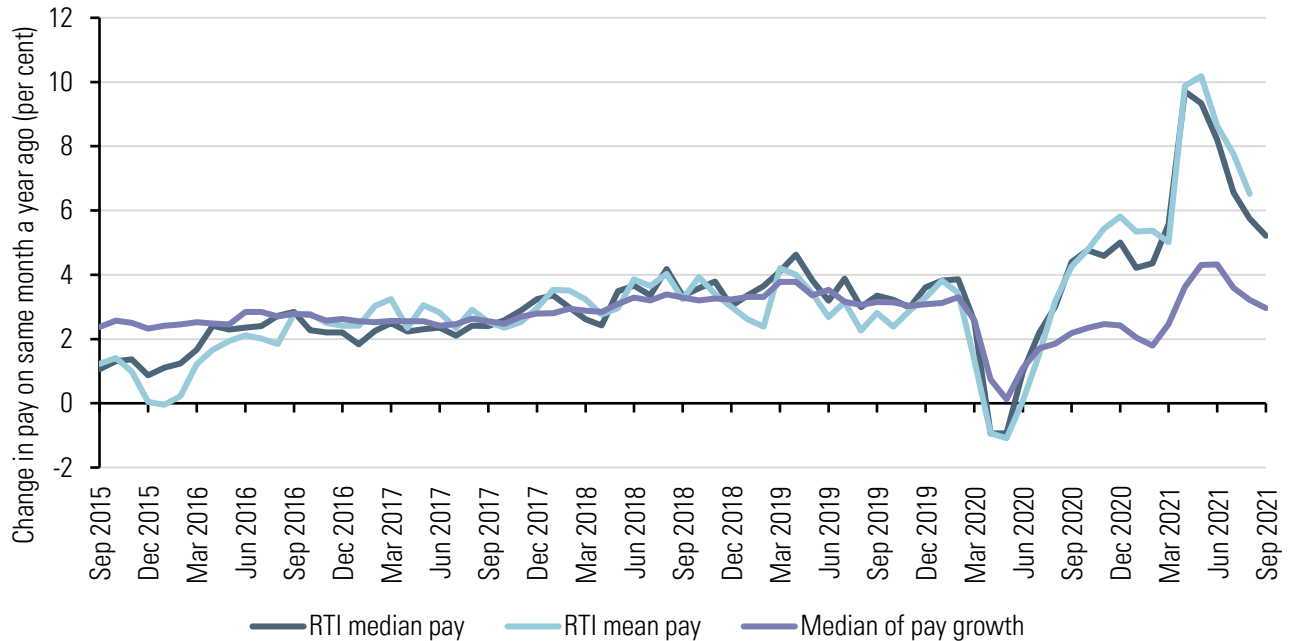
Source: ONS and LPC estimates using ONS data. Base effects and compositional effects taken from monthly Average Weekly Earnings in Great Britain: April 2021-October 2021, and AWE regular pay growth (KA19), monthly, seasonally adjusted, GB, January 2000-August 2021.

**1.56** As well as producing estimates of median and mean monthly pay, HMRC also produce a series that looks at the median of pay growth. That is, it takes all those who were in employment a year ago and looks at how the pay of each of those individuals has changed over the twelve months, and then takes the median of all those individual growth rates. This gives a measure of the typical wage increase that individuals who have been in employment in both years have had and provides another measure of underlying pay growth.

**1.57** Figure 1.15 shows that for most of the period since records begin (in July 2015), the median of pay growth had closely tracked the growth in median and mean monthly pay. However, as the pandemic hit, we can see a divergence. Initially, the median of pay growth was stronger than the other measures with wage growth falling less than implied by the other measures. Since July 2020, that has reversed. The median of pay growth has been much weaker than the headline measures of pay growth.

In September 2021, the median of pay growth was 3.0 per cent, compared with growth in the median of 5.2 per cent (and growth in the mean of 6.5 per cent in August 2021).

**Figure 1.15: RTI growth in median and mean pay and median of pay growth, UK, 2015-2021**



Source: LPC estimates using ONS data. Earnings and employment from Pay As You Earn Real Time Information, seasonally adjusted: RTI median pay (Table 2); RTI mean pay (Table 3), RTI median of pay growth (Table 27), monthly, seasonally adjusted, UK, September 2014-September 2021.

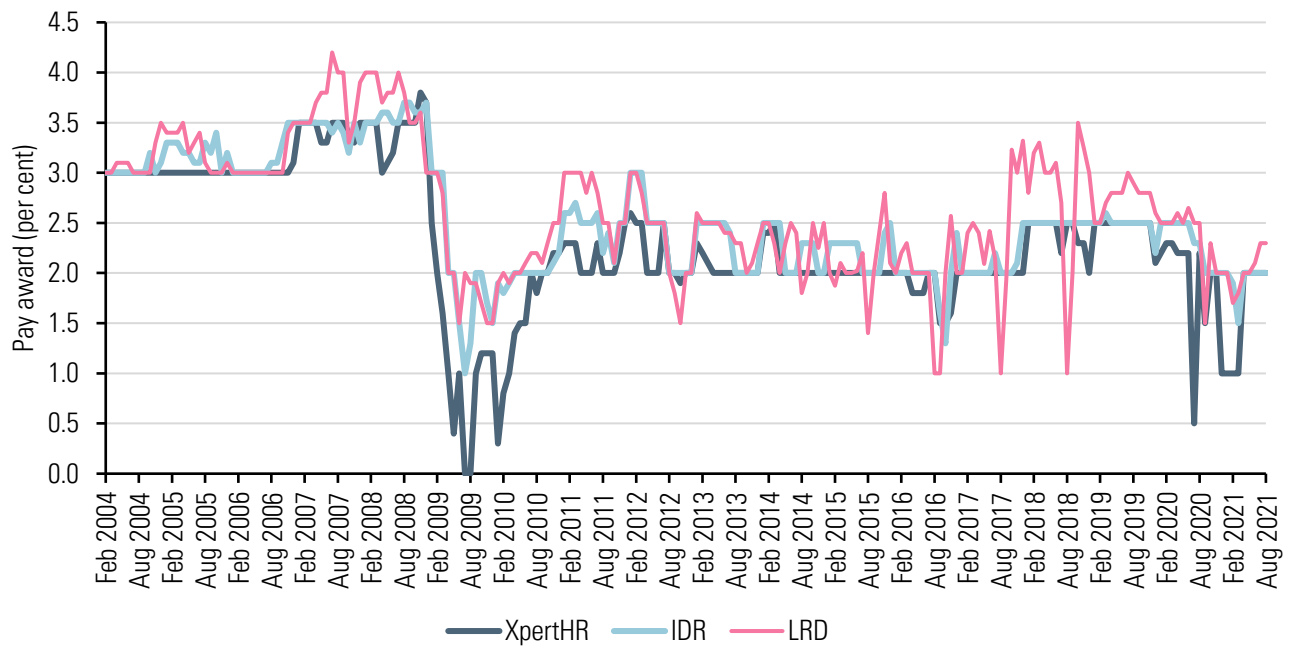
Note: RTI data series begins in July 2014 and the annual growth series in July 2015.

**1.58** Another way to look at underlying wage growth is to see what is happening to pay awards across the country. When we met in October, there was great uncertainty about what was likely to happen to pay. Pay researchers generally reported that many firms were looking to freeze pay and that awards in 2021 were likely to be lower than in 2020. As the most common months for making pay awards are January and April, they argued that many pay decisions for 2020 had already been made prior to the lockdown at the end of March 2020. They thought that the pay awards in January and April 2021 would most likely reflect the effects of the pandemic and measures to control it. That was likely to dampen expectations.

**1.59** To some extent, as shown in Figure 1.16, those expectations were realised with a slowdown in pay awards in the early part of the year. However, the economy has picked up since April and this has been reflected in more recent pay awards. Both Incomes Data Research (IDR) and XpertHR reported the median of pay awards was 2 per cent in August 2021, with the Labour Research Department (LRD) reporting 2.3 per cent.

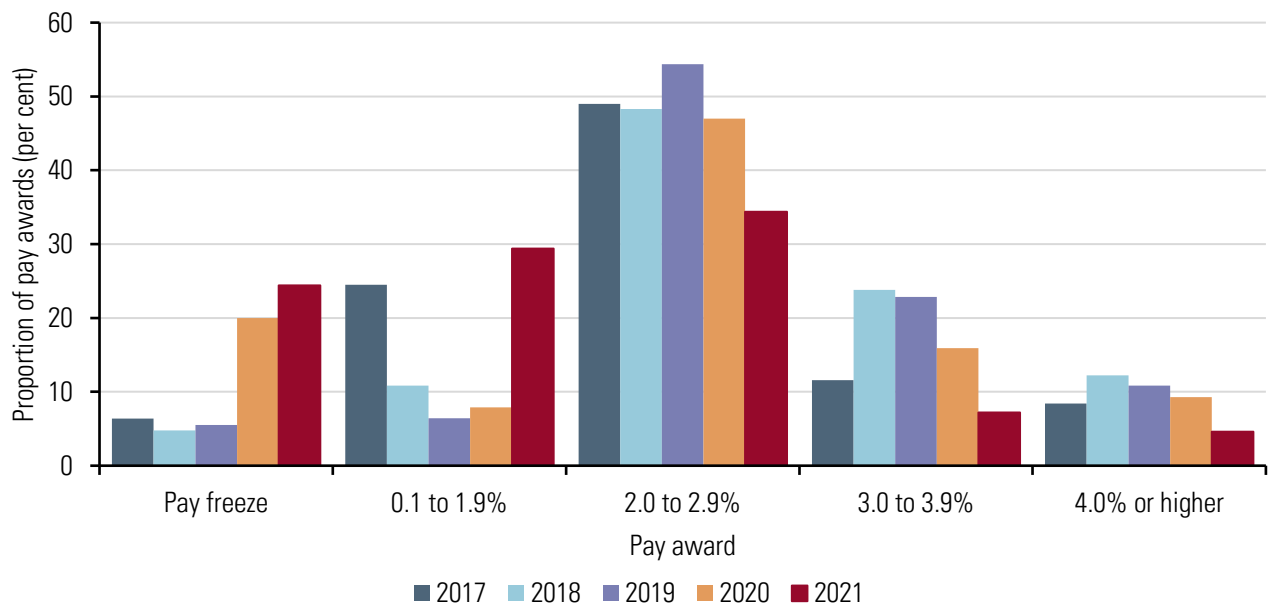
**1.60** Compared with 2020, there was a noticeable change in the distribution of pay awards in 2021, as shown in Figure 1.17. Pay awards in 2021 were generally lower. Nearly a quarter were pay freezes – up from around a fifth in 2020. A further 30 per cent were less than 2 per cent. That compared with only 8 per cent in 2020. There were fewer pay awards above 2 per cent in 2021, compared with recent years.

Figure 1.16: Pay settlement medians, UK, 2004-2021



Source: XpertHR, Incomes Data Research (IDR) and Labour Research Department (LRD), pay databank records, three-month medians, UK, February 2004-August 2021.

Figure 1.17: Distribution of pay settlements, UK, 2017-2021



Source: XpertHR data, UK, 2017-21.

**1.61** In summary, underlying pay growth – such as the median of pay settlements (around 2 per cent), the latest RTI measure of the median of individual pay growth (3 per cent), the Bank of England underlying private sector pay growth (4.0 per cent) and the latest ONS estimate of underlying pay growth that ranges from 4.1-5.6 per cent – are generally below headline average earnings growth, such as 6 per cent for AWE regular pay growth, 7.2 per cent for AWE total pay growth and 5.2 per cent for the growth in RTI median pay.

## Conclusion

**1.62** The economy has recovered a little quicker than had been forecast last autumn as the success of the vaccine roll-out enabled the Government to ease the Covid restrictions. However, that recovery has been slowed as supply chain disruptions, energy supply issues and staff shortages have restricted some activities. Those shortages have fuelled a higher than forecasted increase in inflation.

**1.63** The pandemic has also distorted our usual indicators of average wage growth. The combination of furlough effects, base effects and compositional effects amount to headline pay figures likely overstating underlying pay.

**1.64** What's happening to pay growth is clearly pivotal for the NLW as its target is based on median pay. We discuss the implications of the issues around pay for the path in Chapter 9 and how our recommendations took this into account in Chapter 10.

# Chapter 2

## The labour market

### Key findings

The labour market has recovered rapidly and continues to do so. The substantial falls in number of employees in both Real Time Information (RTI) and Workforce Jobs measures of employment have recovered to a large extent. However, there is a particular geography to the recovery, with the largest employment effects and slowest recovery in London. The majority of areas in the UK have RTI job numbers above their pre-pandemic levels.

This recovery in employee numbers has largely been driven by a massive boost in recruitment in spring and summer 2021, continuing the momentum we discussed last year. Vacancy levels reached record highs (over 1 million) and levels of people moving into work (especially for some low-paying sectors) and between jobs have both improved. Another factor is the large shift from self-employment to employee status in 2020, which may have been connected to both tax changes and the Coronavirus Job Retention Scheme (CJRS).

As vacancies have increased it has also become more difficult for employers to recruit. Overall, employers say there are simply too few suitable candidates, with one reason being that the share of people looking to change their job is at a record low (most new vacancies are filled by people moving from another job). There are also fewer people in the labour force – inactivity has risen across the pandemic as more younger people stay in full-time education and older workers decide not to remain in the labour force.

The drop in the number of EU workers – something the data were not clear on last year – is another factor causing problems in specific sectors. Comparatively few employers say the problem is wages, fewer still in lower-wage sectors. Stakeholders tell us that the broader labour supply pipeline has been disrupted by Covid-19, with apprentice numbers slashed, training more broadly disrupted and young people unable to gain experience in part-time jobs during education.

Throughout the pandemic, overall employment rates have remained high as the CJRS has successfully protected jobs. However, the scheme was due to close days after we submitted our recommendations and the most recent data suggested there were still 1.3 million individuals on furlough. The evidence nevertheless supported expectations of a 'soft landing' for the scheme. There had been no repeat of the large scale redundancies seen in the lead-up to the scheme's original planned closure date. Further, the majority of furloughed workers worked for the smallest firms, but very few of these firms were planning redundancies.

The number of workers temporarily away from work, a metric closely correlated with furlough numbers, had already returned to pre-crisis norms. This suggested furlough may also have been covering other circumstances, for example maternity leave, or furloughed workers may have already found other jobs.

If a furloughed worker believed they did not have a job to return to they may already appear in unemployment or inactivity figures.

As we reached the end of the scheme it became clear that some of the remaining claims would be fraud or error. In September 2021, the Government announced that £1.3 billion had already been voluntarily returned. The deadline for returning over-claims was 20 October, so it is likely this figure will rise. The Government currently has 23,000 open investigations into fraudulent cases and £600 million has already been recovered.

Finally, as already shown, demand for labour is strong with record vacancies. Any furloughed workers who, unfortunately, did find themselves without work as the scheme closed were likely to have other options.

**2.1** As outlined in Chapter 1, the global pandemic and subsequent actions to restrict the spread of Covid-19 resulted in large sections of the UK economy being shut down in spring 2020. The pandemic and the Government's response to it (including the Coronavirus Job Retention Scheme (CJRS)) have greatly influenced the shape of the labour market over the last eighteen months.

**2.2** While there is still a degree of economic uncertainty, the labour market picture is much clearer than in 2020. Payrolled employment has returned to pre-pandemic levels; vacancies are at record highs; numbers supported by the CJRS have steadily reduced; redundancies have fallen; unemployment, whilst still higher than in February 2020, has started to fall and is substantially below forecasts; and the outlook of firms is generally more positive.

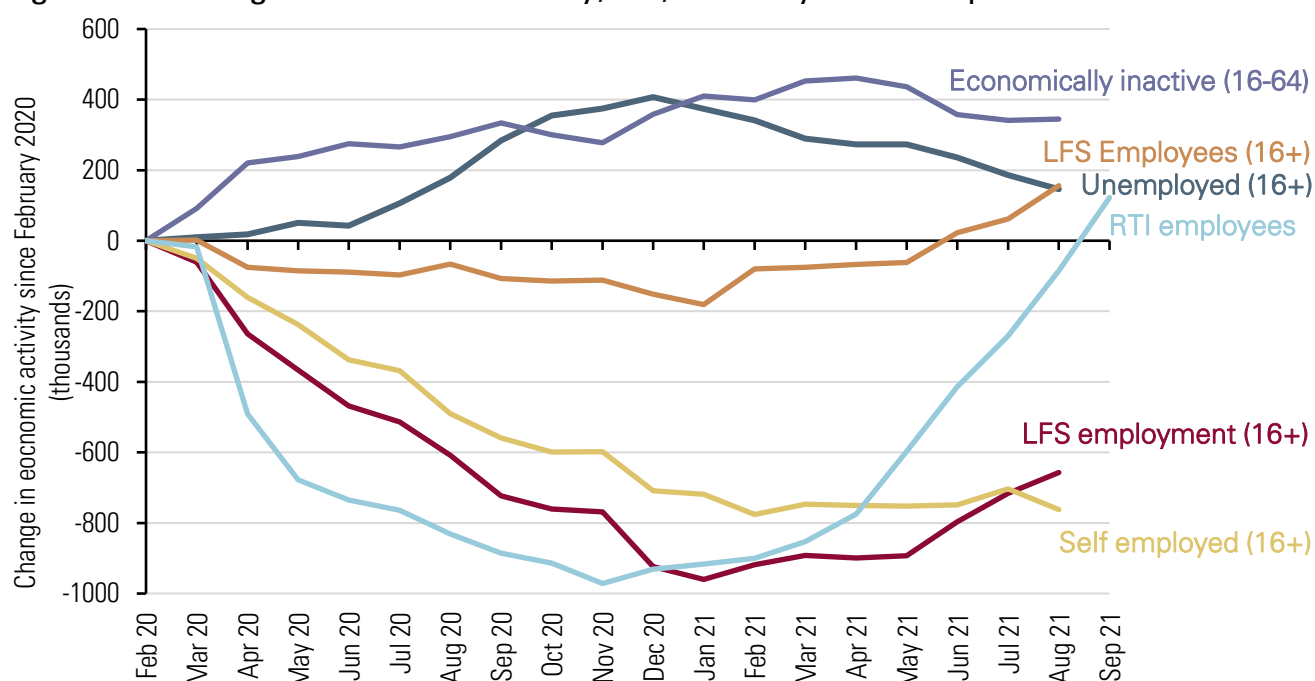
**2.3** In this chapter we look at the pandemic's changing impact on the labour market. Much of our analysis focuses on changes since February 2020, just prior to the introduction of lockdown measures. One of the features of the pandemic is the disproportionate impacts on certain groups. We look at the impacts at both a sectoral and geographical level as well as across individual worker and firm characteristics.

**2.4** Because of the fast-moving pace of change we have supplemented our usual data sources with additional more timely data to better understand what is driving changes. These include: the weekly and monthly time series from the Labour Force Survey (LFS), the Business Insights and Conditions Survey (BICS) and the Opinions and Lifestyle Survey all from the Office for National Statistics (ONS); Real Time Information (RTI) and CJRS data from HMRC; and Adzuna vacancy data.

**2.5** We start by taking a look at how levels of headline labour market indicators have changed across the course of the pandemic. Figure 2.1 shows how the sharp falls in employment seen across 2020 have given way to a jobs recovery as restrictions eased, particularly in RTI employment. Total LFS employment however remains lower, driven by falls in self-employment. Oddly, changes to LFS employee data across the period have been minimal compared to that of RTI payrolled employments.

**2.6** Inactivity rose in the initial phase of the pandemic as individuals uncertain about their futures moved into inactivity rather than unemployment. Figures continued to gradually increase into 2021 though recent data suggests a levelling off in inactivity. We saw unemployment climb in the second half of 2020 but it has fallen back by over a quarter of a million in 2021. It remains higher than pre-pandemic however, and there is a degree of uncertainty surrounding future levels as government support for workers is wound down.

Figure 2.1: Change in economic activity, UK, February 2020 – September 2021



Source: LPC estimates using ONS data: 16+ employment (MGRZ), 16+ unemployment (MGSC), 16-64 inactivity (LF2M), 16+ self-employment (MGRQ), 16+ employees (MGRN), RTI payrolled employees, monthly, seasonally adjusted, UK, Feb 2020-Aug 2021 (Sep 2021 for RTI).

## RTI employment

**2.7** The labour market has seen a strong recovery in RTI payrolled employees through 2021. Provisional September 2021 data (based on 85 per cent of information and subject to revision) shows it at 29.2 million and ahead of February 2020 levels for the first time. The more rapid recent growth largely coincided with the Government's roadmap to reopen the economy in the spring and has continued at pace through the summer months.

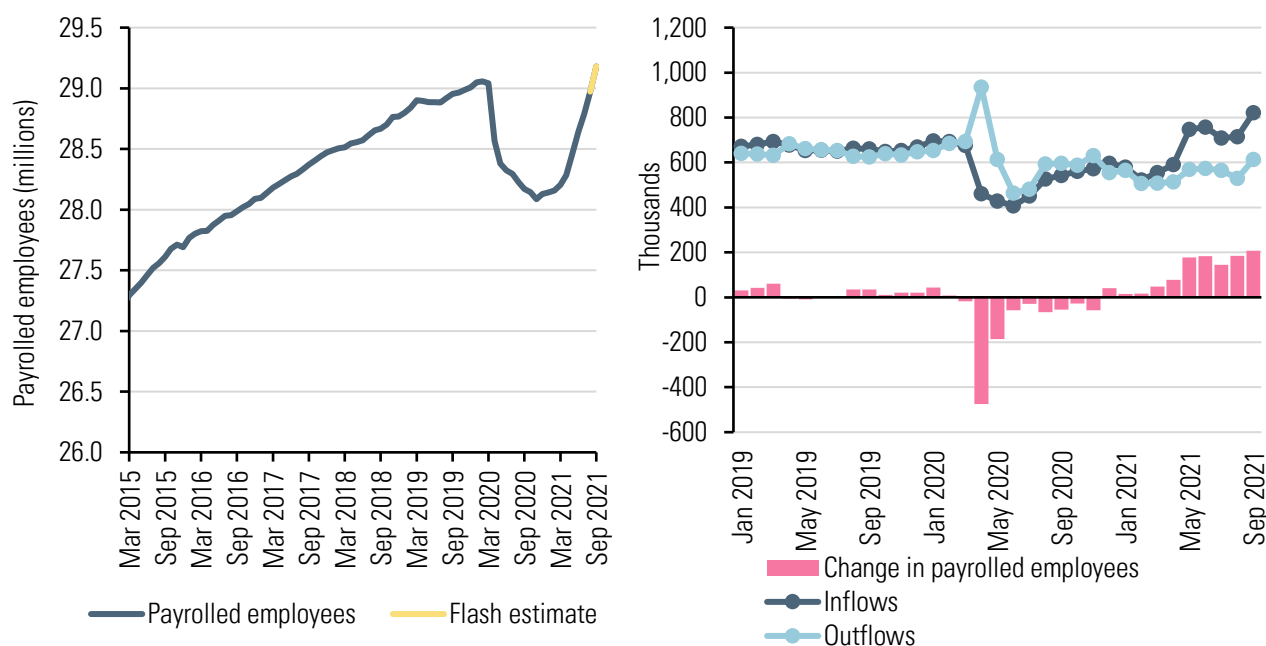
**2.8** While we observed the first signs of growth in RTI employment back in December 2020, levels of inflows and outflows<sup>2</sup> were still below their pre-pandemic norms then. In May 2021 however, inflows increased sharply (as outflows remained subdued) resulting in large monthly net increases to employment. Almost 800,000 employments were added in the five months up to and including September 2021.

**2.9** Whilst aggregate employment returned to pre-pandemic levels, digging beneath the surface shows a very uneven recovery in terms of pace. Looking at the data by sector, age and location shows who and where has been least and most affected and who has experienced the fastest recovery.

<sup>2</sup> Inflows are people who were not in payrolled employment in a previous period but are in the current period while outflows are people who were in payrolled employment in a previous period but are not in the current period.



**Figure 2.2: RTI employment and RTI inflow and outflow, UK, March 2015 – September 2021**



Source: LPC estimates using HMRC RTI data, monthly, seasonally adjusted, UK, Mar 2015-Sep 2021.

## Sectors

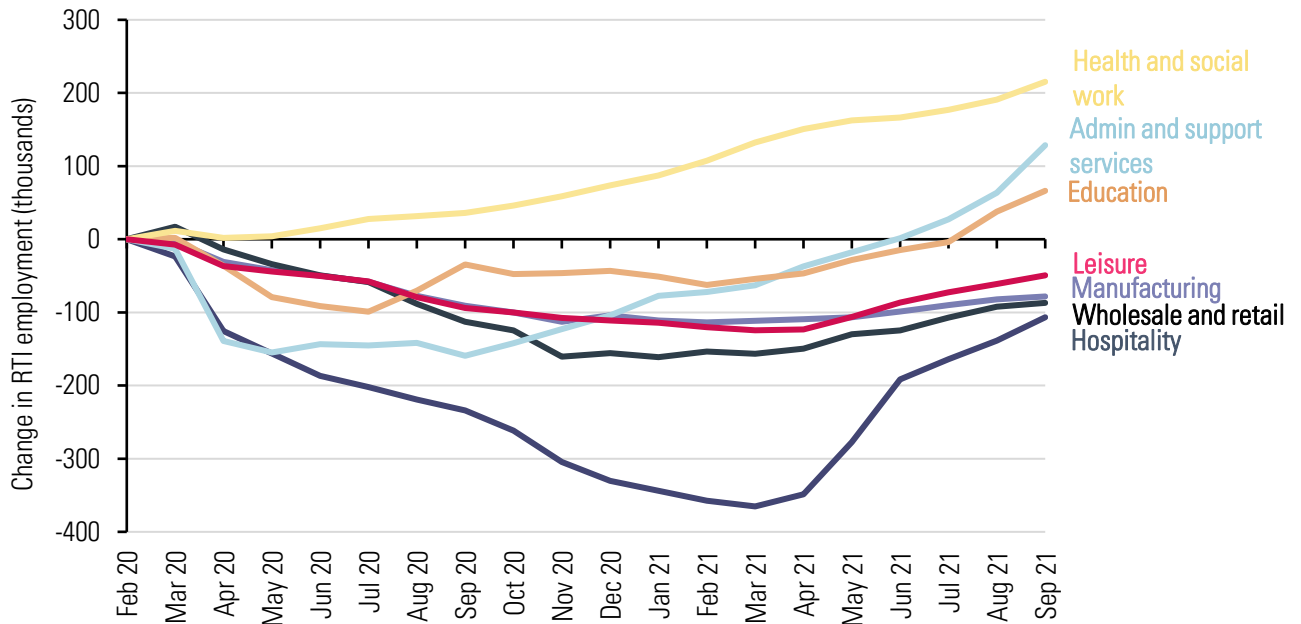
**2.10** Sectors have fared differently during the pandemic largely depending on how customer-facing they were. As such, the economic recovery has been very sector-specific, determined to an extent by the Government's roadmap as businesses were able to re-open or extend the services offered during the lockdown periods. Figure 2.3 shows the changes in RTI employment by sector since February 2020. It highlights how sectors have had very different experiences during the pandemic.

**2.11** Hospitality saw the largest employment falls during the pandemic – in March 2021 there were 365,000 fewer employments in the sector. But a strong recovery saw a large number of workers enter the sector when it re-opened. Despite this, by September there were still more than 100,000 fewer employments in hospitality compared with February 2020. Wholesale and retail lost around 160,000 employments by November 2020, witnessed some recovery through spring and summer 2021 yet still had 87,000 fewer employments by September 2021.

**2.12** Administration and support services and education also experienced large initial falls but recovered much quicker than hospitality and grew in total across the period. Only health and social work saw larger growth, responding to the demands of the pandemic. By September 2021 the sector had grown by 215,000.

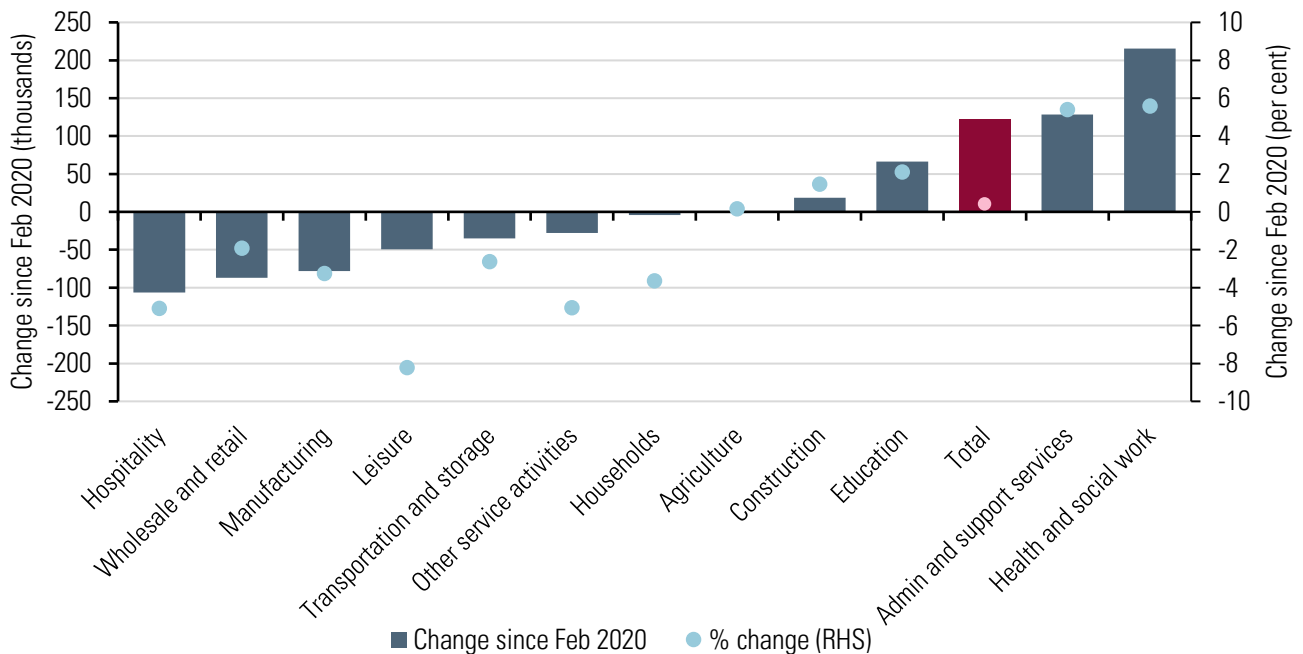
**2.13** Some sectors saw smaller changes in levels but relatively large proportionate impacts, as shown in Figure 2.4. The leisure sector, one of the most affected by lockdown measures, saw a reduction in employment of over 8 per cent. Aggregate employment in other service activities (which includes hair and beauty) fell by 5 per cent over the period.

Figure 2.3: Change in RTI employment, by selected sectors, UK, February 2020 – September 2021



Source: LPC estimates using HMRC RTI data, seasonally adjusted, monthly, UK, Feb 2020-Sep 2021.

Figure 2.4: Change in RTI employment by sector, UK, February 2020 – September 2021

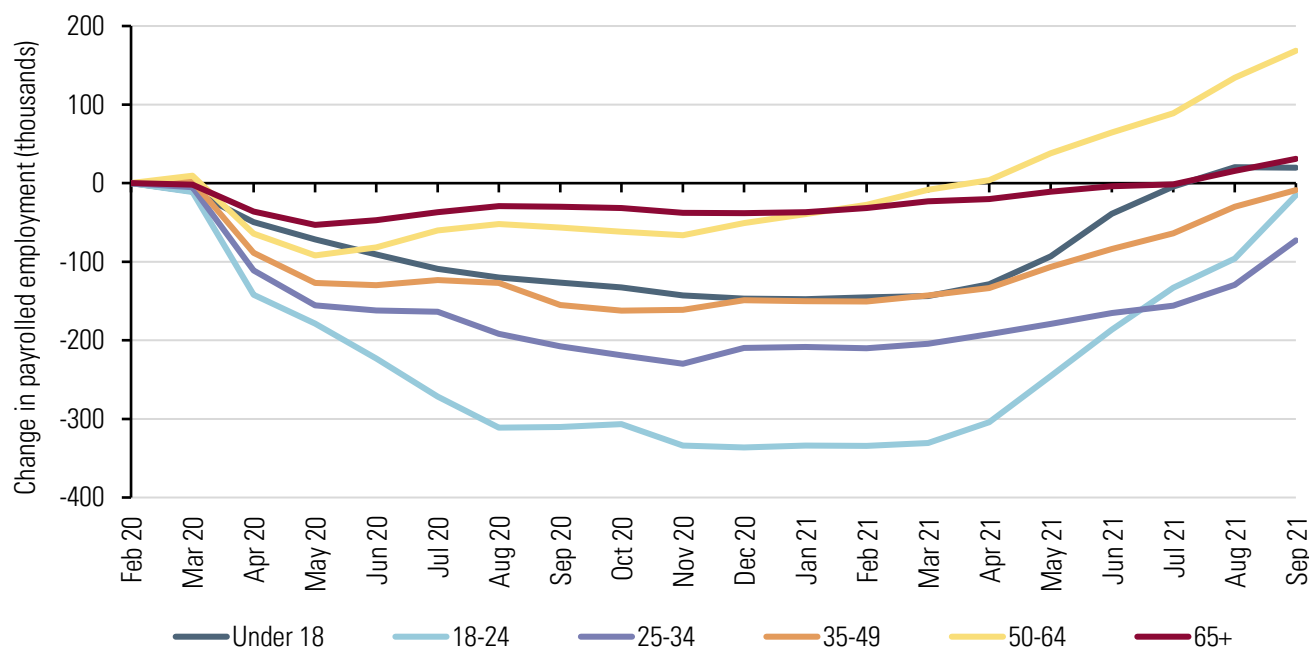


Source: LPC estimates using HMRC RTI data, monthly, seasonally adjusted, UK, Feb 2020-Sep 2021.

## Age

**2.14** The shape of changing RTI employment across the pandemic looks very different by age. By September 2021, employment levels were higher than in February 2020 for workers under 18 and those aged 50 and over. However, there were still over 70,000 fewer RTI employments amongst 25-34 year olds. Young people aged 18-24 saw the greatest initial impact with employment levels dropping by over 330,000 by November 2020. However, employment recovered strongly as the economy reopened in line with the Government's roadmap, and by September 2021 almost all this job loss had been regained.

**Figure 2.5: Change in RTI employment by age, UK, February 2020 – September 2021**



Source: LPC estimates using HMRC RTI data, monthly, seasonally adjusted, UK, Feb 2020-Sep 2021.

## Geography

**2.15** In addition to sector and age we also saw an unequal recovery in RTI employment by location across the United Kingdom. This may be connected to the prevalence or absence of certain sectors or types of workers in local labour markets.

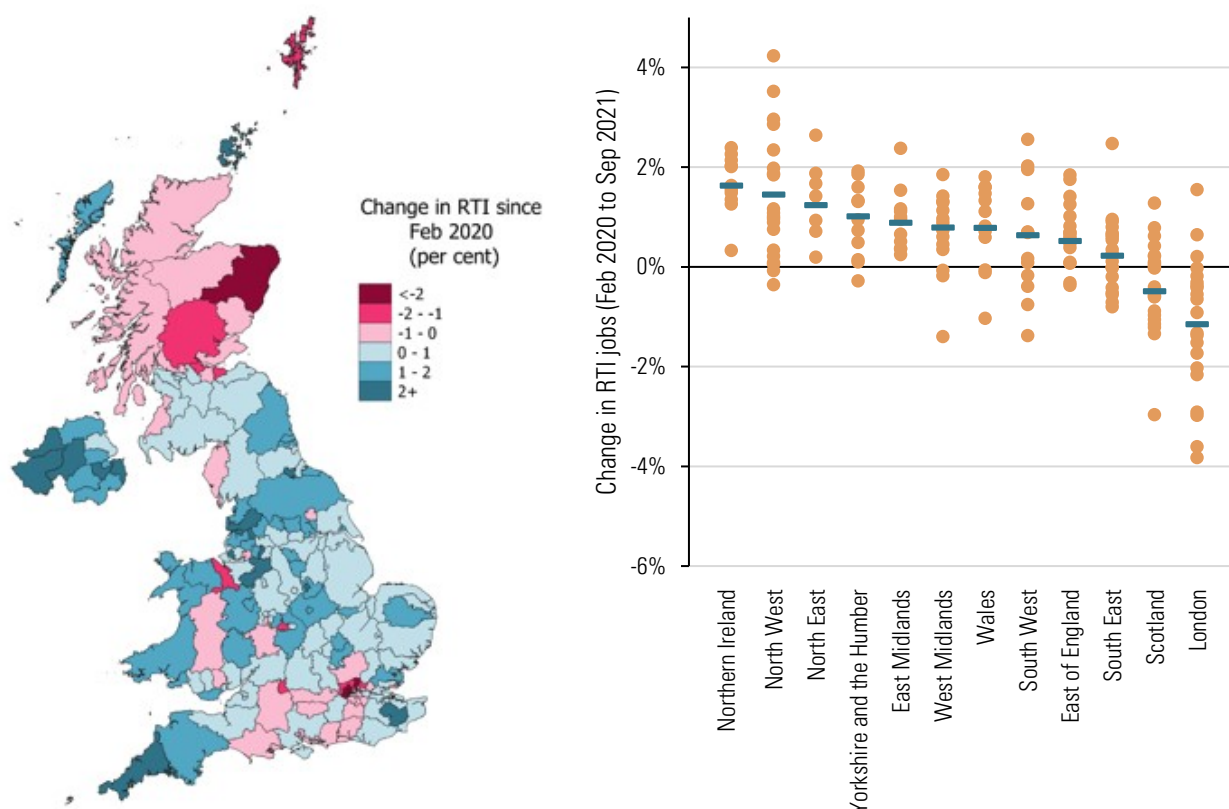
**2.16** HMRC and the ONS have helpfully introduced additional cuts of their RTI data throughout the pandemic – in August 2021 they included RTI information at local authority level for the first time and will continue to publish this data on a quarterly basis.

**2.17** Figure 2.6 shows the change in RTI employment from February 2020 to September 2021 (the latest month available at the time of our deliberations) at NUTS 3 level with the accompanying chart showing how the same NUTS 3 data is spread across the nations and regions. (NUTS 3 divides the UK into 139 separate regions, using the ONS's Nomenclature of Territorial Units for Statistics classification.)

**2.18** Northern Ireland had the highest growth amongst regions and nations of 1.6 per cent with employment increasing across all eleven NUTS 3 areas. The North East and East Midlands were the only other nations or regions where all local areas saw positive growth. In contrast Scotland and London

were the only nations or regions where employment levels were still lower in September 2021 than in February 2020. In London where there were on aggregate 1.2 per cent fewer RTI employments, employment dropped across 18 of the 21 NUTS 3 areas.

**Figure 2.6: Change in RTI employment by NUTS 3 and NUTS 1 since February 2020, UK**



Source: LPC estimates using HMRC RTI data, seasonally adjusted, Feb 2020-Sep 2021.

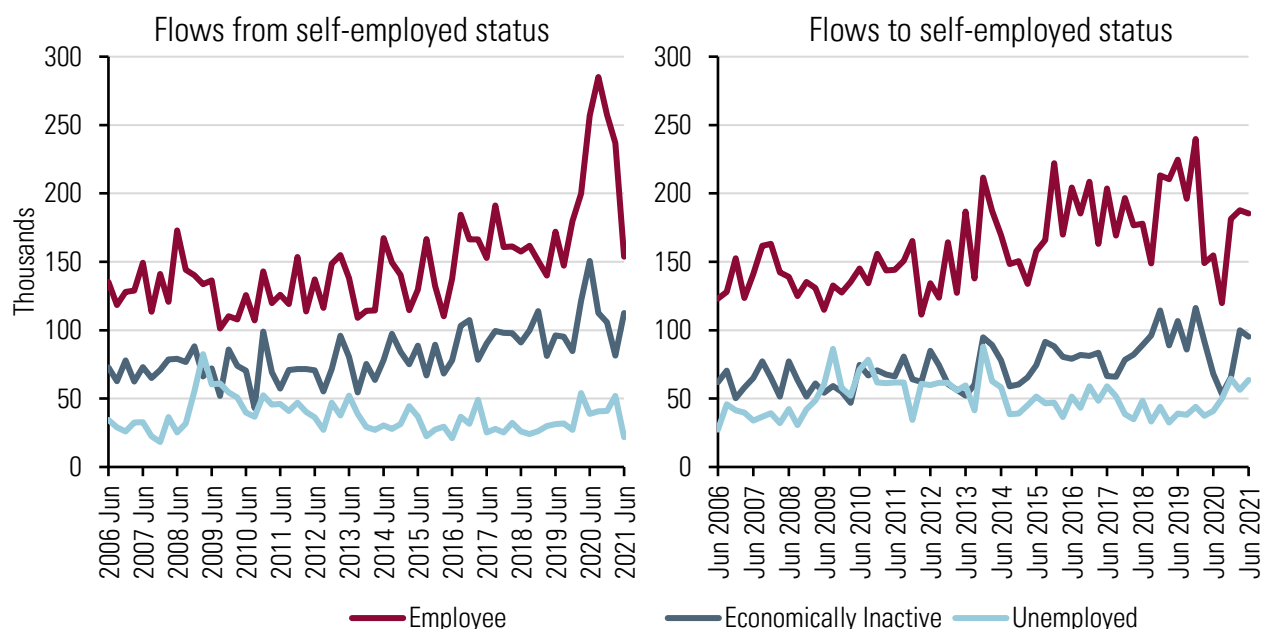
## Self-employment

**2.19** We have already seen that self-employment fell rapidly as the pandemic began (see Figure 2.1), and this is the main reason why overall employment is still below pre-pandemic levels. Part of this fall is due to some workers switching from self-employment to employee status, Figure 2.7 shows the flows in and out of self-employment. Prior to the pandemic there had been a general upwards trend in movement in and out of self-employment via both employee and inactivity status as the overall levels of self-employed workers increased. Then in the first six months of the pandemic flows data showed a large spike, as movement from self-employment to employee almost doubled from 147,000 in 2019 Q3 to 285,000 in 2020 Q3. Across 2020, around 1 million people moved employment status from self-employed to employee, greater than the 630,000-640,000 who did so in 2018 and 2019.

**2.20** There are several possible reasons for individuals to re-classify their type of employment as employee rather than self-employed: to access Covid-related financial support or in response to tax changes (particularly IR35 rules around off-payroll working); individuals with multiple jobs switched their main job from self-employed to employee; and individuals unable to work due to lockdown restrictions were forced to take up new employee roles.

**2.21** After this surge from self-employment to employee status, the latest data (up to the second quarter of 2021) show self-employment flows moving back in line with their pre-pandemic levels. This is consistent with the levelling off of total self-employment shown in Figure 2.1. The reopening of the economy has presented opportunities for individuals – new company incorporations were higher in the first half of 2021 than they were in 2019 prior to the pandemic.

**Figure 2.7: Flows in and out of self-employed status, UK, 2006-2021**



Source: LPC estimates using ONS data: X02 flows between economic status, quarterly, not seasonally adjusted, UK, Jun 2006-Jun 2021.

## Vacancies

**2.22** We reported a year ago on the sudden fall in the demand for labour as large swathes of the economy were shut down in the immediate aftermath of the pandemic. The recovery in vacancies began in the summer of 2020 as non-essential retail and hospitality reopened (the latter supported by the Eat Out to Help Out scheme) before stalling as the country entered a second lockdown. It was not until the Government published its roadmap in February 2021, paving the way for large parts of the economy to reopen, that vacancies started to grow again. From spring into the summer months growth was particularly strong as restrictions eased, translating into large gains in RTI employment from May onwards.

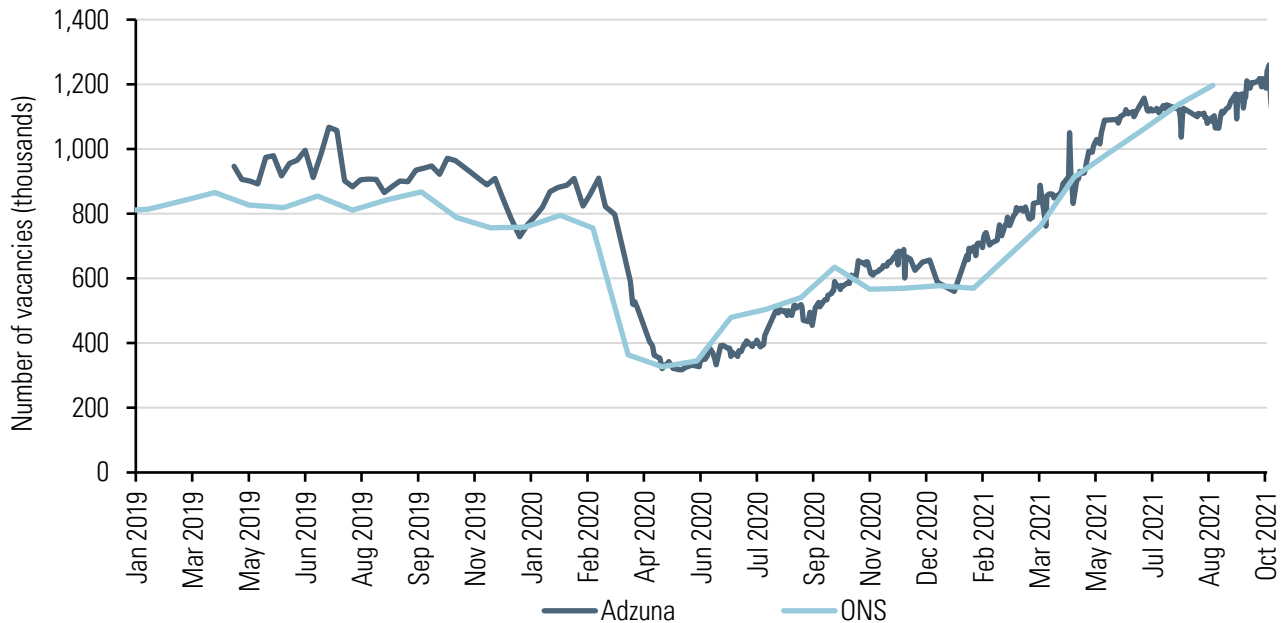
**2.23** Figure 2.8 tells the vacancy story using both official ONS data and more timely data from Adzuna. Levels of vacancies fell from around 800,000 in February 2020 to just 320,000 in May 2020. After rising to around 600,000 figures plateaued during the second lockdown. Vacancy numbers steadily increased in 2021 such that they surpassed their pre-pandemic levels, continuing to reach record highs in excess of one million.

**2.24** Levels of vacancies were higher in September 2021 in all sectors compared to their pre-pandemic levels, as seen in Figure 2.9. Growth was highest in construction, manufacturing, administrative and support services and hospitality at around 60 per cent. Looking at the most recent

quarter from June to September 2021, growth was fastest in transport and storage at 56 per cent – lorry driver shortages have been widely reported in the media.

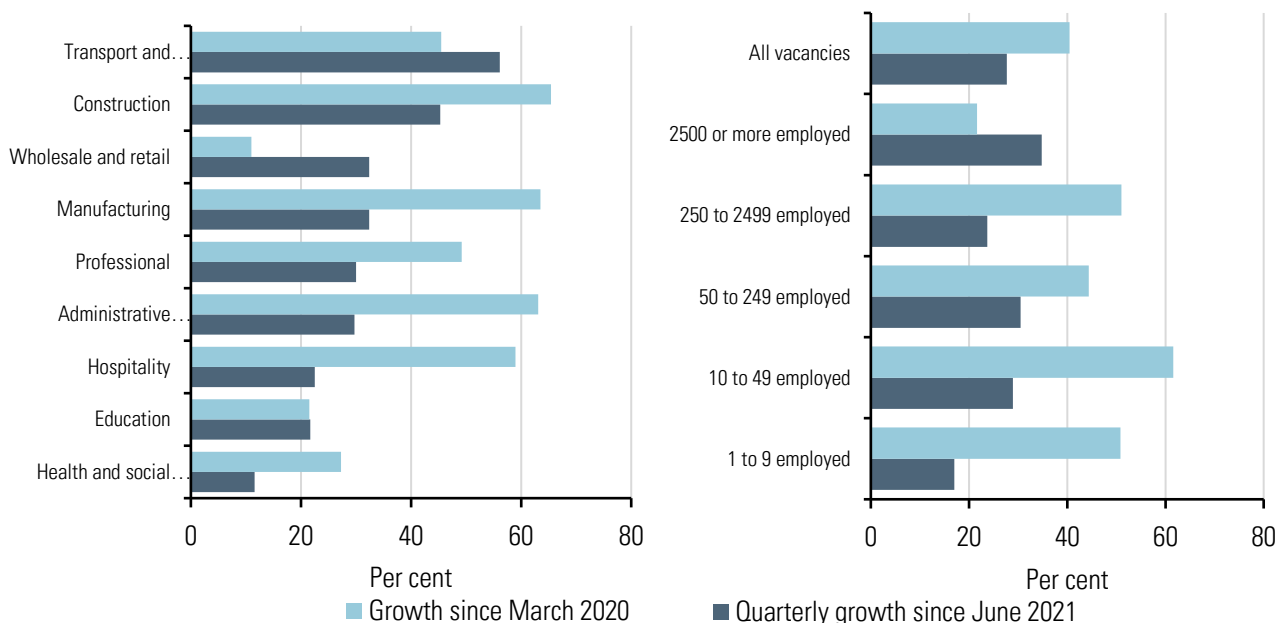
**2.25** We see a similar picture if we look at vacancies by firm size. Over the course of the pandemic there has been positive growth for employers of all sizes, with smaller firms seeing the highest vacancy growth overall. Yet in the quarter to September 2021 larger employers had higher rates of growth.

**Figure 2.8: Total vacancies, UK, January 2019 – October 2021**



Source: LPC estimates using ONS single month vacancy series (X06) and vacancy data scraped from adzuna.com API, Jan 2019-Oct 2021.

**Figure 2.9: Growth in vacancies by sector and employer size, UK, March 2020 – September 2021**

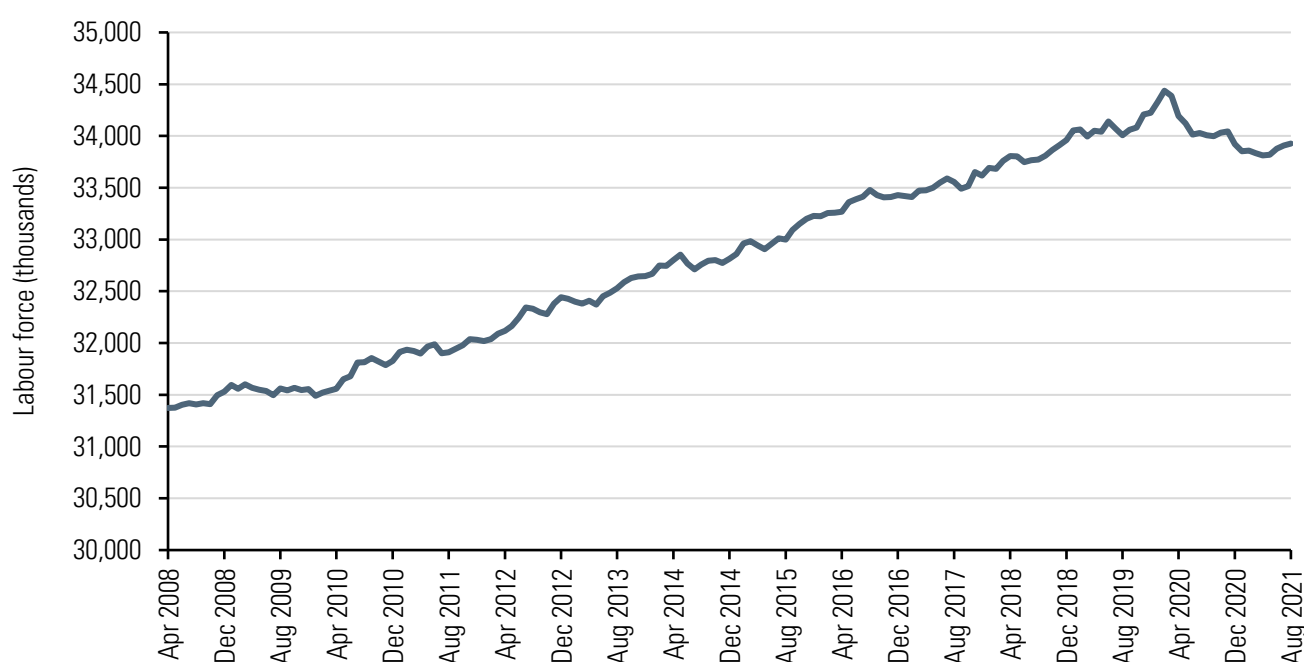


Source: LPC estimates using ONS vacancy data, VACS02, seasonally adjusted, Mar 2020-Sep 2021.

**2.26** The record number of vacancies on offer has resulted in firms struggling to recruit in sufficient quantities as they compete with each other for staff. There may be an element of skills mismatch between workers seeking employment and those required by firms with vacancies. We discuss later in this chapter some of the difficulties our stakeholders faced.

**2.27** One of the explanations behind these continued high levels of vacancies is that we no longer have a growing pool of labour ready and willing to take up these employment opportunities. Figure 2.10 shows that the size of the UK labour force (those employed plus those unemployed) grew steadily for at least a decade. This was driven by a combination of an expanding population and a changing state pension age. By February 2020 it had risen to 34.4 million. However, in the next eighteen months this supply of labour fell by over half a million, making it much harder for employers to fill vacancies.

**Figure 2.10: Labour force, UK, 2008-2021**



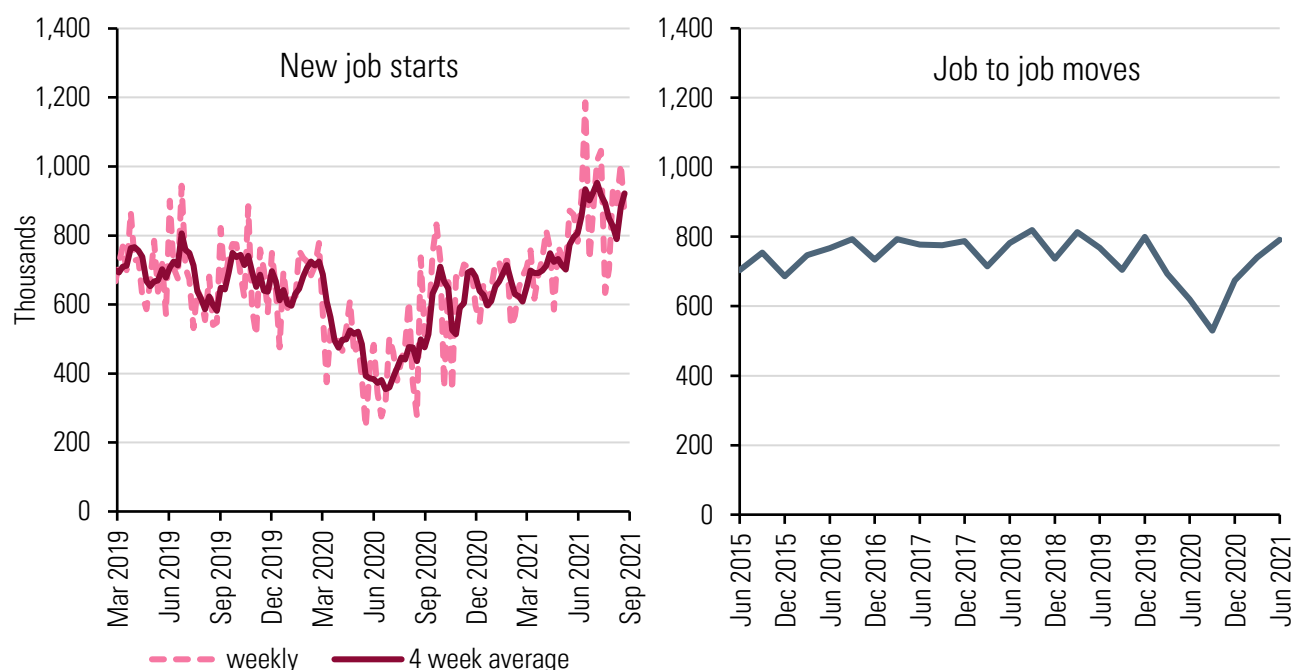
Source: LPC estimates using ONS data, 16+ employment (MGRZ) and unemployment (MGSC), seasonally adjusted, Apr 2008-Aug 2021.

**2.28** Recent iterations of the ONS's Business Insights and Conditions Survey (BICS) have asked firms about their ability to fill vacancies (compared with normal expectations). The data shows firms are finding it increasingly difficult to fill vacancies – rising from 9.4 per cent for all firms in Wave 36 (12 July - 8 August) to 11.8 per cent in Wave 40 (6 September - 3 October). Larger firms are having more difficulty than the smallest. The problem is most acute in health and social work, hospitality and other service activities where around one quarter of firms found it more difficult to recruit in the Wave 40 survey period. When asked why they were finding it more difficult to fill vacancies around half of those firms affected mentioned a lack of qualified applicants with just under half citing a low number of applicants for the available roles. Around one in six firms said it was due to a reduced number of EU applicants.

**2.29** Figure 2.11 shows weekly LFS data on new job starts, highlighting the jobs recovery in 2021 to above pre-pandemic levels. However, the numbers of individuals starting a new job levelled off over the summer, remaining below the number of vacancies that employers were seeking to fill. Despite a strong rebound in 2021 job-to-job moves, often the most common route to filling vacancies, were only just back to their pre-pandemic trend by June 2021.

**2.30** Analysis by the Bank of England (2021c) showed that job search by those in work plummeted during the pandemic to below 4 per cent. Whilst picking up to around 5.5 per cent in the first quarter of 2021, it remained below its pre-pandemic rate of 6 per cent. Despite record levels of vacancies many workers appear reluctant to move, favouring the security of their current employment over a new employer (see paragraph 4.24). The relative security offered via the CJRS to workers may also have been partly responsible for holding down job searches. Reducing levels of job applicants at a time of record vacancies may also be responsible for upwards pressure on wages.

**Figure 2.11: New job starts and job to job moves, UK**



Source: LPC estimates using ONS data, x07, seasonally adjusted, weekly, Jan 2019-Sep 2021 and x02, seasonally adjusted, Jun 2015-Jun 2021.

## Inactivity

**2.31** Individuals not working and not available or searching for work are termed economically inactive. As mentioned at the start of this chapter we have seen inactivity levels rise across the course of the pandemic. Higher inactivity is another part of the reason that firms are struggling to fill their vacancies.

**2.32** Figure 2.12 shows changes in inactivity levels by reason and whether those inactive want a job. In the initial months of the first lockdown there was a sharp increase in those inactive claiming they wanted a job. Most of this inactivity was in the 'other' category and could be explained by individuals who lost their job but did not immediately look for another.

**2.33** Across the period of the pandemic the largest increase in inactivity is from students, over a quarter of a million higher, though it has been falling since the spring. Much of the increase occurred at the start of the 2020/21 academic year as large numbers of young people remained in education rather than seek employment or did not combine full-time education with part-time employment. Student inactivity numbers increased further into the start of 2021 but in recent months have started to fall, in conjunction with the recovery in jobs and increasing job vacancies. We discuss this further in Chapter 6.

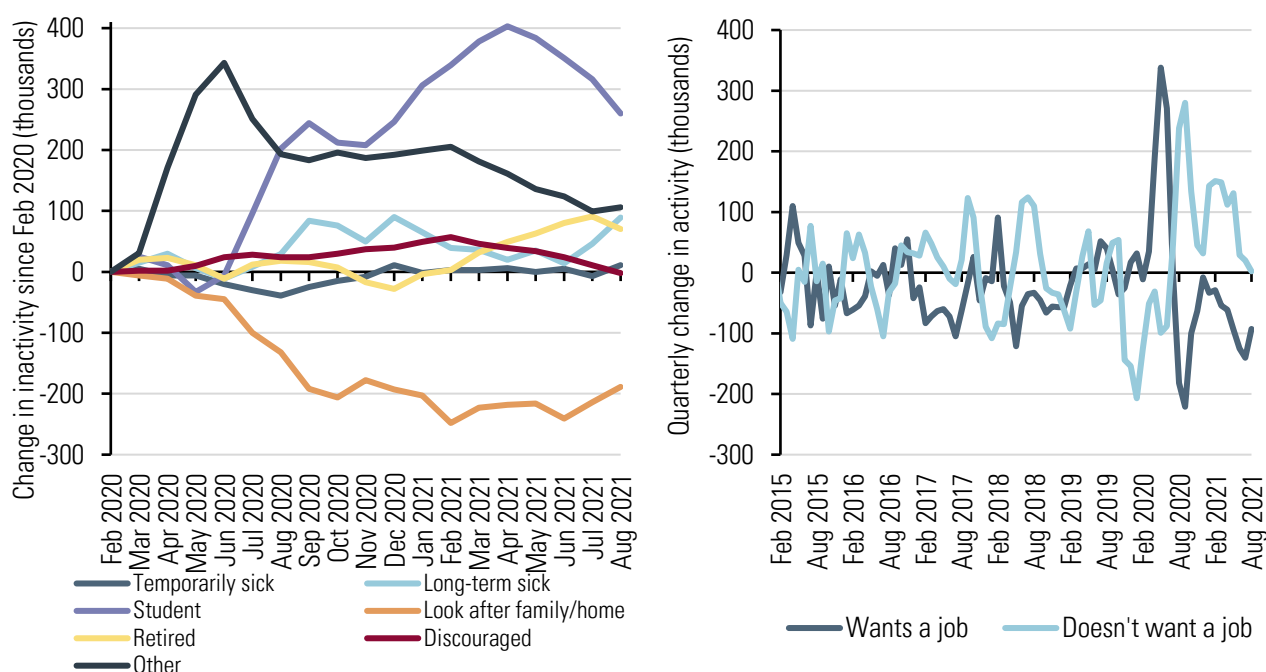


One possible explanation is the return of higher education students to on-site learning, relocating to the towns and cities where part-time jobs are available.

**2.34** We have also seen the numbers of long-term sick increase by 89,000 – possibly linked to Covid-19 – and the retired increase by 70,000 as individuals decided to retire early. The only group where we have seen a notable reduction in inactivity is among those looking after family/home. This group has fallen by 189,000 – likely a result of restrictions making it easier to combine working from home with caring responsibilities.

**2.35** In the latest three months to August inactivity fell by 91,000. This fall was all from individuals wanting a job and reflects the current work opportunities on offer for those looking to move into employment.

**Figure 2.12: Change in inactivity by reason and whether they want a job, UK, 2020-21 and 2015-2021**



Source: LPC estimates using ONS LFS data: Temporarily sick (LF67), long-term sick (LF69), student (LF63), look after family/home (LF65), retired (LF6B), discouraged (LFL8), other (LF6D), wants a job (LFM2), doesn't want a job (LFL9), monthly, seasonally adjusted, UK, Feb 2015-Aug 2021.

### Coronavirus Job Retention Scheme

The Coronavirus Job Retention Scheme (CJRS) was announced on 20 March 2020. It was introduced to support employers through the Covid-19 period by protecting jobs at a time that the Government was seeking to prevent the spread of the virus. It was an unprecedented intervention in the labour market and has been the driver of the majority of impacts we have seen in employment, hours of work and pay in the last 18 months.

The scheme paid 80 per cent of an employee's wage up to a maximum of £2,500 per month. Firms could additionally top up salaries. The Government also paid employer National Insurance (NI) and minimum auto-enrolment pension contributions until August 2020. The CJRS was rapidly developed by HMRC and went live just one month after it was announced on 20 April 2020.

A total of 11.7 million individual jobs were supported, peaking at 8.9 million on 8 May 2020. At the end of August 2021, one month before the scheme concluded, it had cost £68 billion.

Across the duration of the scheme there were several adaptations. On 1 July 2020 flexible furlough was introduced, allowing firms to bring back employees to work part-time. Firms would pay for the hours worked but were able to claim for any unworked hours. From 1 August 2020 firms began to contribute towards the cost by paying employer NI and pension contributions. From 1 September employers made a 10 per cent contribution to wages which doubled to 20 per cent from 1 October for the planned final month of the scheme.

In September 2020 the Government announced the planned successor to the CJRS, the Job Support Scheme (JSS) as part of the Winter Economic Plan. The JSS was set to run for 6 months until April 2021.

However, rising Covid cases and local lockdowns forced the Government to change their plans and on 31 October 2020 the Government postponed the JSS, allowing the CJRS to be extended. From November 2020 to June 2021 the CJRS was as we had seen in August 2020, with employers contributing towards NI and pension costs. In July 2021 firms made a 10 per cent contribution to wages which increased to 20 per cent for the final two months of the scheme.

**2.36** Figure 2.13 shows how the number of employments furloughed has shifted over the duration of the scheme. During the peak early months almost one in three employees had their wages paid by the Government under the CJRS. Numbers fell to around 2.5 million as the original scheme neared its end date in October 2020. Following the introduction of the three-tier system of Covid restrictions in mid-October England entered a second lockdown on 5 November and we saw a swift increase in those furloughed.

**2.37** A third lockdown in England announced on 6 January 2021 resulted in further increases with some 5m employments furloughed, two thirds of whom were fully furloughed. It was only after the Government's roadmap for lifting lockdown restrictions was published on 22 February that numbers started to fall again. The opening of non-essential retail, outdoor hospitality and parts of the leisure sector on 12 April saw large numbers of individuals come off furlough and return to work as already shown in the RTI data.

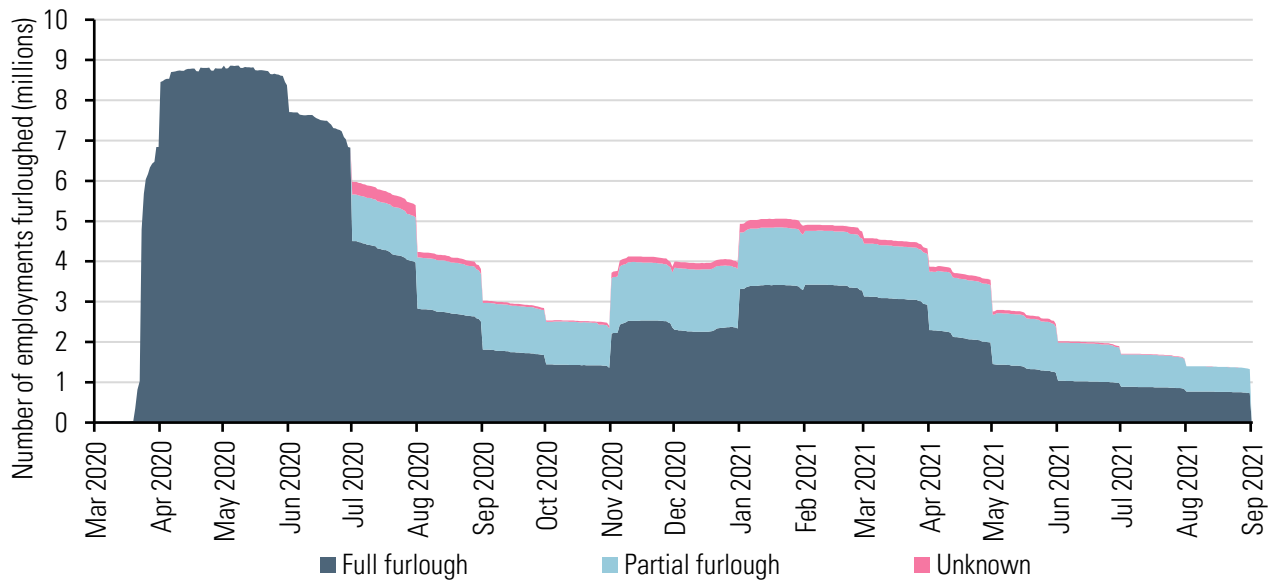
**2.38** As we entered the summer months numbers continued to fall, with fully furloughed employments making up a smaller share of total numbers. By the final months of the scheme there were fewer than 1.5 million employments furloughed, split evenly between full and partial furlough. The scheme had achieved its aim of preventing mass redundancies by retaining links between employers and employees.

**2.39** Hospitality and wholesale and retail were the two sectors that furloughed the largest numbers of employments. At their height, both sectors had more than 1.5 million employments covered by the CJRS. As a share of total employments however, the leisure and hospitality sectors both had around four in every five employments furloughed. Other service activities (including hair and beauty) and construction also both had over half of their sectors furloughed.

**2.40** By the end of August 2021, no sector had more than 200,000 employments covered by the scheme. But while the proportion of total employments furloughed had reduced to 4.4 per cent, some

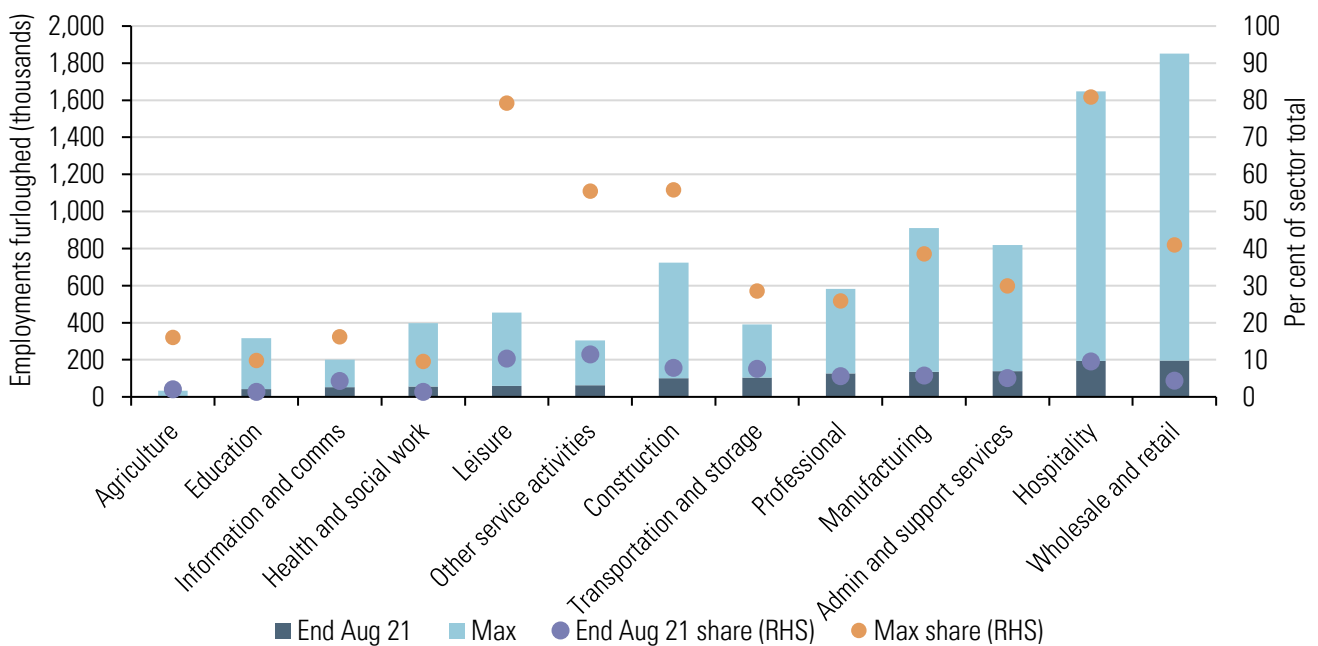
sectors were still disproportionately affected – with one in ten employments from the leisure, hospitality and other service activities sectors still furloughed.

**Figure 2.13: Employments furloughed under CJRS, UK, 2020-2021**



Source: HMRC CJRS data, UK, 1 Mar 2020-31 Aug 2021.

**Figure 2.14: Employments furloughed by sector, UK, March 2020 – August 2021**



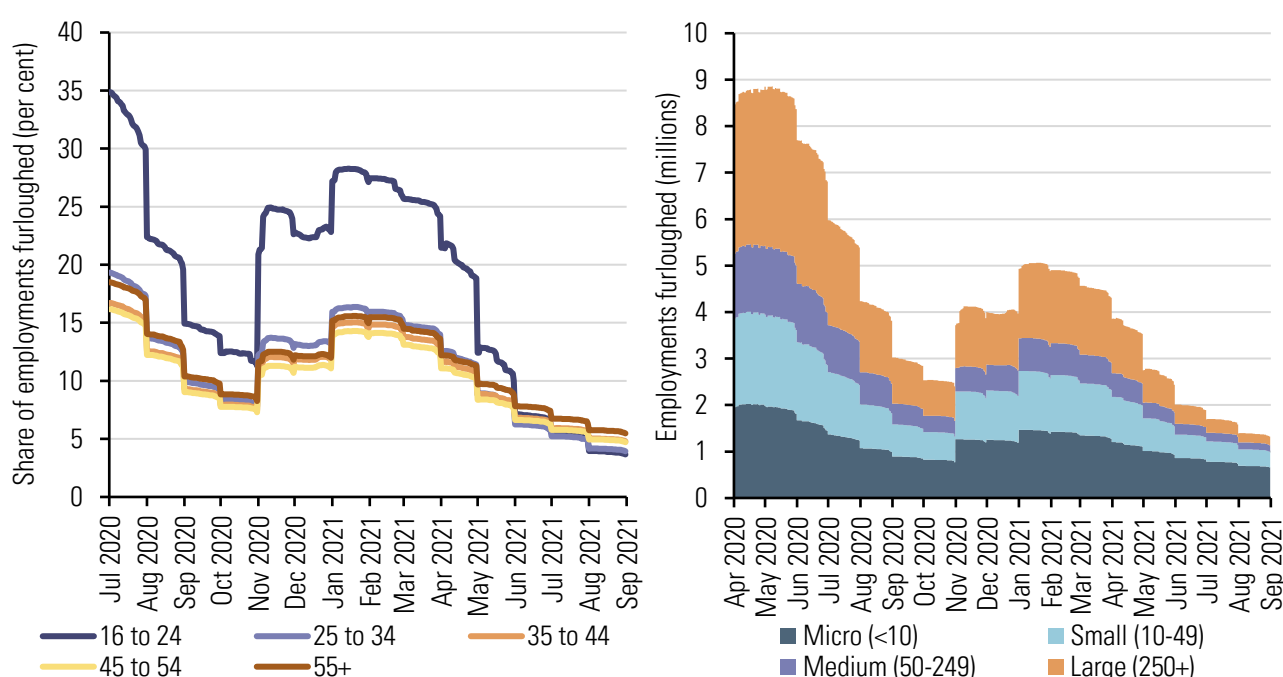
Source: LPC estimates using HMRC CJRS data, UK, 1 Mar 2020-31 Aug 2021.

**2.41** As well as a large sectoral dimension we have also seen differences between age groups. We know that young people are more likely to work in the sectors subject to lockdown measures, particularly hospitality and non-essential retail. Figure 2.15 illustrates the disproportionate impact this has had on young people. One in three employments for those aged 16-24 were furloughed when age breakdowns were first provided back in July 2020. For all other age groups it was between 15-20 per

cent. In subsequent lockdowns it was again young people who were most affected – they were around twice as likely to be furloughed as other age groups. Once the economy started to reopen, we saw the share of young people furloughed fall steeply. The latest data to the end of August showed their rate had fallen to 3.7 per cent, lower than all other age groups, with older workers more likely to have remained furloughed. We discuss the experiences of furloughed workers in more detail in Chapter 4.

**2.42** During lockdowns, employments from large firms (those with 250 or more employees) made up the largest share of the furlough total. But following the easing of restrictions in spring 2021 we saw a swift reduction in the use of the scheme by large employers. By the end of August 2021, fewer than 200,000 of the remaining employments furloughed were attributable to the largest firms. Interestingly one half of those still furloughed towards the close of the scheme were from micro firms.

**Figure 2.15: Employments furloughed by age and firm size, UK, April 2020 – August 2021**

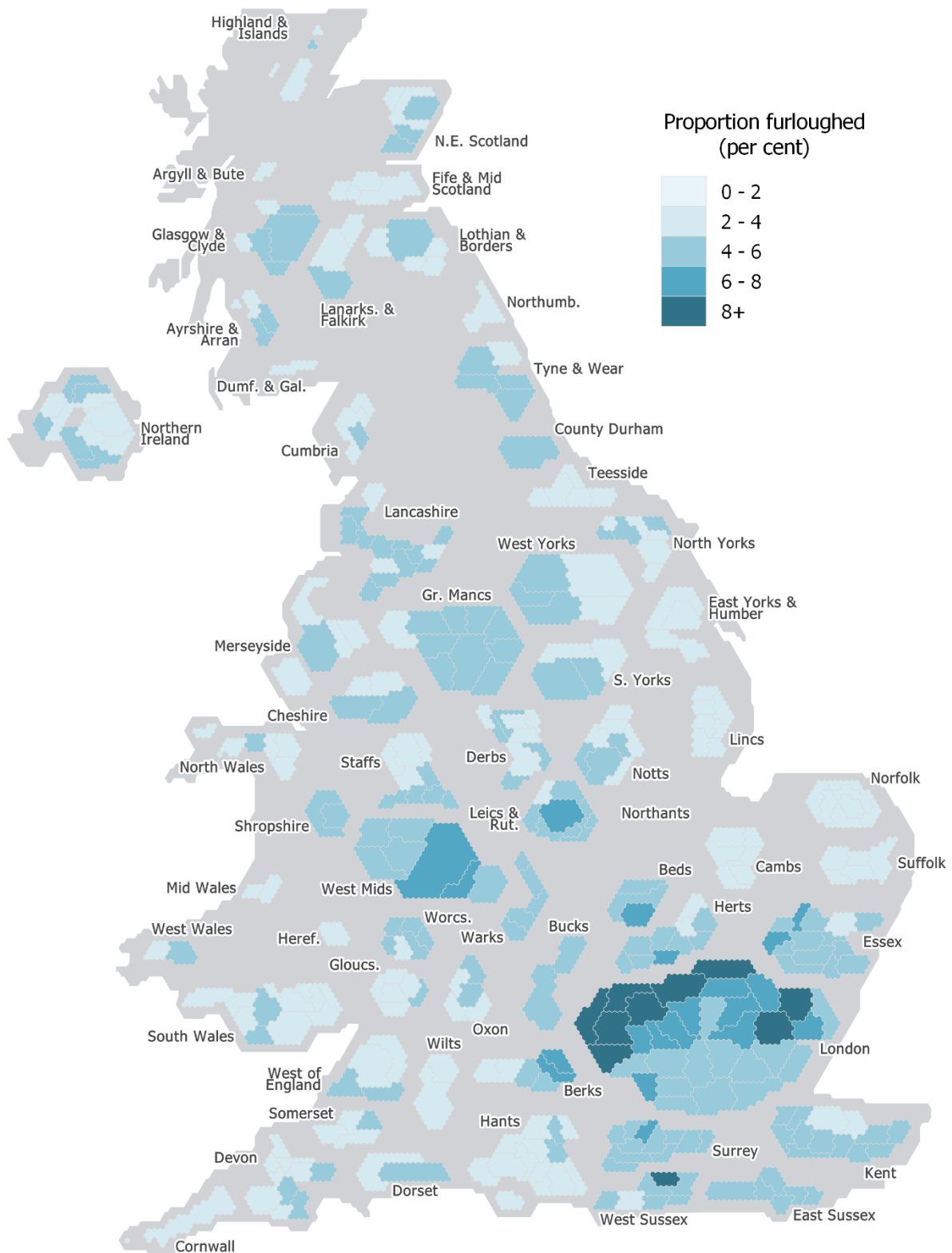


Source: LPC estimates using HMRC CJRS data, UK, 1 Apr 2020-31 Aug 2021.

**2.43** While furlough numbers have consistently fallen month-on-month over the last six months we have seen that there remain differences across the labour market – by sector, age and firm size. This also applies to geography. Figure 2.16 shows how furlough rates differ across the UK with parts of London and the South East having much higher shares of furloughed workers compared to the rest of the country. This appears to be linked to proximity to airports, one of the sectors still affected by the pandemic. Six of the ten local authorities with the highest rates of furloughed employments are close to airports: Hounslow, Ealing and Hillingdon (London Heathrow); Newham and Redbridge (London City) and Crawley (London Gatwick).

**2.44** When making our recommendations we had access to CJRS data to the end of August 2021, one month before the scheme closed. At that time there were still 1.3 million employments furloughed but the final figure was unknown. Commentators estimated there would still be around 1 million furloughed at the end of September.

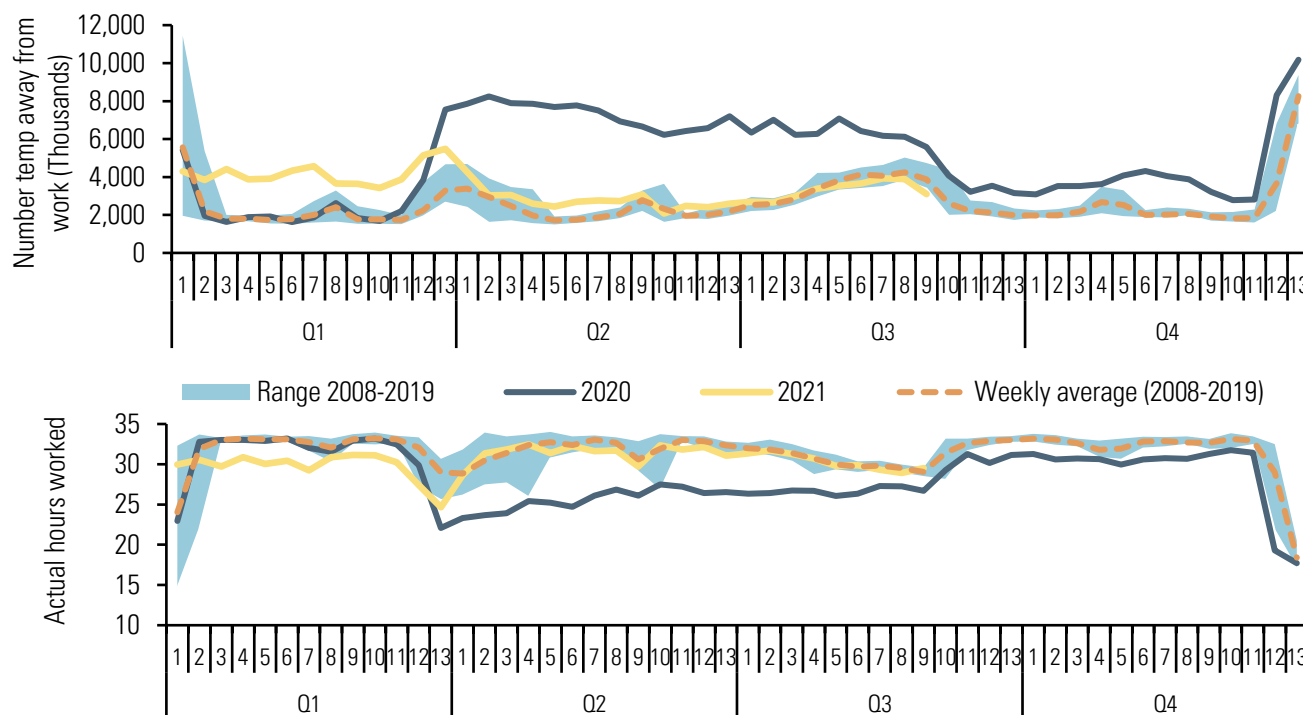
Figure 2.16: Employments furloughed by local authority, UK, August 2021



Source: LPC estimates using HMRC CJRS data, UK, 31 Aug 2021. Contains Parliamentary information licensed under the Open Parliament Licence v3.0.

**2.45** A key question in assessing the state of the labour market is what will happen when the scheme closes. We turn to that question now by firstly looking at hours worked. While the CJRS protected employment, by design it dramatically reduced hours worked. Figure 2.17 shows that across the duration of the pandemic the number of people ‘temporarily away from work’ was far higher than normal and the average weekly actual hours worked were lower than normal.

**Figure 2.17: Number of workers temporarily away from work and actual hours worked, UK, 2008-2021**

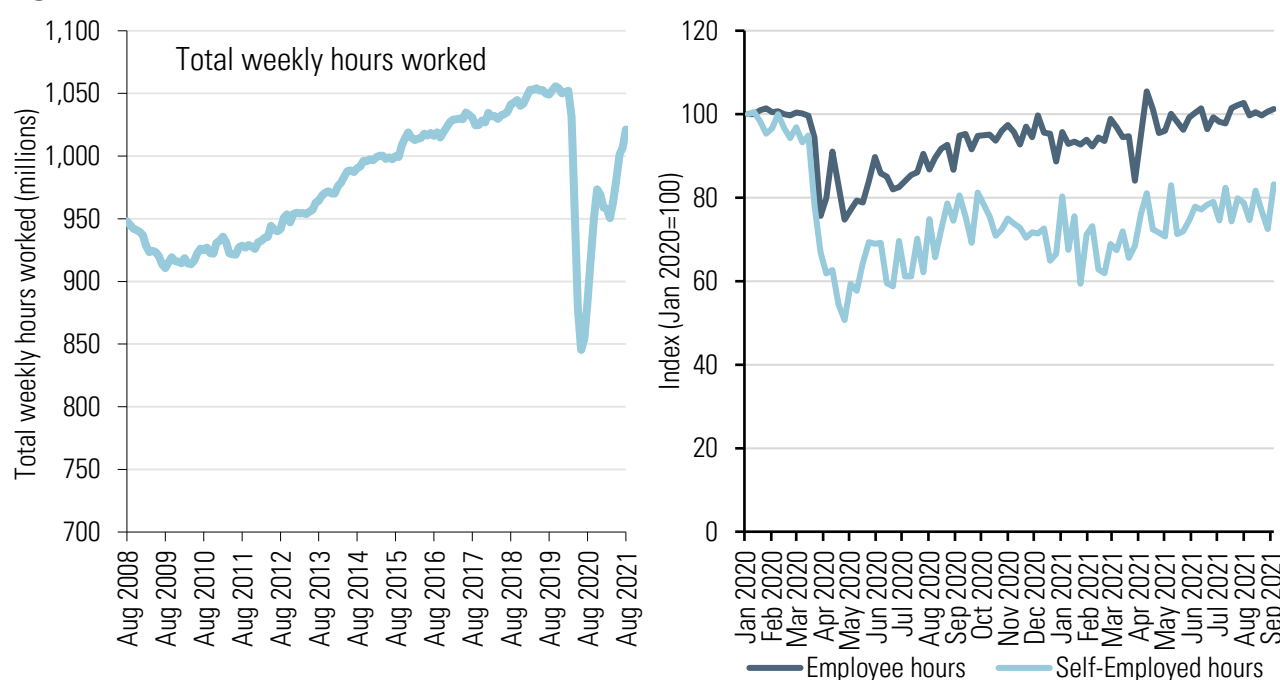


Source: LPC estimates using ONS weekly LFS data (X07), weekly, not seasonally adjusted, UK, Jan 2008-Aug 2021.

**2.46** However, these measures appear to show more of a return to normal levels in the second quarter of 2021 and continuing into the third quarter. Likewise, while the total volume of hours worked remained below their pre-pandemic levels in August 2021, closer inspection in Figure 2.18 shows this is driven by the self-employed. Total hours worked for employees recovered to pre-pandemic levels in the early summer of 2021, with self-employed hours remaining below. However, this latter finding may be flattered by the aforementioned shift from self-employee to employee status.

**2.47** Nevertheless, if the hours worked by employees have returned to normal despite significant numbers remaining on furlough this may suggest that furlough is covering other forms of absence, for example parental leave or sickness absence. If a furloughed worker believes they do not have a job to return to they may already appear in the unemployment or inactivity figures. Alternatively, they may be participating in education or have found another job already, which was permissible under the scheme.

Figure 2.18: Total hours worked, UK, 2008-2021



Source: LPC estimates using ONS LFS data: total weekly hours (YBUS), monthly, seasonally adjusted, UK, Aug 2008-Aug 2021 and X07 Table 2 SA and Table 5 SA Breakdown, weekly, seasonally adjusted, UK, Jan 2020-Sep 2021.

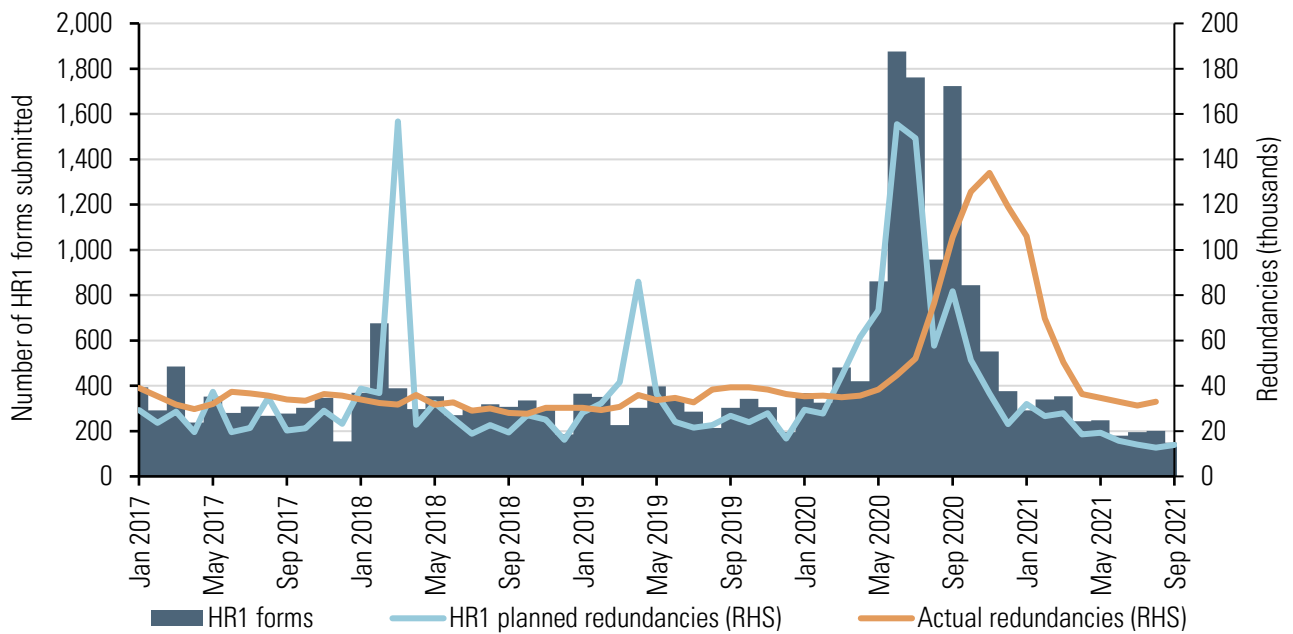
**2.48** One final aspect that might explain the discrepancy between hours worked and numbers on furlough is fraud and error. HMRC estimates the amount lost to fraud and error in 2020-21 is 8.7 per cent in CJRS, 2.5 per cent in the Self-Employment Income Support Scheme (SEISS) and 8.5 per cent in the Eat Out to Help Out scheme – some £5.8 billion against a spend of £81.2 billion. Updated fraud and error statistics for CJRS and SEISS will be produced by HMRC by the summer of 2022. This volume of fraud and error places a degree of doubt over the validity of the 1 million figure remaining on the scheme at the end and therefore the extent of any significant subsequent unemployment. We go on to look at data on planned redundancies to better understand the risks from the scheme's end.

## Redundancies

**2.49** The key risk with the CJRS is that furloughed workers are made redundant as the scheme ends, rather than returning to work or finding another job. However, around half of those still furloughed were partially furloughed, which suggests at least some demand for their labour from their employer. Secondly, firms have been making a contribution towards the wage costs for the final three months of the scheme, which is on top of the NI and auto-enrolment costs they have been covering since August 2020. It is unlikely firms would make this significant outlay on worker costs and then make their staff redundant at the end of the scheme when they have the option of ending the employment sooner and avoiding these costs.

**2.50** We can look at other sources of information to support this view. Insolvency Service HR1 data is provided by firms intending to make 20 or more staff redundant. It shows that notifications have been muted in recent months – falling to their lowest levels in two years. This contrasts with the period leading up to the first planned ending of the CJRS in the autumn of 2020. However, HR1 data is only likely to be applicable to larger firms – and we have shown from CJRS data that larger firms have already reduced their numbers of furloughed workers.

Figure 2.19: HR1 notifications and redundancies, UK, 2017-2021

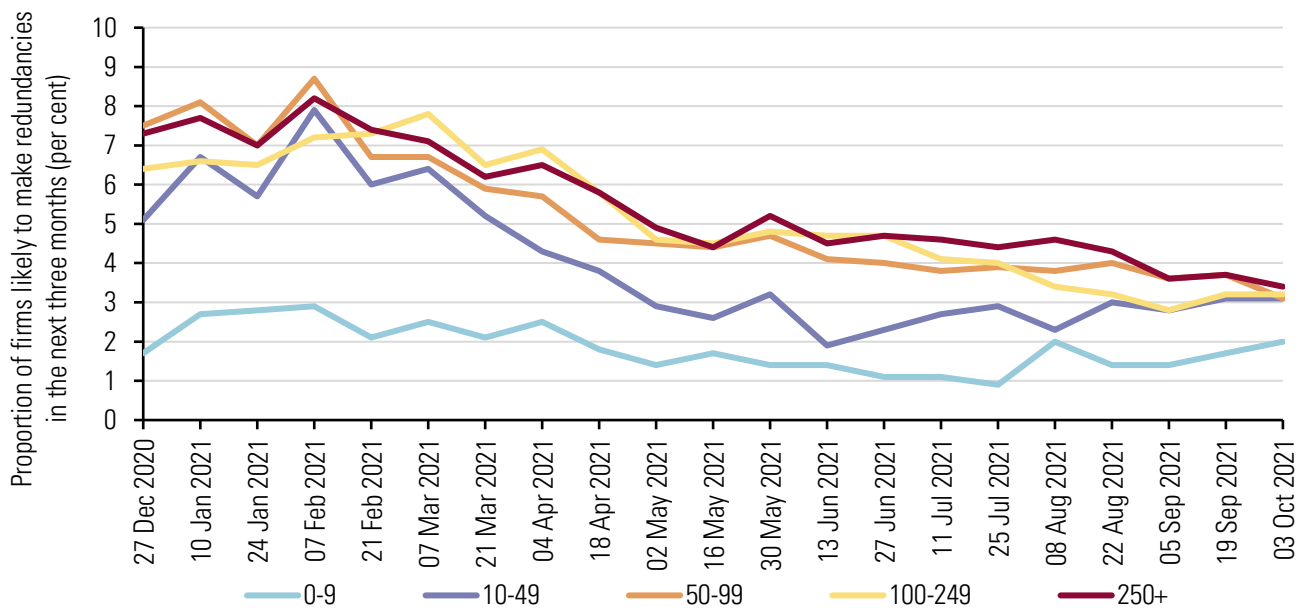


Source: LPC estimates using Insolvency Service HR1 notifications and ONS redundancy data (BEAO), not seasonally adjusted, UK, Jan 2017-Sep 2021.

Note: Actual redundancy figures shown are a monthly estimate of published three monthly figures.

**2.51** More timely firm level data from the BICS have much better coverage of smaller employers and tell a similar story. Figure 2.20 shows how redundancy expectations have dropped across 2021. Even as we neared the end of the CJRS there was little sign that firms were planning redundancies, regardless of size.

Figure 2.20: Firms redundancy expectations, by firm size, UK



Source: LPC estimates using ONS BICS Wave 40 data, UK, Dec 2020-Oct 2021.



**2.52** The CJRS has succeeded in keeping unemployment lower than it otherwise would have been – the unemployment rate stood at 4.0 per cent in February 2020 but was only 0.5 percentage points higher in August 2021. There is room for optimism about future levels of unemployment post-CJRS. This has been echoed by the Office for Budget Responsibility (OBR) who have consistently downgraded their forecasts for unemployment across the duration of the pandemic. When making our recommendations their latest available forecast from March 2021 (Office for Budget Responsibility, 2021) was for unemployment to peak at 6.5 per cent in the fourth quarter of 2021.

## Stakeholder views on employment in the pandemic

**2.53** Stakeholders told us about employment losses from the pandemic to date and the extent to which the CJRS had protected jobs. The Confederation of British Industry (CBI) told us in September 2021 they did not expect the scheme's closure to cause unemployment to rise; having gone to the trouble of furloughing them, firms would seek to bring workers back. The risk to jobs was longer-term, if demand was weak over time. The greatest concerns were geographic rather than sectoral. The return of demand in airports and surrounding areas was slow, while the shift to hybrid working would mean lower footfall in city centres. It would be much harder to persuade workers to change location than to move sector.

**2.54** The British Retail Consortium (BRC) told us that, with two-thirds of retailers using furlough, the scheme 'distorts employment figures, and the true impact of the pandemic on retail employment will crystallise starting with Q4'. They noted some employment impacts were already becoming apparent: 'half of retailers reported they had reduced hours ... 54 per cent indicated that they had reduced the number of shop floor staff over the past 12 months. This surpasses the 38 per cent figure reported last year by a significant margin'.

**2.55** UKHospitality (UKH) told us its sector had already shed large numbers of jobs which were unlikely to return. The sector's pre-pandemic headcount of 3.2 million people had already fallen by 660,000. Although a large proportion of headcount was temporary, seasonal or casual staff, around half of the fall had taken the form of direct redundancies. When UKH gave evidence in September 2021, the sector's vacancy rate was 10 per cent or 180,000 vacancies. Employment had fallen in particular parts of the sector, where demand would be slowest to return, and employment to recover, and in areas dependent on international travel: events, business conferences and city centre hotels. Some seasonal employment was likely to pick up ahead of Christmas.

**2.56** The National Hair and Beauty Federation (NHBF) shared evidence that employment numbers were down 21 per cent on 2019. Despite furlough, one in six business owners had made redundancies as a result of the pandemic and only two in five ruled out further redundancies after furlough. Sixty per cent had cut staff hours to save costs.

**2.57** Unions recognised there had been redundancies during the pandemic but pointed to the CJRS's success in protecting employment relative to previous recessions. GMB cited Bank of England and Chartered Institute of Personnel and Development (CIPD) statements that redundancies were decreasing compared to the peak of the downturn, as 'most businesses have now completed restructuring', with redundancy intentions in April 2021 at their lowest level for seven years. Unite said they received 'almost daily announcements of job losses in sectors such as manufacturing, aviation, hospitality, warehousing, retail and construction', but that overall, the pandemic had a limited impact on

jobs. They were concerned, however, about 'hidden job losses ... through short service dismissal, zero-hours and those now underemployed on precarious contracts'. In Chapter 4 we discuss worker experiences of the CRJS.

## Stakeholder views on the wider labour market

**2.58** The tightness of the labour market was a major theme in our discussions with employers this year. The CBI noted that while the nature of shortages varied by sector, there were common themes. Several sectors were reporting major shortages due to non-returning EU workers (hospitality, logistics, haulage, food processing). Sectors closed during the pandemic reported experienced employees taking second jobs while furloughed and subsequently leaving for sectors that remained open. Finally, staff shortages in logistics were having a knock-on impact in other industries. The CBI noted that while the labour market was performing better than forecast and problems with shortages were preferable to unemployment, friction in hiring remained a significant problem.

**2.59** The Federation of Small Businesses (FSB) noted many of the same underlying factors as the CBI, adding that the problem was aggravated by many employers re-opening at the same time. FSB members in Scotland told us employer caution was a factor, with employers needing experienced people to hit the ground running upon reopening. This led businesses to be cautious about who they recruited, limiting the recruitment of young workers in particular.

**2.60** In hospitality, Unite noted the growing labour shortages across the sector, with 48 per cent of hospitality workers saying they would look for work in a different sector after the pandemic. FSB members in Scotland agreed hospitality was struggling to attract staff, as other sectors were now seen as safer for a career. Whitbread described the labour market as 'extremely volatile', saying that over the summer of 2021 they had 'high numbers of applications for ... roles in our hotels, restaurants and support centre in inner city locations but extremely low numbers in coastal and affluent areas'. Recruitment for specialist roles remains difficult, 'with many potential candidates choosing to exit the hospitality industry altogether'. This was putting pressure on pay rates, forcing them to prioritise pay for specialist roles over entry-level ones.

**2.61** UKH told us that members reopening had found that one in five furloughed employees had not returned to the sector, fuelling labour shortages. There were a variety of reasons for this. Some workers had moved away from the sector permanently, influenced by uncertainty over Covid-19 restrictions and the inability to guarantee hours. They estimated that 15-20 per cent had found a job elsewhere (particularly in retail and online distribution). About half of non-returners were dislocated workers, both UK-born and migrant workers. The former group included students remaining at home and others who had moved back in with families; the latter, workers who had returned home during the pandemic, since electing not to return or affected by travel restrictions.

**2.62** The majority of the sector's issues were labour rather than skills shortages, with the pandemic disrupting the talent pipeline. There was less migrant labour, work-based training and apprenticeship pipelines had been disrupted, and young people had missed opportunities to gain experience through part-time work. There were particular issues for chefs and leadership roles relying on in-work placements.

**2.63** British Beer and Pub Association (BBPA) members in June told us about the difficulty of finding good staff for reopening, due to some workers returning to the EU and the sector being seen as less attractive and secure (worsening hospitality's career image issues). They thought workers had become risk-averse and worried about leaving a job with guaranteed furlough to the end of September. They faced particular issues attracting chefs into roles with pay of around £9.50-£10.50 per hour.

**2.64** In manufacturing, Make UK described the need for labour as critical: 'wage inflation in skilled roles is ballooning, at least in the short term, as manufacturers struggle to retain critically skilled staff'. They thought changes to EU workers' status had added to this challenge. FDF also told us that labour supply had tightened. Availability had fluctuated over the course of the pandemic but had become more serious since the reopening of hospitality. They expressed concerns around 'a shortage of some skilled workers, particularly engineers and drivers, as well as agency workers'. At oral evidence in July 2021, HGV drivers were a particular issue – this shortage, 'if not addressed, will lead to critical supply chain failures of an unprecedented level'. The Federation of Wholesale Distributors (FWD) echoed others' comments on the logistics sector telling us that recruiting and retaining staff had become more difficult. Their members had reported an increase in the use of temporary contracts as prospective staff were unwilling to join permanently. The majority of members had introduced new benefits or rewards such as staff discounts or access to well-being support.

**2.65** In agriculture, the National Farmers' Union (NFU) told us that farmers faced recruitment difficulties, particularly in finding settled/pre-settled EU workers for seasonal roles, with significant impacts on profits, costs and unharvested crops. At oral evidence, they described the lack of available labour was driving significant inflationary pressures and making the NLW less relevant for the sector. The Association of Labour Providers (ALP) described the recruitment shortfall as 'the most significant and severe shortages in a generation'. These were driving employers to reassess their recruitment and business models, in terms of pay, conditions, and access to 'hard to reach' segments of the labour market.

## Conclusions

**2.66** In stark contrast to twelve months ago the prevailing labour market story this year is one of recovery. Record numbers of vacancies led to rapid growth in RTI employment as the economy reopened, surpassing pre-pandemic job levels. Hours worked for employees rebounded and are now back to where they were at the start of the pandemic. The CJRS achieved its aim and successfully kept millions of individuals attached to their place of work, preventing large scale unemployment. Even as we neared the end of the scheme firms did not appear to be preparing to make significant redundancies.

**2.67** A degree of economic uncertainty remains however – the recovery has not been even with some sectors and locations faring better than others. High levels of vacancies remain as firms struggle to recruit in sufficient numbers from a reduced pool of applicants, putting pressure on wages. Skills mismatches will likely be seen across the economy. The pandemic has been hard for many – as we heard first-hand from employer stakeholders and workers alike.

# Chapter 3

## Who are minimum wage workers?

### Key findings

This chapter looks at the characteristics of low-paid workers, the jobs they do and where they work. First, we discuss the challenges of analysing pay data this year and our approach to resolving them. Second, we discuss the personal and job characteristics of workers paid the minimum wage. Finally, we look at the evidence on how minimum wages have affected the distribution of pay around the country.

While this year we are more confident in our estimates of coverage and median pay than last year, the presence of furloughed workers means there is more uncertainty than normal. To account for some of this uncertainty, we will present a range alongside our central estimate in most cases. Furloughed workers are paid 80-100 per cent of their usual pay. This biases down our estimates of what workers would normally be paid (without the furlough scheme). To deal with this we use three estimates of pay. In our lower estimate we use furloughed workers' reported pay, while in our upper and central estimates we adjust their reported pay up to estimate what their pay would have been in the absence of furlough.

The percentage of workers paid the minimum wage varies considerably by individual characteristics. Women are nearly 40 per cent more likely than men to be paid the National Living Wage (NLW). Ethnic minority workers are also more likely to be paid the NLW than White workers, although this is not the case for all ethnicities. Black workers and workers of Pakistani and Bangladeshi origin were more likely than White workers to be paid the minimum wage. However, a similar proportion of White workers and workers of Indian or Chinese origin are paid the minimum wage. Workers aged under 30 and over 60 are more likely to be paid the minimum wage than those aged 30-59. Research shows that raising minimum wages has reduced ethnicity and gender pay gaps.

The NLW has also reduced inequality between and within regions since its introduction. Within every region and nation in the UK, between 2015 and 2019 pay grew fastest for the lowest paying decile. Looking across areas, pay at the 10<sup>th</sup> percentile has grown faster for low-paying areas than higher paying areas.

### What can we say about pay?

**3.1** Usually, we use the Annual Survey of Hours and Earnings (ASHE) as our main source of information on pay. The ASHE takes a snapshot of 1 per cent of all workers in the PAYE (Pay as you Earn) system each April. We typically use this data source to examine the effects of previous minimum wage upratings on coverage and spillovers, to examine the state of the labour market in terms of pay, and to set the path for the National Living Wage (NLW) to achieve the target of two-thirds of median hourly pay by 2024. It is therefore critical in identifying low-paid workers and understanding their labour market circumstances.

**3.2** Last year, there were some limitations with ASHE due to the pandemic: the sample sizes were smaller than normal, and the widespread use of the Coronavirus Job Retention Scheme (CJRS) distorted measures of pay. These issues meant that we were less confident in the estimates that we would normally derive, including on coverage and bite. For the NLW path to 2024 we used ASHE 2019 as the starting point and projected forwards using Average Weekly Earnings (AWE) and pay forecasts.

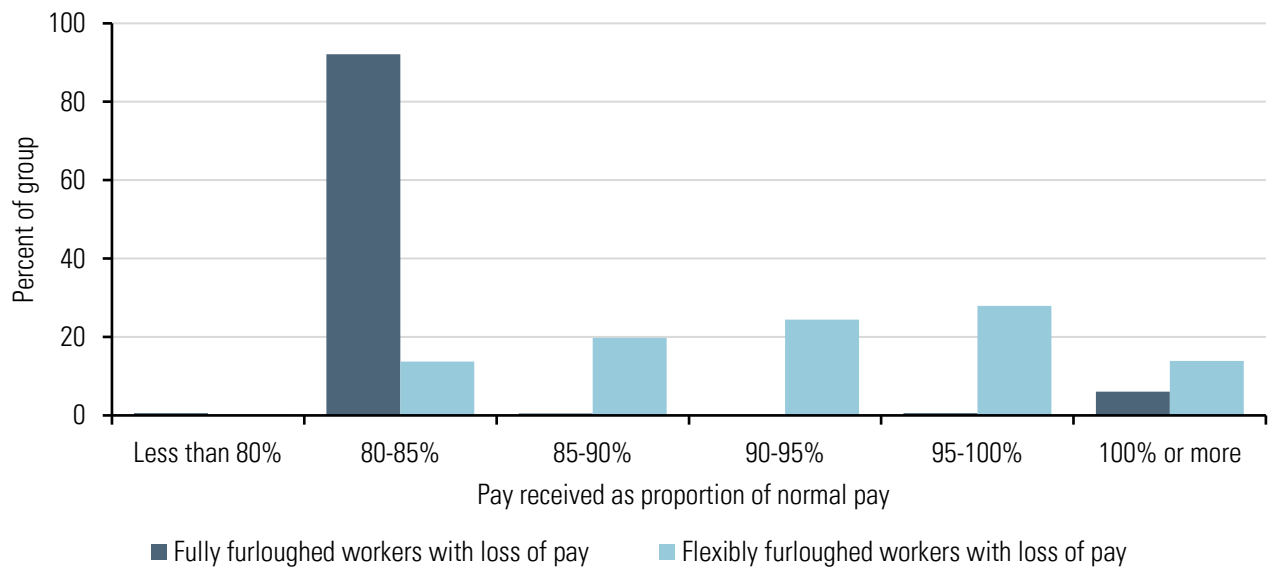
**3.3** This year, the sample size is still lower than normal – there were just over 140,000 responses compared to more than 170,000 in a typical year. Responses were less likely from certain sectors, particularly those most affected by lockdown measures, and were less likely for certain groups of workers. The survey weights are designed to account for this response bias.

**3.4** A greater concern is that furloughing still affects pay measures. The reference date for ASHE this year was 21 April, when the CJRS statistics indicated that 12.4 per cent of employments were furloughed. Workers furloughed may receive less pay than normal, as the scheme provided only 80 per cent of their normal pay up to a cap of £2,500 per month for time spent on furlough. Employers could choose to top up this pay, and some workers were on flexible furlough and therefore also receiving full pay for hours worked. Their derived pay, calculated as the total pay received in the pay period divided by the hours that they would normally work, is therefore artificially low and biases estimates of pay downwards.

**3.5** The Office for National Statistics (ONS) included an additional question in the ASHE this year that asked if a worker was furloughed. We can identify that 11.5 per cent of workers in ASHE were furloughed, which is roughly in line with published CJRS estimates. The survey also asks whether the employee earned less due to absence from work. Using this question, we can distinguish between furloughed workers with ‘no loss of pay’ – whose employers topped up their wages to normal levels – and those who were furloughed with a ‘loss of pay’. Among furloughed workers, around 50 per cent experienced a loss of pay, and the remainder had their pay topped up to normal levels by their employer. Loss of pay was more common among furloughed workers in low-paying sectors and among younger workers.

**3.6** Respondents were also asked to give additional detail in a comment box on furloughed workers, including the number of hours actually worked if they were on flexible furlough, and the percentage of pay received for hours not worked. We can use this information to estimate the ratio between the derived hourly pay figure in ASHE, and the hourly pay that furloughed workers would normally receive, as shown in Figure 3.1.

**Figure 3.1: Pay received as a proportion of normal pay, furloughed workers with loss of pay, UK, 2021**



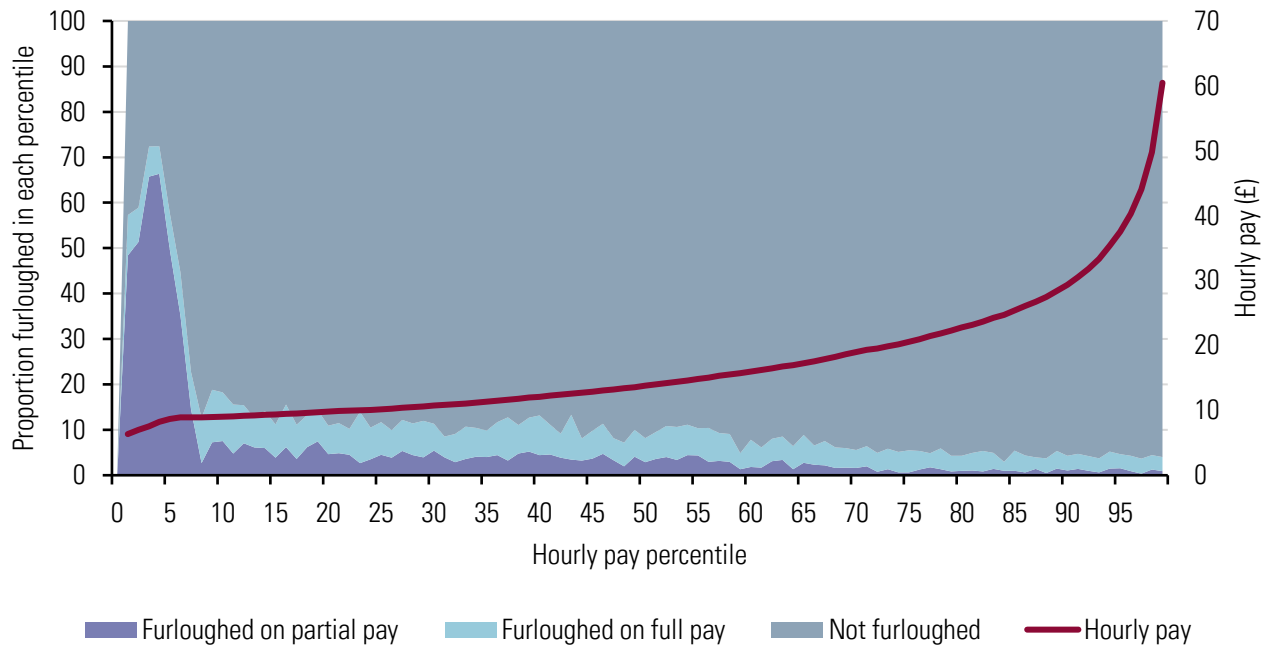
Source: LPC estimates using ASHE, standard weights, furloughed workers with loss of pay, UK, 2021.

Note: Values are derived from a comment box but there are some issues with data quality as described in Appendix 3.

**3.7** Low-paid workers were more likely to be furloughed and experience a loss of pay (see Figure 3.2). If we were to exclude these workers from our analysis, we would remove a large part of the lower tail of the distribution and estimates of median pay would be biased upwards substantially. Including these workers biases median pay downwards, but by a lesser extent. The additional questions allow us to make assumptions about these workers' pay. Throughout our analysis we therefore present a range of estimates for what pay would be in the absence of furlough:

- A lower estimate, where furloughed workers with loss of pay are included without adjustment. The ONS uses this approach in its statistics. Our lower estimate for median hourly pay for workers aged 23 and over is £14.37.
- An upper estimate, where furloughed workers with loss of pay are assumed to receive 80 per cent of their usual pay, and so we adjust their pay by a factor of 1.25. We would expect most furloughed workers to receive somewhere between 80 per cent and 100 per cent of their normal pay, and so this estimate allows us to look at the extreme case where all furloughed workers with loss of pay are at the bottom of this range (and so their pay must be adjusted up more). Our upper estimate for median hourly pay for workers aged 23 and over is £14.48.
- A central estimate, in which we adjust the pay for furloughed workers with loss of pay using the additional questions in ASHE 2021 on the hours worked and pay received by furloughed workers. We use these questions to determine the ratio between each worker's measured pay and what they would normally receive, as described in paragraph 3.6, and then adjust their pay upwards accordingly. Our central estimate for median hourly pay for workers aged 23 and over is £14.42.

**Figure 3.2: Proportion of workers furloughed with and without loss of pay, by hourly pay percentile, UK, 2021**



Source: LPC estimates using ASHE, standard weights, including furloughed workers, UK, 2021.

**3.8** Overall, we have more confidence in the estimates of pay than last year, both because furloughed workers make up a smaller proportion of the sample and so estimates of pay are less biased, and because these additional questions allow us to make assumptions about what the pay of furloughed workers would normally be. Presenting a range allows us to indicate the uncertainty that exists due to the impact that the furlough scheme has had on pay. The range of estimates for median hourly pay for the populations eligible for each of the NMW rates is presented in Table 3.1.

**Table 3.1: Estimates for median hourly pay, by rate population, UK**

Rate population	Central estimate	Lower estimate	Upper estimate
16-17	£6.73	£6.60	£6.79
18-20	£9.00	£8.92	£9.00
21-22	£10.00	£9.87	£10.00
NLW (23+)	£14.42	£14.37	£14.48
Apprentice Rate	£7.47	£7.21	£7.49

Source: LPC estimates using ASHE, standard weights, including furloughed workers, UK, 2021.

Note: Central, lower and upper estimates are calculated as described in paragraph 3.7.

## Characteristics of low-paid workers and jobs

**3.9** In this section, we explore the characteristics of minimum wage workers. We look at who is more likely to be low paid, where they work and what kind of jobs they do. This year's remit asks us to give particular attention to how the minimum wage impacts workers with protected characteristics, and how this varies around the country. In this section, we explore how pay varies between these groups. We also look at the relationship between hourly and weekly low pay.

## Coverage

**3.10** We define coverage as the number of workers paid up to five pence above the respective rate of the minimum wage. In essence, it is the number of minimum wage workers. However, it is important to remember that the minimum wage affects more than just this group – it has spillover effects further up the wage distribution, which we discuss later (see page 91 onwards). In this section we look at how coverage varies across time, geographies, and a range of personal and job characteristics.

**3.11** Table 3.2 shows the headline total number of workers covered by the minimum wage. We estimate that in total 1.5-2.1 million workers are covered by the minimum wage. The number of workers aged 25 and over who were paid at or below the minimum wage jumped in 2016 following the introduction of the NLW. Between 2016 and 2019 the number of workers paid the minimum wage remained remarkably stable despite significant increases in each of the rates.

**3.12** We estimate that coverage fell from 2019 to 2021, however there is significant uncertainty around our estimates for 2021. Using the standard derived hourly pay without adjustment, workers who were earning up to a quarter more than the minimum wage could appear to be minimum wage workers when furloughed. Table 3.2 shows how our estimate of coverage changes based on the pay estimates we use. If we make no adjustments to furloughed workers' pay (the lower pay estimates), then coverage has remained stable. If we adjust furloughed workers' pay (the central and upper estimates), then coverage has fallen.

**3.13** The reduction in coverage is driven by workers aged over 25, with two factors at work. Firstly, employment was lower than pre-pandemic levels in April 2021, especially in low-paying occupations. It has subsequently recovered somewhat, and some of these new jobs are likely to be low-paid, particularly as hospitality and leisure reopened over the spring and summer. Secondly, some firms rounded pay up from £8.91 (the NLW from April 2021) to £9. We discuss this effect, along with more detail on coverage for this group, in paragraphs 5.40 to 5.43.

**Table 3.2: Coverage of minimum wage workers, UK, 2015-2021**

Age group/ minimum wage rate	2015	2017	2019	2021 central pay estimate	2021 lower pay estimate	2021 upper pay estimate
					thousands	
25+	1,029	1,612	1,621	1,289	1,618	1,151
23-24	106	63	57	128	151	114
21-22	151	103	97	94	127	82
18-20	122	116	114	132	171	119
16-17	30	33	36	29	37	26
Apprentice Rate	31	32	31	19	23	18
Total	1,469	1,958	1,956	1,691	2,126	1,510

Source: LPC estimates using ASHE, SOC2010 methodology, low pay weights including furloughed workers, UK, 2015-2021.

Notes:

- Data exclude first year apprentices.
- In 2015 the main adult rate minimum wage the main adult rate applied to all workers aged 21 and over.
- From 2016 to 2020, the NLW applied to workers aged 25 and over and an additional youth rate for 21-24 year olds was introduced. From 2021 the NLW applied to workers aged 23 and over and a new rate for 21-22 year olds created.



- d. Lower pay estimates lead to a greater number of workers paid at or under the minimum wage. This means coverage is higher in the lower pay scenario than in the upper pay scenario.

**3.14** A higher percentage of workers aged under 25 are paid the minimum wage. Table 3.3 shows that 4.5-6.4 per cent of workers aged over 25 are paid the NLW, compared with 11.6-16.3 per cent of younger workers paid the relevant National Minimum Wage (NMW) rate. Younger workers tend to work in low-paying occupations, particularly in hospitality and retail, and so are more likely to receive the relevant NMW rate.

**3.15** Coverage for 23 and 24 year olds increased this year as they became eligible for the NLW rather than the previous 21-24 Year Old Rate. In 2019 only 5.2 per cent of 23-24 year olds were paid the 21-24 Year Old Rate, but in 2021 10.5-13.9 per cent were paid the NLW. Some firms will have already been paying 23-24 year olds the NLW and some firms have increased pay for these workers in line with the change in rate. We discuss outcomes for 23-24 year olds and other workers aged under 25 in more detail in Chapter 6.

**Table 3.3: Percentage of workers covered by minimum wage, UK, 2015-2021**

Age group / minimum wage rate	2015	2017	2019	2021 central pay estimate	2021 lower pay estimate	2021 upper pay estimate
					per cent	
25+	4.3	6.6	6.5	5.1	6.4	4.5
23-24	9.5	5.7	5.2	11.7	13.9	10.5
21-22	16.3	11.7	10.8	11.3	15.3	9.9
18-20	12.0	11.9	11.9	15.5	20.0	14.0
16-17	10.1	12.2	12.4	14.6	18.3	13.0
Apprentice Rate	14.9	16.3	16.1	13.9	16.1	13.0
Total	5.3	7.1	6.9	5.9	7.5	5.3

Source: LPC estimates using ASHE 2010 methodology, low pay weights including furloughed workers, UK, 2015-2021.

Notes:

- Data exclude first year apprentices.
- In 2015 the main adult rate minimum wage the main adult rate applied to all workers aged 21 and over.
- From 2016 to 2020, the NLW applied to workers aged 25 and over and an additional youth rate for 21-24 year olds was introduced. From 2021 the NLW applied to workers aged 23 and over and a new rate for 21-22 year olds created.

**3.16** Minimum wage workers are concentrated in a relatively small number of occupations. We have defined a group of low-paying occupations, based on the proportion of workers who are low-paid (see Appendix 3). In the following analysis, we focus on coverage of NLW workers, as coverage including NMW workers can be distorted by sectors and groups that have high numbers of young people who are not technically covered but are still paid within the minimum wage structure. Nearly 80 per cent of NLW workers work in these occupations, which make up approximately a quarter of total employment. Between 14.4 and 20.0 per cent of workers in these occupations are paid the NLW, compared with only 1.5 to 2.1 per cent of workers in other occupations. Coverage is highest in occupations relating to hospitality and hair and beauty.

**Table 3.4: NLW coverage by low-paying occupation, employees aged 23 and over, UK, 2021**

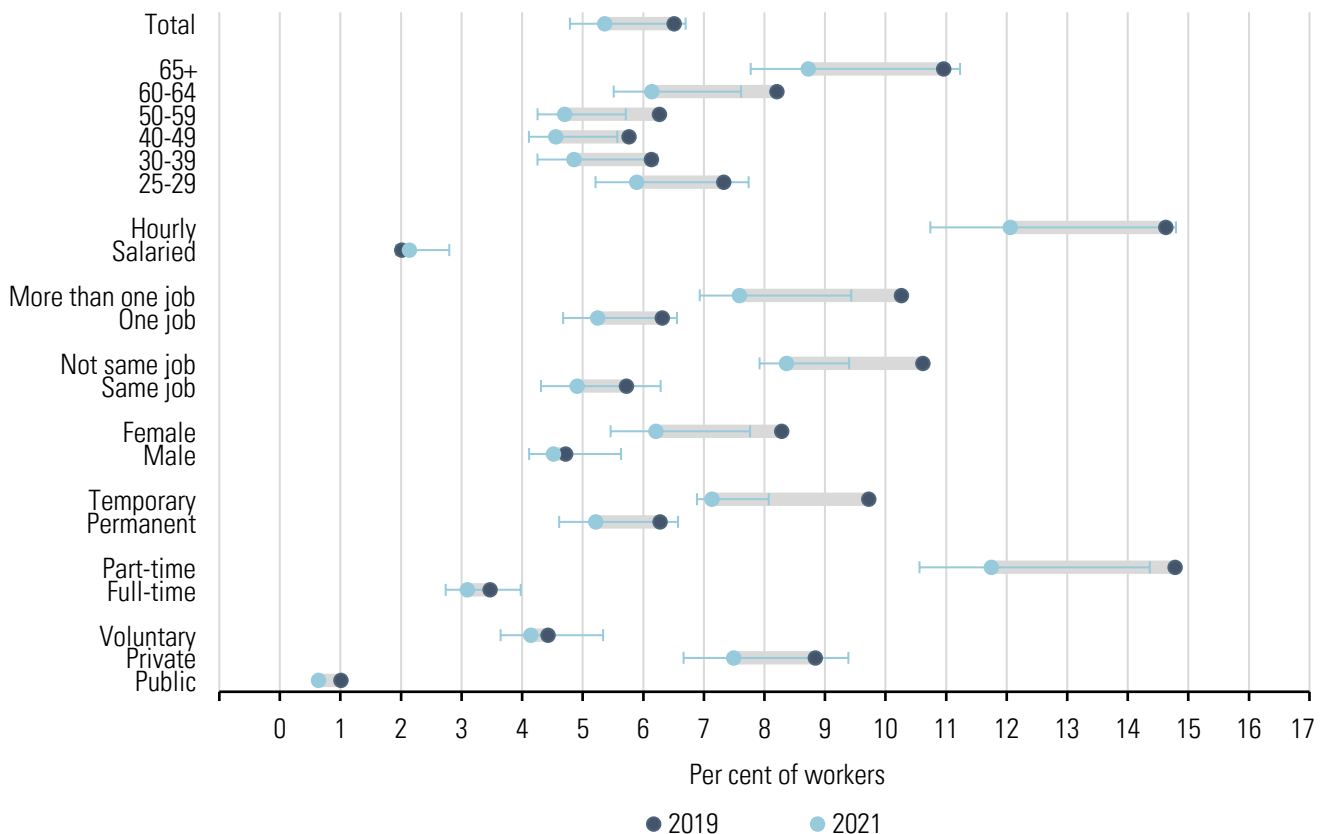
Occupation	Number			Share of employees			Share of all NLW workers
	Central pay estimate	Lower pay estimate	Upper pay estimate thousands	Central pay estimate	Lower pay estimate	Upper pay estimate per cent	Central pay estimate per cent
Agriculture	16	16	15	11.2	11.8	11.0	1.1
Call centres	7	8	7	13.9	15.4	12.9	0.5
Childcare	40	43	37	12.7	13.6	11.6	2.8
Cleaning and maintenance	176	212	159	23.6	28.4	21.3	12.4
Food processing	44	48	42	15.0	16.6	14.4	3.1
Hair and beauty	25	38	15	34.4	51.2	21.0	1.8
Hospitality	233	318	192	33.6	45.8	27.7	16.5
Leisure	24	41	19	15.0	26.0	11.7	1.7
Non-food processing	41	47	38	12.2	13.9	11.4	2.9
Office work	48	66	41	10.7	14.7	9.1	3.4
Retail	239	287	212	14.7	17.6	13.0	16.9
Security and enforcement	10	14	10	8.3	11.4	8.0	0.7
Social care	70	72	69	8.9	9.1	8.8	4.9
Storage	55	63	51	10.8	12.6	10.2	3.9
Textiles	9	11	7	26.3	31.1	21.2	0.6
Transport	62	70	58	14.4	16.3	13.5	4.4
All low-paying occupations	1,099	1,355	973	16.2	20.0	14.4	77.6
Non low-paying occupations	318	414	291	1.6	2.1	1.5	22.4

Source: LPC analysis using ASHE, SOC2010 methodology, low pay weights including furloughed workers, employees aged 23 and over, UK, 2021.

**3.17** Figure 3.3 shows that the proportion of workers paid the NLW varies across job characteristics. Workers paid hourly are approximately six times more likely to be NLW workers than their salaried counterparts. Part-time workers are almost four times more likely than full-time workers to be paid the NLW. Workers who have switched jobs in the last year are also more likely to be paid the NLW than other workers. This reflects the more casual nature of low-paying jobs. Around 90 per cent of NLW workers are employed in the private sector rather than the public or voluntary sector; only 64 percent of employees are employed in the private sector. Although in some cases, such as social care or childcare, they work in private sector roles which are dependent on government funding.

**3.18** Figure 3.3 also shows significant variation based on worker characteristics. Workers aged under 30 and over 60 are more likely than the middle aged groups to be paid the NLW. Women are also much more likely to be paid the NLW than men. Around 5.5-7.8 per cent of women are paid the NLW, compared with only 4.1-5.6 per cent of men. Women are more likely to work part-time and in industries where NLW work is prevalent.

**Figure 3.3: Proportion of eligible workers paid the NLW, by job and worker characteristics, UK, 2019-2021**



Source: LPC analysis of ASHE, low pay weights including furloughed workers, UK, 2019-2021.

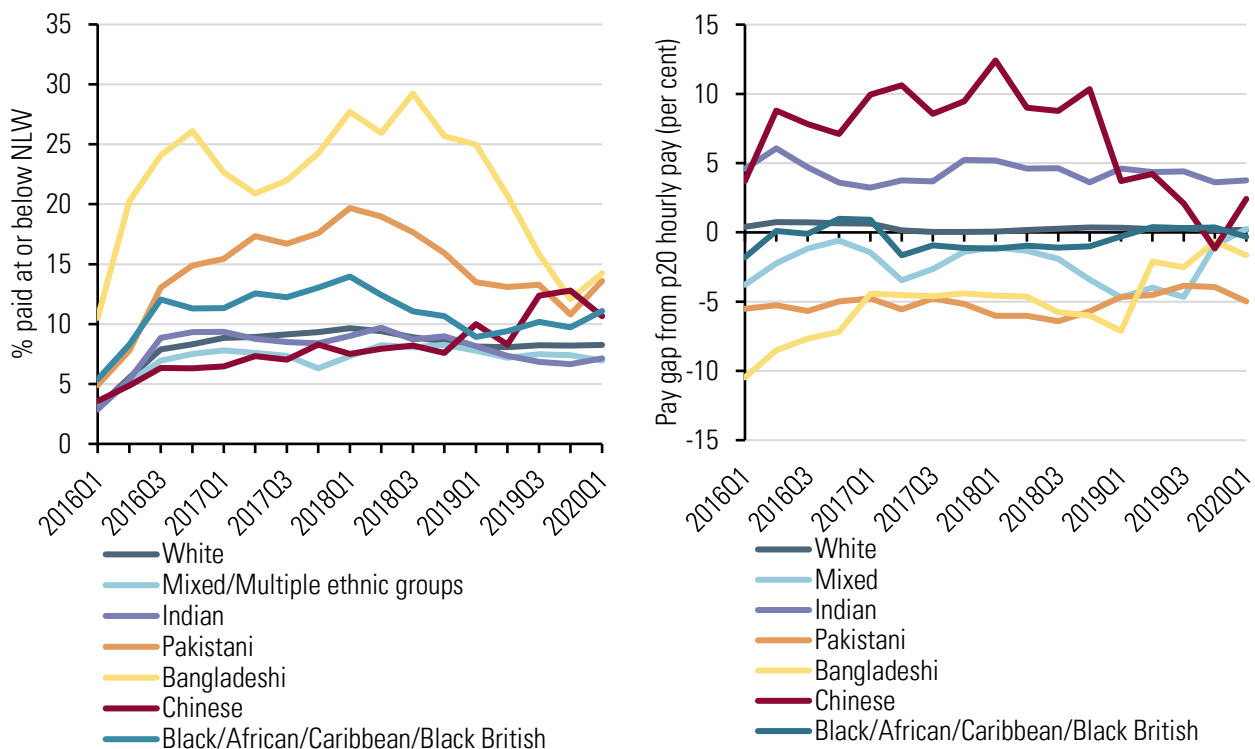
Notes:

- Includes workers over 25 for 2019 and workers over 23 for 2021.
- Uses central estimate for 2021, upper and lower 2021 estimates shown using error bars.

**3.19** We have limited information on worker characteristics in ASHE, our main source of pay data. The Labour Force Survey (LFS) has a broader range of characteristics but the data on pay and hours tend to be less reliable than in ASHE. In the following analysis, we use an imputation methodology to estimate hourly pay for workers that do not have a stated hourly pay to estimate coverage of the NLW. It is less robust than ASHE and produces higher rates of coverage, and sample sizes are small for some groups of workers. However, it can be useful in identifying relative differences within and across chosen characteristics and for looking at changes over time. We look over the period from the introduction of the NLW in 2016 to immediately before the start of the pandemic in 2020 so that we can assess the impact of the NLW rather than pandemic effects.

**3.20** Figure 3.4 shows how coverage by ethnicity has changed over the lifetime of the NLW. When the NLW was first introduced, workers of Bangladeshi ethnicity were most likely to be paid at or below the new rate, followed by those of Pakistani ethnicity. Meanwhile, workers of Indian ethnicity were least likely to be covered. The right panel of Figure 3.6 shows the hourly pay gap at the second decile by ethnicity since 2016. Workers of Indian or Chinese ethnicity are likely to have higher hourly pay, while workers of Bangladeshi and Pakistani ethnicity tend to have the lowest hourly pay. However, the pay gap between these groups has been narrowing. In the first quarter of 2020, the range of hourly pay at the second decile was 8.7 per cent, compared with 15.1 per cent in the first quarter of 2016.

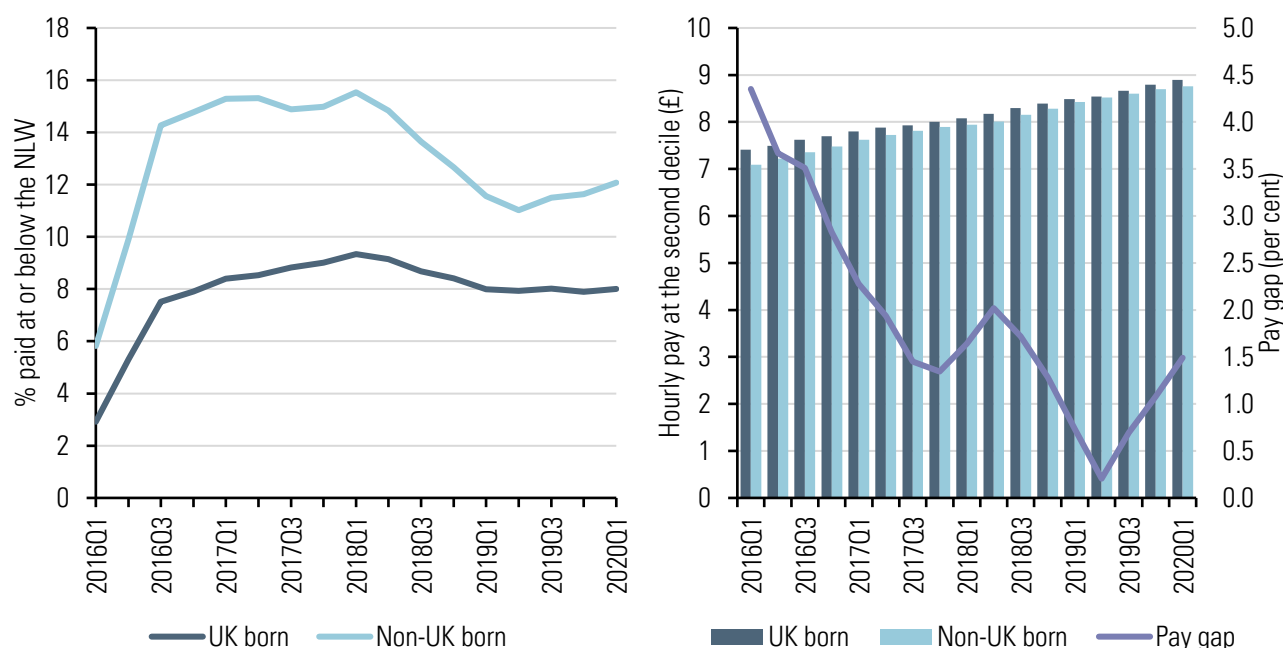
**Figure 3.4: Coverage of NLW by ethnicity and pay gap at the second decile, UK, Q1 2016-Q1 2020**



Source: LPC estimates using LFS microdata, imputed wages, quarterly, income weights, not seasonally adjusted, UK, 2016 Q1-2020 Q1.

**3.21** Similarly, Figure 3.5 shows how coverage of the NLW has changed for workers by country of birth. Workers born outside the UK are more likely to be paid at or below the NLW, but the proportion covered by the NLW has fallen since its introduction. The hourly pay gap at the second decile has narrowed from 4.4 per cent in 2016 to 1.5 per cent in 2020.

**Figure 3.5: Coverage of NLW by country of birth and pay gap at the second decile, UK, Q1 2016-Q1 2020**



Source: LPC estimates using LFS microdata, imputed wages, quarterly, income weights, not seasonally adjusted, UK, 2016 Q1-2020 Q1.

**3.22** Research evidence has generally found that the minimum wage has helped to close the pay gap between groups of workers. Deroncourt and Montialoux (2020) found that the minimum wage had helped to close the earnings difference between black and white workers in the US. Amadzarif, Angeli, Haldane, and Zemaityte (2020) investigated gender and ethnic pay gaps using the LFS in the UK and found clear evidence that minimum wage legislation appears to have contributed significantly to shrinking the gender pay gap among lower-wage workers. They found that each £1 increase in the minimum wage on average closed the gender pay gap by 1 per cent. Clark and Nolan (2021) used the LFS to look at the changing distribution of the male ethnic wage gap in Great Britain. They found that the introduction and uprating of the NMW and NLW has contributed to a narrowing of the pay gap at the lower end. Datta, Machin, and McKnight (2021) used company payroll data and found that a higher wage floor can go some way towards reducing the ethnicity wage gap within establishments. This latter research was commissioned for this report and is summarised in Appendix 2.

**3.23** While workers with certain protected characteristics are more likely to be paid the minimum wage, this evidence suggests that the increases in the NLW and NMW have helped to raise their pay and close hourly wage gaps. These positive wage effects have largely happened without any negative employment or hours effects, which we discuss in more detail in Chapter 5.

## Stakeholder evidence on low pay and protected characteristics

**3.24** Several groups – both employer and worker representatives – responded to our consultation regarding the impact of the NLW on groups with protected characteristics. Employer groups tended to focus on the over-representation of women and ethnic minorities both within specific industries and among low-paid workers in general and the benefits of the NLW in this respect.

**3.25** Several groups from the care sector noted that the care workforce was predominantly female; the Home Care Association (formerly UK Homecare Association (UKHCA)) told us that around 84 per cent of homecare workers are women, and the average worker was 43 years old. The National Hair and Beauty Federation (NHBF) provided data showing 88 per cent of the hair and beauty workforce and 83 per cent of business-owners were women, with its membership also more heavily represented in deprived areas. In addition, they told us a greater than average proportion of the sector are neurodiverse, with some form of dyslexia, attention deficit or other form of diversity.

**3.26** The Local Government Association (LGA) noted the local government workforce is approximately 75 per cent female and that proportion is even greater at the lower end of the pay scales. Of those earning less than £21,000 (FTE salary), 95 per cent are women. The Scottish Grocers' Federation (SGF) told us that in convenience retail, women make up the significant majority (66 per cent) of the workforce. Make UK noted that, while women and ethnic minority groups were underrepresented in the manufacturing sector as a whole, they were more likely to occupy admin and clerical roles closer to the NLW.

**3.27** Responses from unions noted this over-representation but called attention to the limitations of the minimum wage in addressing it, and the other disadvantages found alongside it. Unite's submission recognised 'the positive role of the level of the NMW in addressing pay inequality gaps' but they remained concerned about 'the discrimination and lack of progression of BAME workers', who were 'on average more likely to be trapped in temporary, low paid and insecure work than their White counterparts'. Unite called for mandatory ethnicity pay gap reporting. They told us women 'are more likely to be trapped in lower-paid work and to suffer unequal pay gaps, poverty and income loss from austerity'. This occupational segregation meant that 'the benefits of having more women in employment are being outweighed by the poor quality and low pay of the jobs they largely occupy'. They also reported high levels of sexual discrimination and harassment in low-paid sectors, particularly hospitality – a point echoed in several calls with its members this year.

**3.28** Usdaw's evidence also focused on the systematic disadvantage experienced by women and ethnic minority workers. It noted that 'women are over-represented in low-paid jobs' and lose out further due to spending more time on unpaid domestic work and caring responsibilities. It shared survey data showing that two-thirds of working mothers who had to take time off work to look after a child due to the pandemic lost pay as a result and 49 per cent of working mothers had been financially affected as a result of home schooling. Its survey also found that black workers were significantly more likely than average to be worried about paying monthly bills (52 per cent compared with 41 per cent) and future job security (64 per cent compared with 46 per cent). This reflected wider findings that black workers were overrepresented in low-paid, insecure work and faced greater barriers to participation and progression. Usdaw also stated its support for mandatory ethnicity pay gap reporting.

**3.29** The Scottish Women's Convention (SWC) told us the pandemic had exacerbated existing inequalities, in part as a consequence of the over-representation of women, especially young women, in badly affected service sectors. They noted these women had been worst hit by income losses, with incomes dropping below the NMW/NLW, while women with children were at heightened risk of job loss due to a lack of childcare and adequate employment rights. 'Not enough is being done to remedy the engrained gendered division of labour that means sectors where women predominate are chronically undervalued.' Citizens Advice Scotland (CAS) noted NLW increases were positive for women, ethnic minorities and young people as these groups were likelier to be in lower-paid work.

**3.30** A submission from the Women's Budget Group noted that women were more likely to be in insecure work and that limited opportunities to work longer hours contributed to in-work poverty. Pre-pandemic, women made up the vast majority of those employed part-time (74 per cent of all part-time workers) and there were twice as many women as men in the bottom 10 per cent of earners. Certain groups, they told us, were at greater risk of insecurity: workers with disabilities, workers from an ethnic minority background, single parents and families with children.

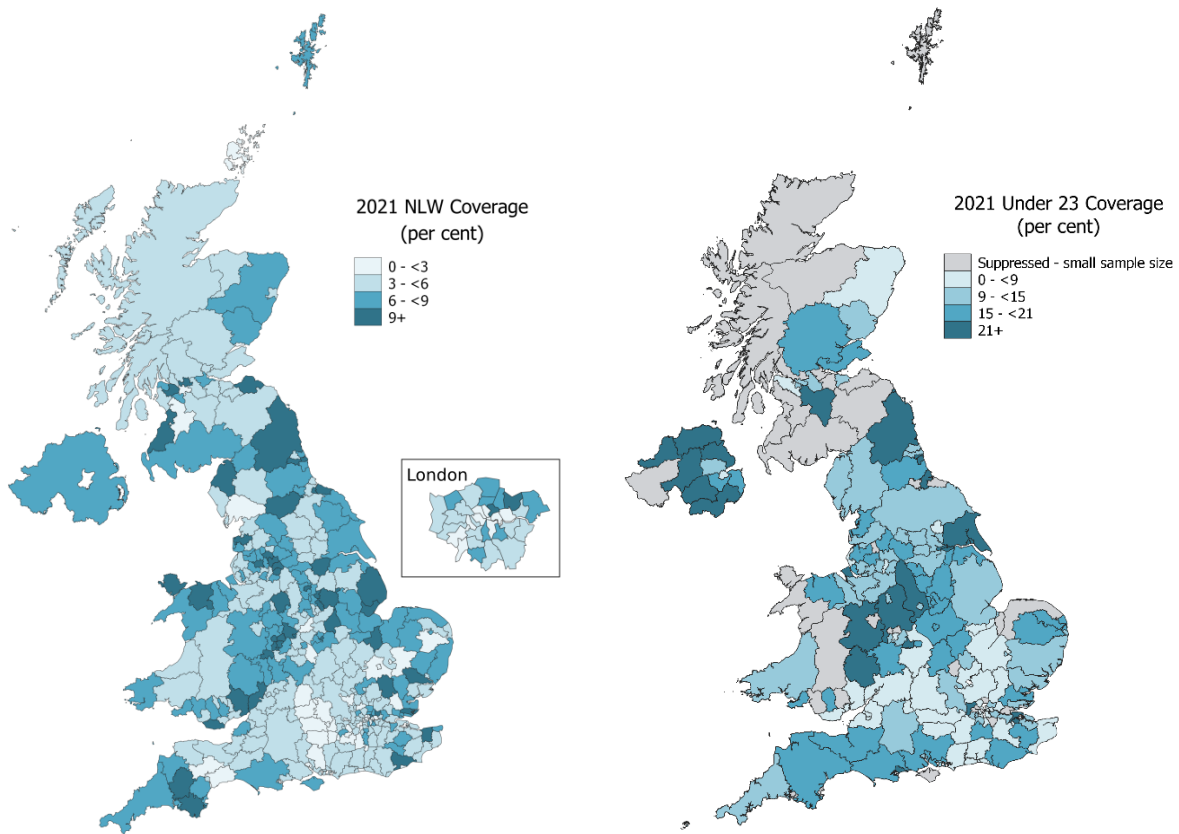
**3.31** In a meeting with Disability Rights UK members, we heard support for NLW and NMW increases, in addition a need for more targeted support to ensure disabled workers were not left behind. They told us about the persistent employment gap for disabled workers – more or less static for 15-20 years – but the common view was that the minimum wage was not the main factor affecting people's entry into work. We find that the gap in employment rates between disabled and non-disabled workers has decreased slightly since 2015 from 39 percentage points to 37 percentage points (see Table 5.1 on page 949494). Progression was a particular problem mentioned – 'a lot of disabled young people are in a low-paid job and they get stuck there because they're scared to leave, there's no incentive to move on... disabled people are made to feel that they should be grateful to have a job'. They shared evidence from Citizens' Advice that disabled people have been disproportionately affected by reductions in hours and redundancies.

## Where do low-paid workers live and work?

**3.32** As well as varying by the characteristics of workers, coverage also varies geographically. Figure 3.6 shows how the proportion of workers covered by the minimum wage rates varies by local authority and NUTS3 region, as measured in ASHE 2021. Local authorities in the South West and North East tend to have the highest proportion of workers who are covered by the NLW, while coverage rates are lower in the South East. For younger workers, coverage is highest in Northern Ireland and the Midlands.

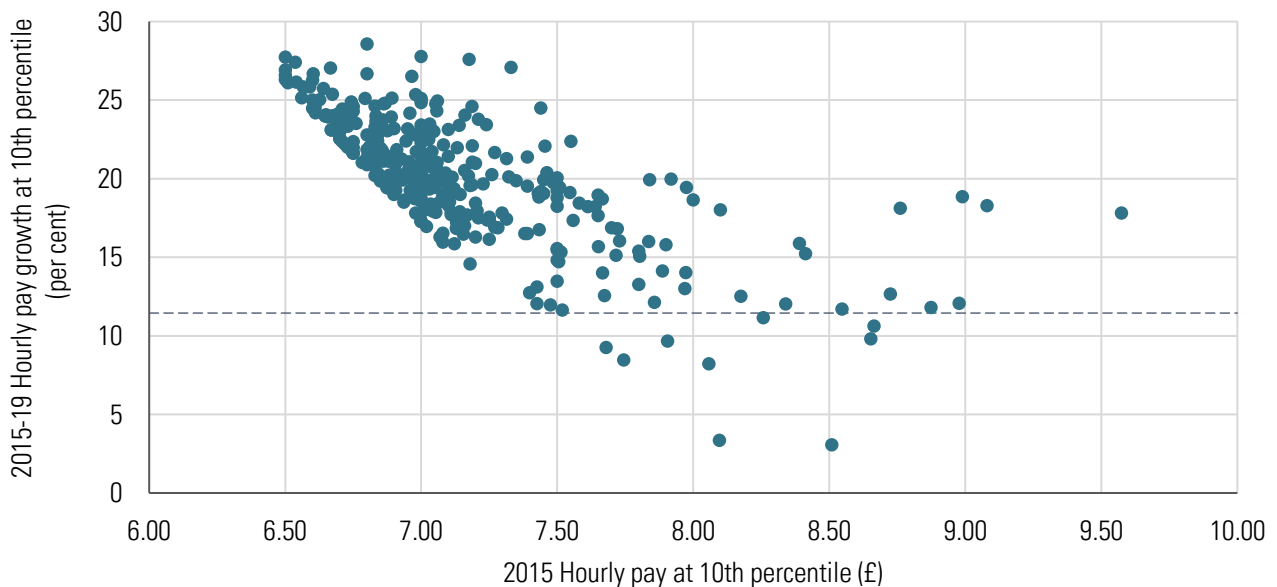
**3.33** Pay varies from place to place, but the minimum wage does not, so when the NLW was introduced it pushed up pay more in some areas than in others. Workers in parts of the country where pay is the lowest (the 10<sup>th</sup> percentile earned around £6.50 in 2015) saw their pay rise by over 25 per cent, more than twice the average increase. This meant that the NLW reduced pay inequality for low-paid workers between areas.

**Figure 3.6: NLW coverage by local authority (23+) and NMW coverage by NUTS3 region (workers under 23), UK, 2021**



Source: LPC analysis of ASHE, low pay weights including furloughed workers, central pay estimates, UK, 2021.  
 Note: Northern Ireland data is not disaggregated in local authority data. Based on workplace location.

**Figure 3.7: Hourly pay growth at the 10<sup>th</sup> percentile, by 2015 hourly pay at the 10<sup>th</sup> percentile for each local authority, UK, 2015-2019**

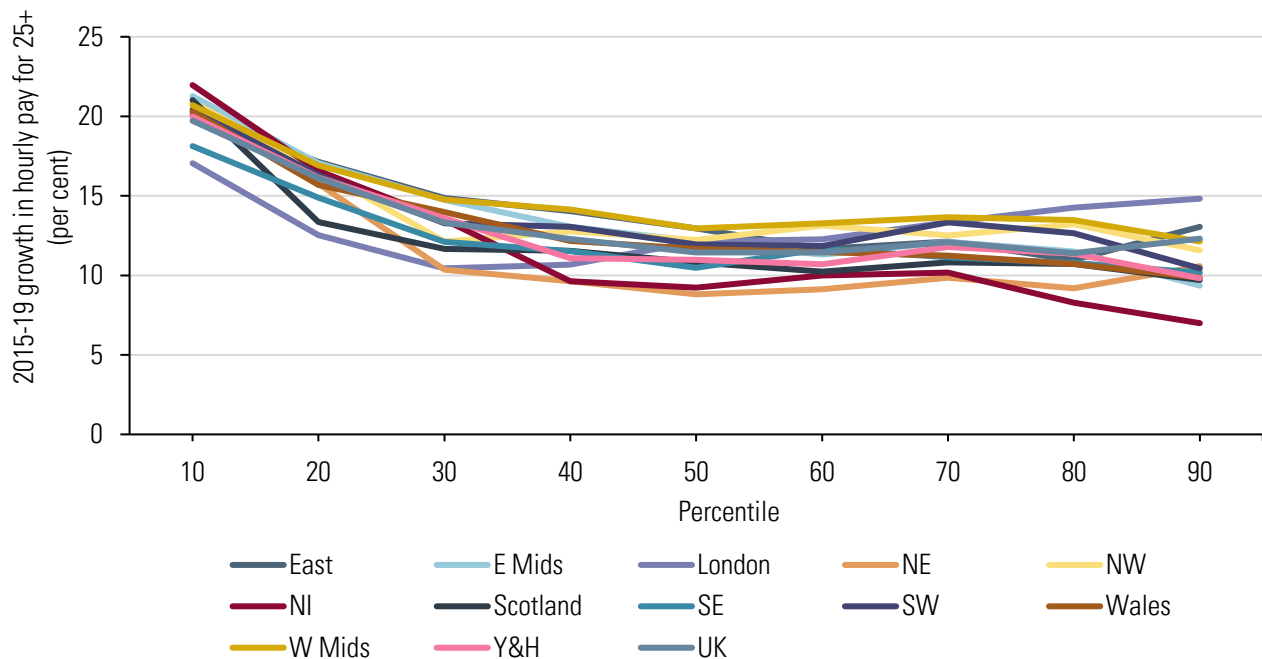


Source: LPC analysis using ASHE, standard weights, UK, 2015-2019.



**3.34** Over the four years after the NLW was introduced, the hourly pay of the lowest-paid workers (at the 10<sup>th</sup> percentile) rose faster than the average in each and every nation and region of the UK. This includes high-paying regions like London and the South East, as shown in Figure 3.8. This means that both within and across each region, hourly pay inequality reduced over the NLW period. This differs from the trend between 2011 and 2015, where pay growth tended to be faster for lower-paid workers but the relationship varied more by region. This suggests that the NLW caused this reduction in pay inequality between and within regions. It is in line with previous evidence on the effect of minimum wages on wage inequality. (See Ahlfeldt, Roth, and Seidel (2018); Avram and Harkness (2019a); and (Butcher, Dickens, and Manning (2012)). We discuss evidence on the employment effects of the minimum wage rates, and how these vary by local area, in Chapters 5 and 6.

**Figure 3.8: Hourly pay growth by decile for region and country of the UK, 2015-19**

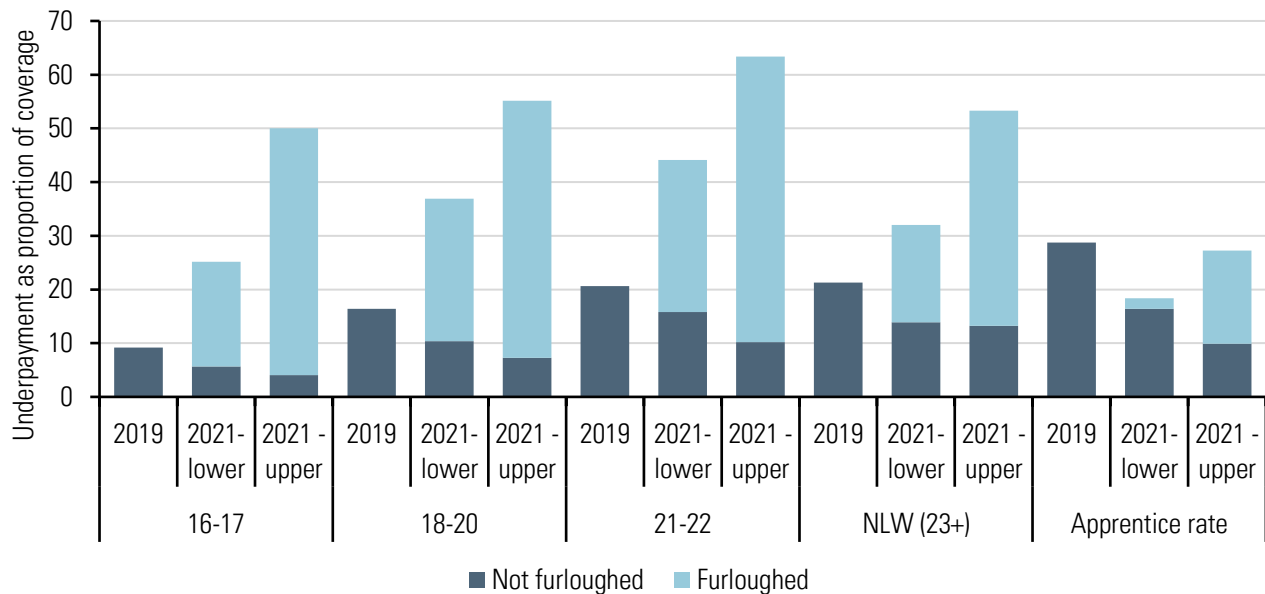


Source: LPC analysis using ASHE, standard weights, UK, 2015-2019.

## Underpayment

**3.35** While ASHE this year allows some analysis of coverage, we have less confidence in measures of underpayment. Figure 3.9 shows that underpayment as a proportion of coverage has increased sharply since 2019, but most of the people who appear to be underpaid are furloughed workers whose pay is artificially low. Even when adjusted to account for the impact of furlough, their pay is in many cases based on their wages in March 2020, before the two most recent upratings. Although these workers were paid less than they would have been if they had not been furloughed, this does not count as non-compliance as they were not working the hours in which they were furloughed. We would expect these high underpayment rates to fall back after the end of the CJRS. We will explore underpayment and non-compliance in more detail in a forthcoming report but some initial stakeholder evidence is given below.

**Figure 3.9: Underpayment of the minimum wage rates as a proportion of coverage, by rate population and furlough status, UK, 2019-2021**



Source: LPC estimates using ASHE, low pay weights, including furloughed workers, UK, 2019-2021.

#### Why do so few workers report underpayment?

A notable feature of the early stages of the pandemic was the fall in workers reporting underpayment (Low Pay Commission, 2021). Groups responding to our consultation this year reflected on the possible reasons for this. One factor was that new problems arising from the pandemic had been more salient than minimum wage underpayment. Citizens Advice told us that while underpayment-related enquiries had fallen, new issues had arisen. Furloughed workers were unsure if employers were allowed to pay them below the minimum wage while on furlough or if they would receive increases in the NLW/NMW. Workers with irregular hours also sought advice on how to calculate their entitlement. In any case, minimum wage underpayment was rarely separate from other problems: Citizens Advice had seen evidence of 'intentional non-compliance and negligent employers ... with poor and unfair practices causing distress and hardship for clients'. Citizens Advice Scotland also told us 'some employers have used the pandemic as a cover for illegal employment practices'. These included examples of unfair dismissals, employers not following correct redundancy processes and older workers who were let go and replaced. Unite echoed this picture, telling us that compliance issues had become more common during the pandemic, singling out apparent abuses of furlough by employers.

Several respondents shared views on recent LPC recommendations around barriers to worker complaints. The SWC told us many women did not know their rights at work and those who did were unlikely to speak out through fear of losing their job: 'a job earning less than the minimum wage is still better than no job at all'. Citizens Advice thought uncertainties around employment status were an obstacle to worker complaints as well as the cost of pursuing a grievance and concerns about anonymity and employer retaliation. They shared examples of workers waiting more than a year to receive money owed by employers, and others seeking advice on what they could do if their employer fired them for raising concerns.

Citizens Advice Scotland argued 'responsibility for enforcement is disproportionately on the shoulders of individual workers'. They noted that clients paid below the minimum wage were likely to be facing other

employment breaches, pushing them towards employment tribunals rather than HMRC's complaints form. Unite also saw a system where workers were 'forced to individualise every complaint'. The Employment Lawyers Association (ELA) thought workers are 'unlikely (realistically) to be protected from detriment' when raising compliance issues and 'the cost barriers to legal advice and representations are high as against the individual sums at stake'. They argued the main solutions were increases to the enforcement budget and improved promotion of employment rights. Unions argued that greater union access and representation would be critical in helping workers understand their rights and encouraging them to raise grievances.

These barriers are all the more important for migrant and undocumented workers. Focus on Labour Exploitation (FLEX) told us that undocumented workers were often reluctant to raise issues with wages out of fear of immigration enforcement. Often in other cases, workers do not raise issues of pay with HMRC due to their dependency on the job, fear of having their hours cut, or being made redundant. In some instances, migrant workers were not made aware of the minimum wage and their labour entitlements. The relationship between minimum wage enforcement and the immigration system was raised by several unions as a potential barrier to complaints. The TUC argued joint working was counter-productive and should cease: 'there is clear evidence that workers are deterred from making complaints fearing immigration enforcement'. Both bodies were particularly concerned that the consultation on a single enforcement body committed to closer working between labour market and immigration enforcement bodies.

FLEX also told us that understanding payslips was a serious challenge for temporary migrant agricultural workers. Workers were rarely supplied with a breakdown of their hours of work, and many failed to understand the piece rate system they were working under. FLEX told us that deductions were common and often opaque to workers. The confusion was compounded by the fact that many workers believed the pay information they were provided with before coming to the UK had been inaccurate; and many came from countries where zero-hours contracts or equivalents do not exist, and so did not understand the practice, which has since been banned on this temporary route, here.

In a separate report next year, we will come back to these issues as well as the range of other evidence we heard related to compliance and enforcement.

## Bite

**3.36** Along with coverage, the 'bite' of the minimum wage is often used to measure its effect on the labour market. We define the bite as the ratio between the minimum wage of a group and the median hourly pay for that group. A high bite indicates that the minimum wage is closer to median hourly pay and therefore there is more compression at the bottom of the pay distribution. Groups with higher bite may be more exposed to risk of employment or hours effects as the wage floor increases.

**3.37** Table 3.5 shows how the bite varies across NMW populations and between occupations and workers with different characteristics. Bites are typically higher for part-time workers, those on temporary contracts, female workers, those working more than one job and those who are hourly-paid. The bite is highest for the 21-22 year old group. While the path for the NLW is based on the bite reaching two-thirds by 2024, there are several groups for whom the bite of the NLW is already well above this, including part-time workers, female workers and those in retail and hospitality. In some low-paying occupations, the bite is close to 100 per cent, which indicates that the minimum wage is effectively the 'going rate' in that sector.

Table 3.5: Bite by characteristics and rate population, UK, 2021

Per cent	NLW		21-22 Year Old Rate		18-20 Year Old Rate		16-17 Year Old Rate		Apprentice Rate	
	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower
Full-time	56.7	56.2	81.6	80.3	72.9	72.1	70.2	69.5	61.4	61.3
Part-time	82.1	80.6	89.8	87.8	73.6	72.9	70.0	66.7	48.3	48.0
Permanent	61.7	61.0	85.0	83.6	73.6	72.9	69.9	68.1	55.9	54.0
Temporary	68.6	68.3	83.6	82.9	72.9	72.9	70.4	68.5	66.9	66.9
Male	57.0	56.5	83.6	82.8	72.9	72.4	68.4	67.7	62.4	62.2
Female	67.6	67.0	86.5	83.9	73.6	72.9	70.4	68.4	53.1	50.8
One job	61.7	61.0	84.5	83.5	73.5	72.9	68.9	66.1	58.1	57.0
More than one job	72.3	71.5	88.3	85.3	75.1	72.9	81.3	77.0	78.2	78.2
Hourly paid	82.2	80.7	89.8	87.6	75.2	73.6	71.7	70.4	73.0	70.9
Salaried	53.4	53.1	78.3	77.3	70.0	69.8	56.3	55.1	48.3	48.3
Hospitality	99.0	93.5	99.6	92.9	90.9	85.2	82.3	75.2	82.9	69.5
Retail	89.7	89.1	89.1	88.0	70.5	70.5	65.4	64.5	66.8	64.7
Low-paying occupations	89.8	88.8	90.4	88.5	74.9	73.6	70.4	69.9	76.2	70.8
Non low-paying occupations	52.7	52.5	76.2	75.9	69.5	68.9	54.9	54.4	51.6	49.9

Source: LPC estimates using ASHE, standard weights, including furloughed workers, UK, 2021.

## Hourly versus weekly pay

**3.38** Hourly pay is the basis for the minimum wage, but when trying to understand the impact on living standards and household incomes weekly pay needs to be considered. The workers with the lowest hourly pay are not necessarily the same individuals as those with the lowest weekly pay, and vice versa. Table 3.6 shows that only 37 per cent of those with the lowest hourly pay are also in the bottom decile for weekly pay. Minimum wage workers are mostly found in the lower third of the weekly pay distribution rather than concentrated at the bottom. By contrast 82 per cent of the highest hourly paid workers are also in the highest decile for weekly pay. This is because the majority at this end of the pay scale are full-time.

**3.39** Workers may be paid well above the minimum wage and still be low-paid on a weekly basis because they work a limited number of hours. The prevalence of part-time working and low hours contracts means that many workers will continue to receive low earnings each week, even as they receive substantial increases in their hourly pay.

**Table 3.6: Relationship between weekly and hourly pay distribution, employees aged 23 and over, UK, 2021**

		Weekly pay decile									
		Lowest	2	3	4	5	6	7	8	9	Highest
Hourly pay decile	Lowest	36.5	28.0	25.3	7.0	1.8	0.8	0.4	0.1	0.1	0.0
	2	24.9	24.7	28.5	15.0	5.0	2.1	0.9	0.2	0.1	0.0
	3	13.0	16.8	20.6	31.5	10.1	3.8	1.7	0.8	0.2	0.0
	4	7.7	10.7	9.0	28.8	28.6	9.3	3.8	1.4	0.6	0.1
	5	3.7	7.7	5.9	7.7	37.1	25.3	8.2	3.1	1.1	0.2
	6	3.2	4.2	4.3	3.3	8.3	43.9	23.1	6.8	2.5	0.5
	7	3.5	2.4	2.7	2.5	3.0	9.2	47.0	23.0	5.6	1.2
	8	3.1	1.7	1.4	2.2	3.0	2.8	10.4	51.0	21.8	2.4
	9	2.1	2.2	1.0	1.0	2.2	2.0	3.3	11.7	60.6	14.0
	Highest	2.2	1.6	1.2	1.0	1.0	0.9	1.1	2.0	7.4	81.6

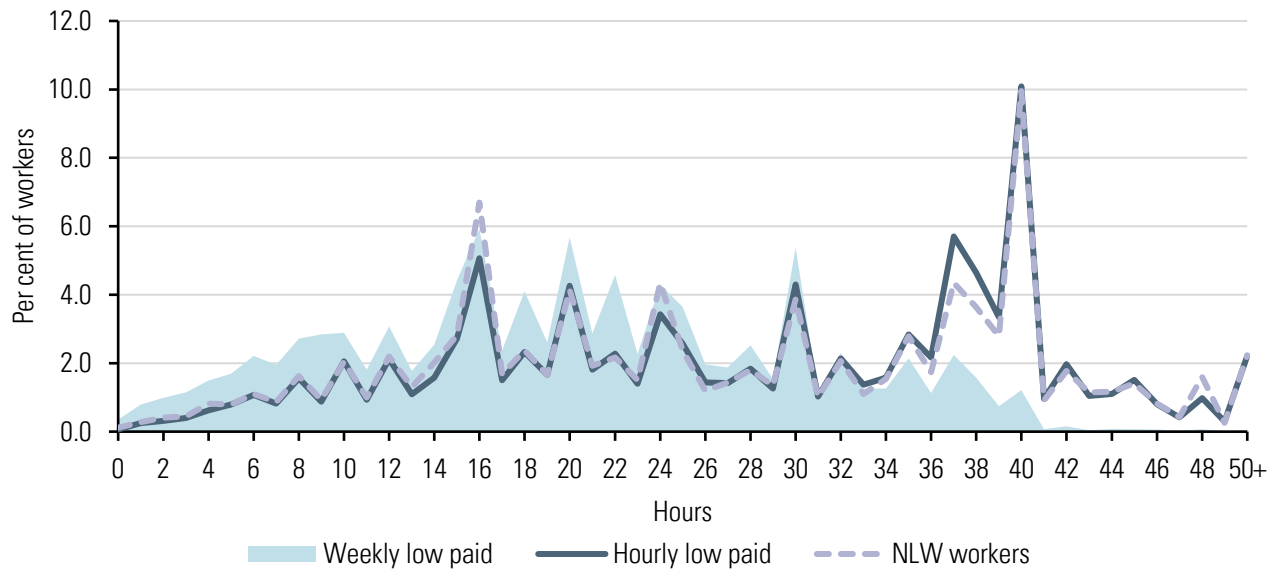
Source: LPC estimates using ASHE, standard weights, UK, 2021.

Note: Data exclude first year apprentices.

**3.40** This is further demonstrated in Figure 3.10, in which we see that the workers who are weekly low-paid are most likely to work 16 or 20 hours, with very few working full-time. We define weekly low-paid workers as those paid below two-thirds of median weekly earnings. This is based on an OECD definition of low pay, where low-paid workers are identified as those paid below two-thirds of median earnings for full-time workers of all ages. We adapt this definition to two-thirds of median earnings for all workers aged 23 and over. Similarly, we can look at workers who are hourly low-paid (paid less than two-thirds of median hourly earnings for workers aged 23 and over). Hourly low-paid workers are much more likely to work 37 or 40 hours per week. However, hours are likely to have been affected by changes in composition over the pandemic, with the number of people working part-time falling over that period. The spike at 16 hours is likely to be linked to the structure of historic benefits including Working Tax Credits and the Employment and Support Allowance.

**3.41** Since the introduction of the NLW, the proportion of workers aged 23 and older who are low hourly paid has fallen from 20.6 per cent to 14.2 per cent (see Figure 3.11). The goal of the two-thirds NLW target is to eradicate low hourly pay, and we would expect to see the proportion of workers who are low hourly paid fall further as the NLW moves towards the target of two-thirds of median hourly earnings. As discussed already, there is a weak link between low hourly pay and low weekly pay, so the proportion of workers who are low weekly paid has fallen more slowly, from 28 per cent to 25 per cent.

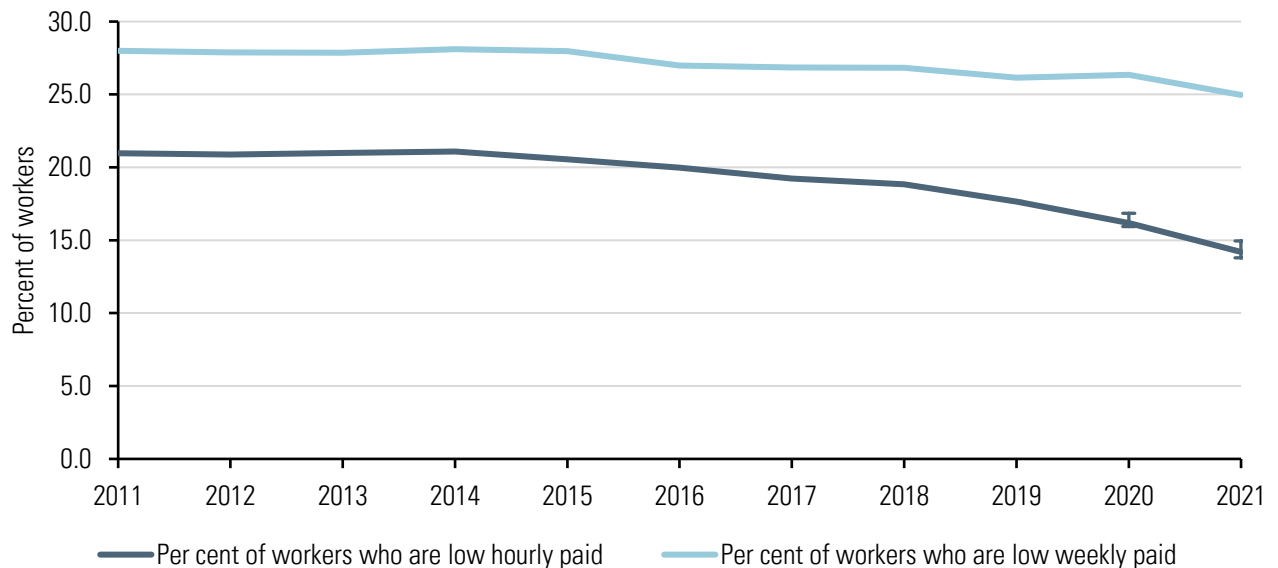
**Figure 3.10: Distribution of hours worked for hourly low-paid workers and weekly low-paid workers, aged 23 and over, UK, 2021**



Source: LPC estimates using ASHE, standard weights, UK, 2021.

Note: Data exclude first year apprentices. Includes furloughed workers. Hours for furloughed workers are the hours that they would normally work.

**Figure 3.11: Proportion of workers who are low-paid on an hourly basis and weekly basis, aged 23 and over, UK, 2011-2021**



Source: LPC estimates using ASHE, standard weights, UK, 2011-2021.

Note: Data exclude first year apprentices. Includes furloughed workers, central pay estimate with error bars showing the range between the upper and lower estimates in 2020-21.

## Conclusions

**3.42** While this year we are more confident in our estimates of coverage and median pay than last year, the presence of furloughed workers means there is more uncertainty than normal. To account for some of this uncertainty, we present a range alongside our central estimate in most cases. Furloughed workers were paid 80-100 per cent of their usual pay. This biases down our estimates of what workers would normally be paid (without the furlough scheme). To deal with this we use three estimates of pay. In our lower estimate we use furloughed workers' reported pay, while in our upper and central estimates we adjust their reported pay upwards to estimate what their pay would have been in the absence of furlough.

**3.43** The percentage of workers paid the minimum wage varies considerably by individual characteristics. Women are nearly 40 per cent more likely than men to be paid the NLW. Ethnic minority workers are also more likely to be paid the NLW than white workers, although this is not the case for all ethnicities. Black workers and workers of Pakistani and Bangladeshi origin were more likely than white workers to be paid the minimum wages. However, a similar proportion of white workers and workers of Indian and Chinese origin are paid the minimum wage. Workers aged under 30 and over 60 are more likely to be paid the minimum wage. Research shows that raising minimum wages can reduce ethnicity and gender pay gaps.

**3.44** The NLW has reduced inequality between and within regions since its introduction. The percentage of workers paid the minimum wage also varies considerably geographically. Around 7.3 per cent of workers in the North East and Northern Ireland were paid the NLW, more than double the percentage of workers paid the NLW in London (3.6 per cent). Within every region, pay has grown fastest for the lowest paying decile between 2015 and 2019. Looking across areas, pay at the 10<sup>th</sup> percentile has grown faster for low-paying areas than higher-paying areas. This is consistent with research from Germany which showed that the introduction of the federal minimum wage reduced regional pay inequalities.

# Chapter 4

## How have low-paid workers experienced the pandemic?

### Key findings

The Covid-19 pandemic led to unprecedented disruption for workers in low-paying sectors. The pandemic and the Coronavirus Job Retention Scheme (CJRS) have created new challenges in people's working lives. But they have also brought to the fore, and in some cases exacerbated, existing issues facing low-paid workers.

Low-paid workers were more likely to have been furloughed, particularly in the sectors most exposed to lockdown measures, such as hospitality and leisure. In many sectors, the majority of furloughed workers had been reintegrated into the labour market by April 2021 – although not necessarily in the same roles. But workers in shut down sectors were slower in returning, as were younger workers.

The furlough scheme has been rightly praised for limiting job losses during the pandemic, but the experience of furloughed workers could nevertheless be difficult. These individuals faced a significant income loss, especially if they relied on tips. And many faced an extended, debilitating period of uncertainty over their future employment status, in some cases not helped by poor employer communication.

Others who worked through the pandemic also faced greater stress. We heard about concerns over health and safety, mental wellbeing and sick pay. We also heard of 'fire and rehire' practices, with some workers feeling forced to accept inferior terms and conditions or lose their jobs.

We continued to hear about the insecurity and precarity of much low-paid work. We spoke with workers battling constant anxiety over getting enough hours to make ends meet. In some sectors, one-sided flexibility benefitting only the employer continues to be common, with short notice shift cancellations and an absence of work schedules common.

The struggle for consistent hours and a secure, predictable income contributes to in-work poverty. In some cases, the design of Universal Credit, where payments fluctuate with hours worked and income, exacerbated this. Low-paid workers felt threatened by the rising cost of living and worried by the impending withdrawal of the £20 per week Universal Credit uplift.

We heard about a range of other factors disrupting individuals' working lives, from the lack of reliable transport to rising childcare costs.

**4.1** The pandemic has disrupted everyone's lives but has disproportionately affected low-paid workers. In this chapter, we summarise the evidence we heard this year on how the pandemic affected low-paid workers.

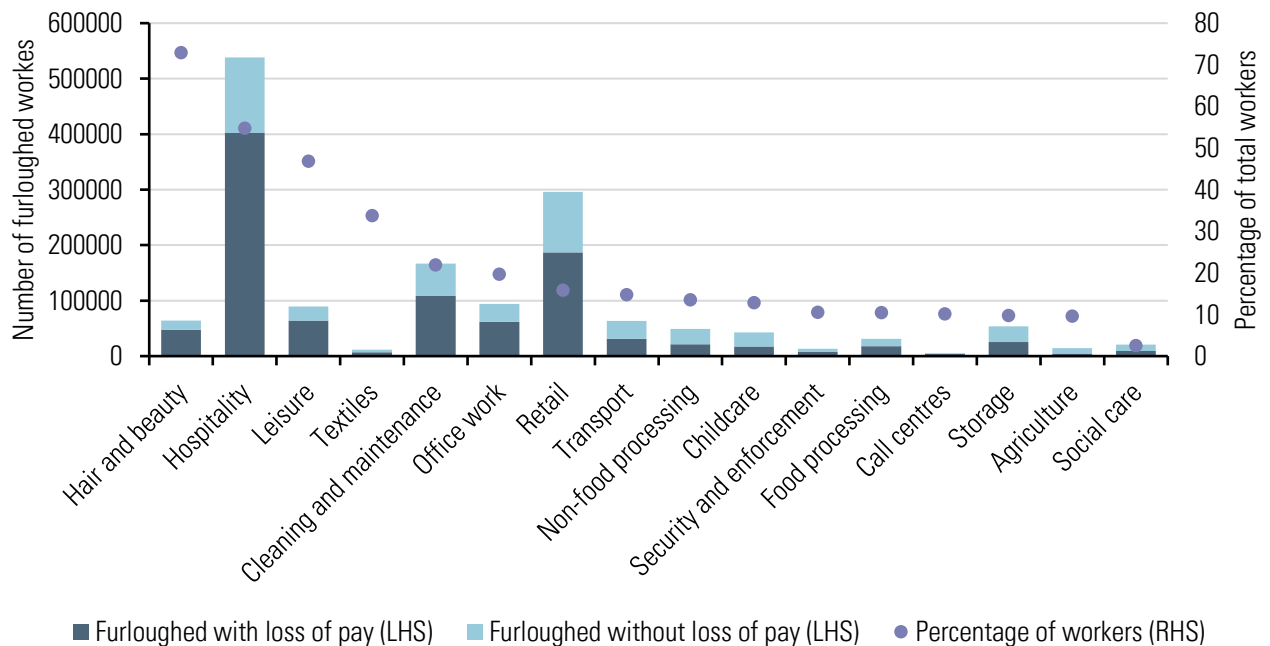


## Coronavirus Job Retention Scheme

**4.2** In Chapter 2, we examined the impact of the Coronavirus Job Retention Scheme (CJRS) on the labour market. Here we look at evidence from the Annual Survey of Hours and Earnings (ASHE) on what had happened to furloughed workers by April 2021. We have already seen that low-paid workers were disproportionately likely to be furloughed during the pandemic. Based on our central estimates, 32 per cent of minimum wage workers were furloughed in April 2021, while only 9 per cent of other workers were furloughed. Low-paid occupations more often require personal interactions with customers and therefore were more likely to be shut down due to the pandemic.

**4.3** Furlough rates vary considerably by low-paying occupation. Figure 4.1 shows how the shutdown of hospitality and leisure businesses led to very high rates of furloughing in those occupations. However, minimum wage work is also common in occupations such as social care and childcare. In social care only 2.5 per cent of workers were furloughed, and 80 per cent of workers were classified as key workers. While these workers were able to continue to work throughout the pandemic, they did so at greater risk to their own health (EMG-Transmission Group, 2021).

**Figure 4.1: Number and proportion of workers furloughed with and without loss of pay by low-paying occupation, UK, April 2021**



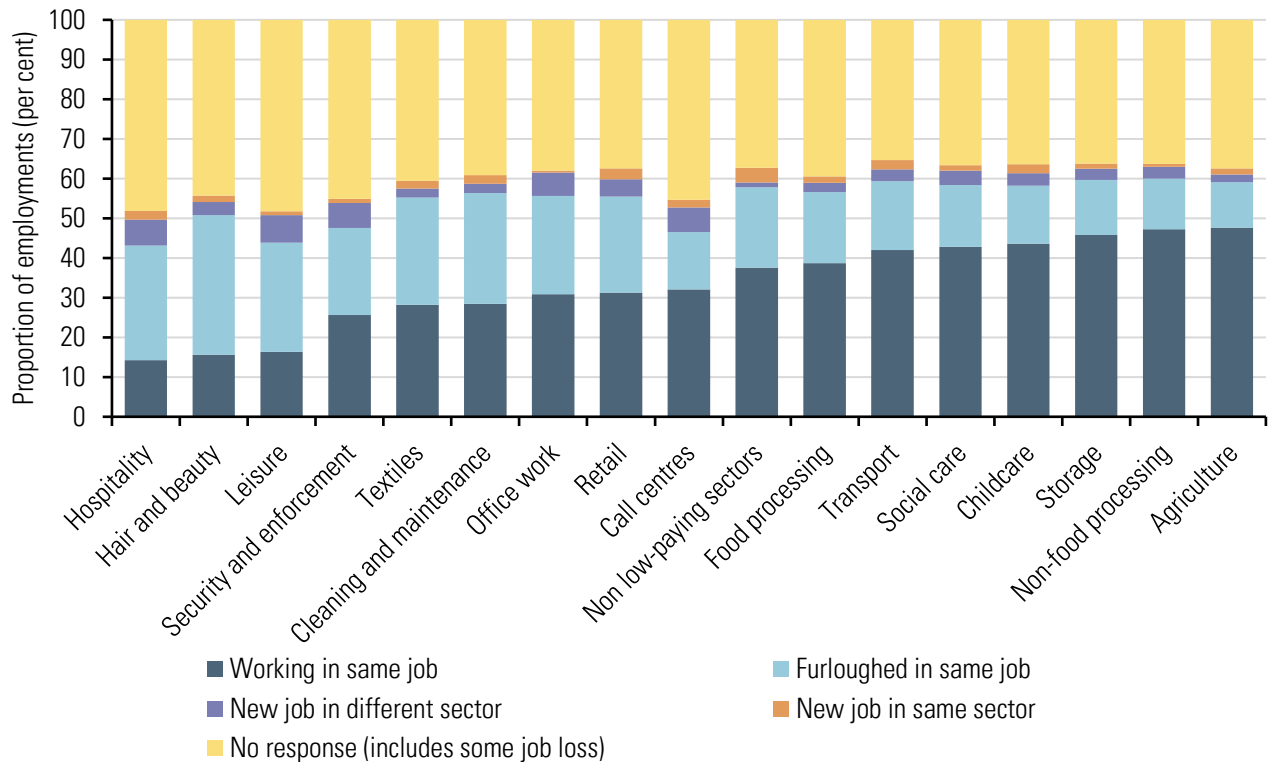
Source: LPC analysis of ASHE using SOC2010 methodology, standard weights, UK, 2021.

Note: Excludes first year apprentices.

**4.4** A key question throughout the pandemic has been what will happen to employment at the end of the CJRS. This was discussed in more detail in Chapter 2 (paragraphs 2.45-2.52). We have ASHE data for both April 2020 (immediately after the introduction of the scheme), and April 2021 (when some businesses had started to reopen). This gives us an insight into what happened to people furloughed last year. Some of these had returned to their job without the support of the furlough scheme. Others remained furloughed or had been furloughed again (including those who were flexibly furloughed). Others had started a new job.

**4.5** Figure 4.2 shows the destinations a year later for those who were furloughed in April 2020, by low-paying occupation. Workers who had been furloughed in hospitality, leisure and hair and beauty were least likely to be working in the same job a year later, and most likely to be furloughed. These workers were also the most likely to have dropped out of the survey in 2021, due to a combination of weaker response rates and job losses. This is consistent with hospitality experiencing the largest falls in employment over the pandemic (as we showed in Figure 2.3).

**Figure 4.2: Destinations of workers who were furloughed in 2020, by low-paying occupation, UK, 2021**

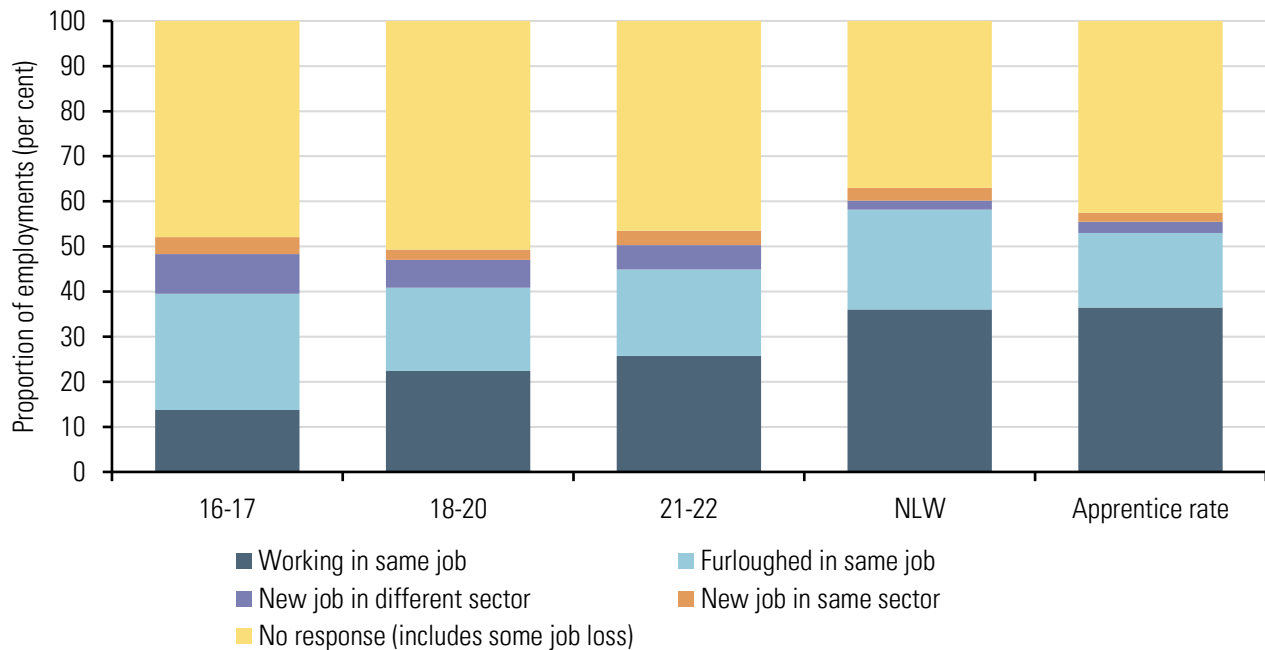


Source: LPC estimates using ASHE 2020 linked to ASHE 2021, standard weights, UK, 2020-2021.

**4.6** Similarly, Figure 4.3 shows the destinations after a year for those who were furloughed in April 2020, by National Living Wage (NLW) and National Minimum Wage (NMW) rate population. The youngest workers were least likely to be working in the same job a year later and were more likely to be furloughed. There were also higher non-response rates for younger workers, partly driven by job losses – young people saw the largest falls in employment. They were also most likely to have started a new job, either in the same or a different occupation. This is what we would expect to see in a normal labour market, as young people are more reliant on job-to-job moves and typically have higher rates of turnover.

**4.7** The situation is likely to have changed further still since April. More people who were furloughed at that point are likely to have returned to work in those jobs or moved to new jobs. However, this analysis shows which groups of workers may have faced the greatest challenges in re-joining the labour market after furlough: those who had been working in lockdown sectors, and younger workers.

**Figure 4.3: Destinations of workers who were furloughed in 2020, by minimum wage rate population, UK, 2021**



Source: LPC estimates using ASHE 2020 linked to ASHE 2021, standard weights, UK, 2020-2021.

## Worker experiences of the Coronavirus Job Retention Scheme

**4.8** As in 2020, we continued to hear from workers about their experience of the CJRS. Although the scheme's success in minimising job losses was widely recognised, the experience for many workers was of reduced income and increased precarity. Hospitality workers we spoke to in Northern Ireland told us they had struggled with furlough, not knowing how much they could expect to be paid or whether they would have jobs to return to. This had led to stress, anxiety and other mental health issues. Workers told us about extended uncertainty over their furlough status and disputes with employers. Their counterparts in Scotland had received consistently poor communication throughout their furlough periods and unpredictable incomes: the amounts paid would vary regularly and without explanation from the employer. This was aggravated by the lack of payslips. Workers found this stressful, noting it prevented them from planning. One worker had had to give up a flat; others had accounts of their relationship with their employer breaking down when they challenged calculations, to the point of being made redundant. Unite's written submission shared other cases of the miscalculation of furlough payments, including the example of a bar worker in Northern Ireland whose 'employer had failed to calculate pay adequately which resulted in staff going two months without pay'.

**4.9** Unite's submission also raised the issue of tips for hospitality workers. The exclusion of tronc payments from furlough calculations had meant the loss of income for many furloughed hospitality workers was considerably greater than 20 per cent. When we spoke to hospitality workers in Scotland, we heard that tips could make up as much as 20 per cent of an individual's salary, and so their loss had a significant impact. Unite told us that many hospitality staff had struggled as a result. Unite also reported workers (especially in hospitality) being denied access to the furlough scheme because employers had failed to submit RTI data in time to HMRC. As a result, young hospitality workers were laid off and unable to access furlough or benefits.

**4.10** Citizens Advice Scotland (CAS) told us that incorrect payment of furlough had been a common issue among individuals seeking their advice, leading to lost wages and unpaid work. Clients had also reported issues around the non-payment of holiday pay during furlough. CAS noted that while the CJRS protected many, their bureaux had reported cases of people refused furlough by their employers or made redundant as the end of scheme approaches. They had seen an increase in redundancies prior to the extension of the scheme in 2020 and expected unemployment to increase once the scheme ends in 2021.

**4.11** Several respondents criticised the fact that furloughed workers could be left on sub-minimum wage pay for long periods. GMB told us that ‘the Government should have protected [furloughed] workers receiving on, or just above, NMW rates’ from being effectively underpaid. This had had a massive impact on low-paid workers: ‘the ONS reports that employee jobs paying the lowest hourly rate were over five times more likely than other jobs to be furloughed with reduced pay’. Unite shared evidence that workers being paid 80 per cent of the NMW for a year had led to increasing debts. Both they and other groups also made the point that many of these workers had not benefited from either the 2020 or 2021 upratings.

**4.12** The Institute of Employment Rights (IER) also argued that the CJRS did not adequately protect low-paid workers’ incomes and that the 80 per cent rule endorsed sub-minimum pay. They cited Trades Union Congress (TUC) research ‘that low paid workers were five times more likely to be furloughed on reduced pay’, with no commensurate reduction in rent or bills. They identified further problems with the scheme: that the calculation is based on a snapshot in time which may not have been representative; and that in some areas, employers may not have correctly recorded hours to begin with. The Scottish Women’s Convention (SWC) stated that employers ‘should not be excused’ for not topping up furloughed workers’ wages to 100 per cent. This ‘demonstrates a broader issue with the state’s disregard for low-paid workers... there is a moral responsibility to ensure the welfare of workers’.

**4.13** Some employers reflected on how furlough had changed their relationship with their staff. In a meeting with Sheffield Chamber of Commerce members, employers told us they had chosen to terminate casual staff from August 2020 onwards, once their CJRS contributions had begun to increase. One employer was concerned they had ‘ruined’ their relationship with their casual staff by prioritising those with permanent contracts. National Hair and Beauty Federation (NHBF) members told us that the scheme had been a barrier to recruitment; workers were reluctant to move jobs in case it made them ineligible for furlough in the future. British Retail Consortium (BRC) members also echoed this point: ‘there is a general nervousness of moving jobs at the moment due to uncertainty. Some [workers] are worried there may be another lockdown and they will be caught in between so people may be holding out to September because of that’.

## **Wider effects of the pandemic on workers**

**4.14** Respondents shared evidence of a range of other impacts from the pandemic on individuals’ work and lives. Citizens Advice shared evidence on Covid-related redundancies: ‘we saw a 37 per cent yearly increase in demand for employment advice – including a 159 per cent increase in redundancy advice’. Low-paid workers had been more likely to lose their jobs in the pandemic: ‘of people whose cases were tagged with the National Minimum Wage (NMW) or the National Living Wage (NLW) codes and at least one other advice code, 1 in 10 also saw us about redundancy in 2020/21. This compares with just 3 per cent in 2019/20’.

**4.15** The ‘fire and rehire’ phenomenon was prominent in evidence submitted to us. Unite told us ‘there are now several well-reported cases of workers being forced onto inferior terms and conditions of employment in the face of threats of redundancies’. They gave one example of hotel workers asked to accept a 20 per cent salary cut and 50 per cent hours reduction or be given their notice, and there was a range of other first-hand examples from our meetings with workers. One hotel worker in Scotland shared an example of being demoted from a team leader position and given fewer hours. At a meeting with airport workers, we heard how a passenger services company had told workers they could save themselves from redundancy if they signed a new permanent zero-hours contract. Usdaw members gave examples of restructuring in retail: one supermarket team leader worried that she was about to lose £1 from her hourly rate of £11.85. In focus groups, hotel workers noted that kitchen and front-of-house staff had been laid off at the end of September 2020 and replaced by casual staff on zero-hour contracts, who were not entitled to non-cash tips. One worker stated her employer had looked to move staff to zero-hour contracts in November, but lockdown had delayed them going ahead.

**4.16** CAS reported that ‘many people have faced other variations to their contracts during the pandemic, usually requiring workers to accept worse pay and conditions’. They cited TUC research showing this was more common for younger and lower-paid workers, and a list of examples of workers forced onto zero-hour contracts or having salary cut.

**4.17** CAS also told us that health and safety had also become a key issue for employees asked to return to work in offices or public-facing jobs. ‘The combination of precarious work and a lack of available jobs means employees may be less able to speak out against an employer and assert their rights if this would risk their employment’.

**4.18** Sick pay – and the difficulty of surviving on statutory sick pay alone – was another issue raised. GMB told us that during the pandemic, they had seen ‘a clear relationship between low pay and low sick pay in sectors such as social care, where high levels of presenteeism were linked to inadequate sick pay arrangements’. They wanted the LPC to recommend to the Government that ‘no worker should be left out of pocket while they are off work sick’. Unite argued that ‘statutory sick pay should be increased so that it is at an equivalent level to a real living wage and should continue to be paid from day one, with the lower earnings threshold abolished. Many of those falling below the lower income threshold are women’. The IER highlighted how low-paid workers had struggled to self-isolate. The lack of proper sick pay ‘has left low paid workers bearing an undue share of the economic risks and consequences of the health crisis’ because there was no reliable support for them to self-isolate.

**4.19** Employers belonging to the British Beer and Pub Association (BBPA) recognised workers’ concerns around safety, physical and mental health. Table service had put extra strain on staff, with one employer having told us that staff were walking around 15 miles per day, and the employer was giving staff vouchers for shoes.

## Issues affecting low-paid workers

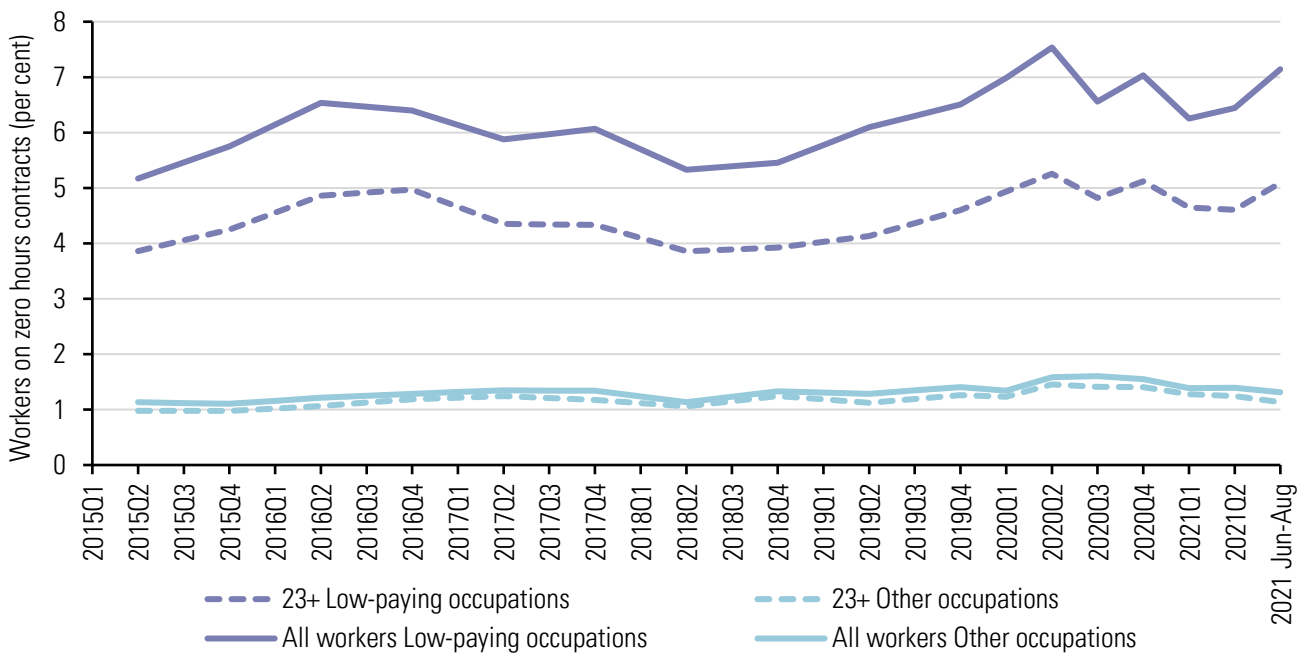
### Insecurity and in-work poverty

**4.20** Insecurity was a central theme this year, both in our discussions with workers and submissions, not only from unions but also employers and other groups. Key areas of concern were the insecurity of

work and hours, unpredictable working patterns, workplace benefits and the cost of living rising. Although these issues generally pre-existed Covid, in some cases the pandemic had intensified them.

**4.21** Figure 4.4 shows that zero-hour contracts are much more common amongst low-paying occupations. Zero-hour contracts are one prevalent type of insecure work, where firms have a contract with a worker but no duty to provide them work. 7.1 per cent of workers in low-paying occupations worked on zero-hour contracts between June and August 2021 while only 1.3 per cent of workers in other occupations did. The percentage of workers in low-paying occupations on zero-hour contracts had increased before the pandemic from 5.7 per cent in first quarter of 2018 to 7.0 per cent in the first quarter of 2020. The rate increased further at the beginning of the pandemic before falling back to pre-pandemic levels.

**Figure 4.4: Zero-hour contracts by low-paying occupations, UK, 2015-2021**



Source: LPC analysis of LFS, quarterly, not seasonally adjusted, population weights, SOC2010 definition of low-paying occupations, UK, 2015 Q1 – 2021 June-August

**4.22** In focus groups with hospitality workers, participants reported regular shift cancellations and that it was common to receive short notice offers of work. None received any compensation for cancelled shifts. Hotel workers told us that while permanent staff could pick shifts, casual staff had to accept what they were offered, and often would be called in the morning to work in the afternoon. The pandemic had accelerated the casualisation of the hotel workforce, with increased use of agency staff to deal with unpredictable demand. In cleaning, unpaid overtime was seen as common and some workers had experienced shift cancellations without notice.

**4.23** Workers in Sheffield told us that uncertainty and insecurity around hours were rife. We heard from individuals working variable hours (one worker whose weekly hours could fluctuate from 40 to 10 without notice), struggling with this and being concerned about raising any issue for fear of losing shifts. There were several examples of ‘zeroing down’ being used as a disciplinary tool if individuals complained about their treatment. Hospitality workers we spoke to in Scotland told us that many workers did not have a written contract, or only received one several years into the job despite there

being a legal requirement to provide a written statement of terms and conditions. It was common for contracts to be 'unfinished', with blank spaces instead of terms specifying pay and hours. Even among union members, there was a lack of clarity as to whether individuals were on a zero-hours contract or not. Hospitality workers in Northern Ireland provided examples of how insecurity and precarity led individuals to put up with bullying and in some cases sexual harassment rather than leave jobs.

**4.24** This point was echoed in discussions with airport workers: we were told that 'the reality is that most low-paid workers won't take the risk to move as they can't afford it and most can't afford to travel elsewhere'. Usdaw members made similar points: moving jobs was seen as extremely difficult as they felt their experience and the absence of training options confined them to their current sectors. Promotions were seen as risky as these jobs tended to be restructured regularly. We heard repeated examples of the scarcity of full-time contracts in retail, and the anxiety of workers who had managed to get such a contract to hold onto it. Retail workers told us how hours which had been increased during the pandemic's peak to cover widespread absenteeism were now being reduced back down forcing staff to move back from full-time work to minimum hours.

**4.25** The online platform Organise shared responses from a large-scale survey of low-paid workers. Most respondents on the minimum wage reported working on zero-hour contracts. Respondents' weekly incomes tended to be lower as the shifts they were given tended to be inconsistent and at times infrequent. Furthermore, weekly income for those on minimum wage zero-hour contracts was not guaranteed, as individuals were not covered by employment protections such as sick pay or maternity leave. The survey also found that the quality of work had decreased for many respondents over the last year. Reasons given for this included reduced hours, the uncertainty of zero-hour contracts and larger workloads as a result of employers taking advantage of home working. Workers had been asked to shoulder more work for the same pay due to the staff reductions; this issue was especially prominent in hospitality.

**4.26** The SWC, too, stated that the pandemic had seen hours reduced significantly for workers on zero-hour contracts: 'there have been many instances of worker displacement where those on permanent/full-time contracts have been reallocated within companies, side-lining those on fewer hours completely'. The Employment Lawyers Association (ELA) told us that people already on precarious contracts had experienced 'considerable, unpredictable reductions in their work shifts and thus in their income, a pressure to work in conditions that felt unsafe and included minimal Personal Protective Equipment (PPE) for fear of being dismissed, overnight job losses'.

**4.27** The GMB provided examples of conditions deteriorating for care workers: 'A third of direct care workers in England are now employed on zero-hour contracts, rising to more than half in London'. Workers struggled to get enough hours to live on, and 'are increasingly forced to work round part time hours and irregular shift work for multiple employers'. They provided examples of increasing desperation and destitution among workers, with GMB reps having to organise collections to buy food parcels for members who are off sick but not in receipt of sick pay. In the gig economy, too, 'many employers have also made low-paid and insecure work part of their business model'. The GMB argued that the Government should play a role 'in providing meaningful disincentives to employers' reliance on insecure contracts and working patterns'.

**4.28** Unite called for minimum 16-hours contracts. 'Workers on zero-hour contracts are more than twice as likely to work night shifts and are paid a third less an hour than other workers. The proliferation

of zero-hour contracts, bad jobs and economic insecurity has left a large segment of the population ... living hand to mouth.’ Unison argued the LPC must act on insecure employment, by ‘[making] recommendations that both deliver a real living wage and curtail forms of contract that are vulnerable to imposition of inadequate hours’. In particular, it should ‘recommend the strengthening of legislation to limit the use of zero-hours contracts, to prevent the bogus classification of workers as ‘self-employed’ and to extend the employment rights of ‘workers’.

**4.29** Several responses drew the link between insecure employment conditions and in-work poverty. The Women’s Budget Group reminded us that in-work poverty has risen despite the NLW, citing Joseph Rowntree Foundation findings on rising in-work poverty (56 per cent of people in poverty are in work, and pre-pandemic 12.7 per cent of workers were living in poverty compared to 9.9 per cent in 1997/98). This was a product of falling benefits and rising housing costs. They highlighted that the sectors with the highest levels of in-work poverty had a predominantly female workforce (accommodation, catering, retail, and residential care).

**4.30** The ELA highlighted the link between low pay and personal debt: ‘low income will most likely lead to individuals being in debt, sometimes substantially. Many will be faced with an ever-increasing debt, which will increase anxiety and stress, creating a cycle of low income, debt and poor mental health’. They also highlighted the association of low pay with poor mental health (‘there seems to be a direct link between income and an individual’s ability to manage stress. For example, those on low income are less likely to be able to save, meaning that they face the prospects of living from week to week on earnings’) and life expectancy (‘According to ... The Health Foundation, men living in higher average earning areas are more likely to have a higher life expectancy, with an increase in salary of £1,000 per year equating to an increase of 0.5 years for life expectancy’).

**4.31** The IER argued that Covid-19 ‘has exposed the serious limitations of the NMW infrastructure’ by demonstrating ‘the failure to ensure an overall basic minimum income is received’. The prevalence of zero-hour contracts and fragmentation of working time meant workers ‘either due to a lack of hours or a lack of payment for those hours are vulnerable to in-work poverty and food poverty’.

**4.32** Two large employers responding to our consultation recognised the impact of zero-hour contracts on their workforce. One of the employers shared feedback from staff that the number of hours worked was as important to workers as their hourly rate. They speculated that a weekly minimum wage could balance the impact of zero-hour contracts. Whitbread told us they did not use zero-hour contracts: ‘we have recently added more clarity into our employment contracts regarding the extent to which we would flex hours up and down each week. This helps to provide a level of certainty for each employee about their income’. They noted, however, that continued subdued demand would mean fewer hours of work for staff.

### Cost of living

**4.33** The rising cost of living, and the failure of the NLW to keep pace with it, was a common theme in responses. CAS shared evidence that ‘the pandemic has raised the cost of living for those on low-pay, with the extra time spent at home leading to increased food and utilities bills ... those living in rural communities have reported increased costs from relying on deliveries for groceries and other essentials’. They noted that debt was the second most common advice area across CAS in 2020/21.



GMB stated the NLW had not kept pace with the cost of living, which 'has risen far more sharply than the headline rate of inflation on many essentials'.

**4.34** A survey conducted by Organise, found low-paid workers saying prices had increased over the last year, with many pointing out that the cost of basic necessities, such as food and utility bills, had increased significantly. Many reported having to rely on foodbanks or having to choose between heating or feeding their children. Most low-paid workers surveyed felt their wages had stagnated and had not risen in line with inflation. Reasons for this included being furloughed; reduced hours for those on zero-hour contracts; and wages not being raised by businesses in line with inflation. Most respondents across all income brackets had a downcast outlook on wage growth and inflation for the next couple of years, especially in light of the pandemic.

**4.35** Usdaw argued the cost of living should be a key consideration for the LPC. Low-paid workers are the group 'least resilient to economic change... Loss of hours and furlough have plunged many low paid workers, who were already in a precarious position, into severe financial uncertainty'. It told us that many low-paid workers struggled to make ends meet: 'In a recent cost of living survey of our members, 42 per cent of respondents have had to rely on unsecured borrowing to pay everyday bills in the past 12 months'.

**4.36** Unison stated that the 2021 NLW and NMW increases would mean a real-terms cut for low-paid workers. They continued to argue for the use of RPI rather than CPI to gauge living costs. Its evidence noted the growing prevalence of Living Wage Foundation rates across the public sector and the persistent gap between these and the NLW: 'a full-time worker on the 'National Living Wage' [and a 37-hour week] still receives over £1,100 less per year than a worker on the Living Wage'.

## Universal credit and the benefits system

**4.37** Many respondents criticised Universal Credit (UC) and other elements of the benefits system as inadequate and contributing to in-work poverty. Several stressed the importance of retaining the £20 per week uplift introduced during the pandemic. Usdaw noted that the 'vital safety net' provided by benefits 'has been significantly undermined in recent years'. CAS told us that 'UC is not achieving its goal of helping people find good, secure, and well-paying jobs, and core aspects of its design ... continue to place people into hardship'. They noted that more than a third of people claiming UC in Scotland are in work. They told us £20 uplift had made a big difference to individuals and should be made permanent. GMB described it as 'a lifeline for many on low-incomes' which should be kept in place'. They cited Joseph Rowntree Foundation research that its removal would pull 500,000 people into poverty.

**4.38** Respondents to Organise's survey felt UC was demoralising and demeaning. Many respondents believed that one should be able to earn a higher amount before having their benefit reduced in order to enable individuals to get to a level of wealth where they can sustain themselves. Respondents felt that businesses took advantage of those on UC to justify paying lower wages.

**4.39** The Equality Trust note the role of 'the failing social security system' as a driver of inequality and poverty. They recommended a broad slate of policies to reduce inequality, including the reduction of the UC taper rate to 55 per cent. The GMB too argued that 'the effective marginal tax rate within UC claws back what little additional income [workers] can make from the hours of work they receive'. At oral

evidence, the SWC shared examples of carers on UC called to do more than 16 hours weekly: ‘the more they worked/earned, the worse off they became’.

**4.40** The SWC argued that UC created problems for women on zero or low-hours contracts, with unpredictable shift patterns and incomes. The back-payment design means ‘there are often times when women are left without enough money to get through the month, and this is a large factor in the increase in child poverty and in-work poverty’. Age qualification rules also excluded many young women from support. The Women’s Budget Group told us that the benefits system exacerbated gender inequality: the burden of unpaid care work meant women earned less than men and were more reliant on benefits. The pandemic had exposed long-term problems with the system: ‘cuts and changes made to benefits since 2010 have resulted in reductions of payments and increases in women’s, children’s and in-work poverty which will only be exacerbated by the recession we now face’.

**4.41** Employers also expressed concerns about the system. Whitbread noted that low-paid workers suffered from a ‘high degree of uncertainty regarding the benefits system as a whole’ and often ‘look to their employer for support and guidance in navigating the system’. Whitbread’s Employee Relations team received a lot of calls seeking support; they were launching additional ‘financial wellbeing support’ later in the year. ‘Beneficiaries of the benefits system need better clarity and tools to support them in navigating their benefits and work status to avoid penalties, confusion and worry’. Other employers reported staff being unwilling to accept bonus payments because of UC clawback mechanisms. United Response (a care provider) stated that staff had been unable to accept recognition payments and even voucher-based rewards because of the impact on their UC payments. Some staff had flexed their hours down to be able to receive such payments.

## Other issues affecting workers

### Transport

**4.42** There were several other factors affecting workers access to employment or working more hours. A range of employers and employer groups told us that transport was a key factor limiting their access to workers. In the care sector, BUPA Care Services told us that ‘one of the top 10 reasons not to take roles with us is the accessibility to transport, particularly early morning or late evening. In some roles we may only be able to recruit those that have their own transport’. The Royal Mencap Society told us that cuts to public transport in recent years had caused particular difficulties for recruiting and retaining colleagues, especially in more rural areas. Many of its employees and workers were not able to afford their own transport/car. United Response told us that transport costs and infrequent schedules limited the amount staff would travel and restricted staff availability in hard-to-recruit rural areas. The Homecare Association (formerly UK Homecare Association (UKHCA)) told us that restricted public transport had been an issue during the pandemic.

**4.43** Whitbread noted that ‘the cost of getting to work can be a huge barrier to career and wage progression ... Investment in better public transport would be a significant factor in attracting and retaining people in hospitality, particularly in locations that are difficult to get to without a private vehicle’. The Scottish Grocers’ Federation (SGF) agreed that ‘access to transport and the potential impact this can have on employees working life is an important issue’. Within their sector ‘Scottish convenience sector employees are living within easy and accessible reach of their place of work’, with 44 per cent walking to work. The National Farmers’ Union (NFU) stated that ‘public transport in rural

areas is often inadequate, making employment opportunities in the sector less accessible to those who do not have their own means of transport’.

**4.44** Unite noted that the high cost of transport disproportionately affected low-paid workers, especially those working flexibly: ‘ticketing options do not take into account variations in working hours/days from week to week and discounted ticketing is not presently set up in such a way to give value for money for people working on precarious contracts’. At a meeting with airport workers, we heard from workers who because of late shifts did not have the option of using public transport and had to pay for parking costs which had increased threefold during the pandemic.

## Childcare

**4.45** The availability and cost of childcare was raised by several respondents. The Women’s Budget Group argued that affordable childcare was a key issue: they pointed to high costs (around 30 per cent of the income of dual-earner couples on median incomes around 20 per cent for 1.5 earner couples) and inadequate provision (just over 57 per cent of local authorities in England had enough childcare for children whose parents work full-time, and 22 per cent had enough for the children of parents working atypical hours). They argued that spending on ‘a universal, free childcare system with well-paid and highly qualified staff’ would be recouped via taxes and reduced benefits payments.

**4.46** Evidence from Whitbread supported this argument. They told us that affordable childcare is a ‘significant barrier to many of our low-income workers ... Parents (often female) are forced to stall their careers’ before the 30 hours entitlement comes into effect at age 3 – ‘the balance of earnings and cost of childcare before 3 is not financially viable for those on low/minimum wage’.

**4.47** The SWC argued that home-schooling during the pandemic had disproportionately negatively affected women’s productivity: ‘continually meeting the demands of children and other family members has meant less capacity for their paid employment or having to make time for it during unsociable hours to the detriment of their health’. This had exacerbated the existing challenge for women, the feeling that they had to work harder than men.

### Evidence from childcare providers

Childcare is a low-paying sector where the effects of a rising minimum wage are tied to a funding settlement largely set by the Government. We estimate minimum wage coverage in the sector to be between 11.6 and 13.6 per cent, and employers tell us that staff costs make up a high proportion (around 70 per cent) of business turnover.

The rising minimum wage therefore has a significant impact. For a long time, though, childcare businesses have told us that funding for the ‘free’ hours to which parents are entitled has not kept pace with the rising minimum wage. This year, the National Day Nurseries Association (NDNA) told us that for 95 per cent of its members, funding rates for ‘free’ childcare did not meet the provider’s costs. The Early Years Alliance (EYA) told us that recent increases in annual funding had fallen far short of the levels necessary to meet the rising minimum wage. They pointed to government estimates from 2015 that it would cost £7.49 per hour to ‘fully fund’ the three and four year old early entitlement offer by 2020/21; while the average funding rate for this period was £4.89.

The pandemic continued to affect the sector deeply in 2021. Already in a precarious position, many nurseries had been forced to close temporarily because of Covid-19 outbreaks; the NDNA told us nearly

three-quarters of settings had closed at some point. At the same time, occupancy rates declined as parents were furloughed or worked from home. This meant nurseries had missed out on fees which cross-subsidised free places, in some cases leaving businesses unviable. An NDNA survey found that 85 per cent of respondents were either making a loss or only just breaking even. These effects were unevenly distributed across the country and between high and low-income areas. The EYA told us the number of settings they operated, predominantly in areas of social deprivation, had fallen by half over twelve months. Poorer families were more likely to have lost access to early years settings. The EYA described this as market failure.

As employers faced attritional conditions, so did their workers. Both the EYA and the NDNA told us that working through the pandemic had meant greater stress and exposure to infection for staff. Often, children's extended absence from childcare settings meant more difficult behaviour when they returned. This was exacerbated by growing recruitment difficulties as the economy reopened, especially when it came to more qualified workers. The NDNA shared survey evidence from the Education Policy Institute, showing that 90 per cent of respondents found it difficult or very difficult to recruit Level 3 qualified staff.

## Other issues raised

**4.48** Alongside transport and childcare, tipping was also raised as a concern. As well as the exclusion of tips from furlough calculations, workers shared evidence of employers changing the rules around the allocation of tips. Hospitality workers in Scotland complained that access to tips was variable and employers used tips as a pot to dip into. An employee of a large dining chain noted the tips policy had shifted from a 70/30 to a 50/50 share between front-of-house and back-of-house staff, meaning waiting staff got less. This was described as a tool by management to increase pay for chefs and ease recruitment difficulties without putting up their headline rate. There were also complaints that tips were used to cover night travel via taxi after a late shift, so fewer tips meant workers took more dangerous (bus or walking) journeys home at night. In focus groups, we heard about rising admin charges levied by employers on tips: in one case this had gradually risen from 28 to 60 per cent. There are also cases of restaurants using service charges to pay staff. Participants thought the Government should take another look at rules around this.

**4.49** The TUC recommended the LPC should look into the impact of the NMW on pensions savings and factor this into recommendations. They stated that low-paid workers may miss out on pensions: 'any worker earning the MLW of £8.91 an hour who works 21.5 hours a week or less misses out on the automatic right to a workplace pension with an employer contribution. Those working less than 13.5 hours a week would miss out on the right to any employer contribution'. Any pension an NLW worker does receive is unlikely to support a decent standard of living: 'A worker earning the NLW for 32 hours a week would earn £14,826 a year. This would result in an annual pension contribution of £687. If they maintained this level of contribution for 40 years, assuming average investment returns of inflation plus 2.5 per cent, they would end up with a pot of less than £50,000, significantly below the £70,000 needed to provide an adequate standard of living in retirement according to the Living Wage Foundation'.

## Evidence on social care

As noted in the introduction to this report, social care is largely reliant on public funding. Over the years, increases in this funding have generally failed to match the pace of the rising minimum wage, causing difficulties across the sector.

Respondents to our consultation once again reflected on the sector's funding shortfall. The National Care Forum (NCF)'s member survey found that only 39 per cent of respondents saw an increase in uplift from commissioners in April 2021. 70 per cent of respondents said current funding did not cover overall staff costs, including April's NLW rise. Similarly, the Voluntary Organisations Disability Group (VODG) told us many providers were not confident future increases would be matched by uplifts from commissioning bodies. This left providers with no alternative but to make cuts in other areas such as worker terms and conditions. The Home Care Association again told us that local authority commissioning rates did not reflect the minimum price for home care. They estimated this as £21.43 in April 2021 (with labour costs accounting for around three-quarters of this figure). The median rate for council-funded care in May 2020 was £17.65, with a median increase for 2021 of around 2 per cent.

This funding squeeze came against a backdrop of Covid-19 and unprecedented pressure on business models. Several respondents suggested the pandemic was leading to structural change, with permanently lower occupancy levels in residential care homes and higher costs due to Covid. Care England told us the sector had hoped for an immediate recovery, but there was a sense now that it would be a long-term issue: 'there has been a loss of confidence and perceptions of safety have changed'. The National Care Association (NCA) told us that for residential care, 'the business model is wrecked', with providers having lost about 25 per cent of their client base and overall cost rises between 40 and 200 per cent. One of the most significant increases had been for insurance – up to 300 per cent. As a result, services were changing to remain viable: 'a lot of providers have started closing down wings (bed capacity), due to a reduction in staffing'. The Homecare Association also told us that Covid-19 had increased costs and reduced incomes in home care as well, with providers experiencing increased PPE costs and increased insurance premiums.

Many respondents highlighted the impact of this shortfall on the pay and conditions of care workers and on the attractiveness of working in the sector. The context for this was widespread staff shortages, aggravated in some areas by the withdrawal of EU workers from the labour supply. Unison told us the poor state of employment conditions was placing severe strain on recruitment and retention, with vacancy and turnover rates both well above the economy-wide average. Several groups told us the reopening of other sectors (particularly hospitality and retail) would lead to social care losing workers. The Association of Directors of Adult Social Services (ADASS) argued the pandemic had shown clearly that care competed for workers with those sectors. When hospitality and non-essential retail were closed, recruitment had eased considerably, but their reopening had reversed any gains.

A submission from Skills for Care outlined how the pay of care workers had stood still relative to other occupations: 'kitchen and catering assistants earned 53 pence less per hour on average in 2012/13 than care workers but this gap had reduced to 15 pence by 2019/20. Similarly, sales and retail assistants earned 13 pence per hour less than care workers in 2012/13 but in 2019/20, they earned 24 pence more per hour on average than care workers'. Other groups pointed to the NHS as a competitor for skilled care workers: Care England shared research showing that care staff would get a £7,000 pay rise by moving into the NHS and public care providers.

Brexit and changes to migration rules were another factor affecting care. The Local Government Association (LGA) described care as 'one of the sectors most vulnerable to migration rules changes because a significant proportion of the workforce are not UK nationals'. They thought the new immigration system would have a significant impact on an already difficult recruitment picture. They pointed out that around 750,000 care workers earned below £20,480, the minimum salary threshold in the points-based system. BUPA Care Services outlined the extensive preparations they had undertaken

for Brexit, including helping EU staff apply for settled status. So far, they had avoided any marked reduction in existing EU staff, but they noted the additional administration required for migrant workers.

Many respondents focused on the sector's inability to invest in staff, offer progression or attract young workers. The NCA stated that investment in staff – particularly in leadership roles – was a huge challenge for the sector. They noted how they have an ageing workforce which is of concern, 'how do you get young people to come into a sector that shows them no pathway to a recognised professionalism?' Skills for Care noted the 'experience pay gap' (the differential an experienced worker can expect over a new entrant) had fallen from 26-37 pence to just 12 pence per hour. 'It will continue to be challenging for employers to reward workers with more experience that are already paid above the NLW.' The NCF's survey found that 39 per cent of respondents said pay differentials had reduced between grades of staff since April 2021. A submission from academics at the University of Kent (Valdean and Allen) argued the minimum wage had led to substantial compression of the wage distribution in care. This had long-term consequences for wage progression, including high staff turnover. They noted this was not an argument against NLW increases, but rather for a pay structure that recognised skills and experience, similar to that of NHS health care assistants.

The VODG expressed a widely shared view, stating its members were frustrated at having to pay the NLW for jobs in care. Providers wanted to pay a fair rate but did not have the freedom as in other sectors to raise prices. ADASS described the workforce as 'burnt-out, exhausted and undervalued'. Surrey Care Association told us many staff were exhausted and may be looking to leave the sector.

Evidence from unions and workers confirmed this picture of limited progression and low morale. GMB told us the sector was 'crumbling after years of chronic underfunding' and the workforce were 'underpaid and undervalued'. They reported increasing desperation and destitution among workers, particularly as a consequence of sick pay; GMB reps had needed to organise collections to buy food parcels for members who were off sick but not in receipt of sick pay. Speaking with care workers in Northern Ireland, we heard about the effects of employers paying only statutory sick pay to workers affected by Covid. This had been hugely alienating and was pushing workers to look at other options within and outside the care profession. We heard from workers who had opted for agency work rather than be directly employed by a private provider. The trade-off between fewer guaranteed hours and uncertainty over job location was worth it for better pay rates and the right of refusal over working conditions.

Unison members working in care told us they collectively felt under-rewarded for their work; pay levels were low and there was no route to progress without abandoning the care aspect which they enjoyed. There was dismay at the way employers invested in unwanted gifts (a bobble hat, a pair of branded socks, a poem engraved on a plastic disc) instead of staff pay. All had had their work upended by Covid, both hours and schedules as well as the nature of the work itself. The work had intensified, in part as a consequence of Covid-related safety requirements (around PPE for example), and in part as the 'nicer' elements of the job (social or developmental activities with clients) were no longer possible. There were complaints about misleading recruitment; all the workers felt that care employers misled people both about the nature and difficulty of the job and the levels of pay available. This led to high staff turnover, the costs of which could be better spent retaining existing staff. Zero- and short-hours contracts were used and in some cases, workers felt unable to complain about their working patterns without losing shifts.

The risk of underpayment remained high. Familiar issues with travel time and payslips were raised again in several meetings. These had been aggravated by the introduction of PPE and extra cleaning

requirements, meaning more time was needed to prepare for appointments. There was little sense that changes to payslip regulations had made it simpler for workers to understand their pay. As one Unison official told us, 'you would need to be a forensic accountant to understand pay slips'.

The sector's overarching ask remained for NLW increases to be matched in the funding the Government grants the sector. Care England reaffirmed their support for good and fair wages but stated that 'for too long, the LPC's recommendations ... have not been matched by adequate government funding'. The NCA summed up their position as two messages: 'we want staff to be paid and we want to be able to afford to pay them properly'.

Several respondents wanted the LPC to look at the transparency and consistency of commissioning practices. The Homecare Association specified two areas where they thought LPC recommendations could be of value: firstly, that councils undertake 'open and transparent cost of care exercises' with providers; secondly, that there is robust oversight of the impact of commissioning rates on care prices and workers' wages. 'We again urge the LPC to recommend that central and devolved Government takes a more active role in funding and oversight of adult social care services.'

The Royal Mencap Society wanted consistency across local authorities: 'We also need to consider whether variances in local authority commissioning payments for social care contracts are appropriate .. these different rates have a real impact on perceptions of fairness and equity across the country.'

Respondents agreed the ultimate goal should be to raise carers' pay above the NLW, to build professionalism and restore esteem to careers in the sector. The Royal Mencap Society supported the proposed NLW increase but recommended introducing Living Wage Foundation rates for the care workforce: 'there should be a far more ambitious plan to pay colleagues ... at a level that truly values the work they do'. They noted the Scottish Government's commitment to paying living wage rates, with the Welsh Government considering the same. Surrey Care Association argued that a national care wage of £2 above the NLW was required to attract the skilled staff the sector requires. ADASS reaffirmed their support for a higher minimum wage for carers. Care England stressed the need for a wider workforce strategy which could be decoupled from long-running discussions about the sector's funding.

## Conclusion

**4.50** Evidence from workers this year illustrated the difficult circumstances many have faced over the past year. Workers who were furloughed have had to cope on a reduced income, often facing great uncertainty over their future. For some workers, the Covid-19 pandemic has changed the nature of their work while for others it has brought existing problems of insecurity and precarity to the fore. The kinds of one-sided flexibility identified in the Taylor Review, and on which we made a number of recommendations in 2018, still affect many workers whom we meet (Taylor Review, 2017; Low Pay Commission, 2018).



# Chapter 5

## The National Living Wage

### Key findings

This chapter tracks employment and pay outcomes for low-paid workers over the last two years. It uses stakeholder evidence, research findings and in-house analysis to estimate the effects of the National Living Wage (NLW) where possible. The Covid-19 pandemic and the Coronavirus Job Retention Scheme (CJRS) have made it difficult to isolate the effects of the 2020 and 2021 NLW upratings.

The NLW grew by 8.5 per cent between April 2019 and April 2021 while median hourly pay grew by only 5.5 to 6.8 per cent for employees aged over 25. This means that pay growth has been strongest amongst low-paid workers. There is continued evidence that NLW increases lead to higher pay for workers paid above the NLW as well as those on it.

Both firms and worker representatives expressed worries about shrinking pay differentials between the lowest-paid workers in firms and slightly more senior colleagues. Our analysis suggests that on average pay differentials in low-paying sectors stabilised between 2019 and 2021, after falling between 2015 and 2019. Stakeholder feedback shows a range of responses around this average. Some employers we spoke to this year told us they were able to reinstate differentials due to the lower NLW uprating in 2021, but long-term pressures on differentials remained a primary concern for most businesses we met. Stakeholders expressed concerns that reduced differentials could affect staff morale and future progression. We have found no effects from the NLW on pay progression previously, but there may be long run effects we cannot yet measure.

We estimate that the percentage of employees paid the NLW fell slightly from 6.5 percent (1.62m employees) to 5.4 percent (1.43m employees) between April 2019 and April 2021. This is surprising given the NLW has grown faster than average earnings over the last two years and has been extended to 23 and 24 year olds. There are two drivers: firstly, employment was still below pre-pandemic levels for low-paid workers in April 2021. RTI employment grew by around 900,000 between April and September; many of these jobs would have been low-paid, so it is possible coverage is now higher than in April. Secondly, employers have been increasingly likely to move workers just above the minimum wage, rounding pay up from £8.91 (the 2021 NLW rate) to £9.

Workers in groups more likely to be paid the NLW have seen poorer labour market outcomes in the last two years, but there is little evidence the NLW has caused this. Instead, the pandemic and ensuing recession have affected the labour market. NLW workers are also more likely to work in industries shut down during the pandemic, and so were worse affected. Stakeholder evidence suggests firms have dealt with the rising NLW via mechanisms other than employment adjustments including raising prices, reducing profits or increasing productivity. Survey results on the NLW's impacts mirrored those from previous years with the leading responses being to increase prices or reduce profits. Increasing prices



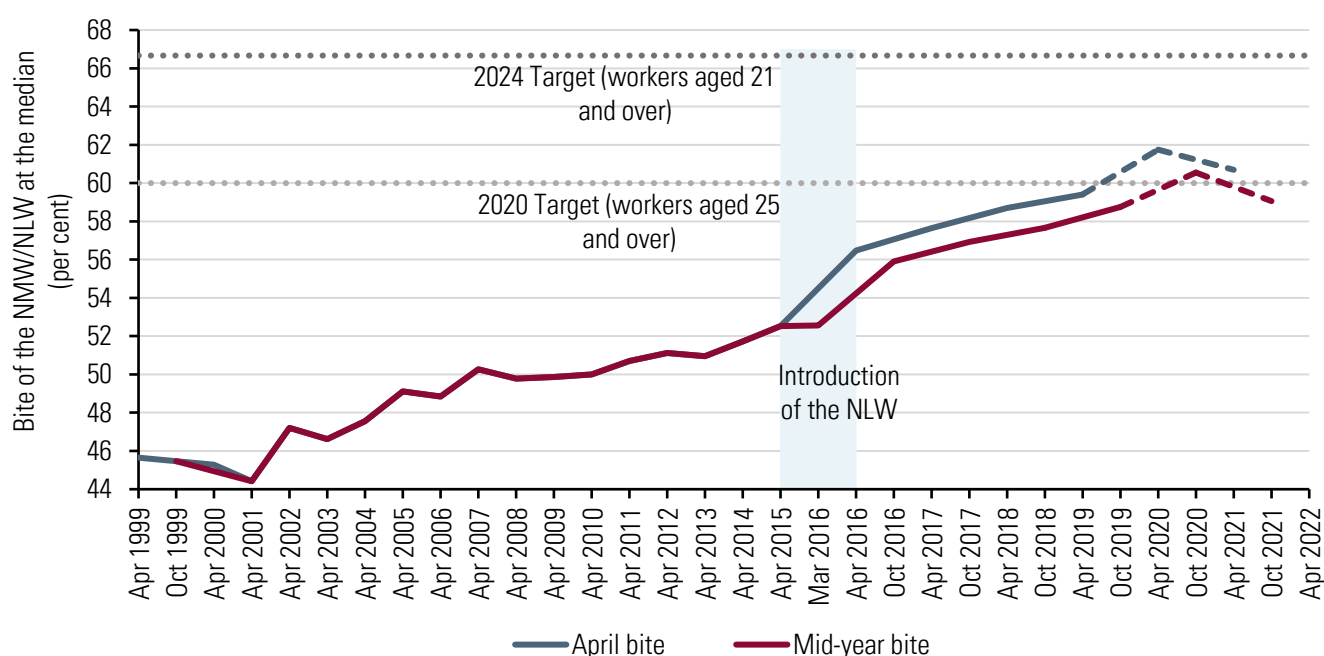
was a more common response this year than in the past, while fewer firms said they responded to NLW increases by investing to increase productivity.

**5.1** The Covid-19 pandemic has made it harder to assess the impacts of the two most recent National Living Wage (NLW) upratings. As detailed in the first two chapters of this report, the pandemic caused a large global recession, which hit the UK particularly hard. It had a large impact on both UK labour market outcomes and the interpretability of statistics relating to the UK labour market. It is therefore difficult to isolate the impacts of the NLW from the pandemic.

**5.2** In this chapter, we use a combination of in-house analysis, research and stakeholder evidence to estimate the effects of the NLW. We first summarise evidence on how the last two NLW upratings have affected pay. We find that the NLW continues to drive pay up for low-paid workers. We then present evidence on how NLW upratings have affected employment. We continue to find limited evidence on employment effects. We then present stakeholder evidence on the effect of the NLW on prices, profits, and productivity.

**5.3** The introduction of the NLW in 2016 led to larger increases in the minimum wage and a change in our remit. Between 2016 and 2020 the Government asked us to recommend NLW rates to reach 60 per cent of median hourly pay (for those 25 and over) by 2020. This was the first time the Government had set a minimum wage target. Reaching this target required large increases relative to median wages. Between 2015 and 2020 the NLW rose from 52 per cent of median hourly earnings to 60 per cent. In comparison between 2010 and 2015 the 'bite' of the National Minimum Wage (NMW) rose only two percentage points from 50 per cent of median hourly earnings to 52 per cent.

**Figure 5.1: Bite of NMW/NLW for workers aged 25 and over, UK, 1999-2021**



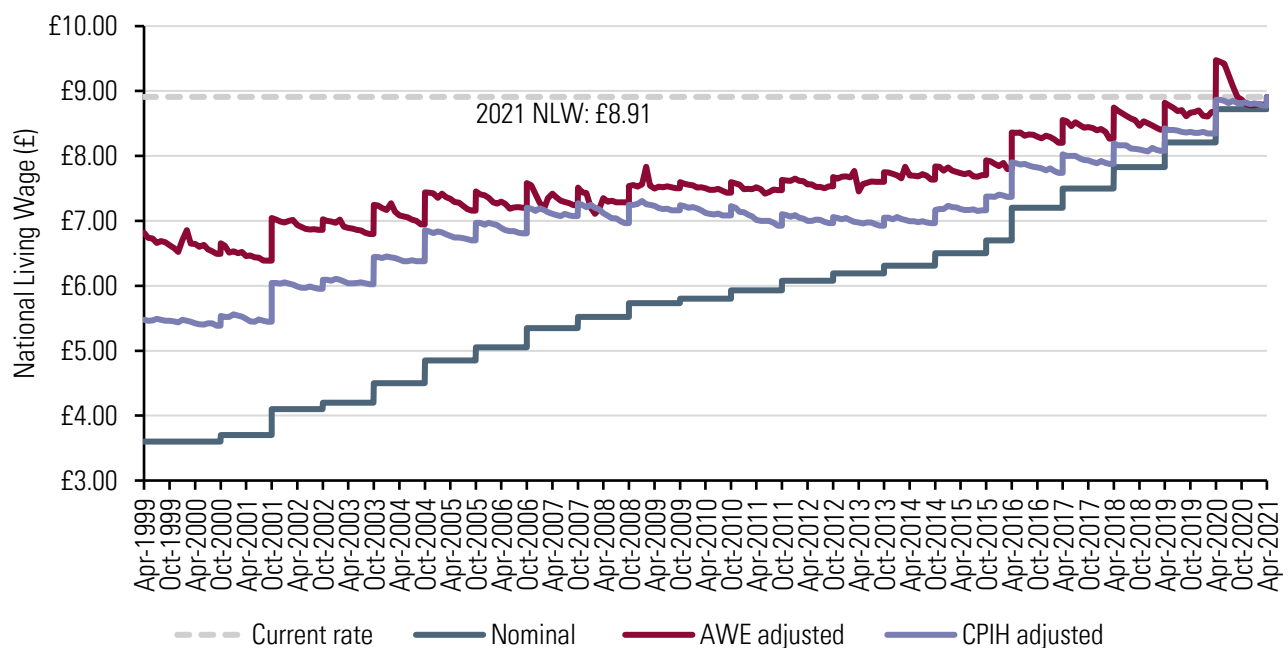
Source: LPC analysis using ASHE, standard weights, and AWE ONS Average Weekly Earnings Seasonally Adjusted Total Pay, UK, 1999-2021.

Notes: Figures for 2020 are based on modelled estimates using AWE and ASHE 2019, as data issues meant we could not use ASHE 2020. April figures are based on ASHE. Mid-year figures use AWE to project median hourly earnings forward from April (when ASHE data is available) to October.

**5.4** Our target in this year's remit is to raise the NLW to two-thirds of median wages by 2024, taking into account economic circumstances. Reaching this target would put the UK at the international frontier of minimum wages. See Appendix 4 for international comparisons and a review of the recent international evidence.

**5.5** Last year we recommended a modest increase in the NLW. The pandemic caused the largest recession in modern history and Commissioners felt caution was necessary to avoid harming low-paid workers' employment prospects. The Government accepted our recommendation and the NLW rose 2.2 per cent from £8.72 in April 2020 to £8.91 in April 2021. This meant the NLW grew slightly above inflation (as shown in Figure 5.2) but did not make significant process towards our 2024 target.

**Figure 5.2: The real and relative value of the National Living Wage/National Minimum Wage, UK, 1999-2021**



Source: LPC analysis using ONS CPIH index, ONS Average Weekly Earnings (AWE) Seasonally Adjusted Total Pay, UK, 1999-2021

Note: For AWE adjustment and CPIH adjustment, figures are in 2021 prices.

## The National Living Wage and pay

**5.6** As discussed in Chapter 3, our normal pay data (the Annual Survey of Hours and Earnings, ASHE) have been harder to interpret over the last two years. This is mainly due to some workers having artificially lower pay due to the CJRS. In this chapter, we report a range of estimates for 2021 pay where possible. When reporting a range is inconvenient, we only use our central estimate.

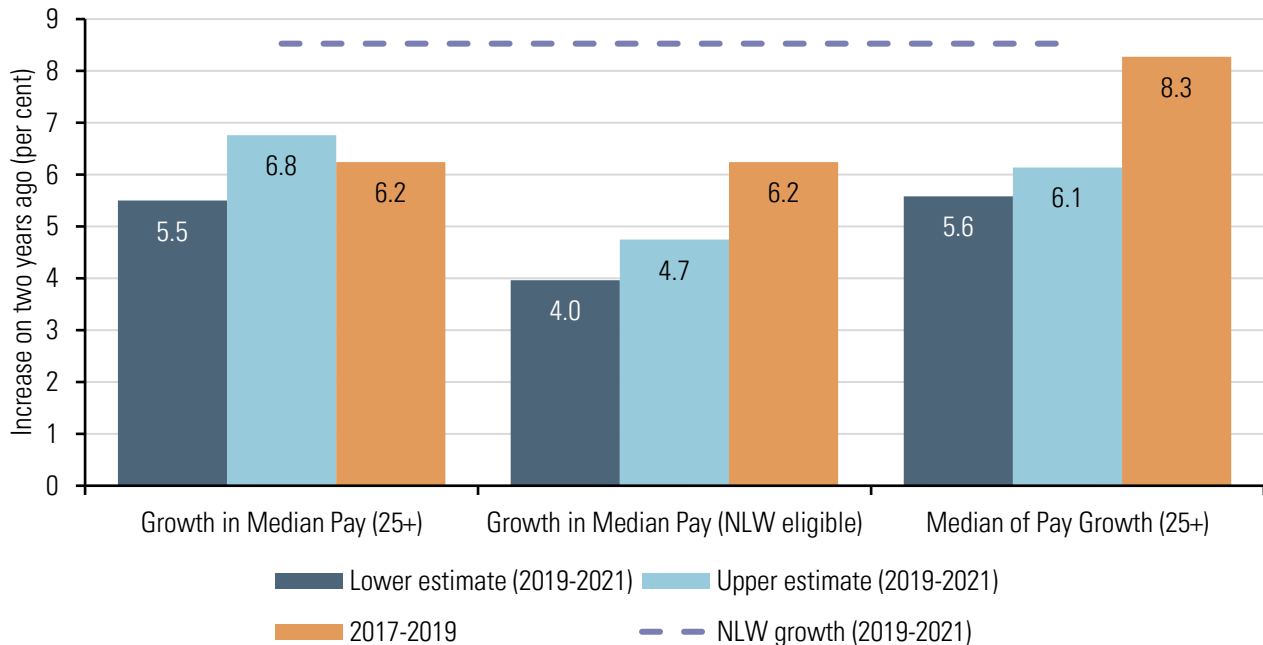
## Pay growth, pay differentials and progression

### The distribution of pay growth

**5.7** Due to the effects of furloughing on the 2020 data, we cannot accurately estimate median hourly growth between 2019 and 2020 or 2020 and 2021. Instead, we look at the two-year period between April 2019 and April 2021, during which the NLW grew faster than median hourly pay for

employees over 25. The NLW grew by 8.5 per cent between 2019 and 2021 (6.2 per cent in 2020 and 2.2 per cent in 2021), while median wages grew by only 5.5 to 6.8 per cent. This is shown in the dark and light blue bars of Figure 5.3.

**Figure 5.3: Growth in median hourly pay, UK, 2017-2021**



Source: LPC analysis of ASHE, standard weights, UK, 2017-2021.

Note: Excludes first year apprentices.

**5.8** The extension of the NLW to 23 and 24 year olds in April 2021 reduced the median wage of the NLW population. In 2019, when only those aged 25 and over were eligible for the NLW, their median hourly pay was £13.83. We estimate the 2021 median for those aged 25 and over to be between £14.59-£14.76 (5.5-6.8 per cent higher than in 2019). As 23 and 24 year olds tend to be paid less than older workers, this reduced median pay for the eligible population. We estimate the 2021 median for those aged 23 and over (the population now eligible for the NLW) to be between £14.37-£14.48. This meant pay growth for the NLW population over the two years was 4.0-4.7 per cent, reducing the increase needed to meet the two-thirds target.

**5.9** The growth in median hourly pay between 2019 and 2021 is exaggerated by changes in the composition of the workforce due to the pandemic. Our main source of pay data is the ASHE, which collects data in April, when employment was still lower than its pre-pandemic level. Payrolled employment in April 2021 was 600,000 lower than in April 2019, according to Real Time Information (RTI) data. Since April 2021 payrolled employment has recovered strongly, growing by approximately 900,000 up to September.

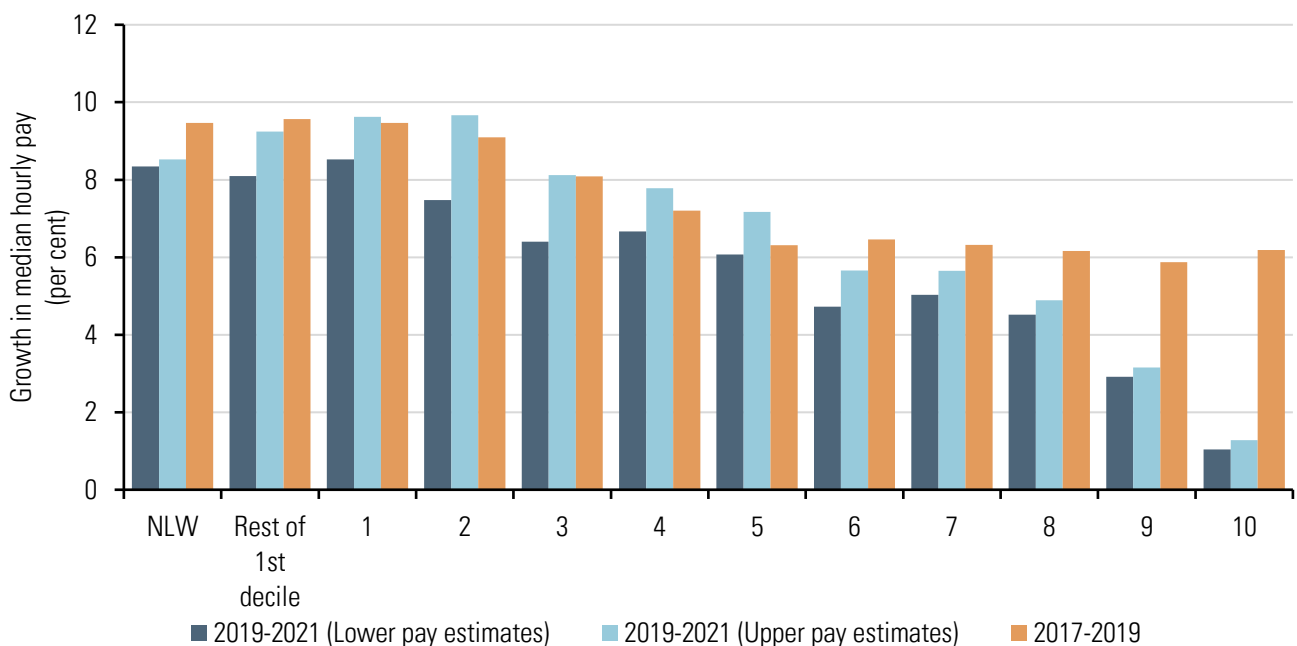
**5.10** The shape of the labour force was also not the same and this skews median hourly pay upwards. Workers in low-paying occupations were disproportionately likely to have left their jobs. Under a different measure, the Labour Force Survey (LFS), employment in low-paying occupations in the first quarter of 2021 was 900,000 lower than in the first quarter of 2019, but 800,000 higher in other occupations. As low-paid workers leave their jobs, median pay rises, artificially boosting measures of pay growth.

**5.11** There are different ways of measuring pay growth to account for some of these effects. The median of pay growth tracks workers who have stayed in employment over two years and takes the average of pay growth for these employees. Since it looks at the same workers over time, it is less affected by changes in the composition of the workforce, unlike the growth in median pay. The median of pay growth fell by approximately 2 percentage points in 2019-2021 relative to 2017-2019, while the growth in median pay has remained at a similar level. This suggests that the growth in median pay may be inflated by compositional effects.

**5.12** We need to bear these compositional effects in mind while interpreting pay information. But it is important to note that some level of compositional effect is normal. Workers are continually moving around the labour market into other jobs, and this affects pay. What is different about the compositional effects caused by the pandemic is that they are large and temporary. These effects have implications for the path of the NLW, which we discuss in Chapters 9 and 10.

**5.13** Between 2019 and 2021, hourly pay grew faster for low-paid workers than for those above them in the income distribution. Figure 5.4 shows that while median hourly pay for the lowest pay decile grew by 8.5-9.6 per cent, it grew by only 1.0-1.3 per cent for the highest decile. This is driven by the NLW. Roughly half of workers in the bottom pay decile are on the NLW, which rose by 8.5 per cent between 2019 and 2021.

**Figure 5.4: Growth in median hourly pay by hourly pay decile, UK, 2017-2021**



Source: LPC analysis of ASHE, standard weights, employees aged over 25 excluding first year apprentices, UK, 2017-2021.

**5.14** We continue to see evidence of pay spillovers from NLW increases. Spillovers occur when minimum wage increases lead to higher pay for workers paid above the minimum wage. Firms may raise pay for workers paid above the minimum wage to maintain pay differentials within their organisation or to maintain the attractiveness of their jobs relative to other occupations. Academic research has consistently found evidence of pay spillovers in the UK and elsewhere (Cengiz et al., 2019; Avram and Harkness, 2019b). Figure 5.4 presents further evidence of pay spillovers. In 2019-2021 pay

increased more than average for workers in the second to fourth deciles, as well as for those on the NLW. This is likely driven by pay spillovers from the NLW.

**5.15** However, Covid-19 has altered the distribution of wage growth in 2019-2021 relative to 2017-2019. While in both periods we see above average growth for the bottom pay deciles, the pattern for the upper deciles is different. In 2017-2019, growth is roughly flat across the top deciles, whereas in 2019-2021 growth is slowest for the highest-paid deciles. Pay grew by just 1.0-1.3 per cent for the top decile in 2019-2021, whereas in 2017-2019 it grew by 6.2 per cent. This is likely driven by the pandemic and could be due to changes in the composition of the workforce. It could be driven by particularly weak pay growth for the top-paying occupations, or it could be that losses in employment amongst lower-paid workers have inflated pay for all deciles but the best-paid workers. Both cases would mean the pandemic has disrupted normal patterns of pay. This means there is more uncertainty over the pay effects (including spillovers) of the NLW than normal, and we cannot estimate exactly how many workers have been affected by them. Nonetheless, the recent data suggest the NLW continues to drive strong hourly pay growth for workers paid the NLW and workers paid near the NLW.

### Academic evidence on pay effects

**5.16** Our commissioned research this year also provides evidence of pay spillovers from the NLW. Cribb, et al. (2021) look at the effect of the introduction of and subsequent rises in the NLW between 2016 and 2020 on hourly wages. They adapt the ‘bunching’ approach pioneered by Cengiz et al (2019) to the UK environment, using geographical differences in wages to estimate the effect of the NLW. They find statistically significant effects on the pay of workers paid up to £1.50 above the NLW (equivalent to the 20<sup>th</sup> percentile of the wage distribution). This suggests the NLW has significant spillover effects and is in line with previous work which has estimated spillovers reaching the 30<sup>th</sup> percentile of the wage distribution (Avram and Harkness, 2019a; Butcher, Dickens, and Manning, 2012).

**5.17** Papps and Delaney (2021) also used the ‘bunching’ approach but focused on the hiring decisions of firms using data scraped from the job vacancy site findajob.co.uk. This innovative data source allowed them to look at the effects of the 2021 NLW uprating on hiring decisions and how they vary between firms, based on what share of the firms’ workers are paid the NLW. They found that firms who had more NLW roles were more likely to raise advertised pay for non-NLW roles following the increase in the NLW. This provides evidence that firms feel the need to maintain pay differentials within their organisations and this is one cause of pay spillovers.

**5.18** Datta, Machin and McKnight (2021) studied the impact of the ‘Real Living Wage’, a voluntary minimum wage above the mandatory minimum. They obtained detailed pay data from a large firm, which provides contracted out services to local authorities. In some areas, the firm adopted the ‘Real Living Wage’ due to requirements from the relevant local authority, while in other areas they do not. The researchers found that adoption of the ‘Real Living Wage’, increased wages by 7 per cent for entry level workers. It also led to a 50 per cent reduction in the within-establishment BAME wage gap. They found no negative impact on employment, or hours. However, they did find that the ‘Real Living Wage’ caused establishments to use a coarser wage structure – fewer pay bands – with spillovers to jobs not directly affected. It also caused an increase in the ratio of entry level workers to supervisors.

## Pay differentials

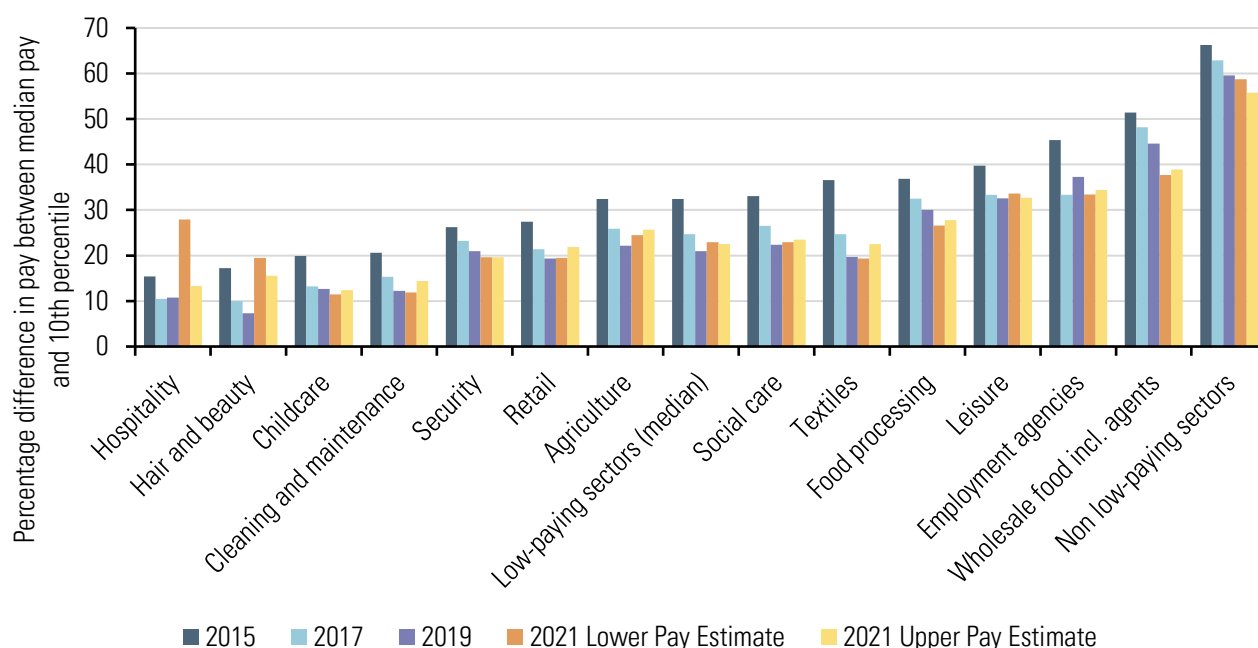
**5.19** The NLW has compressed pay structures in low-paying industries since it was introduced in 2016. If firms raise wages in line with the NLW for their lowest-paid workers but increase wages for more senior roles by a smaller amount, their pay structures will become more compressed. In Figure 5.5 we track the difference between median pay and the 10<sup>th</sup> percentile of pay for low-paying industries. We find that the difference shrank significantly after the NLW was introduced in 2016. In 2015, hourly pay for the median worker in a low-paying industry was 32 per cent higher than for a worker in the 10<sup>th</sup> percentile. In 2017 pay was only 25 per cent higher for a median worker relative to a worker in the 10<sup>th</sup> percentile and by 2019, the difference had shrunk further to 21 per cent.

**5.20** Differentials within non low-paying industries also fell between 2015 and 2019, but by a smaller amount. There was much less compression in non low-paying industries to begin with; in 2015, the median worker in non-low paying sectors earned 66 per cent more than the 10<sup>th</sup> percentile worker. In 2019 this difference had fallen to 60 percent. This 7 per cent fall (due to rounding) is smaller than the 11 per cent reduction in low-paying industries, which suggests the sectors more exposed to the NLW have seen larger reductions in differentials.

**5.21** This is not a perfect measure of differentials within firms. We track differentials within sectors rather than within firms, so our results could be partially picking up a narrowing of differentials between firms rather than within firms. We have also only presented the difference between the median and 10<sup>th</sup> percentile, which may not catch changes to pay structures at other parts of the pay distribution. Nevertheless, this suggests the NLW caused differentials to shrink between 2015 and 2019, particularly in low-paying industries, but that stabilised between 2019 and 2021.

**5.22** In 2021, under our central estimate, the median worker in a low-paying sector was paid 23 per cent more than the 10<sup>th</sup> percentile worker. This is higher than the 21 per cent gap in 2019. This suggests firms in low-paying sectors are no longer reducing differentials and may be increasing them in some cases, although the picture varies by sector. In some low-paying sectors with larger differentials, such as wholesale food and food processing, differentials have reduced further, whereas in sectors where differentials are already low they have stabilised or grown slightly. Two factors are likely driving this stabilisation. Firstly, differentials in some sectors may have reached a point where they can no longer be reduced further without negative effects on worker morale and incentives. Secondly, the relatively modest increase in the NLW in 2021 (2.2 per cent) may have provided firms more space to reinstate differentials.

**Figure 5.5: Difference in pay between median and 10<sup>th</sup> percentile by low paying industry, UK, 2015-2021**



Source: LPC analysis of ASHE, standard weights, UK, 2015-2021.

Note: Low-paying sectors based on SIC07 groupings explained in data sources annex. 'Low-paying sectors' is median of figures of all low-paying industries. 'Non low-paying sectors' is median of figures for SIC industry groups excluding low-paying industries.

### Stakeholder evidence on pay differentials and structure

**5.23** As in the past, we received extensive stakeholder evidence this year on the impact of the NLW across organisations' pay bills and structures and the consequences of narrowing differentials. In some sectors (for example, manufacturing) firms reported a greater tendency to maintain rigid differentials, thereby increasing costs. In others (retail, hospitality, social care) it was more common to hear about differentials tightening, with a consequent impact on staff morale, progression and recruitment. Some employers we spoke to had used the lower 2021 uprating to rebuild or at least stabilise differentials. For many, however, pressure on differentials had built over several years and the sudden tightening of the labour market in summer 2021 had brought these effects to a head.

**5.24** In retail, the British Retail Consortium (BRC) told us that more of their members reported changes to pay structures this year than in the past, with '32 per cent of retailers indicating they had delayed management roles and 57 per cent reporting they have reduced pay differentials'. Two large employers, Greggs and Whitbread gave examples of some pressure over differentials within retail roles. Whitbread had maintained differentials above the NLW in both 2020 and 2021, but their progression framework had meant the differential between hourly and salaried workers had eroded.

**5.25** This contrasts with our analysis, which finds the difference between the median and 10<sup>th</sup> percentile in retail pay grew slightly in 2021 relative to 2019, after falling considerably between 2015 and 2019. These contrasting findings are likely explained by variation within the sector. While some retailers (notably online retailers and supermarkets) have performed well in the pandemic and may have increased differentials, others have been hit harder and may have needed to reduce differentials further.

Our analysis describes what is happening for an industry as a whole and may not be representative of each individual employer within that industry.

**5.26** Community Leisure UK (CLUK) told us the effects of narrower differentials in leisure were particularly acute, resulting in shortages in certain key roles and staff feeling undervalued – especially those whose role was more complex or involved more responsibility. The Federation of Wholesale Distributors (FWD) told us the primary impact of the NLW has been on pay differentials. The National Hair & Beauty Federation (NHBF) also told us it was increasingly difficult to manage the expectations of skilled and experienced staff that differentials would be maintained. Some members unable to do this had seen staff move elsewhere, taking clients with them. The Local Government Association (LGA) told us about the problems which narrower differentials created for them, with bottom-loaded pay awards to stay above the NLW exacerbating recruitment challenges for specialist professions at higher grades, where LAs compete with the private sector on pay.

**5.27** The British Chambers of Commerce (BCC) reported that ‘in cases where employers have struggled to maintain differentials, firms continue to report poor employee morale and increased barriers to progression’. The CBI told us that reduced differentials damage employee morale, ‘reduces incentives for progression...restricts these workers’ ability to take subsequent steps up needed to increase earnings over time... Increasing labour turnover is also a consequence’. In a survey by the Federation of Small Businesses (FSB), most respondents (55 per cent) had maintained differentials. A quarter of those respondents affected by the NLW, however, said changes to differentials had created dissatisfaction among non-NLW staff.

**5.28** Unions such as GMB and Unite recognised that pay compression was a problem. The GMB stated that ‘we have seen a noticeable degree of compression for workers paid just above the minimum rates which can cause problems for good working relationships and retention’. This led to workers becoming stuck on minimum rates. They advocated collective bargaining across the workforce as a means of avoiding this. Unite reported a continued narrowing of pay differentials in hospitality, with some businesses diverting tips to the kitchen to make up the difference, ‘usually wiping out the NLW increase for waiting staff and leaving them financially worse off’.

## Pay progression

**5.29** Reducing differentials between roles, can reduce the incentive and opportunity for NLW workers to progress to more senior roles. Both employers and employees have highlighted this issue to us. The Chartered Institute of Payroll Professionals (CIPP) noted that ‘significant increases to the minimum wage can make it difficult for businesses to incentivise employees into roles that require more complex work or place higher responsibility on them’. Unite noted the lack of progression opportunities for low-paid workers, especially in hospitality, cleaning and facilities jobs. ‘An employee in the accommodation sector barely earns more in their thirties and forties than they do in their twenties’.

**5.30** There is still limited evidence that increases in the NLW have reduced progression for low-paid workers. Avram and Harkness (2019b) studied minimum wage rises between 2009 and 2017. They found that increasing the NLW relative to median earnings has a small negative effect on the probability of minimum wage workers’ progressing to ‘high pay’ employment (defined as more than two-thirds of median hourly pay). However, this is sensitive to how they specify their regression. They therefore suggest caution in interpreting the finding. They also found no statistically significant effect from

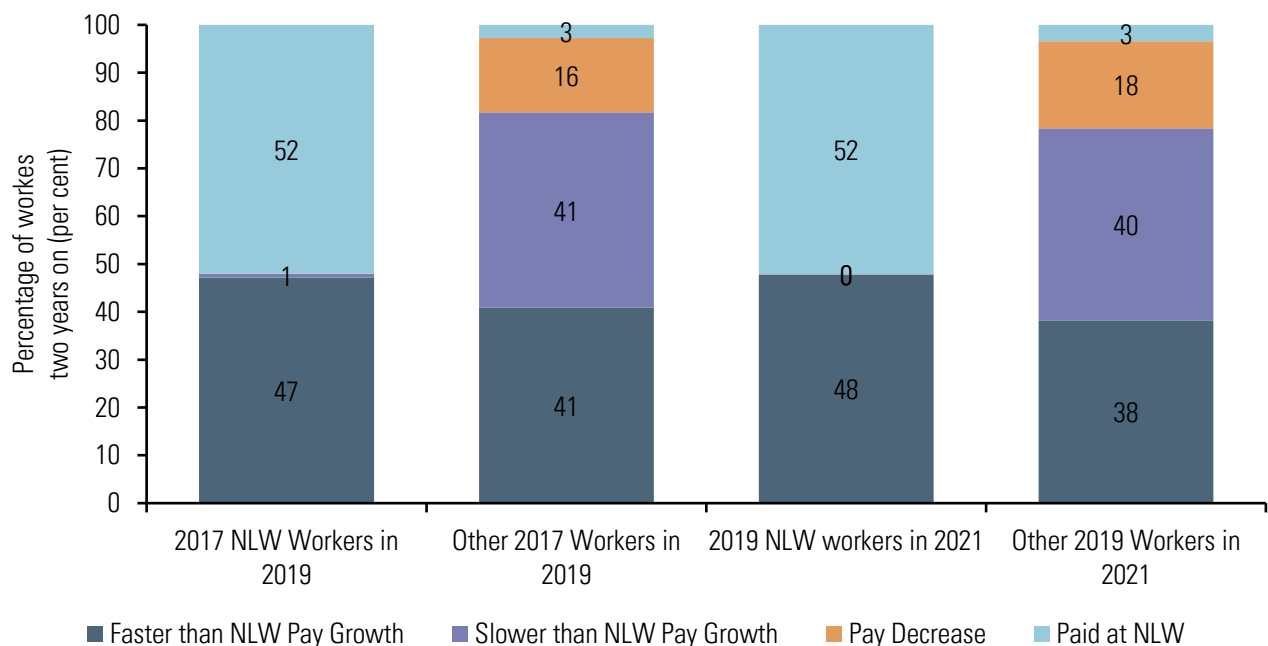


minimum wage rises on the probability of minimum wage workers moving off the NLW and to other low-paying (defined as less than two-thirds of median pay) jobs.

**5.31** More recent evidence suggests NLW workers who remain in employment have faster pay progression than other workers. Figure 5.6 tracks outcomes for the same workers between 2017 and 2021. It does not include workers who became unemployed, self-employed, or moved to an employer who did not respond to the pay survey. It shows that progression tends to be better for NLW workers. Around 48 per cent of 2019 NLW workers were paid above the NLW in 2021; these workers had received more than an 8.5 per cent pay increase. In comparison only 38 per cent of other workers had seen their pay rise faster than the NLW. This is partly due to where NLW workers are in their careers. NLW workers are more likely to be at the beginning of their careers, where fast progression is more likely.

**5.32** We find no evidence of progression slowing in the period 2019-2021 relative to 2017-2019, for workers who remained employed. The share of workers seeing pay growth faster than the NLW is the same for both groups of workers, although the NLW did increase slightly faster in 2017-2019 than in 2019-2021. This shows short-term pay progression is broadly unchanged for workers who remained in employment.

**Figure 5.6: Outcomes for NLW and non-NLW workers after two years, UK, 2017-2021**



Source: LPC analysis of ASHE, 2017-2021, standard weights 2017 and 2019, UK, workers aged 25 and over excluding first year apprentices, UK, 2017-2021.

Note: This figure uses our central estimate of 2021 pay. Only includes workers with ASHE data in initial year and follow up year (two years later.) Does not include workers who have moved out of employment, into self-employment or other workers without follow up data. May be affected by attrition bias.

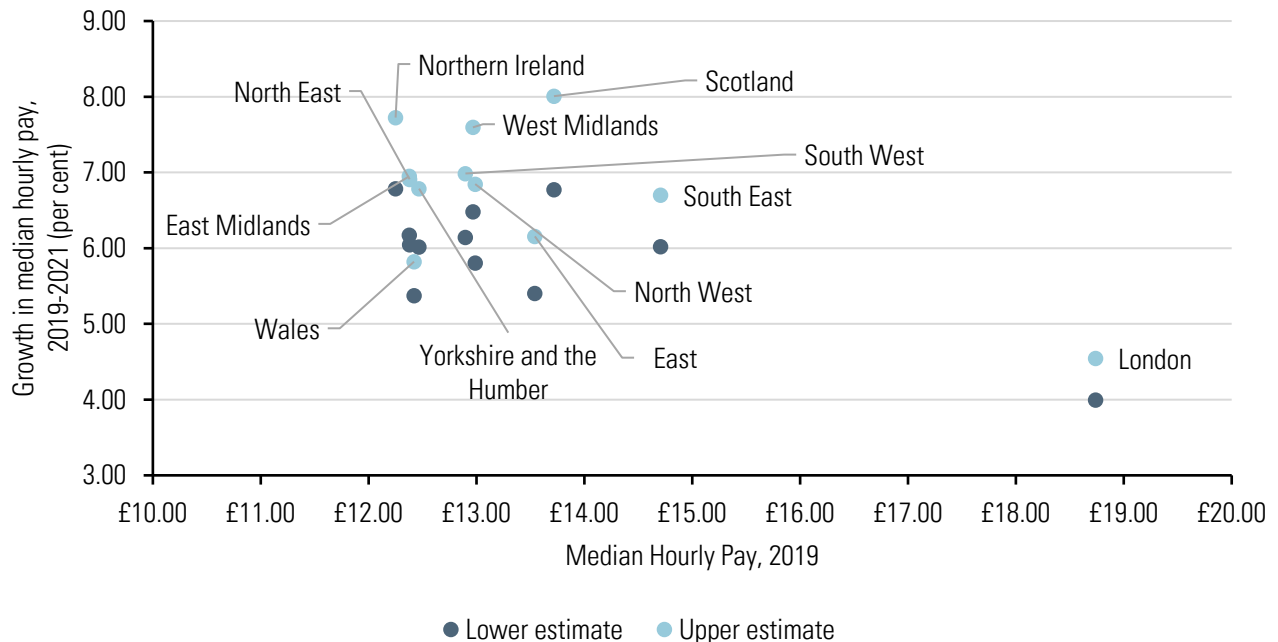
**5.33** However, many workers have lost their jobs during the pandemic. We discuss the evidence on this later in this chapter. We know that losing employment during a recession has scarring effects on future employment. So, while short-term pay progression for workers who stayed in employment has remained strong, it is less clear whether either the pandemic or recent rises in the NLW have harmed

pay progression over the longer term, especially amongst those who have lost their jobs in the recession.

### Pay growth by region and occupation

**5.34** Pay growth between 2019 and 2021 was stronger in regions more exposed to NLW increases. Over this period, median hourly pay grew by 6.8-7.7 per cent in Northern Ireland, the lowest-paying country/region. In London, the highest-paying country/region, median hourly pay grew by only 4.0-4.5 per cent. These differences are partly driven by the NLW. More workers are paid at or near the NLW in lower-paying areas, so increases in the NLW drive up pay for those areas relative to better-paid areas. This is in line with the 2015-2019 trend discussed in Chapter 3. Other factors also affect differences in pay by region. London was hit particularly hard by the pandemic, which is likely the main driver of its slow pay growth.

**Figure 5.7: Growth in median hourly pay by region/country, UK, 2019-2021**

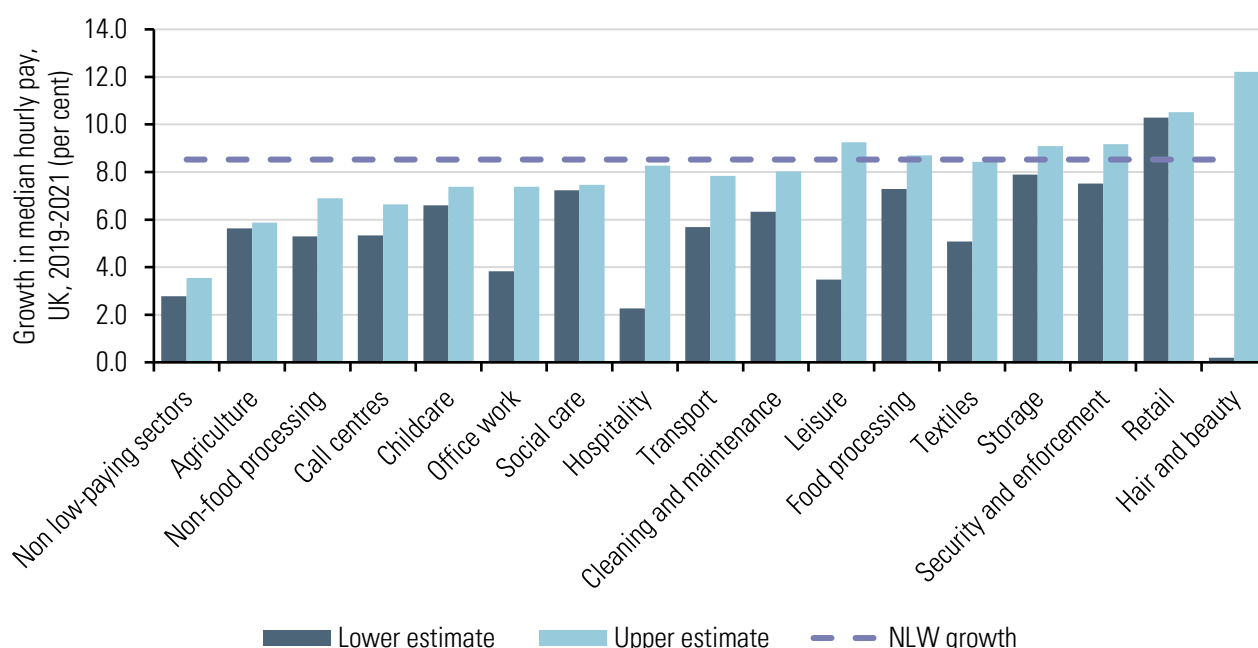


Source: LPC analysis of ASHE, standard weights, employees aged 25 and over excluding first year apprentices, UK, 2019-2021.

**5.35** Low-paying occupations also saw faster pay growth than non low-paying occupations between April 2019 and April 2021. Median hourly pay grew by 7.6-8.7 per cent for low-paying occupations, and only 2.8-3.6 per cent for other workers. This was driven by the NLW. Around 20 per cent of workers in low-paying occupations are paid the NLW compared with only 2 per cent of workers in other occupations. Above-average growth in the NLW leads to higher pay growth in low-paid occupations.

**5.36** Some low-paying occupations have seen faster pay growth than others, due to the pandemic. Median hourly pay grew by 10.3-10.5 per cent for retail workers, but only 5.6-5.8 per cent for agricultural workers. Median hourly pay for sales assistants in supermarkets increased by 11.1 per cent between April 2019 and April 2021. Furlough means there is a large degree of uncertainty over the size of pay increases in sectors such as hair and beauty, where a large percentage of employees have been furloughed.

Figure 5.8 Growth in hourly pay by low-paying occupation, UK, 2019-2021



Source: LPC analysis of ASHE, standard weights, employees aged 25 and over excluding first year apprentices, UK, 2019-2021.

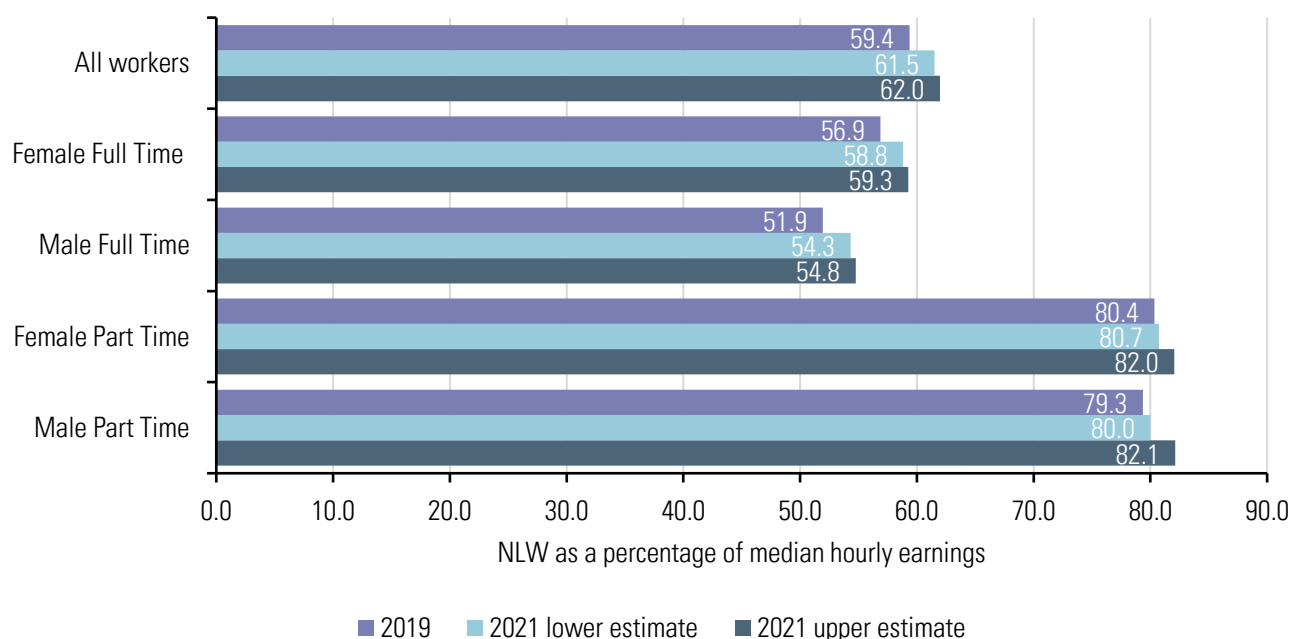
## The National Living Wage relative to median wages

**5.37** The 'bite' is a measure of how high a minimum wage is relative to average wages. It is calculated by taking the minimum wage as a percentage of median hourly wages. This measure is central to the NLW target for 2024, which envisages a bite of two-thirds or 66.7 per cent. In April 2019 the 'bite' of the NLW was 59.4 per cent for all workers, and in April 2021, we estimate it was between 61.5 and 62.0 per cent with a central estimate of 61.8 per cent. The bite has increased for two reasons. Firstly, the NLW has grown faster than median hourly wages. In addition, the NLW age threshold has changed, reducing the relevant median wage by bringing 23 and 24 year olds into the NLW population (see paragraph 5.8).

**5.38** Progress to the NLW target focuses on the mid-year bite, measured in October. Between April and October 2021, there has been strong pay growth (although as discussed in Chapter 1 there are issues in measuring this), while the NLW has not changed. Taken together, this means our central estimate of the NLW's bite had fallen back down to 60.1 per cent in October 2021. We discuss the latest pay data and what they mean for the future path of the NLW in more detail in Chapters 9 and 10.

**5.39** The bite of the NLW is lower for male workers than female workers, and lower for full-time workers than part-time workers, but both gaps are getting smaller. Female part-time workers have lower average pay than female full-time workers, which means the NLW is higher relative to their average earnings. In April 2019 the NLW had a bite of 80.4 per cent of female full-time workers, while it only had a bite of 56.9 per cent for male full-time workers. However, pay growth has been slower for full-time workers, so the bite has increased more for these workers than others. By April 2021, the bite increased by 1.9-2.4 percentage points for female full-time workers, while it increased by only 0.3-1.6 percentage points for female part time workers. Similarly in 2019 we estimate that the bite was 5.0 percentage points higher for female full-time workers than male full-time workers, but this difference had shrunk to 4.5 percentage points in 2021.

**Figure 5.9: The NLW as a percentage of median hourly wages by gender and full-time/part-time, UK, 2019-2021**



Source: LPC analysis of ASHE, standard weights, employees aged 25 and over in 2019 and employees aged 23 and over in 2021, excluding first year apprentices, UK, 2019-2021.

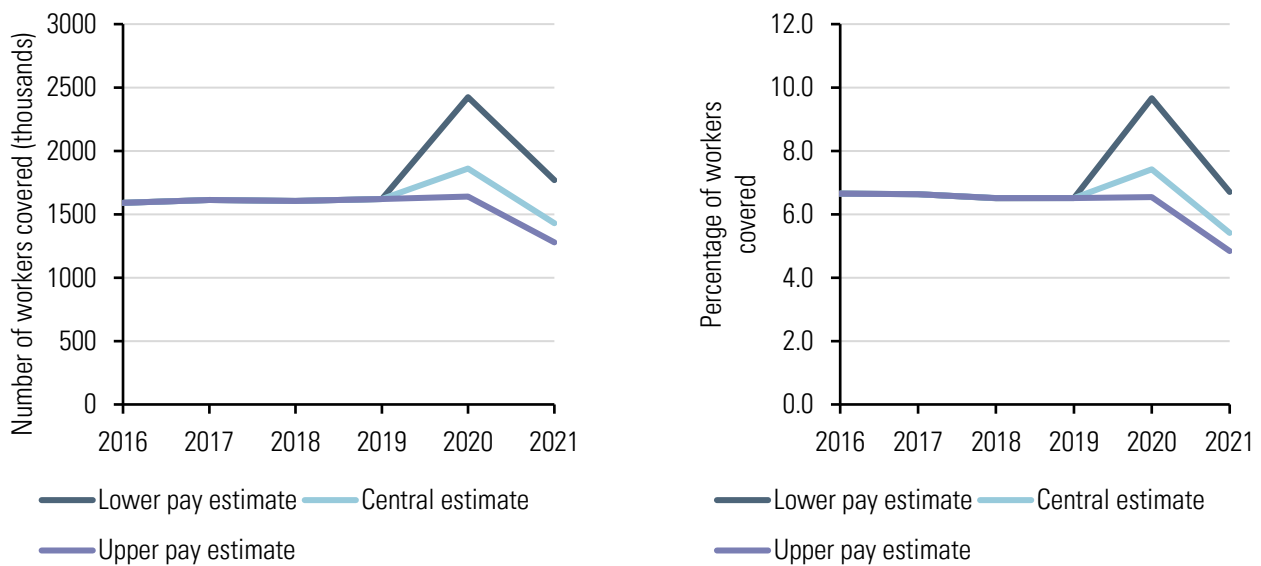
## Coverage of the National Living Wage

**5.40** Coverage is another measure of how binding a minimum wage is. We define the coverage of the NLW as the number of workers paid below, at or less than 5 pence above the rate. Between 2016 and 2019, coverage for NLW workers (at the time, aged 25 or over) was consistently between 1.59-1.64 million workers (6.5-6.7 per cent of employees), despite the NLW rising by 24 per cent in this period. This could be due to firms pegging wages to a certain markup on the NLW (for example, NLW plus 30 pence) or maintaining differentials between their most junior roles and the roles above them.

**5.41** Our central estimate is that NLW coverage fell from 1.62 million (6.5 per cent of employees) to 1.43 million (5.4 per cent of employees) between April 2019 and April 2021. This finding is sensitive to our assumptions about furloughed workers. If we assume that all furloughed workers are on 100 per cent of their usual pay, then coverage rises to 1.77 million (6.7 per cent of employees). But if we adjust pay up for furloughed workers as we assume they report 80 per cent of their usual pay, coverage falls to 1.28 million (4.8 per cent of employees). These estimates are shown in Figure 5.10.

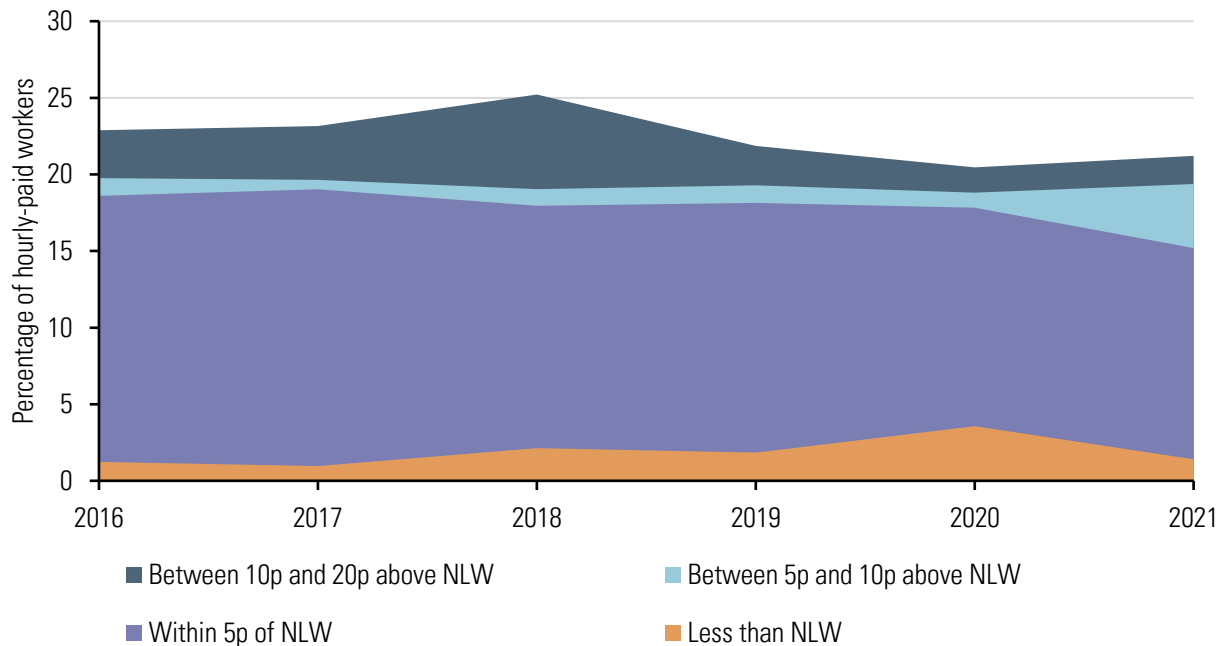
**5.42** Looking just at workers paid hourly gives a more reliable estimate of what has happened to coverage. Around 32 per cent of workers aged 23 and over were paid hourly in 2021. Workers paid hourly are approximately six times more likely to be paid the NLW than salaried workers, as hourly pay is common in low-paying industries. The data on these workers' stated hourly pay are not affected by furlough status. As Figure 5.11 shows, the share of hourly-paid workers covered by the NLW fell from 18.1 per cent to 15.4 per cent between 2019 and 2021. This shows a similar trend to our central estimate. This is surprising for two reasons. Firstly, the NLW grew faster than average wages between 2019 and 2021. Secondly, 23 and 24 year olds became eligible for the NLW in 2021; previously many of these workers were paid below the NLW. Chapter 6 covers outcomes for 23-24 year olds in more detail.

**Figure 5.10: Number and per cent of employees covered by National Living Wage, UK, 2016-2021**



Source: LPC analysis of ASHE, low pay weights including furloughed workers, NLW eligible employees (employees 25 and over before 2021 and 23 and over in 2021) excluding first year apprentices, UK, 2016-2021.

**Figure 5.11: Proportion of workers with stated hourly pay within 20 pence of the NLW, UK, 2016-2021**



Source: LPC analysis of ASHE, low pay weights including furloughed workers, NLW eligible employees (aged 25 and over before 2021 or 23 and over in 2021), UK, 2016-2021.

Note: Includes only workers with stated hourly pay data, so total coverage rate differs than for whole population.

**5.43** There are two explanations for the fall in NLW coverage. Firstly, employment levels were below pre-pandemic levels in April, when pay data was collected. Since April, the economy has added just under 900,000 payrolled jobs, many of which are in low-paying sectors. The proportion of workers paid the NLW could have fallen between 2019 and 2021 due to a disproportionate drop in employment for NLW workers. Secondly, some employers appear to have rounded pay rates up to £9 per hour. This takes workers out of our NLW coverage estimate, defined as being paid within 5 pence of the rate. The light blue band in Figure 5.11 shows the growth in 2021 of workers paid between 5 pence and 10 pence above the NLW. In 2019 only 1.2 per cent of workers paid hourly were paid between 5 pence and 10 pence above the NLW, while in 2021, 4.2 per cent of workers paid hourly were paid between 5 pence and 10 pence above the NLW. The fact that some employers were able to round pay up to £9 indicates that the relatively modest NLW increase in 2021 may have been easier for them to accommodate within their budgets than previous changes. It is consistent with the earlier finding that pay differentials have stabilised in low-paying sectors.

## The National Living Wage, employment, and hours

**5.44** Our remit for the NLW asks us to advise the Government on emerging risks and ‘ensure that the lowest-paid workers continue to see pay rises without significant risks to their employment prospects.’ Monitoring potential employment impacts from the rising NLW is therefore vitally important, and we do this using three tools. Firstly, we commission econometric analysis and other research from academics and research bodies. Secondly, we use stakeholder evidence from our annual consultation, regional visits and stakeholder meetings and finally we carry out in-house analysis, including our own econometric analysis.

**5.45** Isolating employment impacts has been made more difficult in the past two years by the pandemic, as it is difficult to strip out the effect of the pandemic from the effect of the NLW. Despite this, we have found no evidence that the NLW has had large negative employment effects. This section first summarises our in-house analysis of employment impacts and then discusses stakeholder evidence and new academic research.

## Employment outcomes for groups of workers more exposed to the National Living Wage

**5.46** Our most detailed source of data on employment outcomes is the LFS, a nationwide survey of labour market outcomes. The pay data it contains is not regarded by ONS as not as reliable and robust as that in ASHE, but it does have information on pay of various characteristics not covered in ASHE. To monitor potential employment effects from the NLW we track employment outcomes for groups of workers more likely to be paid the NLW relative to comparator groups. We look across demographic groups, occupations, and geographic areas.

### Worker characteristics

**5.47** Before the pandemic, employment rates had grown faster for demographic groups more likely to be paid the NLW. This is shown in Table 5.1. For instance, the employment rate for workers with disabilities grew by 6.1 percentage points from 43.0 per cent in the first quarter of 2016 (when the NLW was introduced) to 49.1 per cent in the first quarter of 2020. The employment rate for workers without disabilities increased by only 3.4 per cent from 82.4 per cent to 85.8 per cent. This points towards no strong adverse employment effects from the introduction of the NLW.

**Table 5.1: Labour market outcome by worker characteristics, UK, 2016-2021**

	Q1 2016	Q1 2017	Q1 2018	Q1 2019	Q1 2020	Q1 2021	2021 Jun-Aug	Change Q1 2016 to 2021 Jun-Aug
Employment							per cent	percentage point
Men	84.1	84.4	84.9	85.2	85.0	83.4	83.7	-0.3
Women	72.3	73.4	74.6	75.1	76.0	75.7	75.3	3.0
White	79.3	80.0	80.8	81.1	81.3	80.2	80.4	1.1
Ethnic Minorities	70.3	71.5	72.5	73.6	75.3	75.0	74.3	4.0
Above GCSE	84.1	84.2	84.6	85.1	85.3	84.5	84.6	0.4
GSCE or lower	68.0	69.4	70.7	70.6	70.7	68.7	68.3	0.3
No qualifications	47.1	49.7	52.1	51.5	51.0	49.9	51.1	4.0
No disabilities	82.4	83.5	83.6	84.9	85.8	84.4	85.4	2.9
With disabilities	43.0	45.3	47.1	47.7	49.1	47.8	48.5	5.5
UK-born	78.9	79.5	80.1	80.4	80.7	79.7	79.7	0.9
Non-UK born	75.0	76.1	77.9	78.8	79.8	79.0	78.8	3.8
30-65	77.9	78.4	79.4	79.8	80.1	79.0	79.2	1.4
25-29	80.9	82.3	82.8	83.3	84.1	83.9	82.8	1.8
Total	78.1	78.8	79.7	80.1	80.5	79.5	79.5	1.4

	Q1 2016	Q1 2017	Q1 2018	Q1 2019	Q1 2020	Q1 2021	2021 Jun-Aug	Change Q1 2016 to 2021 Jun-Aug
<b>Unemployment</b>								
Men	3.7	3.4	2.9	2.7	2.8	3.6	3.2	-0.5
Women	3.1	2.8	2.6	2.5	2.3	3.1	2.6	-0.4
White	3.0	2.8	2.5	2.3	2.4	2.9	2.5	-0.5
Ethnic Minorities	5.9	4.9	4.5	4.4	3.9	6.0	5.4	-0.4
Above GSCE	2.7	2.6	2.3	2.2	2.3	2.9	2.5	-0.2
GSCE or lower	4.5	3.9	3.6	3.4	3.3	4.3	3.8	-0.7
No qualifications	5.0	3.9	4.0	4.0	3.6	3.9	4.1	-0.9
No disabilities	3.0	2.5	2.7	2.1	2.4	3.2	2.6	-0.4
With disabilities	5.3	4.8	4.7	4.0	3.9	4.6	4.2	-1.1
UK-born	3.2	2.8	2.6	2.4	2.4	2.9	2.6	-0.6
Non-UK born	4.2	4.2	3.6	3.4	3.2	5.3	4.1	-0.1
30-65	2.9	2.7	2.4	2.3	2.3	3.1	2.6	-0.4
25-29	4.6	4.2	3.8	3.4	3.5	3.9	4.3	-0.3
Total	3.4	3.1	2.8	2.6	2.6	3.4	2.9	-0.5
<b>Inactivity</b>								
Men	12.3	12.3	12.2	12.1	12.1	13.0	13.1	0.8
Women	24.6	23.8	22.8	22.4	21.7	21.2	22.0	-2.6
White	17.7	17.2	16.7	16.6	16.3	16.8	17.1	-0.6
Ethnic Minorities	23.9	23.6	23.0	21.9	20.7	19.0	20.3	-3.6
Above GSCE	13.2	13.2	13.1	12.7	12.5	12.6	12.9	-0.3
GSCE or lower	27.4	26.7	25.7	26.0	26.0	27.0	27.9	0.5
No qualifications	47.9	46.4	43.9	44.6	45.3	46.1	44.8	-3.1
No disabilities	14.6	14.0	13.7	13.0	11.8	12.4	12.0	-2.5
With disabilities	51.7	49.9	48.2	48.3	47.0	47.6	47.2	-4.5
UK-born	18.0	17.7	17.3	17.2	16.9	17.4	17.6	-0.3
Non-UK born	20.7	19.8	18.5	17.8	17.0	15.7	17.0	-3.7
30-65	19.2	18.9	18.2	17.9	17.6	17.9	18.2	-1.0
25-29	14.5	13.5	13.4	13.3	12.4	12.1	13.0	-1.5
Total	18.5	18.1	17.6	17.3	16.9	17.1	17.6	-0.9

Source: LPC analysis of LFS microdata, quarterly, standard weights, not seasonally adjusted, workers aged 23 and over, UK, Q1 2016-June-August 2021.

**5.48** However, during the pandemic employment fell fastest for groups of workers more exposed to the NLW. This is shown in Figure 5.12. Employment fell more for younger workers, less skilled workers, ethnic minority workers, and workers with disabilities. Each of those groups are more likely to be paid the NLW. The only exception to this is gender. Male workers, who are less likely to be paid the NLW, saw larger falls in employment than female workers. This could be driven by the fall in self-employment during the pandemic, as men are much more likely to be self-employed.

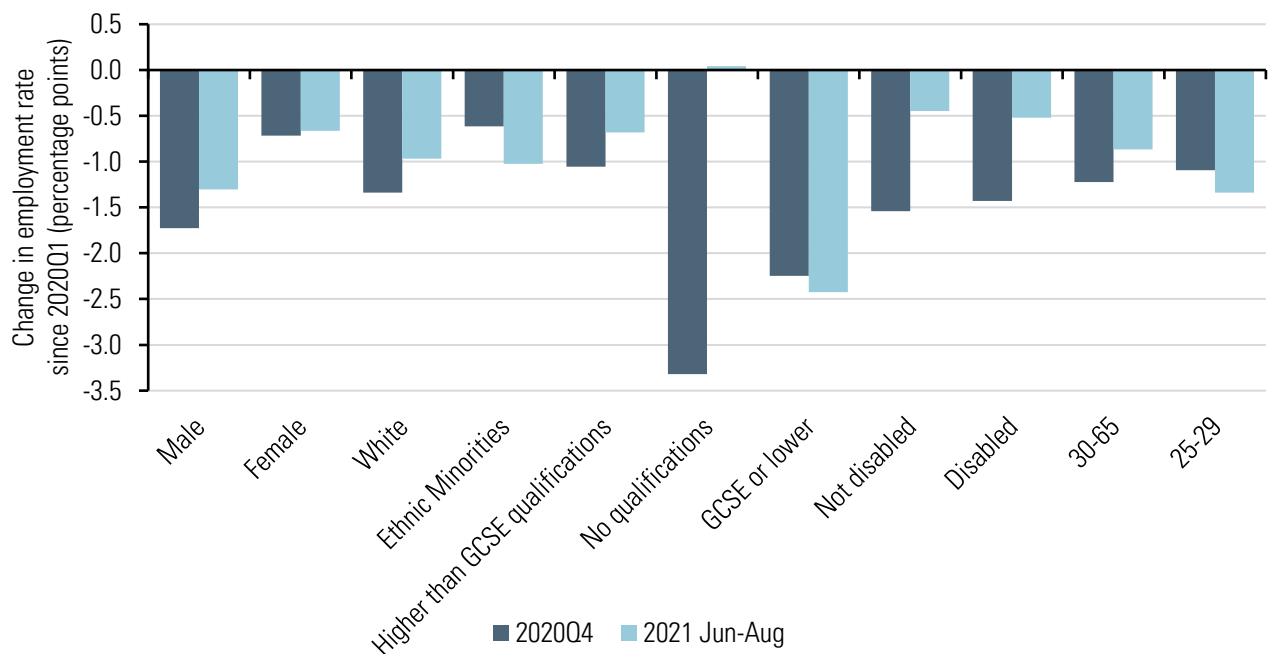
**5.49** The fall in employment for workers in groups more exposed to the NLW are driven by the nature of the pandemic. Workers in low-paid groups are more likely to work in sectors which had to limit sales due to the pandemic. For instance, 19 per cent of workers with disabilities were employed in sectors which were shut down during the pandemic. Only 15 per cent of other workers were employed in



shutdown sectors. It follows that workers in groups more exposed to the NLW have seen larger falls in employment, as they were also more exposed to the effects of the pandemic.

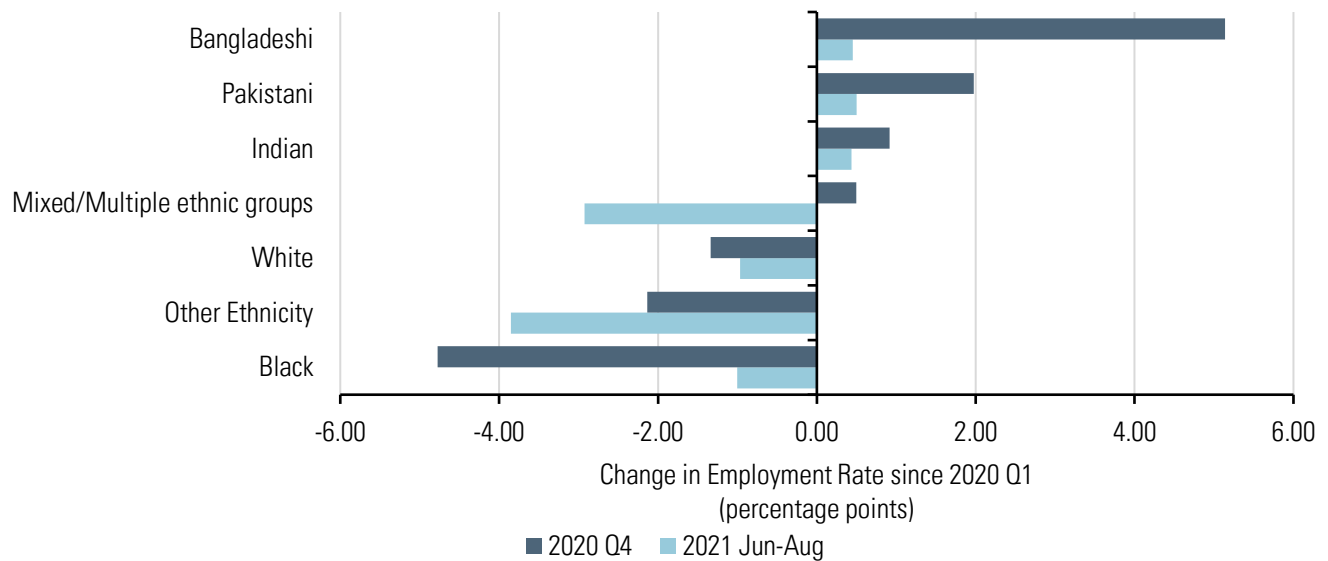
**5.50** As the economy reopened in early 2021, employment recovered faster for demographic groups exposed to the NLW. For instance, the employment rate for workers without qualifications fell by 3.3 percentage points between the first and fourth quarters of 2020. It recovered to pre-pandemic levels in the latest data covering June-August 2021. This suggests the fall in employment was mostly a temporary phenomenon caused by the pandemic rather than a permanent issue caused by NLW increases.

**Figure 5.12: Change in employment rate since Q1 2020 by worker characteristics, UK 2020-2021**



Source: LPC analysis of LFS microdata, quarterly, standard weights, not seasonally adjusted, workers aged over 23, UK, 2020 Q1-2021 June-August.

**5.51** However, employment has not fully recovered for some groups. The employment rate for 25-29 year olds and ethnic minorities are both still below their pre-pandemic levels. There is also variation by ethnicity. While employment rates for Black workers and workers of mixed ethnicity are still below their pre-pandemic level, employment rates are now higher than pre-pandemic for workers of Indian, Bangladeshi and Pakistani ethnicity. Workers of Bangladeshi and Pakistani origin have the highest coverage rates, so strong employment rates for these groups suggest the NLW is likely not the cause of reduced employment for ethnic minority groups. It also should be noted that payroll employment levels were lower in the latest version of the LFS (June-August) used here than in the more recent RTI data. Total employment in September was up 1.3 per cent in the RTI data relative to the June-August average, which suggests some of these groups were likely to have recovered further.

**Figure 5.13: Change in employment rate by ethnicity, UK, 2020-2021**

Source: LPC analysis of LFS microdata, standard weights, not seasonally adjusted, workers aged over 23, UK, 2020Q1-2021 June-August.

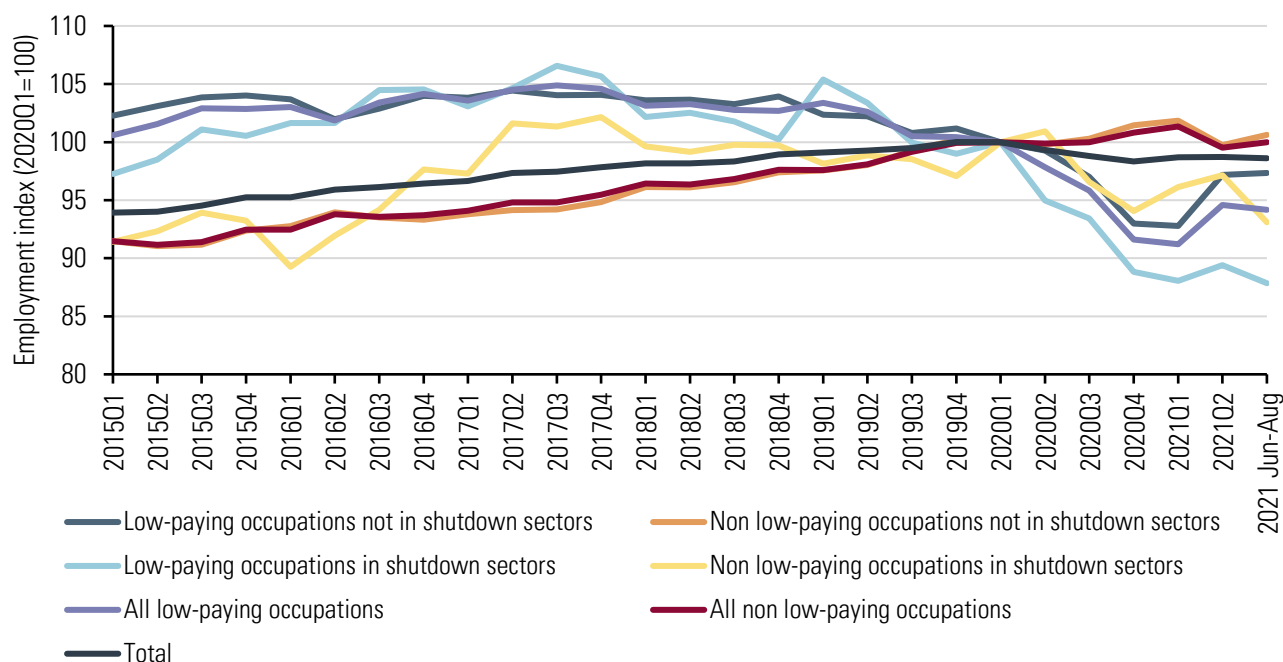
### Low-paying occupations

**5.52** Another group of workers more exposed to the NLW are those in low-paying occupations. Between the introduction of the NLW in 2016 and 2020, employment fell in low-paying occupations, while growing strongly in other occupations, as shown in Figure 5.14. One explanation for this trend could be negative employment effects from the NLW. However, given that workers in demographic groups more exposed to the NLW did not see employment falls in this time, this is not a likely explanation. An alternative explanation could be that the introduction of the NLW led to a reallocation of workers from lower-paying firms and occupations to higher-paying firms and occupations. Dustmann, et al. (2021) find that workers were reallocated to more productive firms after a federal minimum wage was introduced in Germany in 2015.

**5.53** During the pandemic, employment fell disproportionately for low-paying occupations. It fell by 7.2 per cent between the first and fourth quarters of 2020 in low-paying occupations, but actually rose 0.8 per cent in other occupations. This was driven by the concentration of low-paying occupations in shut down sectors of the economy. Around 36 per cent of workers in low-paying occupations work in shutdown sectors, while only 8 per cent of workers in other occupations do and employment has fallen fastest for workers in low-paying occupations within shutdown sectors.

**5.54** More recent data, discussed in Chapter 2, suggest that low-paying occupations may recover quickly. More timely RTI data show strong growth in employment in low-paying occupations such as hospitality between June 2021 and September 2021. The September 2021 vacancy data also shows record levels of vacancies across the economy, with the highest level of vacancies per job in hospitality. This suggests that the large fall in employment in low-paying occupations during the pandemic is likely only a temporary issue.

**Figure 5.14: Employment by low-paying occupation and shutdown sectors, UK, 2015-2021**



Source: LPC analysis of LFS, standard weights, workers aged over 23, UK, 2015-2021.

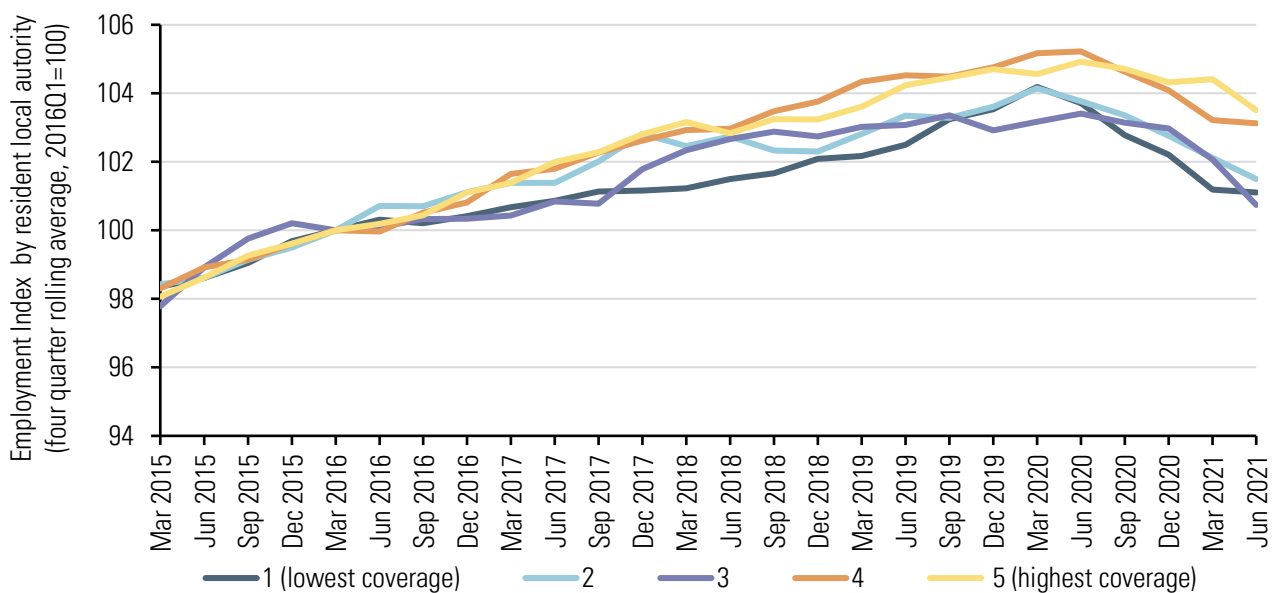
Note: LPC definition of low-paying occupations using SOC 2010, and IFS definition of shutdown sectors using SIC07 (Xu & Joyce, 2020).

## Employment outcomes in areas more exposed to the NLW

**5.55** Geography is key to our understanding of minimum wages. We might expect those areas with more minimum wage workers to be more at risk of negative effects. Figure 5.15 groups local authorities into five groups based on their NLW coverage rate. We find that employment grew fastest in areas with the highest NLW coverage, between the first quarter of 2015 and the first quarter of 2020. Areas with the highest coverage have also seen smaller reductions in employment since the beginning of the pandemic. This would suggest that the NLW has not reduced employment.

**5.56** However, the results of the analysis look different when looking at where jobs are located rather than where the workers live. Figure 5.16 groups local authorities into five groups again, but this time defined by the proportion of jobs located there that are paid the NLW. We find a much more mixed picture when using this approach. Employment grew fastest for areas with lowest coverage and grew slowest for the middle group (group 3) and the group with the highest coverage.

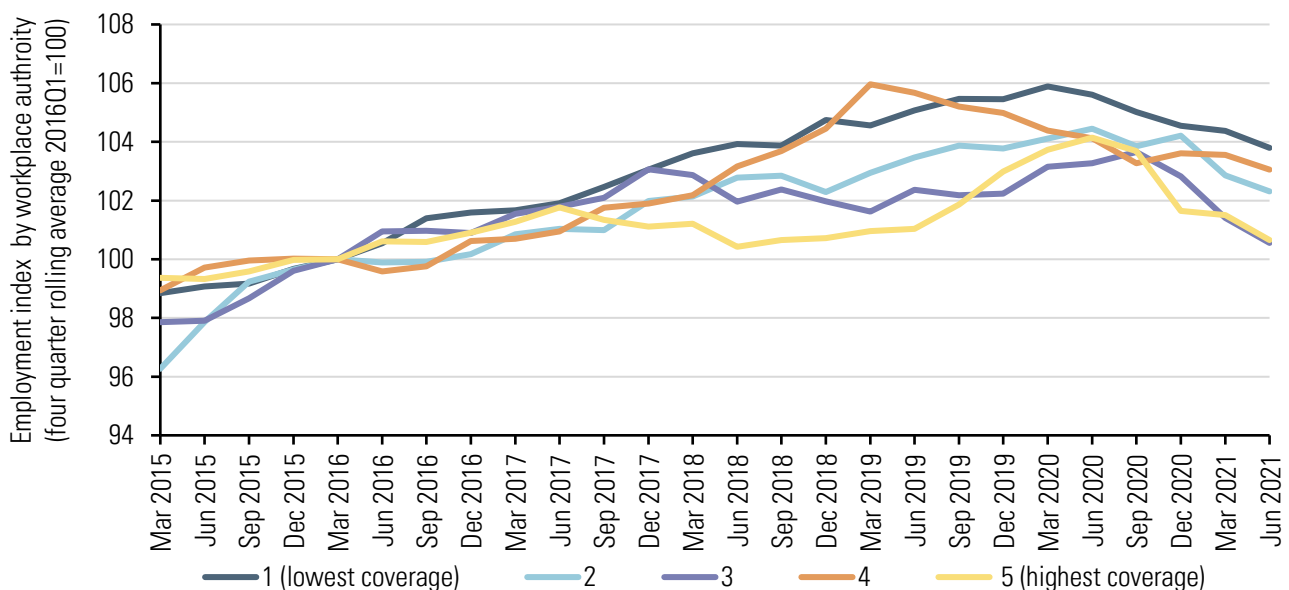
Figure 5.15: Employment by resident local authority, GB, 2015-2021



Source: LPC analysis of ASHE, low pay weights, all ages, UK, 2015, and APS/LFS, workers aged 16-64, four quarter rolling average, UK, Q2 2014-Q2 2021.

Note: Defines groups based on 2015 coverage rates and uses 2015 local authority districts. Excludes Northern Ireland and Isles of Scilly.

Figure 5.16: Employment by workplace local authority, GB, 2015-2021



Source: LPC analysis of ASHE, low pay weights, all ages, UK, 2015, and APS/LFS, workers aged 16-64, four quarter rolling average, UK, Q2 2014-Q2 2021.

Note: Defines groups based on 2015 coverage rates and uses 2015 local authority districts. Excludes Northern Ireland and Isles of Scilly.

**5.57** Multiple factors could explain the difference between workplace-based and residential-based analysis. One explanation could be changes in commuting patterns. For example, low-paid workers may have become less likely to commute into low-paying areas and more likely to work in their local area. If this is the case, then we would expect employment to grow faster for areas with a high share of low-

paid residents than for areas with a high share of low-paying jobs. The recent rise in homeworking could also cause results to differ between residential and workplace analysis.

**5.58** Alternatively, there could be other characteristics about the different areas which might affect the trends. For instance, areas with a high coverage of the resident population are more likely to be urban than areas with a high coverage of the local jobs. If something other than the NLW is causing urban areas to perform better than rural areas, this may also affect the results. The fact that multiple effects may be at work simultaneously is one of the reasons why we also use econometric analysis, which is better able to control for potentially confounding factors. In the next section of this chapter, we discuss the evidence based on our commissioned research.

**5.59** Our internal analysis of employment outcomes provides no evidence of large negative employment effects in the last two years caused by the NLW. We track employment outcomes for demographic groups, occupations, and local areas more likely to be paid the NLW and compare them to comparator groups. Our findings vary somewhat, although none of the analysis suggests strong negative employment effects. For instance, growth in employment since 2016 has been very strong for demographic groups more exposed to the NLW, while it has been relatively weak in low-paying occupations (potentially due to workers switching to better-paying occupations). The pandemic has caused a temporary fall in employment that has disproportionately affected workers in low-paying occupations but not workers in low-paying areas. Put together, our internal analysis shows no evidence of large negative employment effects from the NLW over the last two years, but our findings are more uncertain given the context of the pandemic.

## Research and stakeholder evidence on employment and hours

**5.60** The most robust way of assessing employment effects is through econometric analysis. This has two advantages over descriptive analysis. Firstly, it can isolate the causal effect of an NLW increase on wages and employment, controlling for other factors and trends which may confound the relationship between the NLW and employment. The strength of different studies depends on how well they isolate the effects of minimum wages from other factors. Secondly, it uses statistical techniques to provide confidence intervals around estimated employment effects. This means we can estimate a range for the effect of the NLW on employment. All but two of our commissioned studies focus on the pre-pandemic period. This is because the pandemic has made it harder to test the effects of the NLW. If recent rises in the NLW have different effects to pre-2020 rises, then they may not be picked up by the econometric evidence.

**5.61** Previous econometric studies on minimum wages have found small or no negative employment effects. The existing evidence is reviewed and summarised in Dube (2019) and in our forthcoming review of the NLW. This year we commissioned six research projects on the impact of minimum wages in the UK. This section provides a summary of new research in the UK including our commissioned research.

**5.62** Cribb, et al. (2021) find no statistically significant effects on total employment from the NLW between 2016 and 2020. As previously discussed in paragraph 5.16, they apply the ‘bunching’ approach pioneered by Cengiz, et al. (2019) to the UK context. They compare employment in different wage bands, between different geographic areas. The premise for their analysis is that similar jobs are paid different amounts across different areas, due to differences in the cost of living. For example, on

average a cleaner in London is paid £10.20 an hour, but a cleaner in the East Midlands is paid £9.22.<sup>3</sup> If increasing minimum wages reduced employment, then we would expect employment in relatively low-paid jobs to fall more in lower-paying areas than higher-paying ones. This is because minimum wages affect a higher proportion of the workforce in low-wage areas. Cleaners in the East Midlands are much more likely to be affected by NLW increases than cleaners in London. They estimate, on average, NLW increases led to a 0.09 per cent reduction in total employment, but this is not statistically significant (the 95 per cent confidence interval runs from a 0.42 per cent reduction in employment to a 0.24 per cent increase).

**5.63** Cribb, et al. (2021) do find a (just) significant negative employment effect on women under some specifications. This is in line with previous internal analysis and external research, which found a small statistically significant negative employment effect on women working part-time (Aitken, Dolton, & Riley, 2018; Low Pay Commission, 2020). This could mean that the NLW reallocates employment to firms and occupations more likely to employ men than women (there is a positive but insignificant effect on male employment in Cribb, et al. (2021)). Alternatively, it could mean that there are small negative employment effects in total that are easier to identify when looking only at women (as most NLW workers are women).

**5.64** Georgiadis and Franco Gavonel (2021) investigate the impacts of the NLW on the social care sector and find no significant employment effect. The social care sector is one of the industries most affected by changes to the NLW; around 9 per cent of social care workers are paid at the NLW. Georgiadis and Franco Gavonel (2021) use longitudinal data on pay, employment and hours for social care workers. They compare employment changes for care homes with a high share of NLW workers to care homes with a low share of NLW workers, controlling for differences in exposure to Covid-19 and Brexit. They find a significant positive effect on wages from the NLW increase and no statistically significant effect on employment. This is in line previous research on this sector that looked at the introduction of the NLW (Giupponi & Machin, 2018).

**5.65** Datta, Machin, and McKnight (2021) investigate whether the introduction of the NLW had different employment effects on workers. Overall, their findings support our internal analysis, which suggests that the introduction of the NLW has not harmed employment for workers with protected characteristics. They find that the introduction of the NLW did not reduce employment retention (the chance of remaining in current job) on aggregate. They found the introduction of the NLW actually had a positive effect on employment retention for women and workers with disabilities. This contrasts with Cribb, et al. (2021) and Aitken, Dolton, and Riley (2018), who find negative effects on employment for some groups of women.

**5.66** Datta, Machin, and McKnight (2021) find no statistically significant employment effects on workers of Pakistani or Bangladeshi origin. These workers have the highest coverage rates. They do find a statistically significant employment effect on workers of Indian origin, which is surprising given that Indian workers are less likely to be paid the NLW than other workers. The research may not capture the full effects of the NLW introduction. It compares outcomes for workers paid the NMW, before the NLW

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<sup>3</sup> A cleaner here refers to as a worker in low-paying occupation 'Cleaning and Maintenance'. For more information on our definitions of low-paying occupations see Appendix 3.

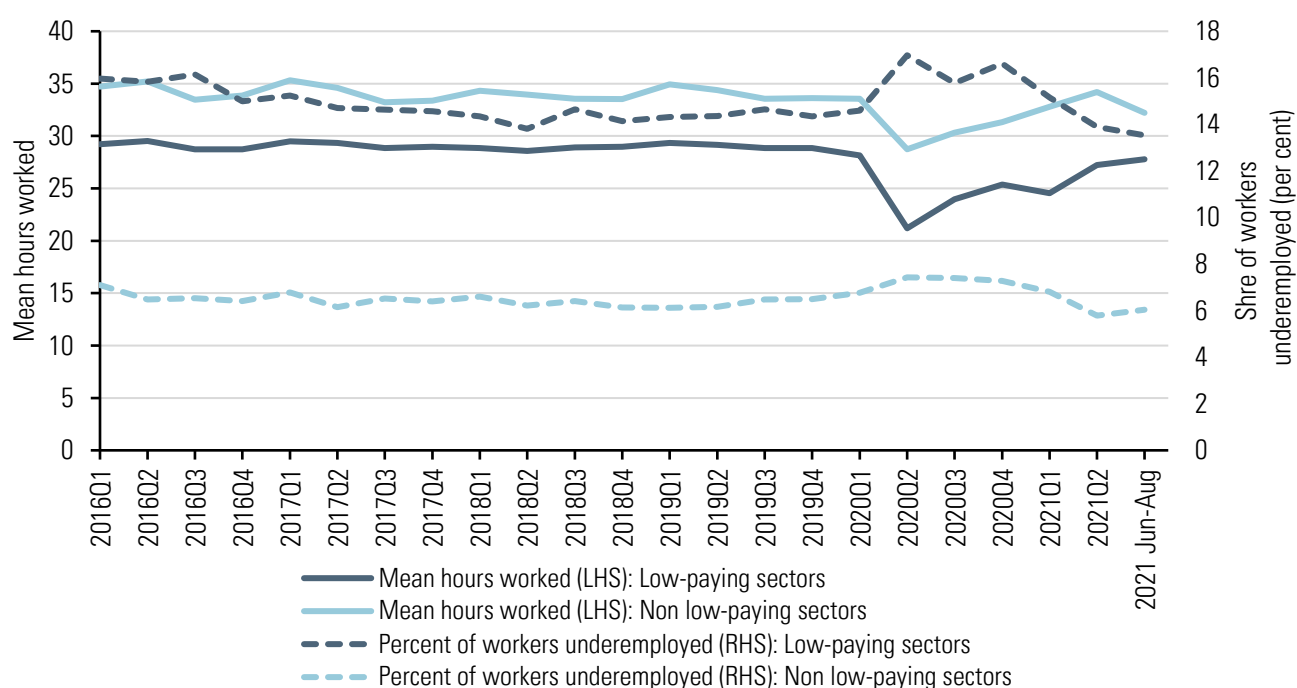
was introduced, to a control group (workers paid up to 10 per cent above the new NLW). The control group may also have been affected by the spillovers from the introduction of the NLW.

## The effect of the National Living Wage on hours and underemployment

**5.67** Employers could also respond to the rising NLW by offering workers fewer hours. Employers may find it easier to reduce staff's hours rather than make them unemployed. The prevalence of zero-hours contracts and other forms of insecure work in low-paying occupations makes it easier for firms to adjust hours. Between June and August 2021, 7 per cent of employees in low-paying sectors were employed on zero-hour contracts.

**5.68** We find no conclusive evidence that firms responded to the two latest NLW increases by reducing hours. We investigate this in Figure 5.17. Underemployment is a measure of whether workers have fewer hours than they want. If firms responded to NLW increases by reducing hours, we would expect underemployment to rise more in low-paying sectors than elsewhere. Underemployment is consistently higher in low-paying occupations, but between 2016 and 2020 underemployment rates decreased slightly for both low-paying occupations and other occupations. Underemployment did rise early in the pandemic for workers in low-paid sectors, but it has since fallen back to pre-pandemic levels.

**Figure 5.17: Underemployment and average hours by low-paying occupation, UK, Q1 2016-Q3 2021**



Source: LPC analysis of LFS microdata, quarterly, standard weights, not seasonally adjusted, workers aged 23 and over, UK, 2016 Q1 – 2021 June-August

**5.69** However, underemployment may rise following the end of the CJRS. Since July 2020 workers could work reduced hours and be paid at least 80 per cent of normal pay for the hours they no longer work through the CJRS ('flexible furlough'). Employers looking to reduce workers' hours are likely to have put them on 'flexible furlough'. Workers would then be less likely to report underemployment, as

they are still partially paid for their lost hours. This may mean any effects from NLW increases on underemployment have been delayed until the end of the furlough scheme.

## Other impacts of the NLW

**5.70** The fact that employment effects of the NLW are limited raises the question as to how employers cope with the cost increases. There are a range of other options that firms can use to absorb NLW increases. They could absorb the loss from their profits; they could pass cost increases on to consumers by raising prices; or the NLW could provide an incentive to increase productivity. This could either occur through firms investing more in training, technology or organisational techniques or it could occur from workers reallocating to more productive firms.

### Overall pattern of employer responses

**5.71** Employer groups' surveys of their membership offer a useful resource for understanding the broad pattern of NLW responses. Several groups carry out annual surveys, tracking business responses and planned responses to NLW upratings. Since the NLW's introduction, it has been very rare to see employment impacts in these surveys. The preferred responses for firms affected by the NLW have consistently been to absorb increases via lower profits or to pass them on by raising prices. As in 2020, lockdowns and the CJRS meant the NLW's impact was harder to gauge, especially for firms in shutdown sectors. But the overall pattern of responses to the 2021 uprating tended to follow the trends since 2016.

**5.72** The Chartered Institute of Personnel and Development (CIPD)'s survey found the 2021 uprating had a limited effect on pay and employment: 'Overall...the survey data continues to show that employers have been able to absorb the NLW without any significant impacts ... the proportion of employers that have absorbed the cost has risen compared to the other two popular responses, especially during the past year'. In fact, this was the only one of the leading responses which had become more common compared to previous years – raising prices, improving productivity and cutting pay, hours and bonuses were all less frequent responses than in previous years. The CIPD noted that hospitality was the sector most affected by NLW increases but the employment impact looked greater in retail: there, the most common responses were 'taking lower profits/absorbing the cost (33 per cent), improving productivity levels (26 per cent), raising prices (19 per cent), employing fewer workers (19 per cent)'. In hospitality, just six per cent of employers say that they have made job cuts.

**5.73** The BCC's survey of its members found that 47 per cent paid above the NLW and would take no action. Among those affected, the leading responses were still absorbing increases by taking lower profits and, where possible, increasing prices. The BCC drew attention to the specific impacts on low-paying sectors, where a third of respondents stated they would raise prices, 17 per cent would take lower margins, and 14 per cent would reduce staff benefits.

**5.74** The FSB found that 9 per cent of members said the uprating increased their wage bill by a large extent and 40 per cent said that it increased their wage bill to some extent. Reduced profits and increased prices were still the leading responses overall: 68 per cent of affected businesses reduced profitability, while 39 per cent raised prices.



**5.75** The National Farmers' Union (NFU) found that 72 per cent of horticulture employers were affected by last year's NLW rise. Of this group, 90 per cent saw profits hit and 45 per cent cut investment. Around 41 per cent cut jobs and 23 per cent reduced hours. About 31 per cent increased the quality or quantity of work required and 38 per cent passed on price increases. In the NHBF's survey of its hair and beauty salon members, cutting hours and employment were among the top responses but taking lower profits remained the most common answer.

**5.76** As in previous years, we have received little evidence that the NLW has directly affected employment. The Trades Union Congress (TUC) made the point that lockdowns and Covid-19 have caused job loss, not the NMW/NLW: 'restrictions on trade are responsible for the loss of many low-paid jobs, rather than exposure to the minimum wage...minimum wages have little impact on determining whether workers have a job. Employment is determined by the wider health of the economy and the approach we take to securing a strong recovery.' Only the NFU Scotland provided evidence that the NLW had reduced employment opportunities: according to Scottish Government Farm Business Income estimates, 'around 52 per cent of farms could not afford to pay at least the MAW [minimum agricultural wage]'.

## **Price effects**

**5.77** Passing on costs through increased prices is another option to deal with the NLW increases. In the CIPD's survey, 21 per cent of respondents had raised prices, more than last year. In the BCC's survey a third of members most affected stated they would raise prices. This was common amongst the FSB as well with 39 per cent of members having raised prices this year.

**5.78** Several employer groups told us about the factors which prevented them from putting up prices. The CBI noted that: '[For] those firms unable to rely on increasing productivity ... passing costs on to consumers has been a way of offsetting wage costs. However, internationally tradeable sectors and those where domestic competition is intense struggled to do so while maintaining their competitiveness'. Retailers told us that competitive pressures made businesses reluctant to raise prices. The BRC stated that 'high competition, especially in the grocery sector, and households increasingly more price conscious limit price rises. In turn, this means that cost rises are absorbed by retailers themselves, cutting further into margins already razor-thin'. The Association of Convenience Stores (ACS) echoed this while noting that customers were willing to pay some premium for convenience.

**5.79** In agriculture, the sector's position at the bottom of the supply chain makes price increases difficult. The NFU stated that 'if appreciating labour input costs are not reflected in meaningful farm gate price increases [the risk] is that businesses become unviable', and the NFU Scotland told us farms were unable to pass on price rises. The Association of Labour Providers (ALP) outlined how farms' margins were squeezed by the purchasing power of large supermarkets.

**5.80** In hairdressing, a sector where companies have historically told us they are very reluctant to increase prices, the NHBF told us that many salon owners had increased prices to meet the cost of implementing Government guidelines on PPE and sanitisation. At oral evidence, they reported price increases between 10 and 20 per cent. Despite this, we heard that rising self-employment was creating further competitive pressure.

**5.81** In other sectors, the Federation of Wholesale Distributors (FWD) reported that 42 per cent of its members had passed on the impact of the NLW by increasing prices – although one Manchester-based warehouse operator told us about the difficulty of doing this, with his clients unwilling to agree to annual price increases any greater than 2 per cent. One childcare provider told us that NLW increases had a direct impact on prices, resulting in reduced demand – ‘ever more parents [are] unable to afford the annual increase in fees caused by the NMW and NLW rises’.

## Productivity and investment

**5.82** Improving productivity is an important channel for businesses to adapt to a rising NLW, but one where we have seen mixed evidence for several years. Respondents across several sectors reported an improvement in productivity not linked to the NLW but as a result of the pandemic forcing employers to do more with less. On investment, there was a familiar divide between larger firms, better able to invest, and smaller ones less able to do so.

**5.83** Make UK told us that in manufacturing there had been ‘a de-facto improvement in productivity ... This is likely a short-term phenomenon and has been generated by businesses maintaining output decline at a slower rate than the rate at which they are reducing staff’. The leading NLW response in its member survey was to focus on productivity improvements and automate processes. Several other bodies reported an intensification of work. CLUK reported ‘a marked intensification in work as a result of working in far higher pressure situations due to reduced staffing’. The British Independent Retailers Association (BIRA) stated that productivity ‘has naturally increased with staff placed on furlough and the same work being done by less people due to job losses’. The growing switch to online retail had also helped productivity. The NHBF told us about the pressure on salons to maximise productivity to make the most of ‘short-lived immediate busy periods of full appointment books’ following re-opening.

**5.84** Large employers in retail and manufacturing told us they were investing in automation in response to the NLW. The BRC’s member survey found that ‘over two-thirds of respondents indicated they had invested in technology to increase automation as a result of the NLW. Going forward, 93 per cent of respondents expect to invest in technology to increase automation in the future in response to cost pressures’. Investment in automation was common amongst BCC members in manufacturing sectors. This was driven by labour cost disparities relative to other countries, which incentivises businesses to compete through investment in technology rather than increased labour. Unite signalled to us that despite the cooling effect of the pandemic, a number of large hospitality employers had made significant investments in new sites.

**5.85** On the other hand, the FSB told us that productivity investments were relatively rare among its membership: A fifth of affected members had reduced investment, while only 14 per cent had taken steps to increase productivity. Around 39 per cent of this group said they would invest in technology, while 36 per cent used job redesign to increase productivity. The Scottish Grocers’ Federation (SGF) reported a steady decline in investment in stores: ‘rising staff costs also negatively impact on the ability of retailers to invest in their businesses’. CLUK told us Covid had curtailed planned productivity improvements in many leisure providers.

**5.86** Other employers have told us about the limitations they face in improving productivity: members of the Northern Ireland Hotels Federation (NIHF) told us they were unable to make productivity improvements, their business models were service- and labour-intensive, with clients reluctant to

accept automation. The Trees Swindon Old Town Ltd, a childcare provider responding to our consultation, told us it could not increase productivity due to regulatory requirements and had ‘no ability to introduce flexibility as opening time is set by demand’.

**5.87** Usdaw argued that the example of the living wage showed that improving pay and work quality was important in solving the productivity challenge: ‘improving terms and conditions in retail, and across the economy... we will be able to deliver improvements to overall productivity.’ They cited living wage employers reporting ‘improvements in staff loyalty, engagement, productivity, staff turnover, absenteeism and stronger corporate reputation’. They stated that such an approach was likely to be more effective than automation, which Usdaw members saw as displacing investment in people.

## Conclusions

**5.88** The NLW increases in 2020 and 2021 drove up wages for low-paid workers faster than median wages between 2019 and 2021. This allowed the Government to hit its target for the NLW to reach 60 per cent of median hourly earnings by 2020. The NLW increases led to faster pay growth for workers paid the NLW but also for other workers with below average pay.

**5.89** Both firms and worker representatives expressed worries about shrinking pay differentials between the lowest-paid workers and other workers with below average pay. Our analysis suggests that on average pay differentials within low-paying sectors have stabilised between 2019 and 2021, after falling between 2015 and 2019. Stakeholder feedback shows a range of responses around this average. Some firms reported shrinking differentials in response to the NLW, more than in previous years. Other firms said they were able to reinstate differentials due to the lower NLW uprating in 2021. Some stakeholders expressed concerns that reduced differentials could affect staff morale and future progression. We have found no effects of the NLW on pay progression previously, but there may be long-run effects we cannot yet measure.

**5.90** We estimate that the percentage of employees paid the NLW rate has fallen slightly from 6.5 per cent (1.62 million employees) in April 2019 to 5.4 per cent (1.43 million employees) in April 2021. This is surprising given that the NLW has grown faster than average earnings over the last two years and the Government have lowered the age threshold from 25 to 23. It is driven by two factors: firstly, employers have been increasingly likely to move minimum wage workers just above the minimum wage, rounding pay up from £8.91 (the 2021 NLW rate) to £9. Secondly, employment was still below pre-pandemic levels for low-paid workers in April 2021.

**5.91** We have found no clear evidence that recent rises in the NLW led to reductions in employment or hours. Workers more likely to be paid the NLW saw large reductions in employment over the last two years but this was driven by them working in sectors which were shut down by the pandemic. As the economy has reopened, employment has recovered for most groups of workers more exposed to the NLW. This suggests the fall in employment was a temporary issue driven by the pandemic, rather than a permanent issue caused by the NLW. Our commissioned research also found no statistically significant employment effects from previous NLW increases.

**5.92** Firms were more likely to respond to NLW rises by increasing prices or reducing profits. Surveys of employers continue to find that the most common response to a NLW rise is to reduce profit margins followed by increasing prices. This is in line with previous results from employer surveys since 2016.

Some firms in low-paying sectors such as large retail and manufacturing reported that the pandemic had allowed them to increase productivity. However, stakeholders from other sectors such as hospitality reported challenges in increasing productivity.



# Chapter 6

## Young people

### Key findings

Last year the picture for young workers was bleak. They were more likely to work in the sectors that were hit hardest by social distancing measures, particularly hospitality and non-essential retail. Young workers were therefore most likely to see changes to their employment, to be furloughed, or experience a reduction in hours.

The situation now is very different: over the summer, there have been strong signs of recovery as businesses have reopened. Increased demand for workers has led to substantial rises in employment for all age groups and young people have been the fastest to move off the furlough scheme. However, despite significant gains, young people have more ground to make up and some sectors and groups of workers lag behind.

Young people's pay has grown robustly, albeit in part driven by compositional changes as more low-paying jobs were lost. At the same time, there has been an increased reliance on the youth rates, with workers under 21 more likely to be paid at the wage floor. We heard that employers had made greater use of the lower rates to help them to protect and create jobs during the crisis.

The NLW threshold moving to 23 appears to have had a positive impact on 23-24 year olds. In the latest pay data we can see that more of this age group are paid the NLW, but without an increase in unemployment and underpayment.

Our intention is to move 21-22 year olds onto the NLW by 2024, and the majority of our stakeholders continue to tell us that this is the right move. Among this age group use of the National Minimum Wage (NMW) and National Living Wage (NLW) has fallen, as a greater share are now paid above the NLW. Their employment rates have improved particularly rapidly over the summer, so that they are just below where they were at the start of the pandemic.

**6.1** As well as the National Living Wage (NLW), we advise the Government on the level of three youth rates of the National Minimum Wage (NMW). Our remit for these rates is to raise pay as high as possible without damaging employment prospects.

**6.2** The rationale for age-related minimum wage rates is that younger workers are at higher risk of being priced out of jobs than older workers. Average wages for younger workers tend to be lower because they have less experience and weaker bargaining power. Additionally, young people are more likely to experience a scarring effect; those who spend some time unemployed are more likely to have worse labour market outcomes for several years afterwards (Gregg, 2004; McQuaid, 2015). Research into the impact of minimum wages has generally found that increases have improved earnings without negative effects on employment, but there is some international evidence of negative effects for the youngest workers (Neumark and Wascher, 2007; Bondibene and Dolton, 2011).

**6.3** In 2019, we reviewed the structure of the youth rates and recommended that the age at which workers are paid the NLW should be moved from 25 to 21, starting with a move to 23 in 2021 (Low Pay Commission, 2019a). This is therefore the first year that 23-24 year olds have been paid at least the NLW, and the first year that the temporary rate for 21-22 year olds has been in place.

**6.4** The past year has continued to be challenging for young people. Since our last report, all nations in the UK went into lockdown again, with a phased reopening over several months. Young people are more likely to work in the sectors that are subject to social distancing measures, particularly hospitality and non-essential retail. Young workers were therefore most likely to see changes to their employment, to be furloughed, or experience a reduction in hours.

**6.5** Over the summer of 2021, there have been strong signs of recovery as businesses have been able to reopen. Increased demand for workers has led to rises in employment across all ages, and young people have been the fastest to move off the furlough scheme. However, while recovery has been robust, young people had more ground to make up and some sectors and groups of workers lag behind. It is vital that the youth rates are set in a way that recognises the progress that has been made while still protecting those workers who are most at risk.

**6.6** In this chapter, we will look at the impact of recent increases in the minimum wage rates on young people, how the labour market has evolved over the last year, and what the position might look like in April 2022. We will consider how 23-24 year olds have been affected by the change in NLW threshold to 23, and whether the evidence supports the threshold moving further to 21.

## **The youth labour market**

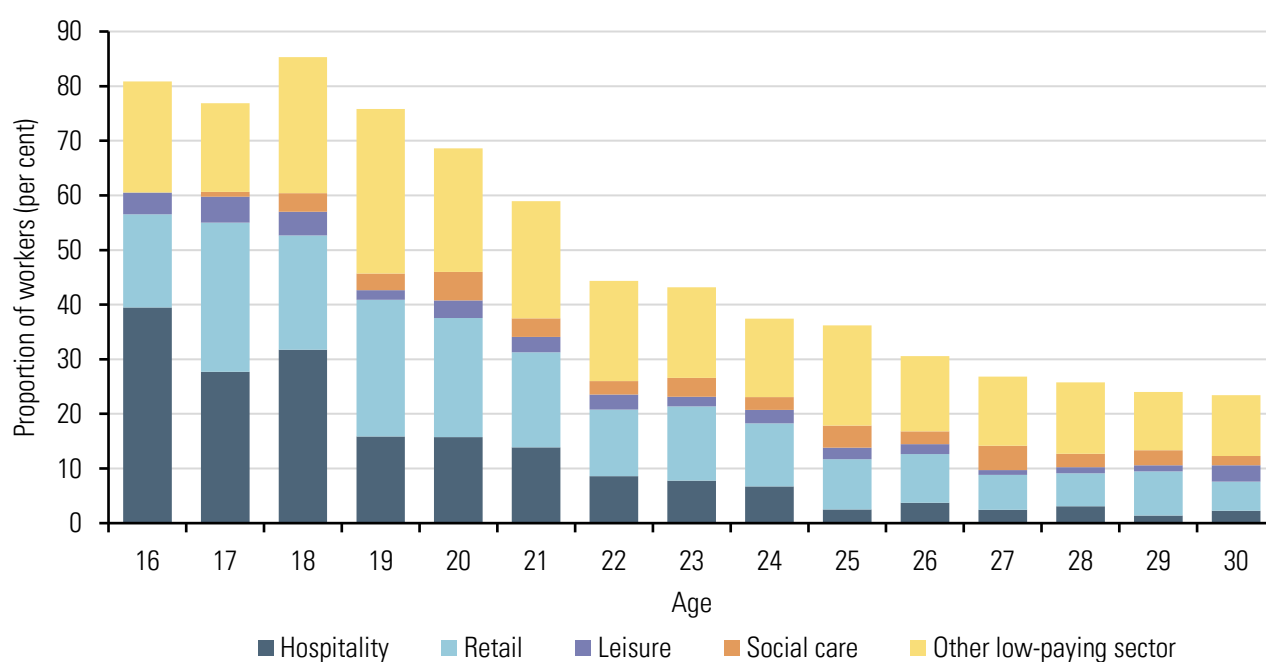
**6.7** Young people occupy a different place in the labour market than their older counterparts. They are more likely to be in full-time education, and working part-time alongside their studies (Figure 6.1). Their relative inexperience and need for flexibility means that they tend to be concentrated in low-paying retail and hospitality jobs (Figure 6.2), and their work is more unstable, with a greater use of zero-hours contracts. As workers get older, they are less likely to participate in education and more likely to work full-time in a non low-paying sector.

Figure 6.1: Labour market activity, by age group, UK, Q3 2020-Q2 2021



Source: LPC estimates using LFS Microdata, Q3 2020 – Q2 2021, population weights, UK.

Figure 6.2: Breakdown of occupations worked in, by age, workers aged 16-30, UK, Q3 2020-Q2 2021



Source: LPC estimates using LFS Microdata, Q3 2020 - Q2 2021, population weights, UK.

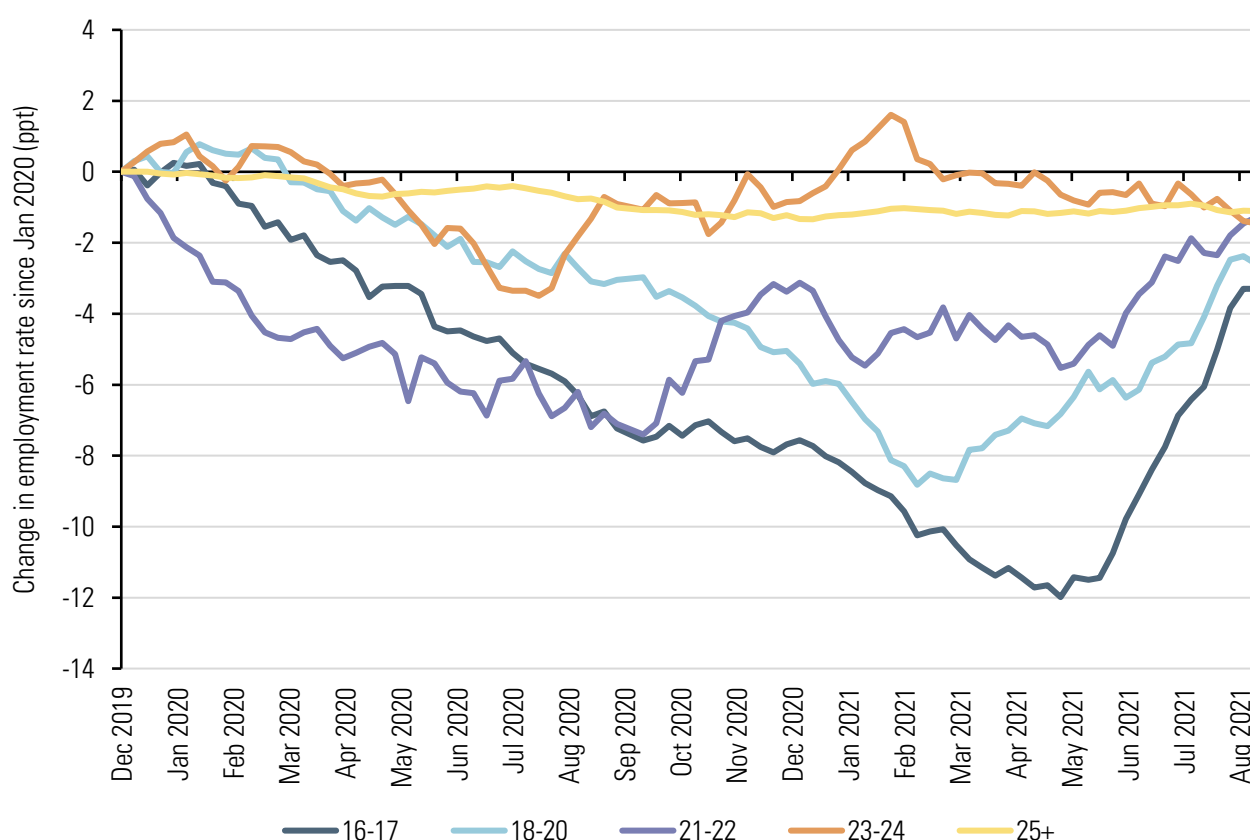


## Changes in employment

**6.8** Young people are most likely to work in the sectors that were most affected by lockdown measures, and as a result saw greater falls in their employment rates throughout 2020, as shown in Figure 6.3. This is in contrast to workers aged 23 and over, whose employment has stayed much closer to pre-pandemic levels. The Coronavirus Job Retention Scheme (CJRS) protected jobs for those already in work, but young people are less likely to be in work. They are much more reliant on job vacancies in key sectors like hospitality to be able to join the labour market in the first place. This is particularly true for 16-17 year olds, whose scope to find their first job was severely limited and who therefore experienced the sharpest employment rate falls. Their relative inexperience and prevalence of insecure working arrangements may also have made them more vulnerable to job loss.

**6.9** However, there has been a robust recovery throughout the spring and summer of 2021 as businesses were able to reopen. Recovery for the youngest workers started later, but has been more pronounced. This was driven by the high levels of demand described in Chapter 2. As a result, all age groups were close to their pre-pandemic employment rates by the end of August. But despite strong gains, young people had more ground to make up and their employment is still behind.

**Figure 6.3: Change in employment rate, by age group, UK, December 2019 – August 2021**

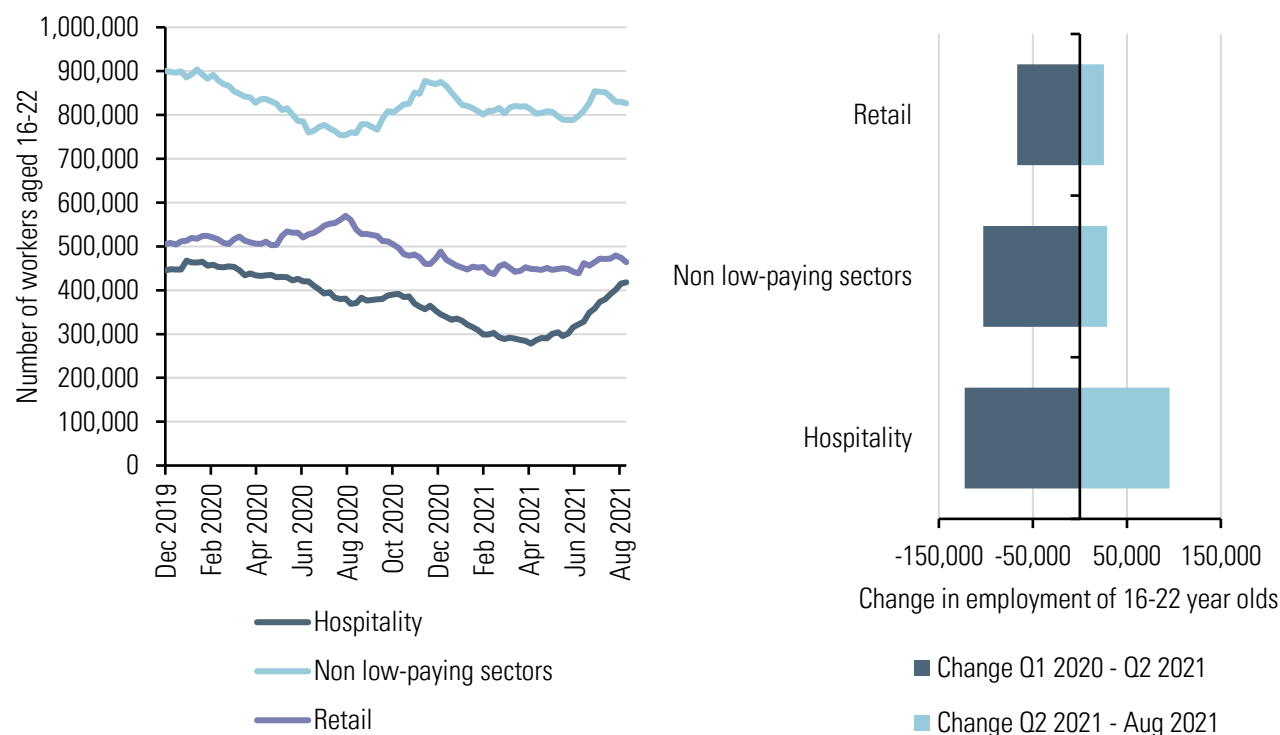


Source: LPC estimates using LFS Microdata, population weights, not seasonally adjusted, weekly data, quarterly rolling average, UK, Dec 2019 – Aug 2021.

**6.10** We noted in last year's report that the impact of the pandemic had been felt unevenly across sectors. This remains the case this year, both in terms of employment losses and the subsequent

recovery as businesses affected by lockdown measures have reopened. Figure 6.4 shows that the falls in youth employment were largest in hospitality, with substantial falls in retail as well as in some non low-paying sectors. While lockdown restrictions and limited hiring in hospitality drove the employment shock for young people, the reopening of hospitality businesses has also been driving the recovery. Over the summer, the fastest growth in youth employment has been in this sector, where vacancies have been at historically high levels. The employment recovery in retail and non low-paying occupations has been slower.

**Figure 6.4: Change in employment of 16-22 year olds, by occupation, UK, December 2019 – August 2021**



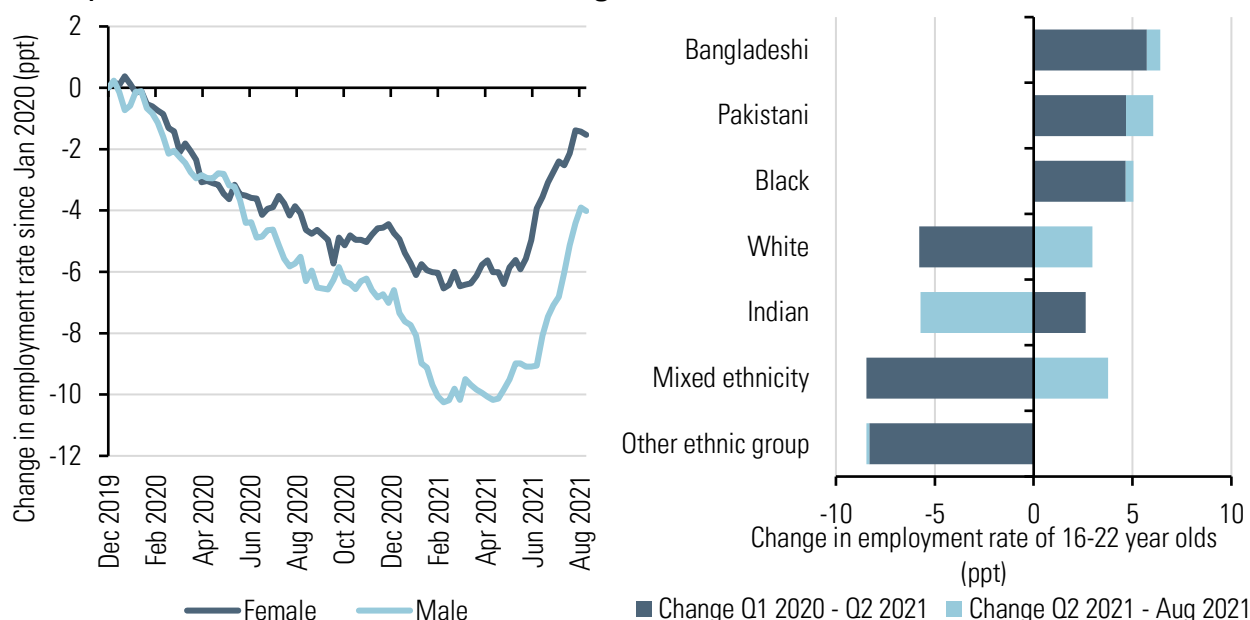
Source: LPC estimates using LFS Microdata, population weights, not seasonally adjusted, weekly data, quarterly rolling average, UK, Oct 2019 – Aug 2021.

**6.11** As well as differences between sectors, the impact of the pandemic has varied between groups of workers with different characteristics. Henahan (2021) found that conditions deteriorated most significantly among young people whose pre-pandemic employment position had been the weakest, with greater increases in the unemployment rate for young Black and Asian people compared to young White people. Similarly, Papoutsaki and Wilson (2021) found that certain groups had been harder hit by the pandemic. Young Black and Asian people, young male workers, and those living in southern England, Scotland and Wales were more likely to have seen falls in employment.

**6.12** The recovery has also varied between groups of young workers. Figure 6.5 shows that young male workers experienced greater falls in their employment rate throughout the pandemic, and though they have recovered well, their employment rate is still further below pre-pandemic levels (than those for women). In the last year there has been substantial employment growth for young Black workers and those of Pakistani and Bangladeshi origins, while young White workers and those of mixed ethnicity remain below where they were before the pandemic. There have also been regional differences, with

London hardest hit in terms of youth employment, and further behind in terms of the more recent recovery.

**Figure 6.5: Change in employment rate of 16-22 year olds, by sex (LHS), and by ethnicity (RHS), UK, December 2019 – August 2021**

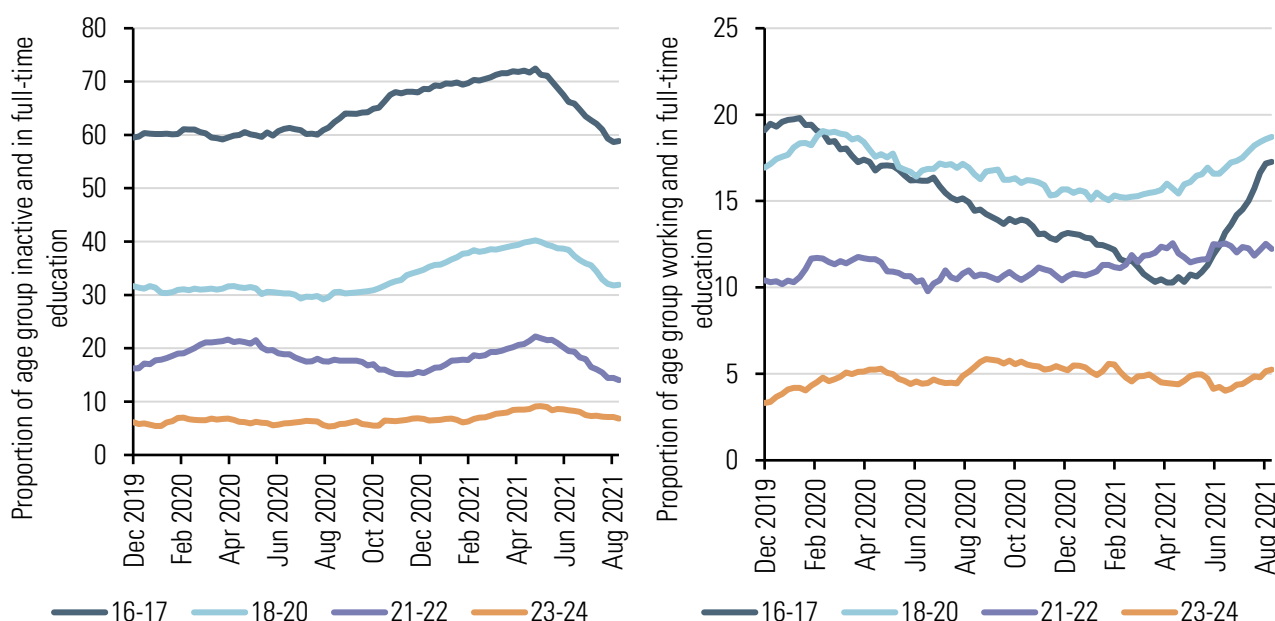


Source: LPC estimates using LFS Microdata, population weights, not seasonally adjusted, weekly data, quarterly rolling average, UK, Oct 2019 – Aug 2021.

**6.13** Rather than becoming unemployed, some young people became economically inactive, which means they were either not looking for work or not available for work, or both. There was a significant increase in the proportion of young people who are inactive and in full-time education (Figure 6.6). Some young people chose to stay in education to protect themselves from unemployment and an uncertain labour market, a behaviour which is often seen during an economic crisis (Henehan, 2020). Further young people who may ordinarily look for a part-time job alongside their studies chose not to do so, perhaps because of the lack of available job opportunities at that time. Online learning at universities meant that more students were at home and were therefore less likely to be in the big towns and cities where part-time jobs are more readily available.

**6.14** However, throughout the recovery, inactivity has fallen as those in full-time education found work. Young people in education have increasingly been able to work or look for work alongside their studies. This is encouraging, as part-time work is an important way in which young people gain skills and the means to financially support themselves.

**Figure 6.6: Proportion of young people who are inactive and in full-time education (LHS), and employed and in full-time education (RHS), UK, December 2019 – August 2021**



Source: LPC estimates using LFS Microdata, population weights, not seasonally adjusted, UK, 2019 – 2021.

**6.15** Among our stakeholders, there is a sense that young people have fared better than expected. During our consultations in spring 2021, several groups including the Recruitment and Employment Confederation (REC) and the British Chambers of Commerce (BCC) told us that they expected youth employment to take a long time to recover due to the lack of available employment opportunities. The Confederation of British Industry (CBI) and the Chartered Institute of Personnel and Development (CIPD) were also concerned by the outlook for young people. Youth Employment UK felt the impacts of the pandemic were compounded by the need for young people to compete with older, more experienced workers who were also searching for jobs. In September, the CBI noted that the trajectory for youth unemployment was not as alarming as in previous crises. Furlough has helped to minimise unemployment overall, and high vacancy levels in sectors such as hospitality have provided more opportunities for young people to find work.

**6.16** When the outlook for young people was most uncertain, the Government introduced the Kickstart scheme to provide funded job opportunities for young people at risk of long-term unemployment. Stakeholders' insights suggest modest uptake of the Kickstart scheme by employers. We have heard of a few problems including a limited pool of applicants, some of whom are not well prepared for work. The criteria for the scheme required employers to provide evidence that they would not be able to hire without Kickstart funding, but labour shortages have led to record numbers of vacancies. Even with Kickstart placements below budgeted levels, the evidence suggests that the labour market has continued to tighten and provide a substantial volume of opportunities for young people.

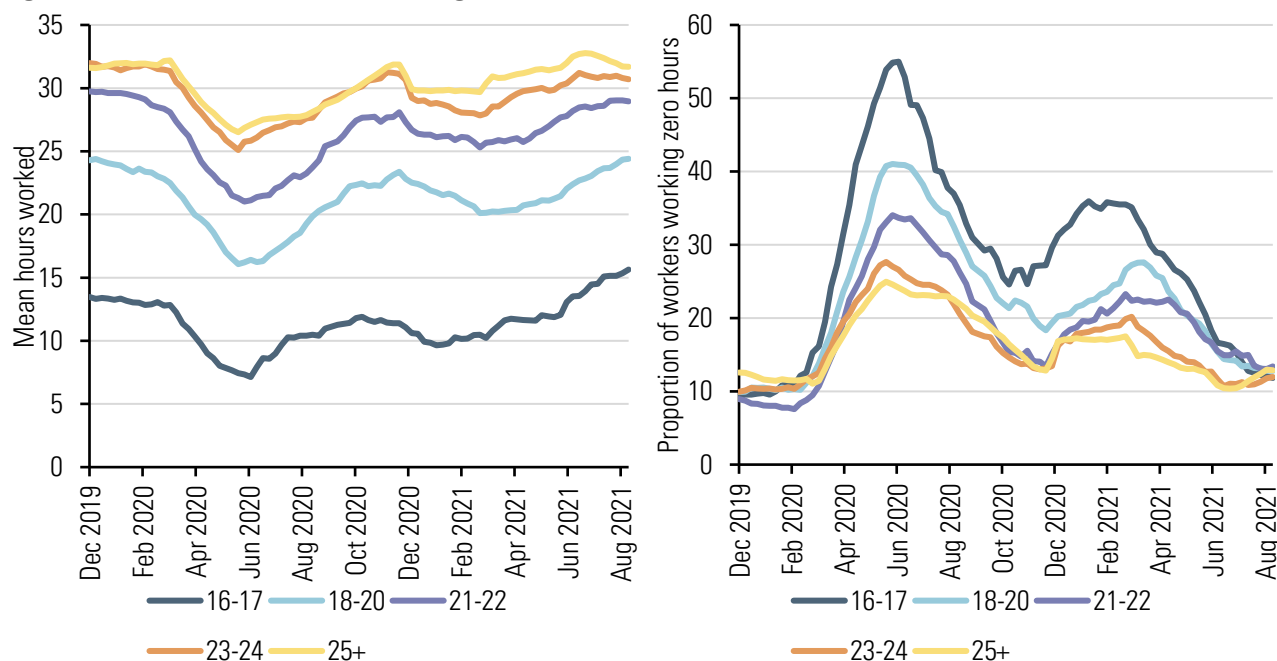
## Changes in hours

**6.17** The pandemic has had a significant impact on hours worked, with the CJRS effectively ensuring that people could stay in employment while working no or reduced hours. At the peak of the scheme, 48 per cent of employments of workers aged under 23 were furloughed.

**6.18** The furlough scheme ensured that more young people could keep their jobs. But their experience of furlough was not always positive. Hospitality workers in Northern Ireland told us that their experience of furlough had led to stress and anxiety. They told us about uncertainty about their furlough status and disputes with employers. Scottish hospitality workers similarly told us that they had uncertainty over what they were entitled to and that the amounts they were paid would vary without explanation, which made planning difficult. One worker had to give up a flat; others talked about the relationship with their employer breaking down.

**6.19** The extensive use of the furlough scheme reduced the hours worked by young people. Figure 6.7 shows the mean hours worked by young people on a weekly basis since the beginning of 2020. Young people tend to work fewer hours, fitting in part-time work alongside their studies. All age groups experienced a fall in their hours during the lockdowns as they were furloughed or worked fewer hours on flexible contracts. When businesses reopened over the summer there was a strong recovery in hours worked, with all age groups close to pre-pandemic levels by the end of August. Those aged 16-17 are now working more hours on average than they were before the crisis. Similarly, the right hand panel of Figure 6.7 shows that the proportion of young workers not working any hours peaked during the national lockdowns, but fell back to normal levels by the end of August. By the end of the furlough scheme, young workers were less likely than older workers to be furloughed (see Figure 2.15).

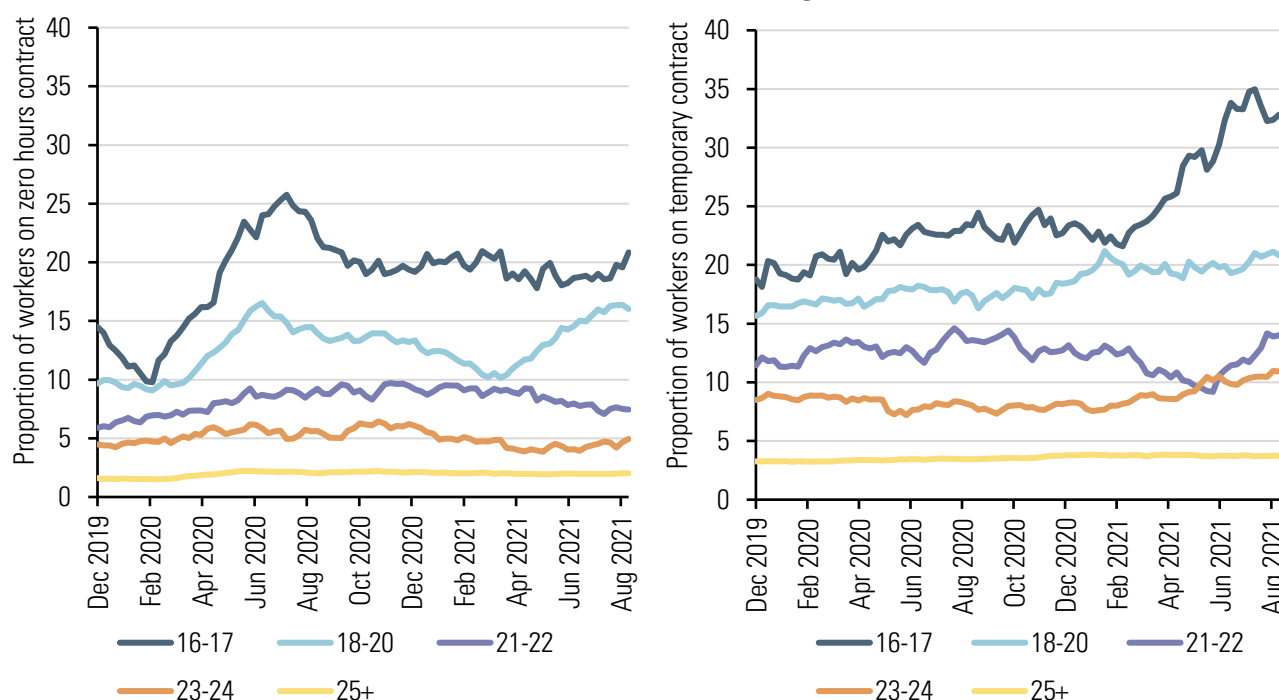
**Figure 6.7: Mean hours worked (LHS), and proportion working no hours (RHS), by age, UK, December 2019 – August 2021**



Source: LPC estimates using LFS microdata, population weights, not seasonally adjusted, weekly data, quarterly rolling average, UK, Oct 2019 – Aug 2021.

**6.20** While there has been strong recovery in both employment and hours worked, there has at the same time been an increase in insecure work among young people. Figure 6.8 shows that the youngest workers were already more likely to be on a zero-hours contract or temporary contract, and the proportion of workers on these contracts has increased over the course of the pandemic. Some of the recovery over the summer appears to be driven by short-term contracts for young workers. This could indicate that businesses are uncertain about their future prospects and do not want to commit to longer-term employment.

**Figure 6.8: Proportion of workers aged 16-22 on zero hours contracts (LHS) and temporary contracts (RHS), UK, December 2019 – August 2021**



Source: LPC estimates using LFS microdata, population weights, not seasonally adjusted, weekly data, quarterly rolling average, UK, Oct 2019 – Aug 2021.

**6.21** Young people may be more likely to end up in insecure work because they have less experience and bargaining power, or they may prefer the flexibility offered to them so that they can fit shifts around their studies. But insecurity can be extremely challenging for workers as well. In response to our consultation, Unite said they were concerned about 'hidden job losses... through short service dismissal, zero-hours and those now underemployed on precarious contracts'. Hospitality workers we spoke to in Northern Ireland provided examples of how insecurity and precarity led individuals to put up with bullying and in some cases sexual harassment rather than leave their jobs.

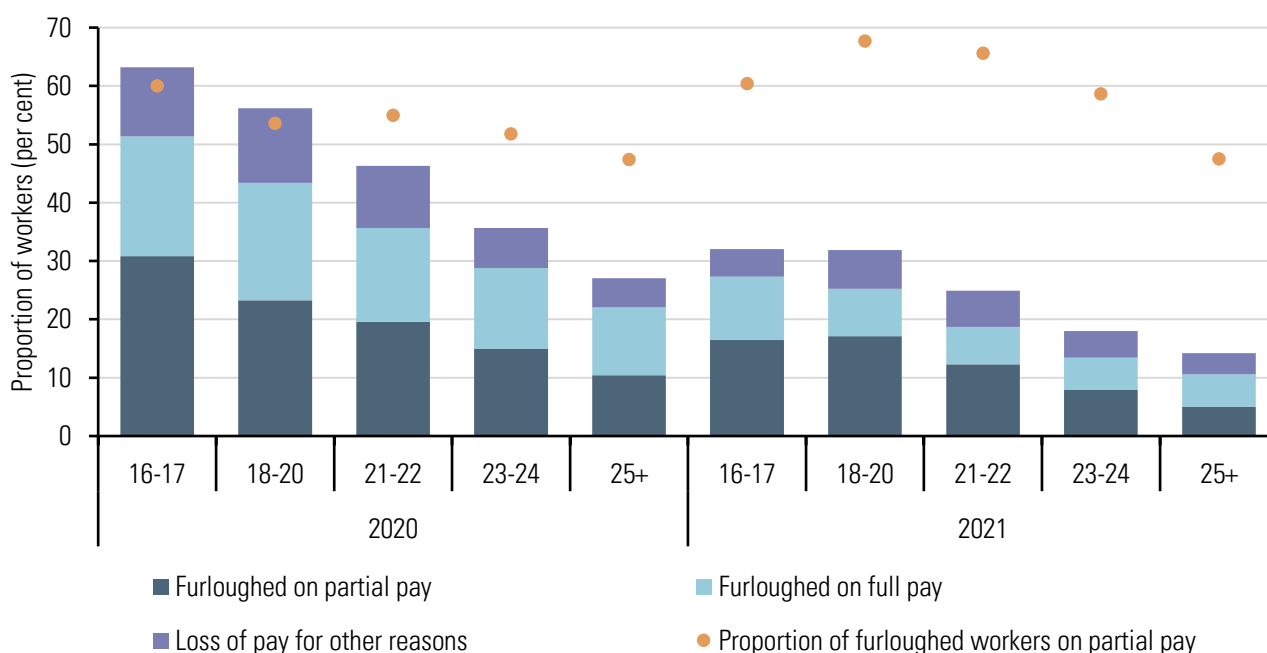
**6.22** Overall, the labour market outlook for young people is positive. They have experienced robust recovery in employment and hours, and there continues to be high demand, especially in key sectors for young people such as hospitality. However, some occupations, regions and groups of workers lag behind. There are some groups that are a concern, including those who were still furloughed at the end of the scheme, as well as those who have been unemployed or furloughed for many months who may find it hard to return to employment. The Prince's Trust told us that many young people who have been out of work for a while may need more support to build their confidence for work. UKHospitality said that some employers are having to invest more in training young entrants who come without basic job

skills. FSB Scotland members raised concerns about the wellbeing of young staff who have struggled to cope with the stress of the pandemic, having to adapt to a situation and work environment they were not prepared for.

## Young people's pay

**6.23** There is uncertainty in our estimates of median pay (as discussed in Paragraph 3.7). It is difficult to work out the normal hourly pay of furloughed workers who have experienced a loss of pay. Younger workers were more likely to be furloughed than older workers last year, and were still more likely to be furloughed in April 2021, when the Annual Survey of Hours and Earnings (ASHE) took place (Figure 6.9). They were also less likely to have their pay topped up by their employer. This means that they have experienced greater disruption to their pay over the pandemic, and estimates of pay based on their derived hourly rate are more uncertain for younger workers. However, young people are more likely to be paid on an hourly basis and have a stated hourly pay rate that is less affected by furlough than their derived pay. This allows us to have a better idea of what they would normally be paid, which we use in our estimates of coverage and usage of the rates.

**Figure 6.9: Proportion of workers furloughed, with and without loss of pay, by age group, UK, 2020-2021**



Source: LPC estimates using ASHE, standard weights, UK, 2020-2021.

**6.24** Furthermore, furloughed workers are concentrated at the lower end of the pay distribution (as shown in Figure 3.2). This means that young minimum wage workers are also most likely to have been furloughed and experience pay changes. Our pay analysis is therefore most uncertain for the lowest-paid young workers. The range of estimates for the median pay of each age group is given in Table 6.1.

Table 6.1: Median pay, by age group, UK, 2019-2021

Rate population	2019	2021		
		Lower estimate	Upper estimate	Central estimate
16-17	£6.15	£6.60	£6.79	£6.73
18-20	£8.27	£8.92	£9.00	£9.00
21-22	£9.20	£9.87	£10.00	£10.00
23-24	£10.73	£11.22	£11.39	£11.29

Source: LPC estimates using ASHE, standard weights. Includes furloughed workers, excludes apprentices eligible for the apprentice rate, UK, 2019-2021.

Note: Lower, central and upper estimates use the methodology described in Chapter 3.

## Pay growth

**6.25** Widespread use of the furlough scheme in April means that we also have uncertainty in the pay growth experienced by each age group. We compare pay in 2021 to pay in 2019, prior to the impact of the furlough scheme. Over that two-year period, the youngest workers experienced the strongest pay growth, as shown in Figure 6.10. Pay at the median has grown faster than the increases in the rates for 16-17 year old and 18-20 year old workers. However, the stronger pay growth for the youngest workers is partly driven by compositional effects; in April, large numbers of low-paid young people had lost their jobs, which increases average pay. These effects are strongest for the youngest workers, who saw greater falls in employment.

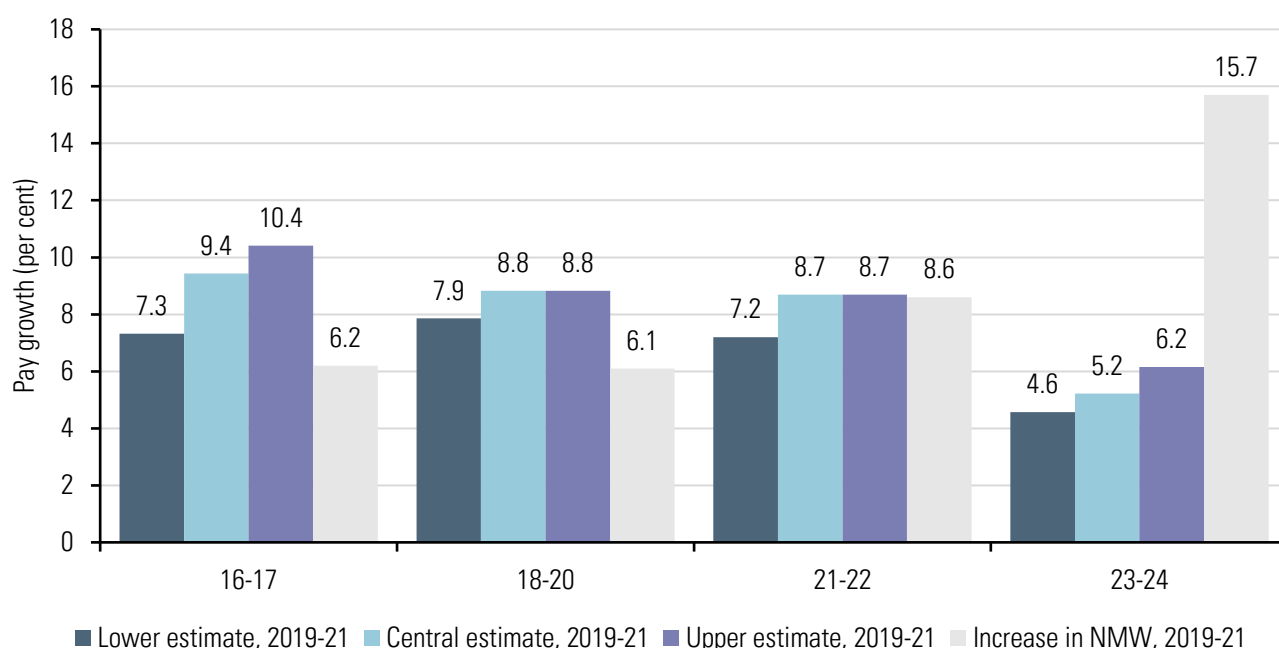
**6.26** Those aged 23-24 saw a substantial rise in their wage floor as they moved up to the NLW. Despite this, their overall pay growth levels were lower, with growth in median hourly pay between 4.6 and 6.2 per cent over the two years. This is because the majority of this age group were already paid above the NLW before they became eligible for it. Indeed, this is one of the reasons we recommended this change to the age threshold. We will see in the next section (Figure 6.14) that pay growth for 23-24 year olds was much higher at the bottom of the pay distribution.

**6.27** While some of this pay growth is compositional, labour shortages and a tightening labour market may have helped to strengthen pay growth for young workers. Groups including Unison Northern Ireland and The Prince's Trust reported that some employers had experienced difficulties recruiting and retaining young people as a result of their low wages, and that certain groups of young workers were able to choose to work elsewhere to achieve better rates of pay.

**6.28** Pay growth has not been uniform across regions and occupations, as shown in Figure 6.11. Young workers in Yorkshire and the Humber and the South East have experienced the strongest pay growth over the last two years. Pay growth has been weakest in London and Northern Ireland, which are also the regions that have the greatest uncertainty in pay due to furloughing. Similarly, pay growth in hospitality and hair and beauty has been highly distorted by furloughing, with many young workers experiencing disruption to their pay and weak pay growth over the last two years. Meanwhile, pay growth has been strongest in childcare and retail.



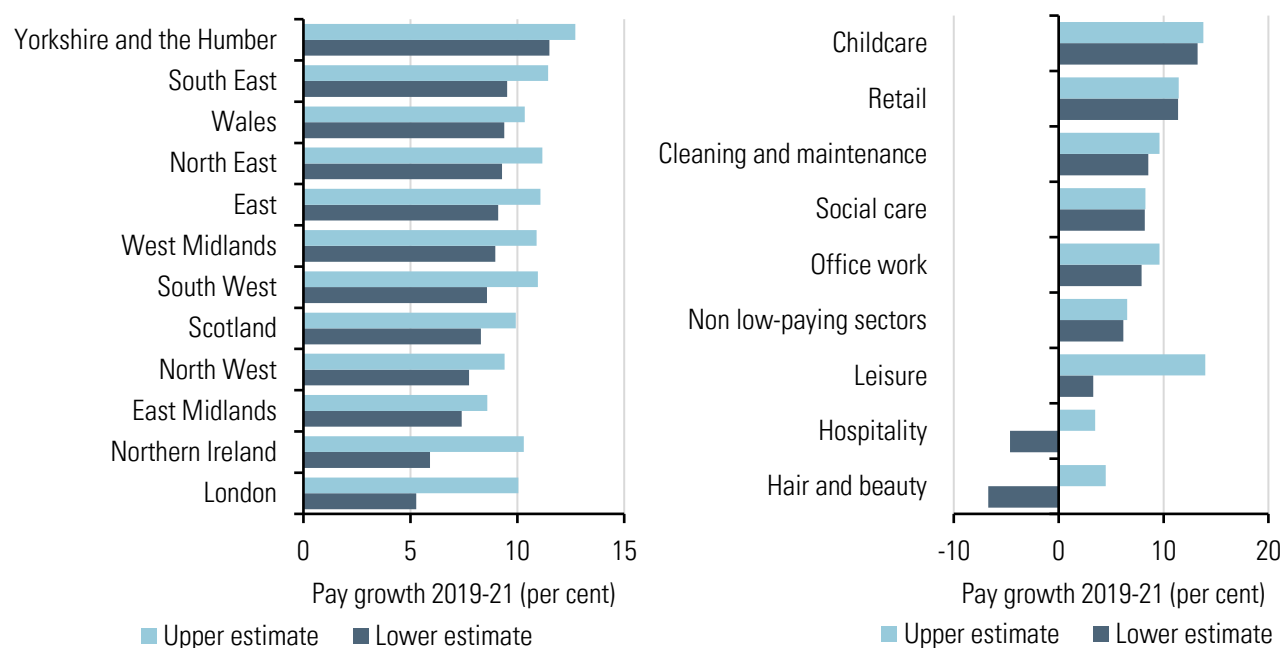
Figure 6.10: Pay growth at the median, by age group, UK, 2019-2021



Source: LPC estimates using ASHE, standard weights, UK, 2019-2021.

Note: Includes furloughed workers, excludes apprentices eligible for the Apprentice Rate. Lower, central and upper estimates defined as in Figure 5.8.

Figure 6.11: Pay growth at the median for workers aged 16-22, by region (LHS) and by occupation (RHS), UK, 2019-2021



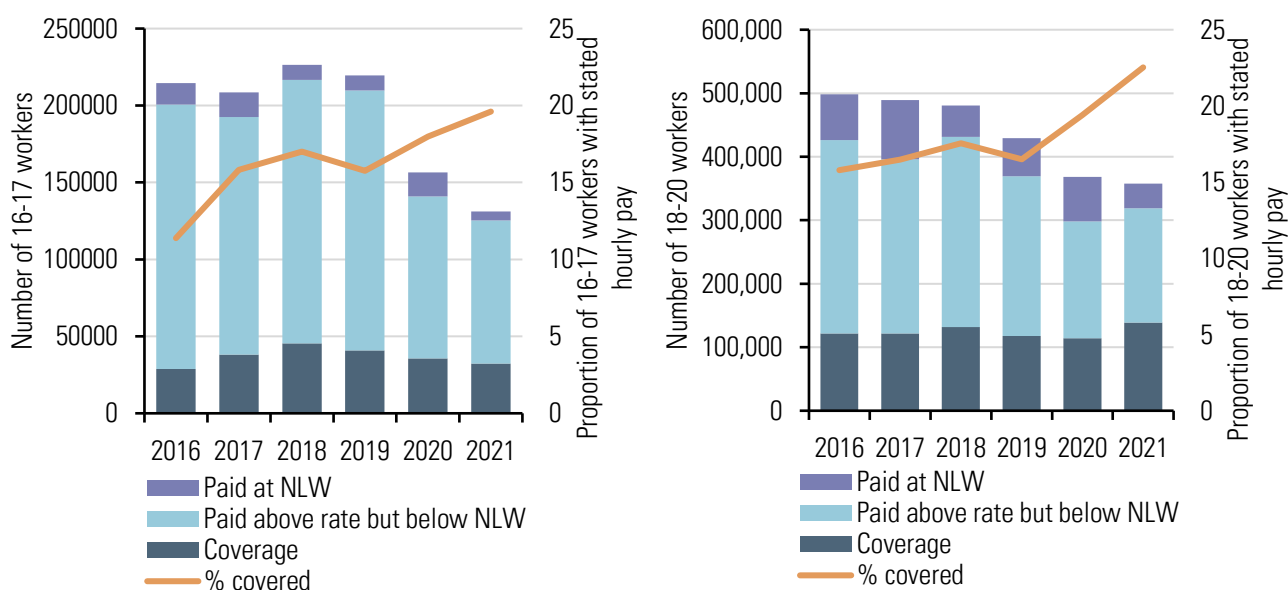
Source: LPC estimates using ASHE, standard weights, UK, 2019-2021.

Note: Includes furloughed workers, excludes apprentices eligible for the Apprentice Rate. Lower, central and upper estimates defined as in Figure 5.8.

## Coverage and usage of rates

**6.29** While the youngest workers have experienced strong pay growth, there has also been increased use of the youth rates. Among both 16-17 year old and 18-20 year old hourly-paid workers, the proportion paid at or below the minimum wage rate has increased over the course of the pandemic (Figure 6.12). This is not the case for 21-24 year old workers, which is discussed in more detail in the next section on changing the age threshold for the NLW.

**Figure 6.12: Coverage of the minimum wage for 16-17 and 18-20 year old workers, stated hourly pay, UK, 2016-2021**



Source: LPC estimates using ASHE, standard weights, includes furloughed workers, excludes salaried workers, UK, 2016-2021.

Note: 2020 ASHE data is included to have a consistent time series, but is subject to the limitations discussed in Chapter 3.

**6.30** Historically, many employer groups and employers have told us that they pay a single rate to all workers to promote fairness in the workplace (Hudson-Sharp, Manzoni, and Rolfe, 2019). This has continued to be the case for several groups, including Make UK, the Association of Convenience Stores, the British Retail Consortium and the Local Government Association. The Association of Labour Providers told us that food growers and manufacturers are unable to pay youth rates on the basis of compliance with ethical labour standards which have determined that use of age-related pay is a form of discrimination.

**6.31** However, in line with the evidence from the pay data, some groups told us that businesses had increasingly been using the youth rates this year. The CBI told us that there had been an increase in the use of the rates among its members: 'more businesses have told us that they have started to use the youth rates and the 21-22 rate to support the creation of employment opportunities for younger workers. Youth rates remain important to the employers who rely on them to protect jobs and create new ones, particularly in an economic crisis'. The National Hair and Beauty Federation (NHBF) told us that they fully use the rates in its sector.

**6.32** Another factor that could have elevated estimates of coverage this year is that employers did not have to uprate the pay of all furloughed workers in line with NMW/NLW increases. If workers had been furloughed in 2020 and were still furloughed or furloughed again in April 2021, their pay could be based on their wages in March 2020, prior to both of the most recent upratings. Several respondents criticised the fact that furloughed minimum wage workers could be receiving less than their normal pay for long periods. Young people who were furloughed and whose pay has not been increased may appear to be minimum wage workers even if they were paid above the minimum in March 2020.

**6.33** The picture is likely to have changed since April, when ASHE took place. At that point, the labour market was still in the very early stages of recovery, which could explain high rates of coverage. Since April we know that 400,000 young workers have moved into employment<sup>4</sup>. If these jobs are primarily low paid, it could have pushed coverage higher still. But it is also possible that coverage rates may have fallen as labour shortages and continued recovery could have helped young workers to achieve better wages.

## Lowering the National Living Wage age threshold

**6.34** In April, the age threshold for the NLW moved to 23. This followed recommendations we made in our 2019 review of the youth rates (Low Pay Commission, 2019a). We recommended a two-step approach, with a commitment to reduce the threshold to 21 at a later date.

**6.35** It is important to evaluate the impact that this change has had on 21-24 year olds so far, and consider when to go ahead with the move to 21. We use the arguments made in the youth review: 1) that use of the NMW among that age group is low, 2) that moving 21-24 year olds up to the NLW would result in reasonable bites, 3) that 21-24 year olds are similar to 25 year olds across a range of indicators, 4) that stakeholders agree that the NLW age should be lowered, 5) that when the NMW eligibility age was last lowered there were no significant negative impacts, 6) demographic changes reduce the risk of higher rates, and 7) that record high employment and a tightening labour market are likely to offer protection to young workers.

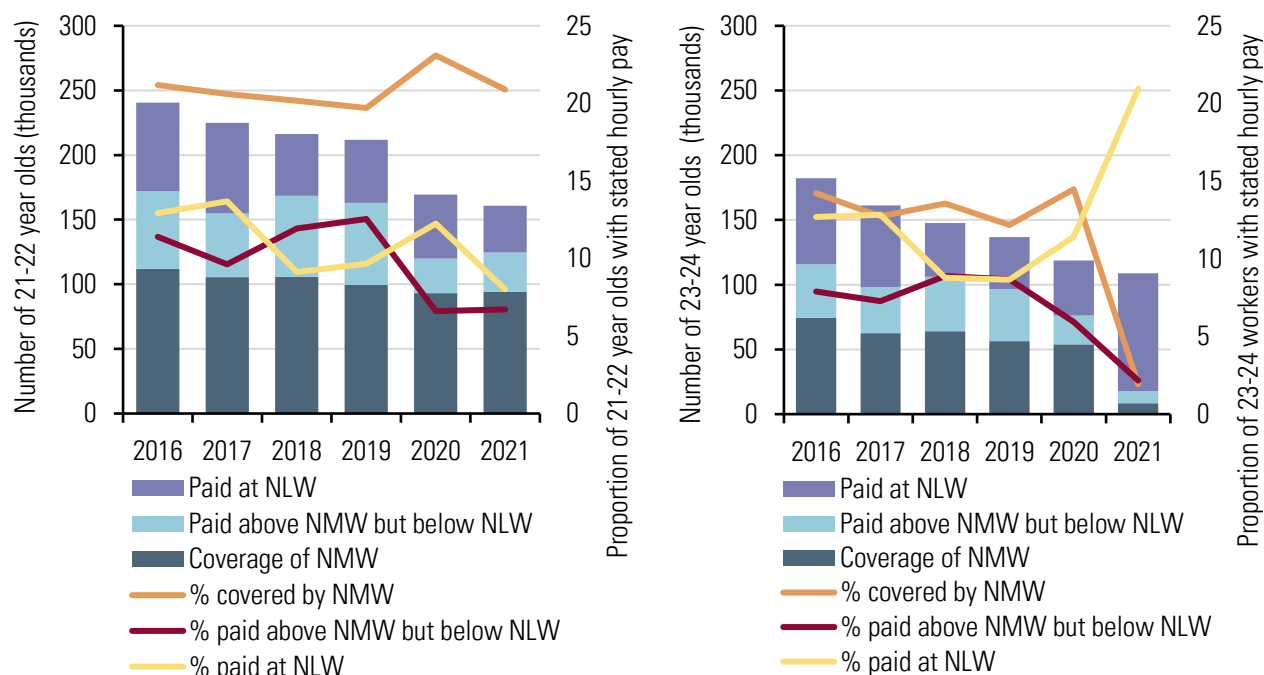
### Argument 1: Use of the National Minimum Wage is low

**6.36** As the NLW threshold changed to 23 in April 2021, the proportion of 23-24 year olds paid at the NLW increased sharply, while the proportion paid below fell (Figure 6.13). This suggests that employers have responded well to the change in age threshold. Before this change, up to 100,000 workers aged 23-24 had hourly pay below the NLW, this fell to 18,000 in April 2021. A minority of workers in this age group were directly affected by the change because most were already paid above the NLW, which was a key argument for going ahead with the change in age threshold.

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<sup>4</sup> HMRC payrolled employees on Pay As You Earn, workers aged under 25, April – September 2021

**Figure 6.13: Coverage of the NMW and NLW for 21-22 and 23-24 year old workers, stated hourly pay, UK, 2016-2021**



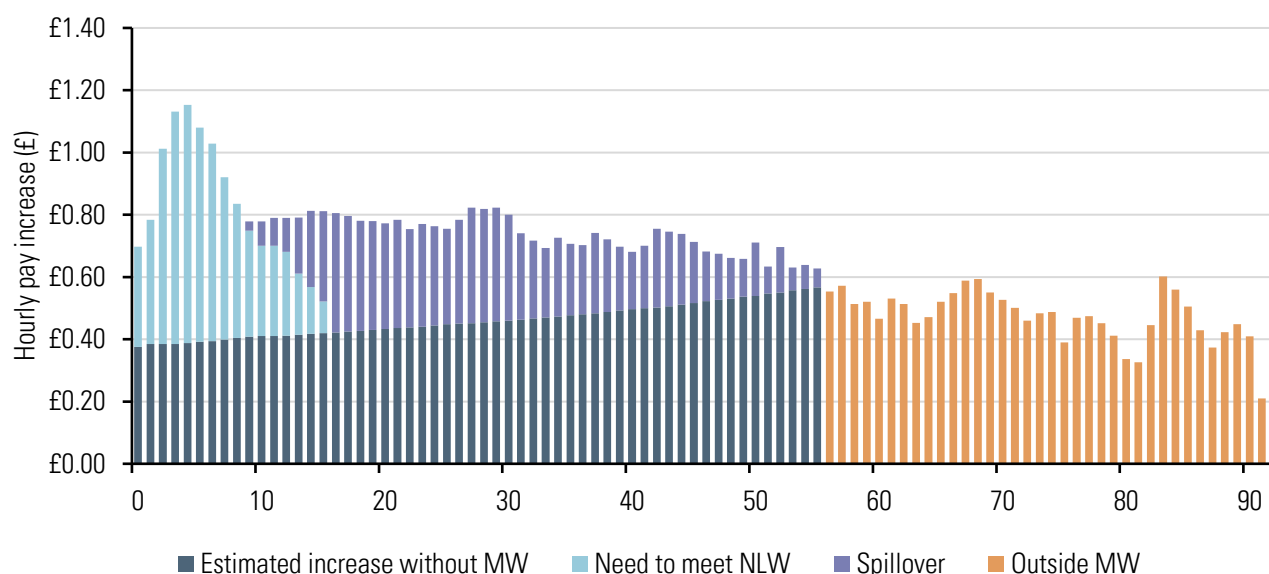
Source: LPC estimates using ASHE, standard weights, includes furloughed workers, excludes salaried workers, UK, 2016-2021.

Note: 2020 ASHE data is included to have a consistent time series, but is subject to the limitations discussed in Chapter 3.

**6.37** Among 21-22 year olds, the proportion paid at the NLW has fallen, despite the announcement that they will eventually be paid the NLW. At the same time, coverage of the lower NMW has remained relatively flat. This suggests that employers are continuing to rely on the NMW and are not yet pre-emptively paying the NLW to 21-22 year olds. However, a higher proportion of this age group are now paid above the whole minimum wage structure. Furthermore, the numbers who are paid below the NLW are still relatively low: 125,000 workers aged 21-22 had an hourly pay that was below the NLW in April 2021.

**6.38** Though there were a relatively small number of workers aged 23-24 who were paid below the NLW who directly benefited from the change in age threshold, additional workers are likely to have benefited as a result of spillover effects. Pay growth over the last two years has clearly been stronger at the bottom of the distribution for 23-24 year old workers. This is likely to be driven to some extent by compositional changes, but it is also consistent with a robust pay increase for the lowest-paid workers as their wage floor increased by 15.7 per cent over that period.

Figure 6.14: Pay increases across the distribution for 23-24 year olds, UK, 2019-21



Source: LPC estimates using ASHE, standard weights, UK, 2019-2021.

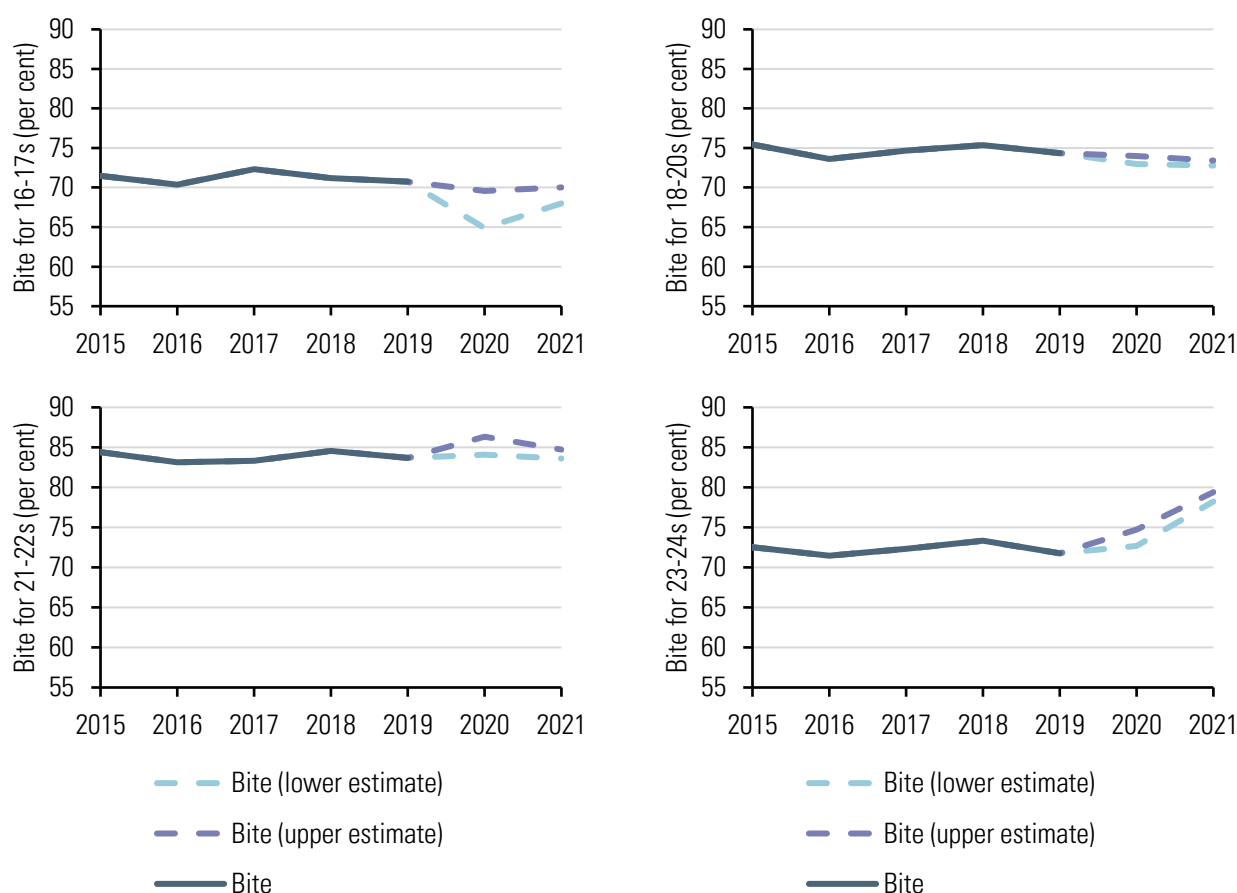
Note: Includes furloughed workers, excludes apprentices eligible for the apprentice rate. Uses central estimate for pay in 2021 as defined in Chapter 3.

**6.39** Research evidence indicates that the introduction of the NLW had a positive effect on this age group even before they were legally entitled to it (Cribb, et al., 2021). The NLW has substantially increased pay for workers aged under 25, without negatively affecting their employment. This suggests that when the NLW was introduced, many employers chose to substantially increase wages for younger workers. It is an encouraging sign that many employers already value fairness in pay and would be likely to respond well to the change in age threshold.

## Argument 2: Moving the workers onto the National Living Wage would result in reasonable bites

**6.40** One measure for gauging the scope to raise pay is the bite of the minimum wage, which is the ratio of the minimum wage for each age group to their median hourly pay. It is a useful indicator of the potential pressure that could be produced by increases in the minimum wage. A key argument in the youth review was that moving 21-24 year old workers would result in reasonable bites. Figure 6.15 shows how the bite of the minimum wage has changed since 2015 for each of the age groups. For workers aged under 21, the bite has been relatively flat over the lifetime of the NLW, and has fallen marginally since the pandemic. Meanwhile, the bite for workers aged 23-24 has increased substantially as they have become eligible for the NLW, though it remains below 80 per cent. This represents an increase in pressure but it is not unreasonable, and supports our recommendation to extend the NLW to this group. However, the bite for 21-22 year olds is already higher, and was close to 85 per cent in April 2021. Moving this group onto the NLW would push the bite up further, which could increase the risk of reduced employment opportunities.

Figure 6.15: Bite of the minimum wage by age group, UK, 2015-2021



Source: LPC estimates using ASHE, standard weights, UK, 2015-2021.

Notes:

- Includes all furloughed workers. Upper estimate includes furloughed workers with loss of pay without adjustment, lower estimate adjusts their pay by a factor of 1.25.
- 2020 ASHE data is included to have a consistent time series, but is subject to the limitations discussed in Chapter 3.

### Argument 3: 21-24 year old workers are similar to older workers

**6.41** In the youth review, we argued in favour of the NLW threshold moving to 21 because workers aged 21-24 are relatively similar to older workers across a range of measures. In terms of their participation in work and education (Figure 6.1), the type of work they do (Figure 6.2 and Figure 6.8), and how they have been affected by the pandemic in terms of their hours and employment (Figure 6.3, Figure 6.7, Figure 6.9), 23-24 year olds are similar to older workers, but this is less true for 21-22 year olds. 21-22 year olds are more likely to be in education and working alongside their studies, and are more likely to work in low-paying sectors such as retail and hospitality. Again, this supports our decision to go ahead with the move to 23, while suggesting a more measured approach for 21-22 year olds.

### Stakeholder views

**6.42** Few stakeholders commented on the impact of the NLW age threshold moving to 23 this year. At the time of the youth review, there had been widespread support for lowering the threshold from both worker and employer representatives.

**6.43** A small number of groups commented on the proposed reduction of the NLW age threshold from 23 to 21. The BCC recommended that the change should take place ‘no earlier than 2024’, a view supported by the FSB, who believe this would allow sectors more time to recover from the pandemic. The NHBF specifically called for the change to be delayed until 2026.

**6.44** Meanwhile, the CIPD said there was a lot of support for lowering the NLW threshold, with its surveys finding no evidence that the different wage rates had any impact on the employment of young people. In line with the low usage of the youth rates, many stakeholders believe there would be no impact of the planned reduction in the NLW threshold. Chartered Institute of Payroll Professionals (CIPP) members argued that the threshold should be reduced in 2022. Unions including Usdaw believe the change should be introduced as soon as possible. They believe that the longer the 21-22 Year Old Rate is in place, the more established it will become. Youth Employment UK also felt that ‘2024 is too far ahead, especially with the pandemic leaving people out of work’.

## Other arguments

**6.45** When the NMW eligibility age was reduced from 22 to 21 in 2010, following our advice, it led to a 20 per cent increase in the wage floor for 21 year olds. But despite the magnitude of that increase – and the implementation of the change in the immediate aftermath of the financial crisis – econometric evidence showed no significant negative effects on employment for 21 year olds. It will be critical to assess whether the move to 23 has been similarly positive before we recommend going further to 21. A fuller evaluation of this first stage, and recommended timelines on the second, will be possible in next year’s report.

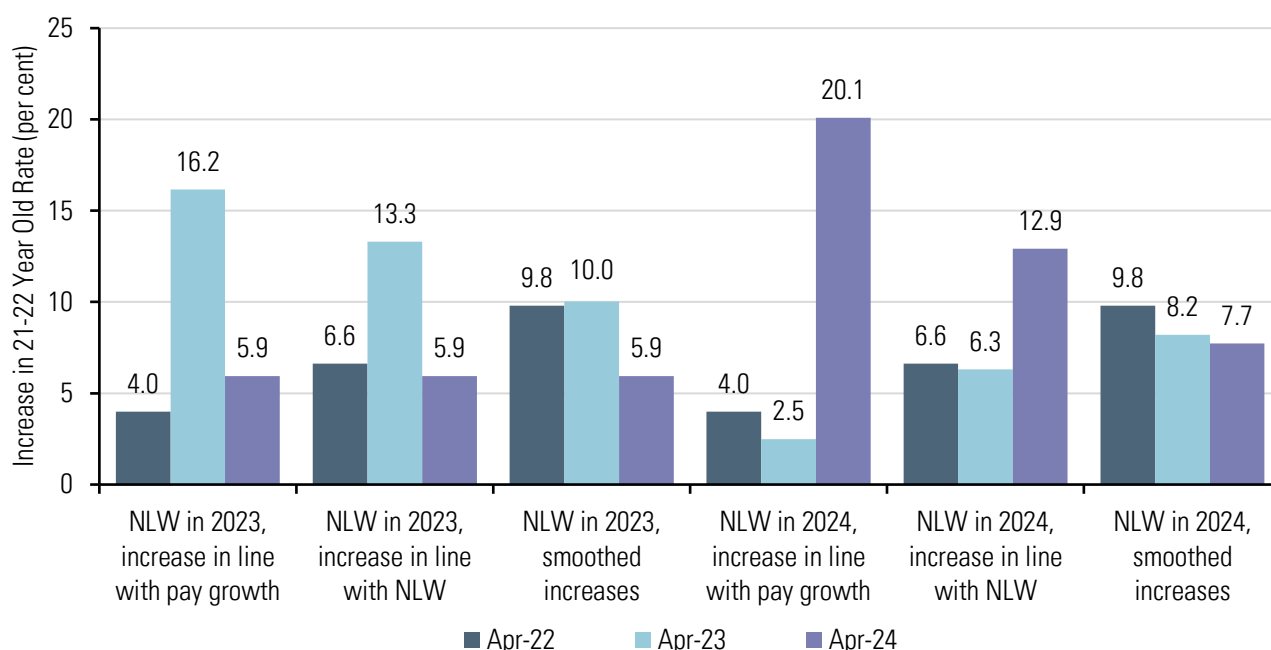
**6.46** Demographics were also a key part of our rationale in the youth review. Population projections suggest that the number of 21-24 year olds will fall over the timeframe that these changes are introduced. This reduction in numbers will help to protect the employment of this group.

**6.47** Finally, at the time of the youth review the economic conditions were particularly strong, with record high employment and a tightening labour market. We argued that this would help to protect young workers as their pay floor is increased. The labour market is tightening once again, and we are in the middle of a robust economic recovery, but there is still some ground to make up.

## Options for 21-22 year olds

**6.48** Given that we have committed to moving 21-22 year olds onto the NLW by 2024, the wage floor for that age group needs to increase substantially over the next two to three years. But there is a range of options as to how we get there, as shown in Figure 6.16. Increases in line with pay growth would require a substantial jump in the year that 21-22 year olds become eligible. Larger increases in line with the NLW avoid the gap between the rates widening, but still require a substantial jump in the year that the temporary rate is removed. Each ‘smoothed increases’ option avoids the large step change in the year that they become eligible by reducing the gap between the 21-22 Year Old Rate and the NLW next year.

Figure 6.16: Options for increases in 21-22 Year Old Rate, 2022-24



Source: LPC modelling using ASHE 2021, standard weights, AWE, Bank of England underlying pay growth taken from minutes of September 2021 meeting. (Bank of England, Monetary Policy Summary and minutes of the Monetary Policy Committee meeting ending on 22 September 2021, 22 September 2021c)

## Conclusion

**6.49** Last year the picture for young workers was bleak. They overwhelmingly worked in shut-down sectors, were more likely to be furloughed and lost pay as a result. As things stand currently, the situation is very different. Younger workers have been the fastest to move off the CJRS despite being the most likely to be furloughed last summer. At the same time, employment rates and hours have recovered quickly and are now close to pre-pandemic levels. However, some groups and sectors lag behind, and there has been an increase in insecure work.

**6.50** This year was the first that 23 and 24 year olds became eligible for the NLW. This appears to have gone smoothly so far. They are increasingly paid the NLW without a spike in underpayment and their employment has not been negatively affected.

**6.51** Our intention for 21 and 22 year olds is to move them onto the NLW by 2024, and the majority of our stakeholders continue to tell us that this is the right move. We have seen that use of the NMW and NLW has fallen for this age group, as a greater share of them are now paid above the NLW. Their employment rates have also improved, particularly rapidly over the summer, so that they are just below where they were at the pandemic's outset. To avoid a large step change in the year they become eligible, we judge it sensible to reduce the gap between the 21-22 Year Old Rate and the NLW next year.

**6.52** However, for those aged 20 and below there has been an increase in the use of the youth rates by their employers, which is usually a sign of pressure. And while their employment rates are recovering, they fell by more and have more ground to make up than the older age groups.





# Chapter 7

## Apprentices

### Key findings

Our deliberations on apprentices this year build on the review of the Apprentice Rate we carried out a year ago. Then, the context was a sudden shock to an apprenticeship system already in steady decline (especially the lower-level and younger apprentices more exposed to the rate). Despite this, we proposed to increase the Apprentice Rate substantially, aligning it with the 16-17 Year Old Rate over two years. This was motivated by long-standing stakeholder feedback about the level of the rate and the relatively small role it plays in employers' decisions.

In this year's consultation, businesses and workers alike supported this proposal. We continued to hear that the rate was seldom used, that the impact of this change for the majority of low-paying sectors would be minor and that, more generally, raising the level of the rate was the right thing to do.

We also heard about the specific impact of Covid-19 on apprenticeship starts, and about longer-term factors weighing down uptake. Despite additional Government incentives, the overall message was that starts continued to be depressed through the year.

This is borne out in official statistics. Starts in England were subdued in autumn 2020 and overall have continued to decline year-on-year. The recent pattern is similar in the devolved nations. As the crucial autumn 2021 period approached, however, the vacancies picture was positive.

The picture on pay – very cloudy last year – is slightly clearer. The Annual Survey of Hours and Earnings (ASHE) provides more reliable information and we have access to a new data source, the Apprentice Evaluation Survey (AEvS). These show that the Apprentice Rate continues to be used predominantly for apprentices under the age of 19. A fall in the number of apprentices doing lower-level apprenticeships has driven growth in median pay, but it is these apprentices who will be most affected by alignment with the 16-17 Year Old Rate. Underpayment continues to be a problem across all ages.

**7.1** In this chapter we set out the evidence available when considering our recommendation on the Apprentice Rate to apply from April 2022. Our deliberations were shaped by our in-depth review of the rate completed last year. The crucial decision was whether to go ahead with that review's key proposal, that the Apprentice Rate should be aligned with the 16-17 Year Old Rate, with the final increase to achieve alignment taking place in 2022.

**7.2** The main rationale for aligning the two lowest National Minimum Wage (NMW) rates was that, overall, pay is not a leading factor in employers' decisions over apprentice recruitment. This means the rate has a weak relationship with the recruitment and employment of apprentices, which led us to conclude there was room for a significant increase. In addition to this, we have heard a large volume of feedback from employers and workers alike that the level of the rate was too low. Both workers and employer representatives link this to a variety of problems: the difficulty for apprentices of surviving on

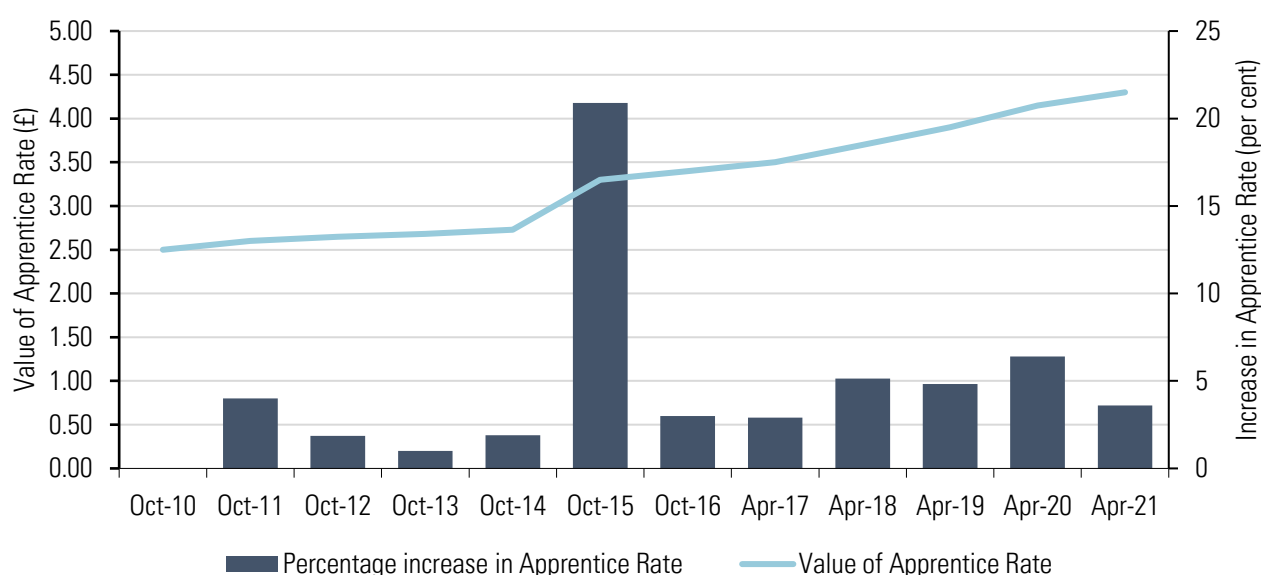
low pay; restrictions on access to apprenticeships; and perceptions of apprenticeships as low quality or low value. Our remit dictates that employment is always our upmost consideration but the volume of evidence over a period of years has indicated widespread dissatisfaction with the level of the Apprentice Rate and a consensus that the rate can be lifted without causing damage.

### A brief history of the Apprentice Rate

The Apprentice Rate was introduced in October 2010 at a level of £2.50 an hour. Before this, there was an exemption from the NMW for apprentices aged under 19 and for older apprentices in the first year of their apprenticeship. The rationale for the exemption – and subsequently for an Apprentice Rate lower than other NMW rates – was the desire not to undermine the relationship between employers and apprentices, where the latter accept a lower starting wage in exchange for access to training.

The rate has risen steadily since then, with the exception of a sharp increase in October 2015 from £2.72 to £3.30 an hour – a jump of nearly 21 per cent. Subsequent research found no evidence that the large increase had reduced the number of starts or completions, but noted the limitations of the available data.

Figure 7.1: Previous increases in the Apprentice Rate, 2010-2021



Source: LPC Reports 2010-2020.

**7.3** We noted at the time that alignment was not the same as merging the two rates and this remains our position. Although there is some overlap, apprentices and 16-17 year olds are distinct groups and we intend to continue treating them as such in the future. We have treated the 16-17 Year Old Rate as a lodestar for the Apprentice Rate, but alignment is not intended to permanently collapse the two rates into one, and their future divergence remains a possibility.

**7.4** A year ago, the initial waves of the pandemic and lockdowns had damaged the labour market for apprentices in much the same way as for other workers. In all parts of the UK, recruitment had fallen sharply, with closed sectors particularly badly affected. This led us to propose alignment over two years rather than one. We recommended the Apprentice Rate increase in April 2021 by 15 pence or 3.6 per cent, from £4.15 to £4.30. This was greater than increases in other rates, reflecting what we see as the weaker link between the Apprentice Rate and employment levels. It nevertheless demonstrated a

degree of caution, as we waited to see how apprentice recruitment would respond in the new academic year. This chapter will first look at stakeholder responses to the proposed alignment before assessing the latest data on apprentice starts and apprentice pay.

## Stakeholder views

**7.5** We sought views in this year's consultation on whether now was the right time for the significant increase in the Apprentice Rate needed to align it with the 16-17 Year Old Rate. Many respondents supported this. The British Chambers of Commerce (BCC) said the increase would help make apprentice positions more attractive to young people seeking employment. Unison and the Trades Union Congress (TUC) hoped equalisation would be a step towards one rate for all workers.

**7.6** Among employer groups, support for equalisation of the rates was generally linked with low or zero usage of the Apprentice Rate. Employer groups across a range of sectors, including the Association of Convenience Stores (ACS), the British Retail Consortium (BRC) and Make UK, said their members did not use the Apprentice Rate. In most cases, members instead elected to pay apprentices the same rates as other employees. In some cases, apprentices were paid below normal pay scales but still above the Apprentice Rate and other NMW rates. This was the case for FSB members in Northern Ireland and manufacturers belonging to the Sheffield Chamber of Commerce. The BRC told us that although no members used the rate, 'a small number of retailers have noted they are considering reducing the rate of pay for new apprentices going forward'. Community Leisure UK (CLUK) also told us some of their members make use of the Apprentice Rate due to affordability but did not oppose equalisation.

**7.7** Several groups – unions, employers and others – repeated the message that the Apprentice Rate was too low. This meant it did not ensure a decent standard of living for young people; left them struggling to cover basic living costs; and could cause hardship and distress. One FSB member based in Scotland told us about her concerns that the low Apprentice Rate could discourage individuals with families from starting apprenticeships. The Intergenerational Foundation argued the rate was too low to ensure a decent living, and the lack of a financial incentive for young people was one factor in recent falls in starts. They cited National Union of Students research from 2015 suggesting that low pay led to apprentices struggling to afford to do apprenticeships. They also argued that a higher rate would improve apprentice quality by discouraging employers from providing low-quality apprenticeships. Citizens Advice Scotland (CAS) shared anecdotal evidence of apprentices being used as cheap labour, with employers not fulfilling their training and development responsibilities. The TUC echoed this argument, stating that 'the current set-up has risked encouraging exploitative employers to deliver poor quality apprenticeships in order to access cheap labour'. Youth Employment UK provided evidence of hardship and stress experienced by young people on low-paying apprenticeships. Their 2021 Youth Voice Consensus found that 19 per cent of apprentices rated their pay as 'poor' or 'very poor'.

**7.8** GMB expressed concern that the Apprentice Rate was not being used for 'genuine development roles'. They argued current eligibility for the rate was too wide and should be restricted to 16-20 year olds only. The Chartered Institute of Personnel and Development (CIPD) also suggested an upper age limit for the Apprentice Rate, aligned to NLW eligibility so apprenticeships did not become uncompetitive. Other stakeholders called into question the need for a specific Apprentice Rate, for a variety of different reasons. The British Independent Retailers Association (BIRA) told us the current rate should be removed and replaced with sector-specific schemes. Unite also expressed their desire for the rates to be removed in favour of age-related pay.

**7.9** A few groups opposed alignment of the rates and told us an increase would prevent employers hiring apprentices. UK Fashion and Textiles said the rate should remain as low as possible: while for businesses, employment costs were an important consideration, for employees the quality of training and attraction to the career path were more important than pay. The National Hair and Beauty Federation (NHBF) opposed any increase and said the increase in training and employment costs would prevent the hiring of more apprentices. NHBF members strongly rely on the rate, with a high proportion employing apprentices.

**7.10** We heard from several stakeholders that the number of apprentices hired had fallen due to the pandemic. The British Chambers of Commerce (BCC) described a ‘massive fall in numbers’ of apprentices. The Local Government Association (LGA) had seen a 22 percent drop in the annual number of positions offered within local government and said continuing financial pressures would reduce opportunities for young people in the short term. The National Farmers’ Union (NFU) and the NHBF also pointed to financial pressures being one of many factors causing a decline in apprentice recruitment. Make UK told us a lack of employer demand meant they had filled only 90 places across two apprentice training centres which usually have capacity for 350 a year. Care England stated it was impractical for the sector to meet off-the-job training requirements. The BIRA noted that members were not against taking on apprentices, but the schemes did not work easily for retailers.

#### Incentive measures

The Plan for Jobs, announced in summer 2020, introduced new incentives for employers in England to recruit apprentices, effective from August 2020. Employers would receive £2,000 for recruiting a 16-24 year old into an apprenticeship and £1,500 for recruiting someone aged 25 and over. This supplemented the existing £1,000 incentive for recruiting an apprentice aged 16-18 years old (or one aged under 25 with an Education, Health and Care Plan plan).

These incentives were expanded in February 2021, changing to a flat £3,000 incentive for recruiting an apprentice of any age. Originally proposed to remain in place until the end of September 2021, these measures were subsequently extended to January 2022.

DfE figures showed the incentives had been claimed for just over 85,000 starts during the 2020/21 academic year. This represents fewer than one in four starts overall, although there may be a lag in employers submitting their claims.

**7.11** There were mixed views on the impact of the pandemic on existing apprentices. The BCC expressed concern over a rise in apprentice redundancies, but a number of employers told us that apprenticeships had continued despite the disruption caused by lockdowns. For example, Whitbread told us 95 per cent of apprentices had continued with their learning throughout the pandemic, supported by online tutoring.

**7.12** Some groups told us that demand for apprenticeships among young people was one cause of persistently low numbers. At oral evidence, CLUK told us their members had made efforts to promote apprenticeships, but applications were persistently low. They thought this could be due to low pay – but that the rate should not necessarily be a disincentive for young people living with parents, given the opportunity to gain qualifications. Some employers, including members of Northern Ireland Manufacturing, FSB Northern Ireland and the British Beer and Pub Association (BBPA), felt the education system contributed to low uptake of apprenticeships, with schools preferring to push young people towards other routes.

**7.13** Some stakeholders expressed concern that the Kickstart scheme might displace demand for apprentices but the evidence on this was mixed. Youth Employment UK told us Kickstart was in competition with apprenticeships, resulting in young people having to choose between short-term employment or lower pay in an apprenticeship. Evidence from Make UK supported this; they told us members had begun to focus on hiring young people through Kickstart instead of apprenticeships, where Government support was ‘a drop in the ocean’. FSB members in Scotland, on the other hand, told us that Kickstart offered only a small pool of applicants and businesses would be likely to prefer apprentices.

**7.14** Some stakeholders were critical of Government support to businesses employing apprentices. The NHBF and the Recruitment and Employment Confederation (REC) were both critical of the Apprenticeship Levy and felt it was contributing to a reduction in the number of positions offered.

## Apprenticeship starts

**7.15** The initial wave of Covid-related lockdowns across the UK, in spring and summer 2020, led to a sharp fall in apprentice starts and a 17 per cent decline in total for the 2019/20 academic year. Table 7.1 shows how this fall was distributed by age and level in England, with level 2 apprenticeships taking the largest proportional hit. A key question for this year’s recommendations was to what extent starts stabilised during 2021 as the economy reopened.

**Table 7.1: Apprenticeship starts, England, 2019/20 academic year**

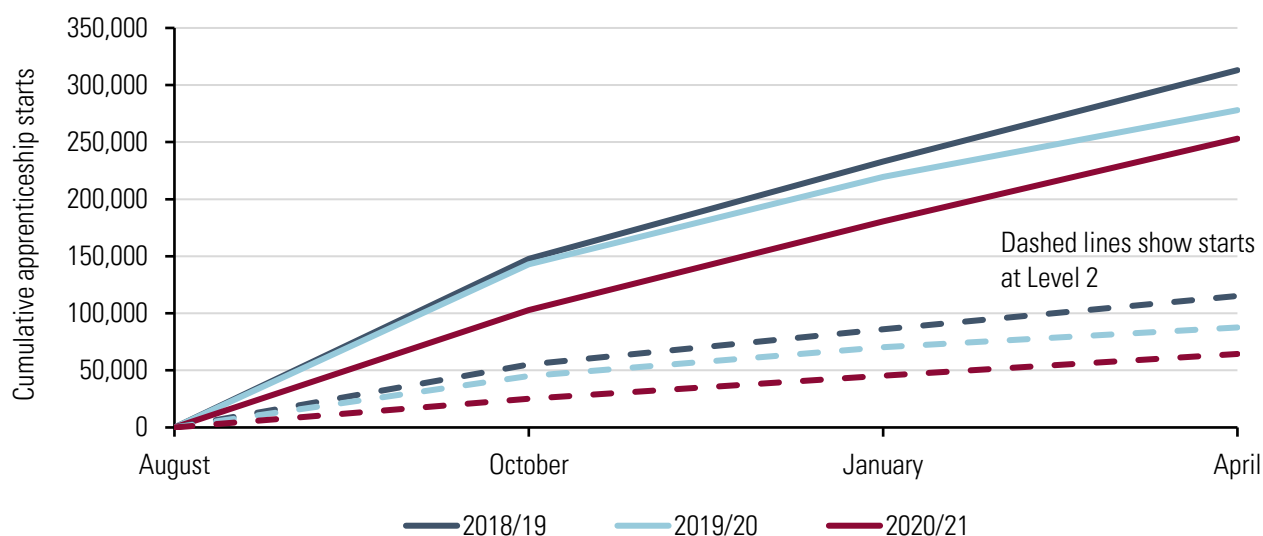
	Starts in 2019/20	12 month change	
		Levels	Per cent
Total	318,900	-66,000	-17
Under-19	75,300	-20,500	-21
19-24	94,300	-19,000	-17
25 and older	149,400	-26,600	-15
Level 2	98,900	-42,800	-30
Level 3	139,000	-31,600	-19
Level 4 and above	81,100	8,400	12

Source: LPC estimates using Department for Education Apprenticeships and traineeships statistics (July 2021).

Note: Data are organised by academic year (August to July).

**7.16** The key annual period for starts is the first quarter of the academic year, with large numbers of apprentices usually beginning their courses in September and October. At the time of our 2020 recommendations we were still awaiting data for this crucial period. Figure 7.2 compares cumulative starts in England through the first three quarters of the 2018/19, 2019/20 and 2020/21 academic years. (The available statistics for 2020/21 only extended to April at the time of our deliberations.) Twelve months later, we can see that starts in England were sluggish in autumn 2020 and much lower than in the previous two years. This is unsurprising given the backdrop of rising Covid-19 cases and prospect of further lockdown measures. In 2020/21, there were around 50,000 fewer starts between August and October compared to previous years and an overall 20 per cent decline over nine months. This was more pronounced for level 2 courses, where the decline in starts compared with 2018/19 was around 44 per cent. The disparity in the second and third quarters, however, was much less pronounced, indicating a degree of recovery.

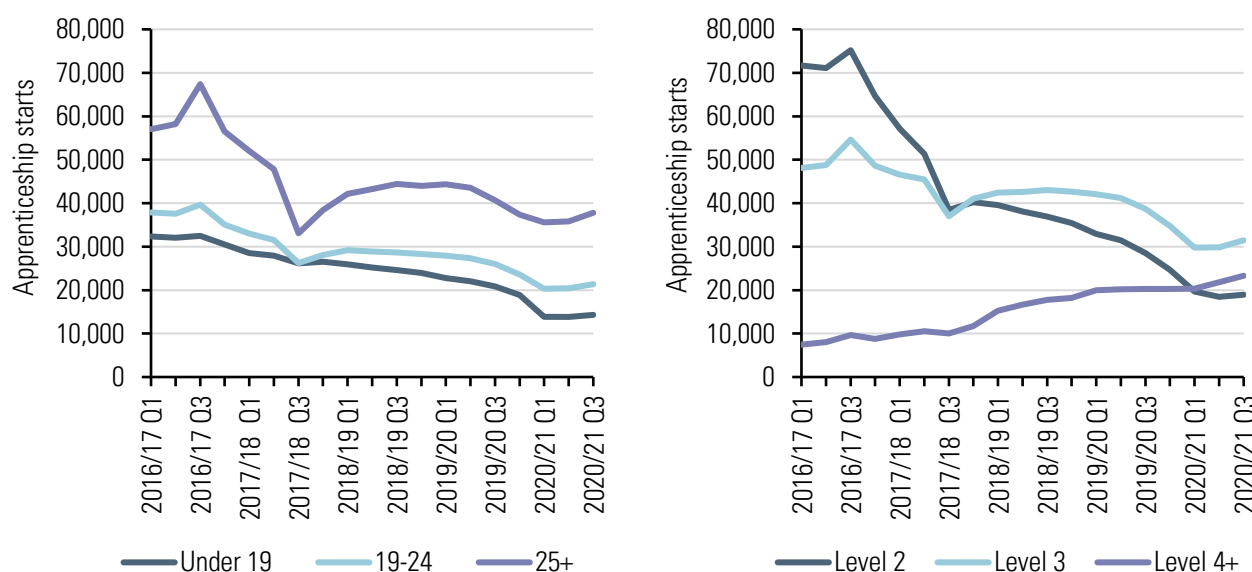
**Figure 7.2: Cumulative apprenticeship starts, England, August to April, 2018/19-2020/21**



Source: LPC estimates using Department for Education Apprenticeships and traineeships statistics (July 2021).

**7.17** The pre-pandemic context for apprentice starts in England was a steady, years-long fall in starts, coinciding with the introduction of major reforms that started in 2016/17. Several factors have been cited to explain the fall in starts. These include the introduction of the Apprenticeship Levy, co-investment for small and medium enterprises, the replacement of apprenticeship frameworks by new standards, more stringent training rules and the tightening of functional skills requirements (Department for Education, 2020). As this package of reforms was brought in, overall numbers declined steadily. Starts at level 4 and above have consistently been the best-performing area and starts at level 2 and among those aged under 19 have been the weakest. As Figure 7.3 shows, level 2 starts have moved from being the largest component of overall numbers in 2016 to the smallest in 2020.

**Figure 7.3: Apprenticeship starts, by age and level, England, Q1 2016/17 – Q3 2020/21**

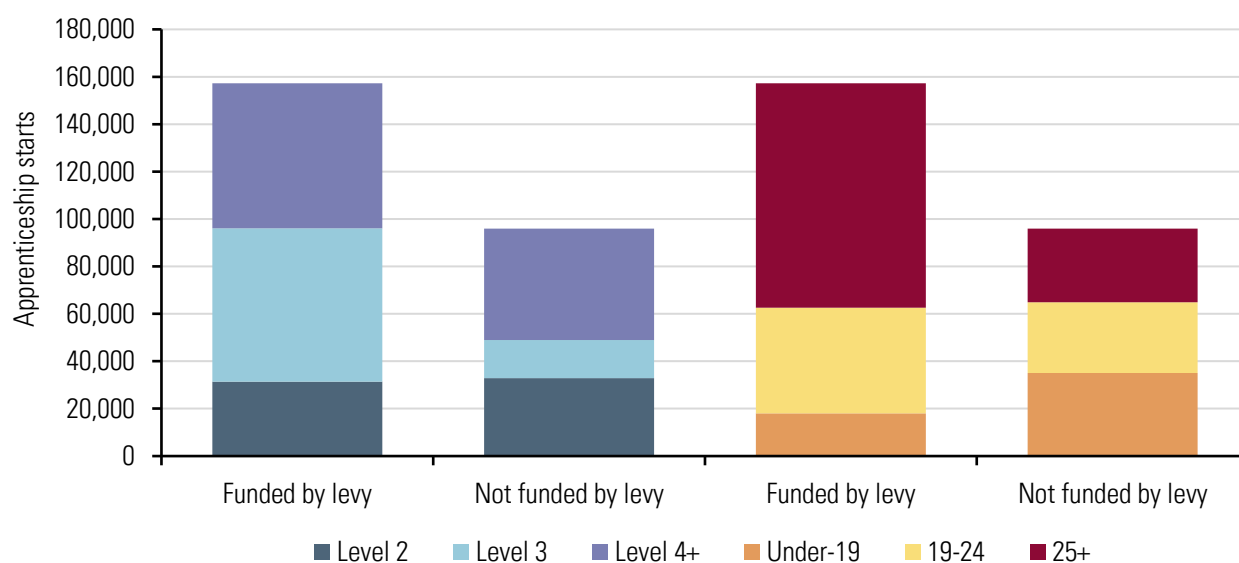


Source: LPC estimates using Department for Education Apprenticeships and traineeships statistics (July 2021), four-quarter moving averages.

Note: Data are organised by academic year (August to July).

**7.18** The divide between large companies who pay the Apprenticeship Levy and small ones who do not is an important part of this story. (The levy applies to any employer with an annual pay bill greater than £3 million.) Starts have been more resilient in the former and weaker in the latter. Figure 7.4 shows the contrasting profiles of apprentices recruited by each group. Smaller companies, exempt from the levy but obliged to fund 10 per cent of the costs of an apprenticeship, are more likely to offer lower-level apprenticeships to younger workers. The total fraction of apprentices funded outside the levy had declined in recent years but appears to have rebounded in 2020/21.

**Figure 7.4: Breakdown of apprenticeship starts, by levy status, England, Q1 2020/21-Q3 2020/21**



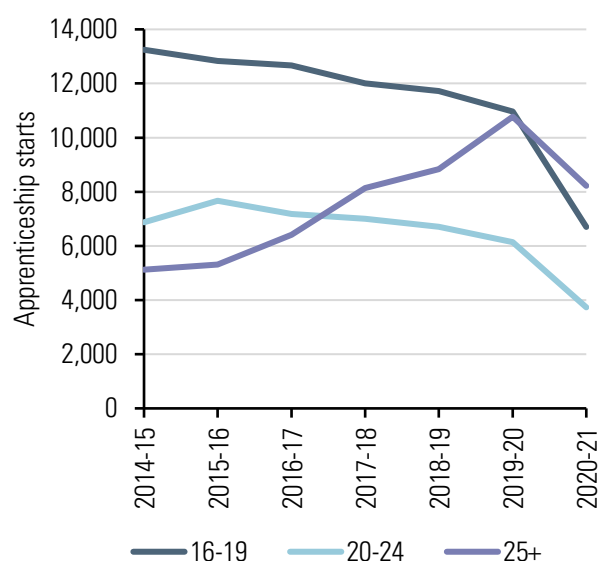
Source: LPC estimates using Department for Education Apprenticeships and traineeships statistics (July 2021), 2020/21.

Note: Data are organised by academic year (August to July).

**7.19** In comparison with England, starts and the composition of the apprentice population in Scotland, Wales and Northern Ireland had been more stable before the pandemic. During 2020 however, all nations saw a comparable fall in starts. In Scotland, as shown in Figure 7.5, starts dropped by around a third over the 2020/21 financial year. There was a pronounced fall in Wales from the final quarter of the 2019/20 academic year, as shown in Figure 7.6, while in Northern Ireland starts for the 2019/20 academic year were down by a fifth overall on the previous year, as shown in Figure 7.7. More recent data from Scotland and Northern Ireland suggest that starts have rebounded, but in Scotland remain below pre-Covid levels. Starts data from Wales only cover the period until January 2021, when much of the economy remained in lockdown measures.



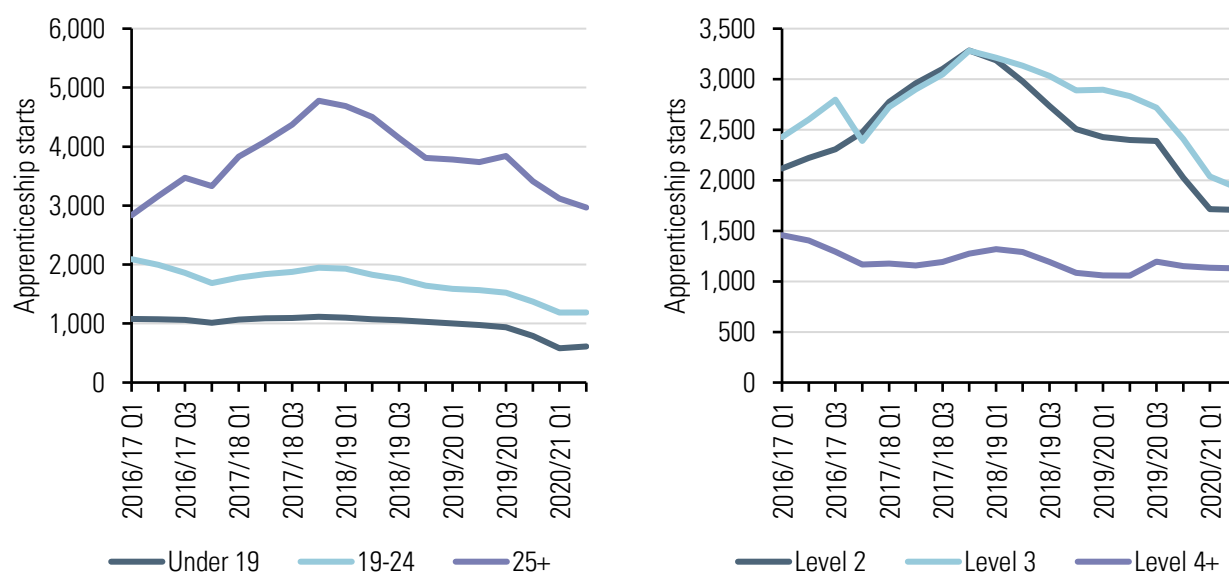
Figure 7.5: Apprenticeship starts, by age, Scotland, 2014/15-2020/21



Source: LPC estimates using Skills Development Scotland Modern Apprenticeships statistics, 2014-2021.

Note: Data are organised by financial year (April to March).

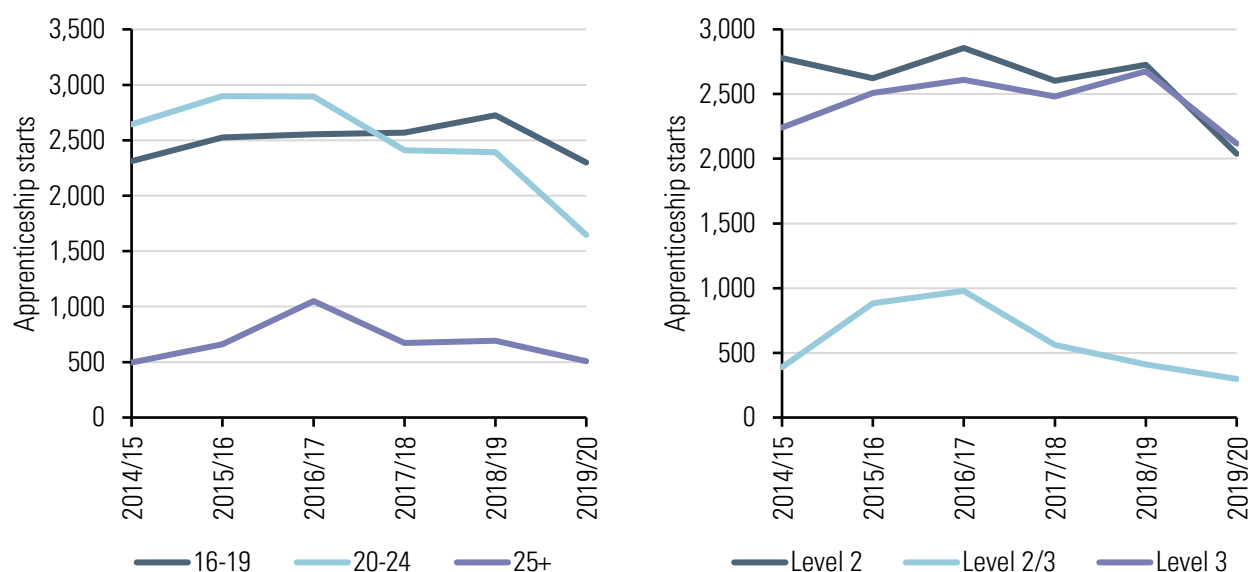
Figure 7.6: Apprenticeship starts, by age and level, Wales, Q1 2016/17 - Q2 2020/21



Source: LPC estimates using statistics from the Welsh Government (Stats Wales), four-quarter moving averages, 2016-2021.

Note: Data are organised by academic year (August to July).

Figure 7.7: Apprenticeship starts, by age and level, Northern Ireland 2014/15-2019/20

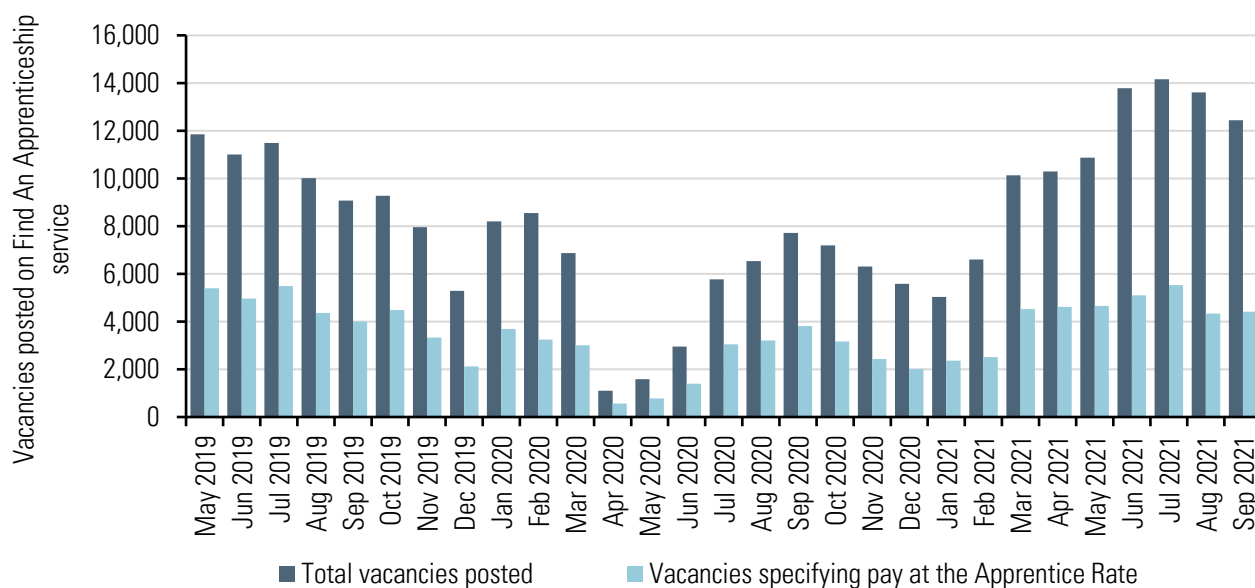


Source: LPC estimates using Apprenticeships NI statistics, 2014-2020.

Note: Data are arranged by academic year (August to July).

**7.20** The key question is when – or whether – starts across the UK will return to pre-Covid levels. As in previous years, at the time of our deliberations data on the start of the new academic year was not yet available. Vacancy levels over the summer, however, were high. Research we have commissioned shows that in June and July, apprenticeship vacancies posted on the Department for Education’s (DfE) Find An Apprenticeship site had surpassed pre-Covid levels, indicating a positive outlook at all levels in August and September (Delaney and Papps, 2021).

Figure 7.8: Vacancies posted on Find An Apprenticeship website, England, May 2019-September 2021



Source: Estimates by Dr Kerry Papps (University of Bath) from vacancies posted on the Find An Apprenticeship website, 2019-2021.

**7.21** The DfE's data are not comprehensive but given that around 40 per cent of adverts on the site are for roles at the Apprentice Rate, it may be a good indicator of recruitment activity for lower-paid apprenticeships. This fraction was stable throughout the pandemic, but fell slightly as overall ad numbers reached record levels. This increase in recruitment matches the general tightening of the labour market, with the growth in apprentice vacancies following the growth in general job vacancies. There are other positive indicators in this research. Ads posted since April 2021 have a shorter gap between the closing date and start date (potentially reflecting greater urgency to hire). In addition, more ads have been posted by less frequent hirers of apprentices (indicating more employers are seeking to recruit apprentices). These findings support anecdotal evidence from employers in several low-paying sectors, who told us they were looking to recruit younger workers and reassessing the development offer needed to retain workers. There is room for a cautiously positive outlook as we move into 2022.

## Apprentice pay

**7.22** In last year's report, we noted the absence of timely apprentice pay data. The pandemic had badly affected the 2020 Annual Survey of Hours and Earnings (ASHE) and there had not been an Apprenticeship Pay Survey (APS) since the 2018/19 iteration. This year we have a more reliable ASHE. In addition, although there is still no APS, we have access to a new source. The DfE's most recent 2021 Apprenticeship Evaluation Surveys (AEvS) Learners Survey, although not primarily concerned with pay, has been adapted to collect data on apprentices' earnings. We are grateful to both DfE and the Department for Business, Energy and Industrial Strategy for their efforts to provide this source.

**7.23** We have previously noted our reservations about the apprentice pay data in ASHE. These tend to underestimate the number of apprentices in the workforce (for example, because workers on an apprenticeship are not recorded as such on payroll systems). Past research has suggested that apprentices excluded from ASHE are disproportionately likely to be on low earnings (Drew, 2015). APS, which had a larger sample size and collected information on apprentices' course, training and level of study, was our preferred data source. In its continued absence, the AEvS represents an alternative source collecting pay data directly from apprentices.

### Apprenticeship Evaluation Survey

The Apprenticeship Evaluation Surveys (AEvS) Learners Survey is commissioned by the DfE and asks apprentices in England about their experience as a learner. The achieved sample in 2021 included 3,047 'current' apprentices (classified as undertaking their apprenticeship at the time of interview, between May – July 2021) and this is a subset of the full apprentice sample.

This year, the survey included additional questions that asked apprentices about their pay. Apprentices were asked to give their gross pay from a recent payslip. If they did not have a payslip to hand, they were asked to recall their pay. All figures were converted to an estimate of gross hourly pay. Unlike ASHE, pay figures do not relate to a specific reference date and so may date from before the most recent NMW/NLW uprating. AEvS also asks apprentices directly about their pay, rather than asking their employer as is the case in ASHE.

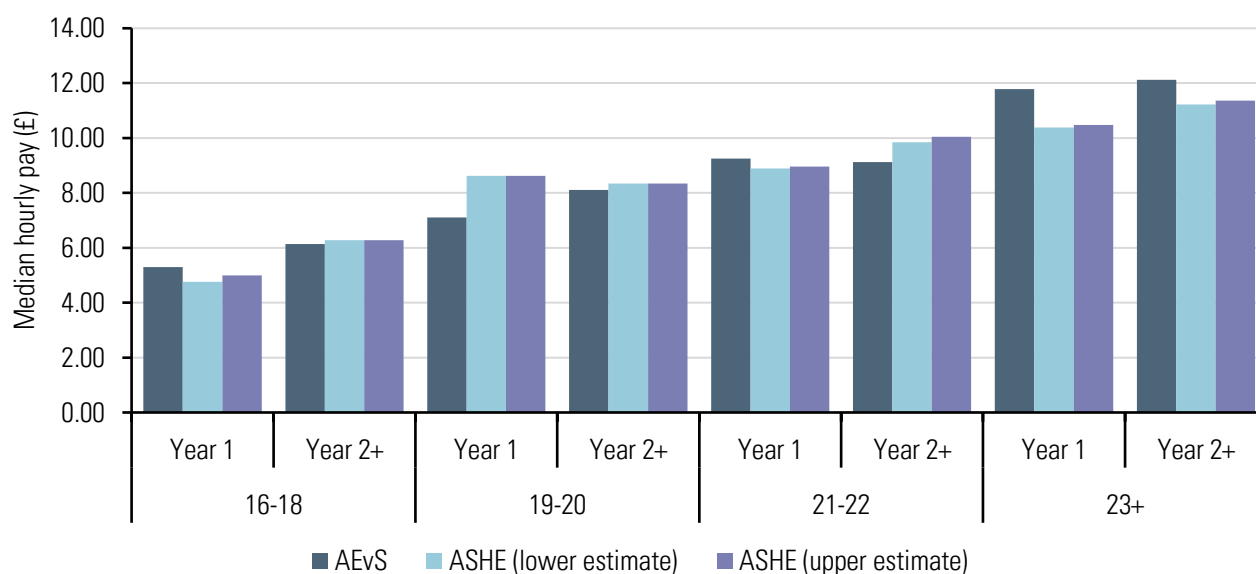
Not all apprentices were able to give pay information: there are 1,957 current apprentices in the 2021 survey sample with an hourly pay figure. We therefore use a separate weighting system based on only those apprentices with pay information, in order to gross up to the national population of apprentices. Some estimates may therefore differ from analysis that is due to be published by the DfE, which will

use the standard population weights based on all apprentices in the survey. The DfE AEvS reports are expected to be published in 2022.

**7.24** The pattern revealed by both ASHE and AEvS is that younger apprentices earn less, older apprentices earn more and pay for all groups tends to increase with time. As with other rates, we have produced a range of estimates of median pay using ASHE, conditional on assumptions about how much pay furloughed apprentices have lost. Figure 7.9 compares these medians to those produced by AEvS. There is no consistent relationship between the two, with AEvS giving higher or lower figures than ASHE for different groups. Both surveys find that median pay is lowest for 16-18 year old apprentices in their first year. Estimates from ASHE range from £4.76 to £4.99; the AEvS produces a slightly higher median of £5.30.

**7.25** It is difficult to estimate pay growth over the period in question. For AEvS there is no previous data for comparison. For ASHE, we can estimate growth over a two-year period, but growth is likely to be skewed by the same compositional effects we observe elsewhere (the lowest-paid workers are most likely to have lost their jobs during the pandemic, raising the median and boosting growth figures). In addition to this, we have previously found that the small sample size of apprentices in ASHE leads to volatile pay growth figures for individual age groups and cohorts. Figure 7.10 shows estimated growth across the pay distribution for the Apprentice Rate population. Overall growth looks robust but we need to bear in mind caveats about compositional effects.

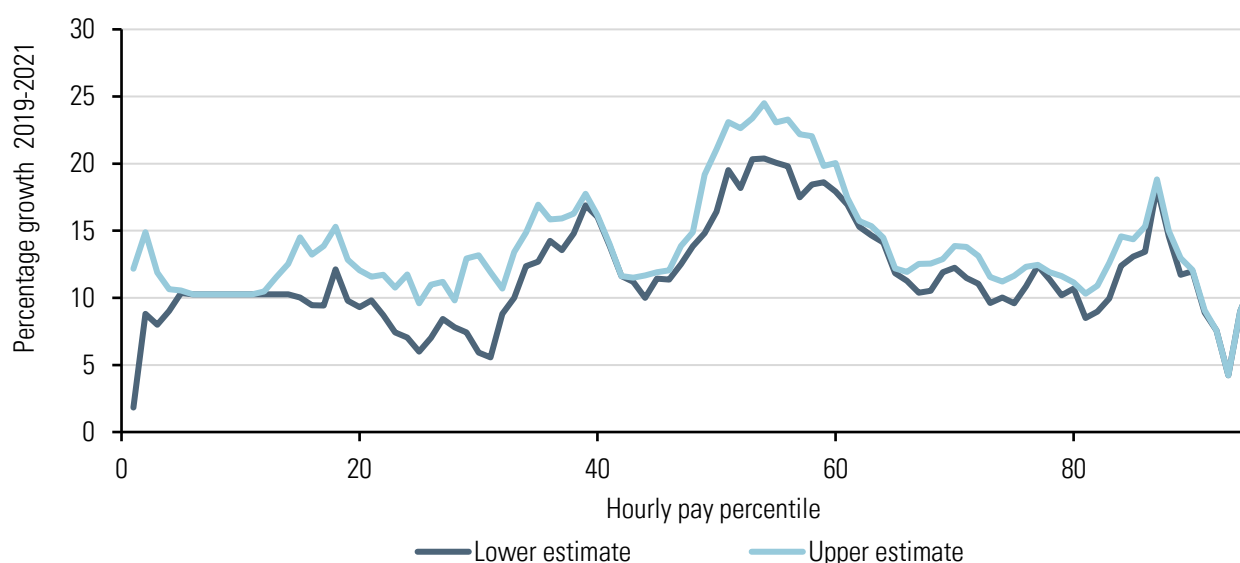
**Figure 7.9: Median hourly pay, by age group and year of apprenticeship, ASHE, UK, 2021 and AEvS, England, 2021**



Source: LPC estimates using AEvS 2021, pay weights, and ASHE 2021, standard weights, UK.

Note: Both estimates include furloughed apprentices. The lower and upper estimates for ASHE are as described in Chapter 3.

Figure 7.10: Distribution of pay growth for Apprentice Rate population, UK, 2019-2021



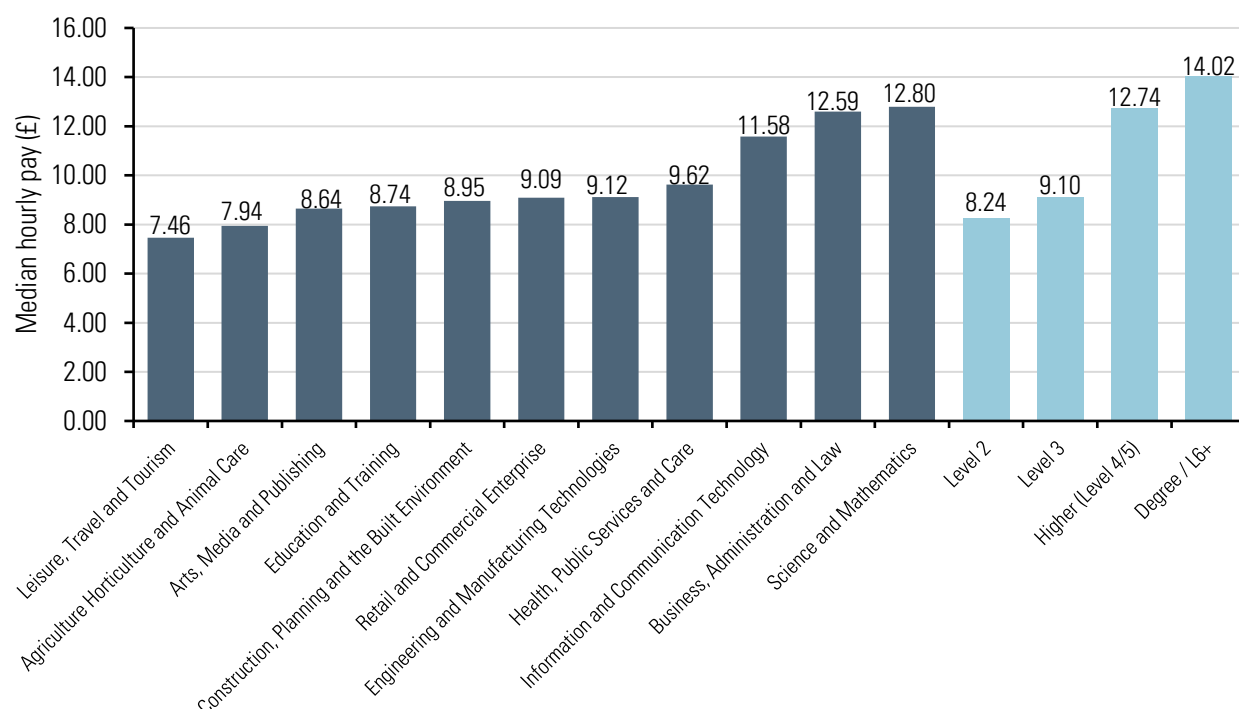
Source: LPC estimates using ASHE, standard weights, UK, 2019-2021.

Note: Low and high estimates for the bite are as described in Chapter 3.

**7.26** AEvS also allows us to look at the apprentice population by their level of study and the subject area of their course. For the latter measure, AEvS data are broken down according to DfE's broad sector subject areas (SSA). Figure 7.11 shows that median pay is generally lower for lower-level courses and is lowest in two SSAs: Leisure, Travel and Tourism and Agriculture, Horticulture and Animal Care. These both have relatively small numbers of apprentices. Between August 2020 and April 2021 there were only 650 level 2 starts in the former and just over 4,000 in the latter. (By contrast, there were other 21,000 level 2 starts in Health, Public Services and Care.) In the past, APS included different sectoral breakdowns and found that apprentice pay was lowest in hair and beauty and childcare. Here those sectors are captured within broader categories. Because each SSA is made up of apprentices with a range of ages and experiences, median hourly pay in each case is comfortably above the Apprentice Rate and the 16-17 Year Old Rate. Under the headline figures, though, there are likely to be significant variations within those SSAs.

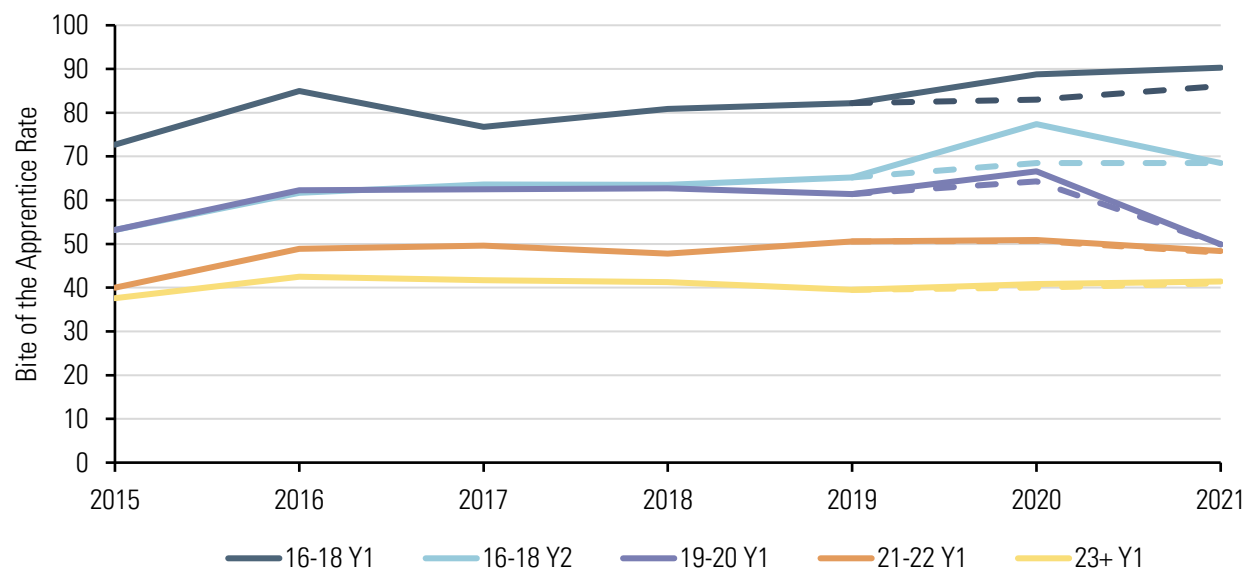
**7.27** As shown in Figure 7.12, the ASHE medians show the bite of the April 2021 Apprentice Rate of £4.30 to be between 86 and 90 per cent for 16-18 year olds in their first year and nearly 70 per cent in their second year. For older apprentices, the bite of the Apprentice Rate is considerably lower and, because of the strong pay growth recorded in ASHE, has fallen in recent years.

**Figure 7.11: Median hourly pay, by subject area and level of apprenticeship, England, 2021**



Source: LPC estimates using Apprentice Evaluation Survey, pay weights, England, 2021.

**Figure 7.12: Bite of the Apprentice Rate, UK, 2015-2021**



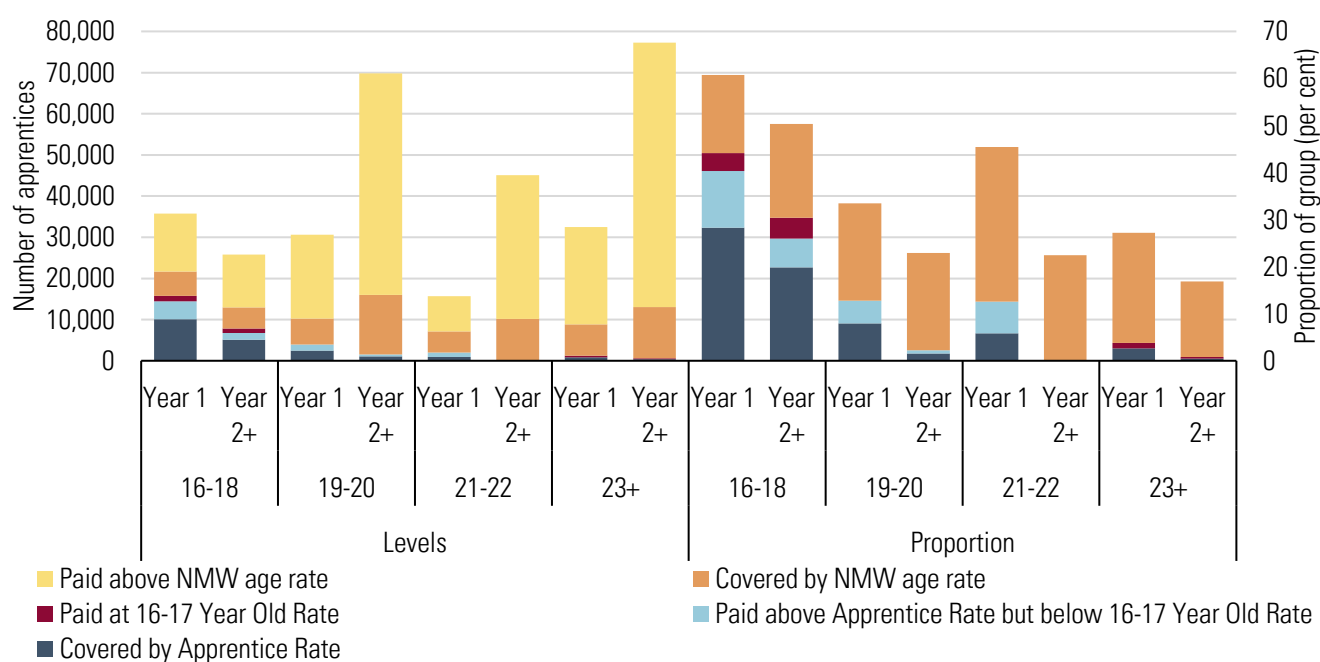
Source: LPC estimates using ASHE, standard weights, UK, 2015-2021.

Note: Low and high estimates for the bite are as described in Chapter 3.

**7.28** The pay distributions in both ASHE and the AEvS show a spike at the Apprentice Rate of £4.30, but in the latter the spike is smaller and the overall distribution is much ‘noisier’. The varied distribution could be due to: self-reporting of apprentice pay rates, apprentices deducing an hourly rate from their weekly or monthly salary, differences in employer versus learner pay reporting. Alternatively, as apprentices were not asked about their pay on a specific reference date, responses could refer to different periods straddling April’s uprating. Despite the differences, the pictures of coverage (shown in Figure .13 and Figure .14) are similar in each and consistent with previous surveys.

**7.29** The bulk of Apprentice Rate coverage is 16-18 year olds in their first year, though there is some coverage across all age groups. Each source shows around 30 per cent of first year 16-18 year olds covered by the rate; between 20 and 30 per cent of 16-18 year olds in their second year; around 10 per cent of 19-20 year olds; and smaller proportions for older age groups. Above the age of 18, the majority of apprentices in every age group are paid above the relevant NMW rate for their age. We can also see which apprentices are paid below the 16-17 Year Old Rate and would therefore be affected by alignment. Those affected are again mainly 16-18 year olds; another 10 per cent of first-year apprentices in this age group in ASHE and another 7 per cent in AEvS.

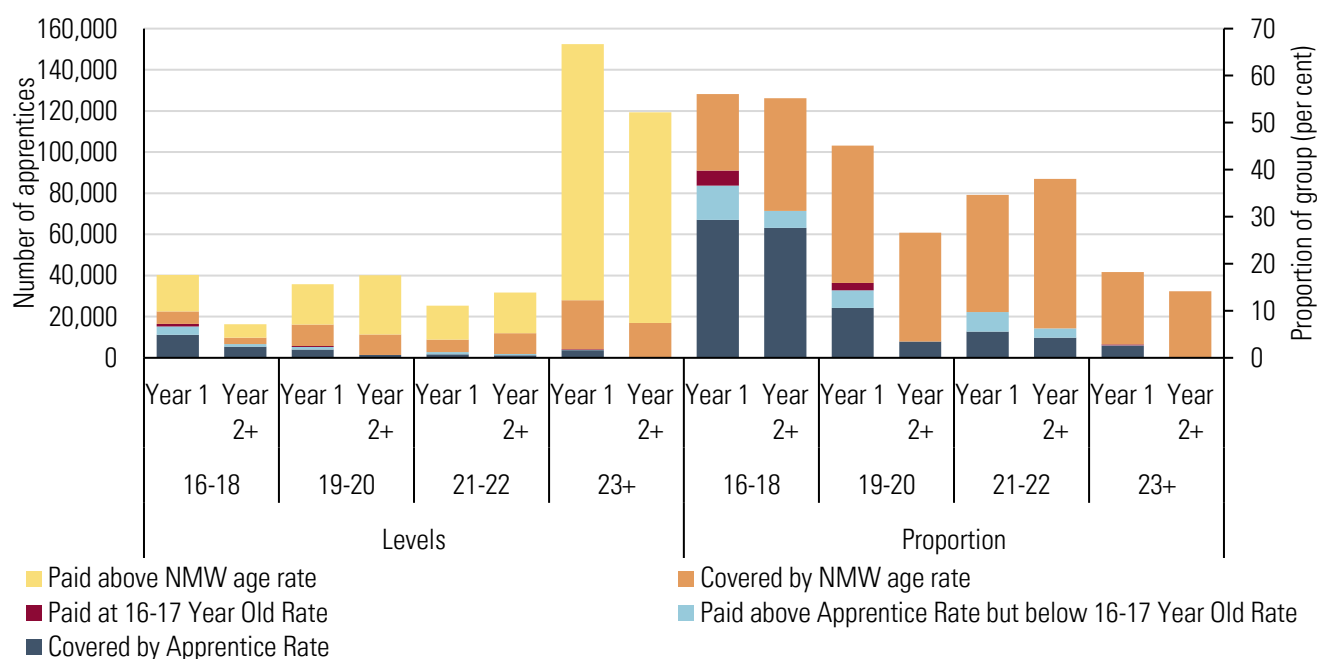
**Figure 7.13: Coverage of Apprentice Rate, by levels and proportions, ASHE, UK, 2021**



Source: LPC estimates using ASHE, low pay weights, including furloughed apprentices, UK, 2021.

Note: The pay for furloughed apprentices with loss of pay is adjusted using additional questions about their pay, as described as the ‘central estimate’ in Chapter 3.

**Figure 7.14: Coverage of Apprentice Rate, by levels and proportions, AEvS, England, 2021**



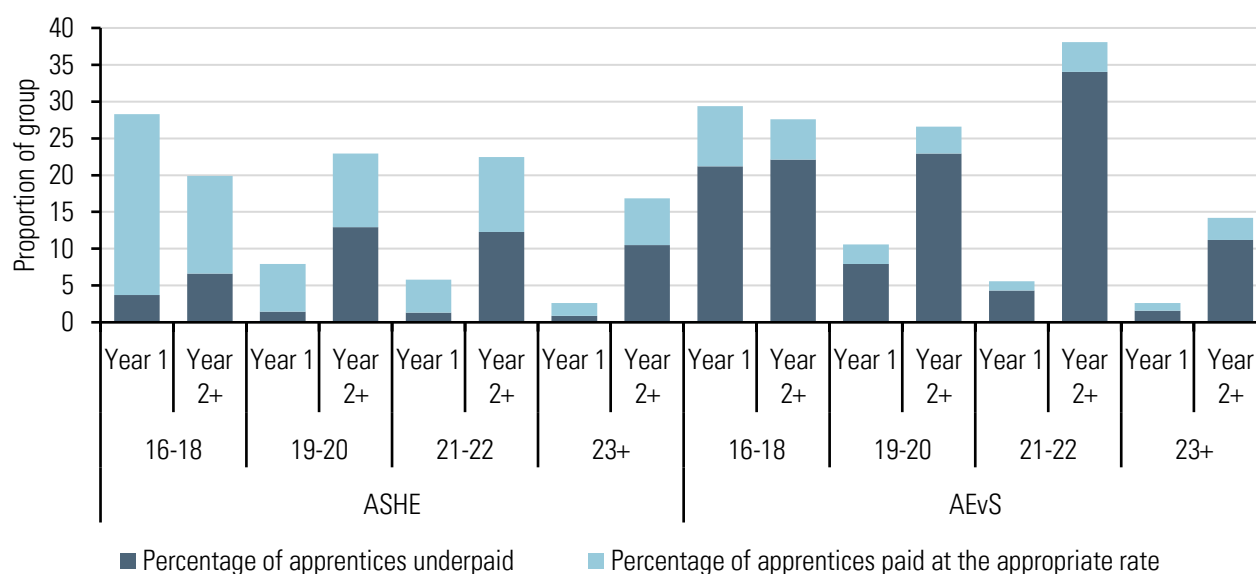
Source: LPC estimates using Apprentice Evaluation Survey, pay weights, England, 2021.

**7.30** High rates of underpayment have long been the most salient feature of apprentice pay surveys and are once more apparent in both ASHE and the AEvS. Figure 7.15 shows recorded underpayment in each survey. As in the past, measured underpayment is high for both 16-18 year olds (entitled to the Apprentice Rate) and older apprentices in their second year (entitled to the NMW rate for their age). Measured underpayment is significantly higher in the AEvS. This is as expected: ASHE is a survey of employers and unlikely to capture underpayment related to training hours. The variability of the pay reference date apprentices used when responding to the AEvS means we should treat the underpayment and minimum wage analysis with some caution as responses could refer to different periods straddling April's uprating.

**7.31** Nevertheless, recorded underpayment in ASHE is higher for apprentices than for any other rate population, and the levels of underpayment in AEvS are consistent with those reported by apprentices responding to previous iterations of APS. In previous publications, we have set out in detail our view that the likeliest cause of high underpayment among apprentices is non-payment of training hours by employers (see Low Pay Commission, 2020a). The data this year do not allow us to retest that hypothesis, as we do not have access to detailed information on apprentices' training hours. We welcome the Government's acceptance of our previous recommendations on this matter, and note the action taken to date (which has included work to make employers aware of common errors when it comes to apprentice pay). These latest figures underline the need for a continued focus on apprentices as a group at risk from underpayment.



**Figure 7.15: Proportion of apprentices underpaid, ASHE, UK, 2021 and AEvS, England, 2021**



Source: LPC estimates using ASHE, low pay weights, including furloughed apprentices, UK, 2021 and the Apprentice Evaluation Survey, pay weights, England, 2021.

Note: The pay for furloughed apprentices with loss of pay is adjusted using additional questions about their pay, as described as the 'central estimate' in Chapter 3.

## Conclusions

**7.32** We have already noted our cautious optimism around the outlook for apprentice starts. Like other groups, apprentices are likely to benefit from a tight labour market and stronger economic growth. While there are limitations to the pay data for apprentices, the sources available show a largely positive picture. There is nothing in the data that gives us cause to rethink the alignment with the 16-17 Year Old Rate proposed a year ago.

**7.33** The main argument for caution in alignment relates to the exposure of 16-18 year olds to increases in the rate. Coverage for this group is significant. The bite of the rate is already approaching 90 per cent and is likely to rise further with alignment. In other areas this might incline us towards caution, but there is a rare near-consensus across our stakeholder base that for apprentices there is scope to increase the rate without undermining employment. At the root of this is the argument that pay is a secondary factor for employers making decisions on apprentice recruitment. We accept this is not universal; this year, both the hair and beauty and textiles sectors have told us there are risks to a large increase in the Apprentice Rate. We judge, though, that current labour market conditions will offer young apprentices sufficient insulation against employment risks. We note as well that the 2015 increase – a similar cash figure – did not affect starts or completions. And we believe that alignment with the 16-17 Year Old Rate still offers employers a significant discount on the full adult rate. We also note the strength of feeling that the current level of the rate is unfair and a disincentive for those considering apprenticeships.

**7.34** As discussed at the start of this chapter, alignment does not mean merger. We will continue to monitor the apprentice labour market to understand the impact of our recommendation on the opportunities available to young people.

# Chapter 8

## The domestic worker exemption

### Key findings

The remit this year asked us to investigate how widely the domestic worker exemption is applied. In response to this, we have spoken to people in a range of sectors, as well as groups with a particular interest in au pairs and domestic workers.

The exemption was introduced to facilitate au pair relationships. In these arrangements, a young person stays with a host family abroad and helps with childcare and light housework while learning English and being treated as a member of the family. However, due to immigration changes there is no longer a route for most au pairs to enter the UK.

At the same time, the exemption creates a loophole for exploitation of live-in domestic workers such as housekeepers and cleaners, who work long hours for households without any intention of cultural exchange. There is evidence that the exemption is used as a defence in court cases where there is serious exploitation. Case studies of migrant domestic workers (and some au pairs) show that they are often vulnerable and at risk of being abused.

This has been noted before, but the steps taken have not addressed the issues. Previous LPC recommendations and James Ewins' report in 2015 led to changes in the Overseas Domestic Worker visa. Workers are now allowed to change employer and employers must declare they will pay at the minimum wage or above. However, in practice it is difficult for domestic workers to move between jobs because of the short duration of the visa, and the declaration does little to prevent employers paying these workers less than the minimum wage. Changes to the visa regime have not been sufficient, because the exemption can still be relied on by employers facing underpayment claims at employment tribunals. There is therefore a strong case for changes to minimum wage regulations.

The evidence we have gathered supports the Puthenveetil judgement. This ruled that the exemption is indirectly discriminatory because it is more likely to be applied to women. Our evidence shows that both au pairs and overseas domestic workers are more likely to be female. As this was a first instance judgement, there is currently some legal ambiguity which could be resolved if the Government sets out its intentions for the exemption.

The requirement to live in the employer's home and be treated as a family member makes this exemption incompatible with the majority of jobs, so there is little use of it outside the expected sectors. However, there is some evidence that the exemption is increasingly being used for live-in carers. Some groups with an interest in live-in carers have said that there is a need for regulation of the sector and the Government should set minimum standards for pay to improve transparency and prevent exploitation.

**8.1** The 2021 remit asks the LPC to ‘gather evidence on the application of the live-in domestic worker exemption to minimum wage entitlement... to present findings on which sectors make use of the exemption, how often is it used and the impact of this on the labour market, with a special focus on equalities impacts.’

**8.2** Specifically, we have been asked to explore the equalities impacts of Section 57(3) of the 2015 NMW regulations (‘the exemption’). This exemption states that workers do not need to be paid the minimum wage if they live with their employer and are treated as part of the family. The exemption was originally introduced to facilitate au pair arrangements, which are designed to allow young people to visit the UK on cultural exchange. The idea is that a young person lives abroad with a host family, and learns about their culture and language while helping with light housework and childcare. However, there is extensive evidence that since the introduction of the exemption, it has provided a loophole for exploitation of live-in domestic workers more broadly.

## Au pairs

**8.3** The exemption was originally introduced to facilitate affordable au pair placements (LPC, 2014; Hodge MP, 1999). From 1969 to 2008, the UK au pair scheme was formalised and regulated through the existence of an au pair visa, which outlined the expectations for the role of an au pair. The visa specified that au pairs must be unmarried, without dependent children, aged 17-27, and could stay in the UK with a host family for up to two years. They had to be engaged in cultural exchange and improving their English. They could do 25 hours of light housework or childcare per week with an additional two evenings of babysitting. In exchange they should receive ‘pocket money’, recommended to be £65 per week in 2008. They should have their own bedroom and be provided with meals (Cox and Busch, 2018).

**8.4** In 2008, the au pair visa was removed, and with it the regulation of the sector. The British Au Pairs Agencies Association (BAPAA) continued to regulate its member agencies and ensure that au pair placements followed the requirements of the historic au pair visa. But at the same time there was a boom in au pair placements outside of these agencies (Cox, 2015). Freedom of movement meant that large numbers of young people could enter the country, and websites such as Gumtree and AuPairWorld meant that families could find au pairs directly, without the need for an agency. Without regulation and enforcement of standards, many of these placements have involved au pairs working long hours, working beyond the scope of childcare and light housework, and having limited opportunities to learn English and engage in cultural exchange. In practice there has become little to distinguish them from a domestic worker or nanny.

**8.5** Examples of the experiences of au pairs that we spoke to are given in the box below. There are some common themes – au pairs are often asked to work longer hours than agreed, and are seen as constantly available because they live in the home. The au pairs themselves often feel unable to say no because their accommodation is tied to the work. Many of the au pairs have experiences that are not in line with the original intention for the scheme. Some were given less food than the rest of the family, or were not welcome at family meals. Some were unable to attend English classes or have opportunities to practice their English because of their lack of money and the demands on their work schedule. In many cases they have clearly been viewed as cheap labour rather than as a family member.

**Case studies of au pairs (names have been changed)**

Ana was expected to be available to work all day. The host family said that she was not allowed to eat certain things, and they were often rude to her. They expected her to clean the whole house, even during her free time. She eventually moved to a new host family, where she was told that she could join the family for dinner on Wednesdays. She found this confusing because she didn't know if she was welcome to join for dinner on the other days. She would sometimes go to sleep hungry or have snacks in her room. She was never invited to events with the family, and even when she stayed with the family over Christmas she was not invited to join for the meal. She moved to a third family, with one older child, who were more welcoming and gave her more food. But they expected her to stay in the house all day and be available to clean and accept deliveries, even during her free time.

Elisa is aged 25 and from Brazil. She came to the UK in 2017 to become an au pair in a family with three children. She was originally told she would do a little childcare and be paid £120 per week. They had agreed that she would work 8 hours per day, but this became 12 hours or more once she arrived. She started to get really depressed as she realised that the amount of work she was asked to do with so little pay was 'obscene'. She left the family after six months.

Matilde was originally promised £180 per week but was then given £80. The home was not as it had been described. She was asked to do lots of additional jobs like taking care of the animals on a farm. She then moved to a host family in London and worked there for a number of weeks before she was 'kicked out' by the host mother after the host father 'joked about her body'. She lost her job and her place to stay.

Laura was an au pair in London for a year, and received pocket money of £100 for 30 hours per week (£3.33 an hour). The initial agreement was to just do a small amount of work with the children, but after some time they started to ask her to do other things such as laundry for the whole family, cleaning the house, and baking for guests. She found it hard to afford her English course and often had to miss the class because the hosts asked her to work or be in the house. The host family gave her limited food, or would say they had forgotten to get her food and she would need to get her own.

Adriana worked 45 hours per week with a pocket money of £100. Her duties included taking care of the child and doing a range of housework including laundry, the dishes, vacuuming the house, cleaning the kitchen. The host family did not respect her free time and frequently asked for favours. She noted that families think au pairs are always available and that au pairs are unable to say no because they live with them and it would affect the relationship. She was also often unable to attend an English course because the family asked her to work.

Gabi was paid £80 per week. She had thought she was going to be looking after a child, but in reality she was more of a dog walker and cleaner, though she did have to use her free time to babysit the child in the evenings. She was given no timetable for her work and so couldn't plan. She was unable to take English classes because of the travel costs. She didn't know anyone. The family gave her limited food. She would not consider herself to have been mistreated, but felt that she was trapped into saying yes to everything.

**8.6** Au pair agencies do not see au pairs' activities as work – they should be paid pocket money and treated as a family member. One agency told us: 'an au pair is only on duty for 25-30 hours per week, including babysitting. It is certainly not a job of work, but purely a family arrangement'. The exemption is seen as necessary to ensure that these placements are affordable for families. Au pairs can be an attractive option for parents who work long hours or shifts as they provide flexibility and are cheaper

than more formal childcare arrangements. However, the language of 'host family' and 'pocket money' hides an underlying power dynamic, and the exemption as well as the lack of regulation of the sector means that when an au pair is subject to exploitative behaviour, they have limited means to challenge their employer.

**8.7** Au pairs do not have employment rights and there is no framework to report most abuses. Enforcement of payment of pocket money is not possible because au pairs are not legally employees. We heard examples of employers reacting negatively when au pairs or nannies raise complaints, including some instances of physical abuse. The fact that their work is so closely linked to their accommodation puts them at severe risk of losing their home if they have difficulties in their relationship with the host family. Because of their low pay rates of pay, au pairs may not have access to funds to be able to afford to stay elsewhere. In some instances, au pairs have had to look for emergency housing support when they are forced out of their au pair placements. One au pair had run away from a placement where she had been working 50 hours per week without breaks, in which her payments had been delayed and she was verbally abused by the family. While agencies can help to protect au pairs and ensure they have access to a contract and basic standards, they are not a substitute for genuine regulation of the sector. We were told of cases where the employer has abused or assaulted the au pair and the agency has not supported them and has instead sided with the host family.

**8.8** HMRC told us that abuses against au pairs are difficult to investigate because there is no documented evidence of hours worked and pay received and it ends up being the employer's word against the au pair's word. Au pairs would be unlikely to come forward and make a complaint because living with their employer makes them extremely vulnerable and affords them no anonymity. If there has been a breakdown in family relationships it is difficult to assess if they had been treated as a family member previously.

**8.9** While au pairs have traditionally been young European women, and this has continued to largely be the case for au pairs placed through agencies, we have heard that many of the au pairs in the unregulated part of the industry are undocumented workers from countries such as Brazil and the Philippines. The Nanny Solidarity Network told us that once workers obtain the right to work they will tend to transition to better paid jobs. Anecdotally, they have seen that fewer people from Europe want to work as an au pair because there is little incentive to do so. The cultural exchange is minimal due to the long hours worked, and they will generally find much better rates of pay in live-out nannying work or in hospitality. They told us that the work that nannies and au pairs do is quite similar, but nannies would be paid £11 an hour while au pairs might be paid £3 an hour and have no employment rights.

**8.10** More recent changes to the migration system following the UK's exit from the EU effectively mean there is now no viable route for au pairs to legally enter the UK. Au pairs cannot come from EU countries unless they earn above the £25,600 salary threshold for a worker visa, which is well above what au pairs are typically paid. There is a route for young people from a restricted list of countries – including Australia, Canada, New Zealand, South Korea and Japan – but in practice, workers from these countries are significantly more likely to work in other sectors. Even if EU countries were added to the youth mobility scheme, the au pair industry would still compete with fruit-picking and hospitality. Au pair agencies told us that the industry is virtually decimated. However, the unregulated part of the sector continues to function, with some using the visitor visa route and then illegally working as an au pair.

**8.11** The scale of the sector is largely unknown, because au pairs from EU countries previously did not have to obtain a visa, and we cannot measure the number of undocumented migrants illegally working as au pairs. However, analysis by Professor Rosie Cox, which looked at how quickly advertised posts were filled, estimated that there were between 60,000 and 90,000 au pairs in the UK (Cox and Busch, 2018). BAPAA told us that around 45,000 families each year would host an au pair through a regulated agency. The scale has fallen substantially since the UK exited the EU, with the Nanny Solidarity Network estimating that the number has nearly halved since then. They say that many of those remaining are undocumented workers.

**8.12** Au pair agencies do not want the exemption to be removed, but au pairs told us that if they were entitled to the minimum wage, that would help to change the culture and raise standards. The failure to properly define the role of au pairs, nannies and domestic workers has led to the lines between them being blurred and has given parents the expectation that all forms of domestic labour should be low paid. Removing the exemption would mean that platform apps would have to advertise a higher wage for these roles, and parents and workers would be better informed.

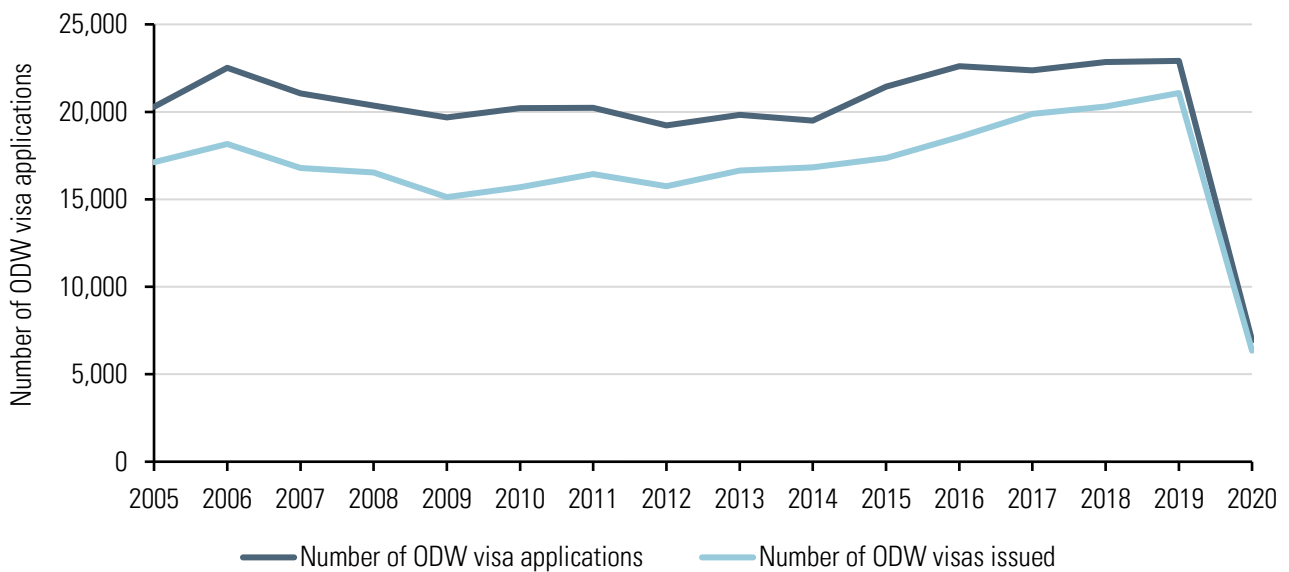
**8.13** However, removal of the exemption alone will not solve all the problems of exploitation. The sector is propped up by hidden employment, with vulnerable undocumented women working long hours for very low pay. Au pairs and au pair agencies both told us that the sector needs to be better regulated, with a dedicated au pair visa that specifies what an au pair can do and what their rights are.

## Migrant domestic workers

**8.14** While the original intention of the domestic worker exemption was to facilitate au pair arrangements, there have been longstanding concerns that the exemption may enable exploitation of domestic workers outside au pair schemes. This is because the legislation is vague and does not precisely define the role of an au pair. The exemption provides a loophole for employers to argue that domestic workers are treated as family members and therefore do not need to be paid the minimum wage (Cox, 2015).

**8.15** Migrant domestic workers typically enter the UK on an Overseas Domestic Worker (ODW) visa. Historically, this provided a route to settled status, but the maximum length of stay was reduced to six months in 2012. The visa was updated in 2016 following concerns about exploitation to allow workers to change employers to work in another household. However, it can be practically difficult to find another employer if they have already stayed for some of the six month term. They are also not allowed to work except as a domestic worker in a private household, which can lead to them effectively being trapped in their employment.

Figure 8.1: Applications for Overseas Domestic Worker visas, UK, 2005-2020



Source: Home Office migration statistics, UK, 2005-2020.

**8.16** Previous LPC recommendations and James Ewins' report (Ewins, 2015) led to changes for this group of workers. Since 2015, applicants requesting permission to stay in the UK on an ODW visa must show that their employer intends to pay at least the minimum wage, and the employer must provide a signed statement that the work will not fall under the family worker exemption. However, the exclusion of migrant domestic workers is not stated in the minimum wage regulations, so it effectively remains as a loophole. A failure to comply does not result in any sanction or mean that use of the exemption is unlawful. The exemption is not typically used in contracts or explained to domestic workers, but it is relied on in court when there are claims of underpayment (for example *Puthenveetil v Alexander, George & Secretary of State for Business, Energy and Industrial Strategy* [2020]; *Nambalat v Taher and Tayeb, Salim Udin v Chamsi* [2013], *Julio & Others v Jose & Others* [2012], *Onu v Akwiku* [2011], *Asuquo v Gbaja* [2009], *Awan v Shariff* [2009]).

**8.17** HMRC have limited capacity to assess if someone is treated as a family member and have restricted ability to investigate domestic settings. They say that domestic workers with concerns should seek assistance in court because of the level of enquiry needed. The exemption therefore puts the onus on vulnerable women to prove that they have not been treated as part of the family and to go to court to do so. The Anti-Trafficking and Labour Exploitation Unit (ATLEU) told us that the exemption is almost always raised by the employer as a defence, even when the UK Competent Authority has conclusively recognised the worker as a victim of human trafficking or modern slavery. The exemption places a burden on workers in enforcing their rights and makes litigation more complex.

**8.18** Domestic workers are typically women, the majority of them mothers supporting families at home. They are most often from the Philippines, with some from Indonesia, West Africa and India. They are often highly vulnerable, hidden in private homes without access to their own networks and with language barriers. We have heard several first-hand stories of exploitation, with some examples of their experiences in the box below. Many of them talked to us about experiences that have similar themes to those of the au pairs. They are seen by the families that they live with as being constantly available, and so are asked to do several additional hours of work, often without any additional pay. If they have contracts, they are nominal and are not adhered to. They are also similar in that their accommodation is

tied to their work and as a result they have limited means to challenge their employer or say no when they are asked to work longer hours. Most workers report being underpaid, often well below the NMW. We have also heard some instances of more serious abuse including physical abuse and being prevented from leaving the house.

**Case studies of migrant domestic workers (names have been changed)**

Imelda had previously worked for her employers in the Middle East, and joined them when they moved to the UK. She didn't know any of the rules in the UK and so was initially happy with payment of £400 per month. She worked from 6am to 12 midnight, doing the cooking, laundry and cleaning. She was not allowed to speak to another Filipino or to leave the house. Her contract says she should be paid £1400 per month, but this was not enforced; she was told to sign the contract even though she didn't understand it. She was afraid to leave the house and become undocumented.

Maria was referred under the National Referral Mechanism when she was exploited as a domestic worker in a previous role, through which she was given the right to work for 2 years. With her current employer, she is paid £350 for 50 hours work per week. She feels unable to challenge this or leave because of the limited duration of her visa.

Lynn supports her three children at home in the Philippines as the breadwinner of the family. Her salary is sent directly to her family. She works 400 hours per month, caring for an elderly man for £3.87 per hour. She feels that she cannot leave the job because of her visa status. She was distraught to receive a negative National Referral Mechanism decision at the start of the pandemic. Her employers said she was happy working with them and showed pictures of her playing with the children. She feels that the UK Competent Authority trusted the words of her employer more than her.

Eunice used to work 60 hours per week and was paid £300. But during the lockdown they added some additional time, including babysitting on Saturday nights. They did not pay for these additional hours. She was told to work on her day off if she wants to take bank holidays.

Sharon is a widow with five children who are still studying. She works in central London as a housekeeper. She has to sleep in the same bed as the family's dog and wakes up regularly. She works 80 hours per week and earns £5 per hour. She does not feel that she is able to complain because of her visa situation. She feels that her only hope is the NRM and this may grant her the right to stay.

Angel was earning £1000 per month. She worked 12 hours per day Monday to Friday with another half day on Saturday, with no sick pay or annual leave. She had a contract which stated that she would work 8 hours on the minimum wage but this was not enforced and she had no choice but to accept.

Christina had a verbal agreement to do 50 hours of work per week, but after a few months this changed to 65 hours without an increase in salary. She is now effectively paid £6.50 per hour. She told us that the work is unlimited but pay is limited.

**8.19** The fact that the ODW visa cannot be extended beyond six months limits these workers' ability to find another employer. It means that workers can be trapped in potentially exploitative employment as if they raise a concern they risk their accommodation, their ability to support their family and their immigration status. The short duration of the visa puts them at risk of becoming undocumented, which further increases their risk of exploitation. Some migrant domestic workers told us that they were having to rely on the National Referral Mechanism (NRM) as the only means to obtain the right to stay and work in the country. These women had been exploited, and in many cases the NRM had found reasonable or even conclusive grounds that they were victims of domestic servitude. The Voice of



Domestic Workers told us that the NRM is the only protection available to these workers, and they are forced to apply there.

**8.20** These women are vulnerable for several reasons, as previously highlighted in James Ewins' report (Ewins, 2015). Their financial circumstances make them vulnerable: they tend to be supporting family members at home, and may also have debt bondage where their salary is deducted to pay for recruitment and visa costs. They are often single mothers who have already escaped abusive situations and may therefore be more willing to tolerate exploitative employer relationships. Kalayaan told us that 64 per cent of their clients over 2020-21 were single parents and 15 per cent of this group had been victims of domestic violence. Working in a domestic setting makes them more vulnerable, as they are isolated, they do not have networks, and authorities cannot easily inspect homes. They often do not speak English and have limited awareness of UK laws. The ODW visa makes it difficult to get help and to find a new employer if they are exploited. Compounding all these factors, the exemption provides a defence to their employers if they are underpaid, and makes it harder for them to enforce their rights as employees.

**8.21** These issues have been noted before, but the steps taken have not been sufficient to protect this group from exploitation. The Ewins report led to a change to allow domestic workers to move between jobs – but this remains difficult in practice due to the short duration of the ODW visa. Previous LPC recommendations led to a requirement for employers to declare they would pay above the minimum wage – but in practice this does little to ensure that they do so, and employers still rely on the exemption when taken to tribunal. This requirement also only affects those who entered the UK after 2015; domestic workers who entered the country before or have settled status are not protected. The changes made so far have not gone far enough, and there is a strong case that more substantial changes are needed to protect these workers.

### Other sectors

**8.22** Growth in the live-in care sector, especially since the pandemic, could lead to employers increasingly relying on the domestic worker exemption. Kalayaan noted an increase in cases where the employer of a live-in carer has relied on the exemption as a defence. Academics with an interest in live-in care workers told us that the sector is largely unregulated, with few barriers to market entry, and would benefit from a set of minimum recommendations about pay and working conditions. Kanlungan told us that employers take advantage of migrant workers, even when they are qualified social carers, and pay them well below the minimum wage.

**8.23** There is minimal use of the exemption in other sectors, as the terms of living with the family and being treated as a family member are not applicable in most cases. However, some au pair adverts include jobs that would not typically be part of a conventional au pair role, including walking dogs or working in the family shop.

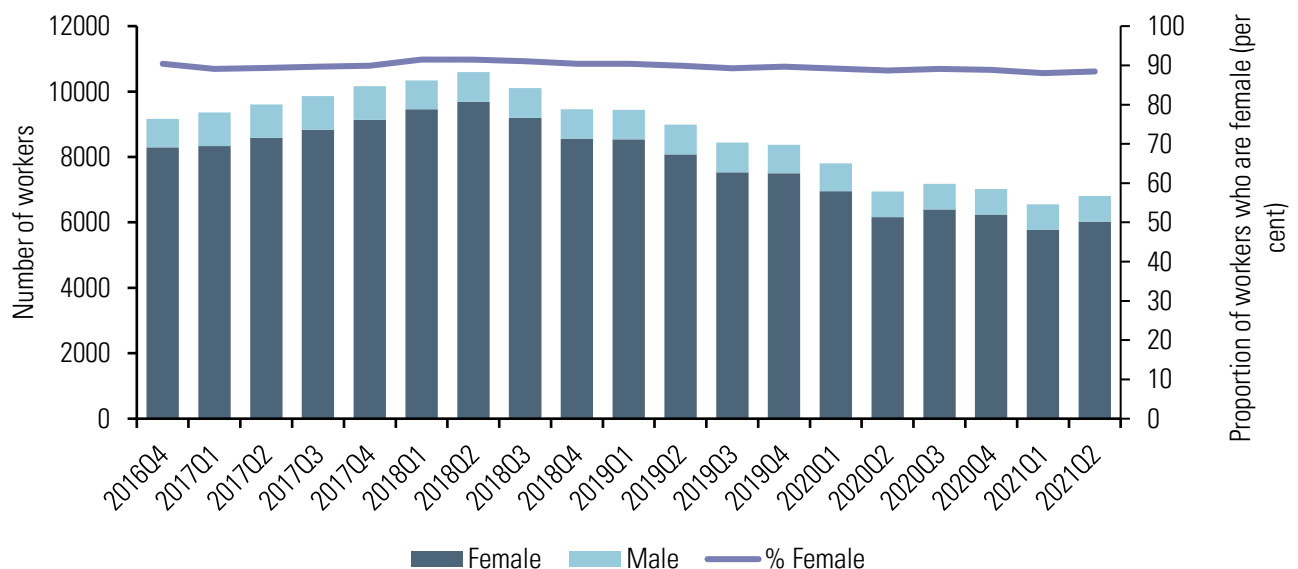
## Equalities impacts

**8.24** In 2020, the London South Employment Tribunal heard the case of Puthenveetil vs Alexander, George & Secretary of State for Business, Energy and Industrial Strategy. The case was unusual in that it argued that the exemption itself was discriminatory as it is more likely to apply to women. The Tribunal agreed that domestic workers were more likely to be female and found that the exemption was indeed unlawful and could not be applied in this case. As this was a first instance judgement, there is currently some legal ambiguity which could be resolved if the Government sets out its intentions for the exemption.

**8.25** The evidence that we have gathered supports the Puthenveetil judgement. Au pairs are overwhelmingly women. Families looking for au pairs specify that they want female au pairs in adverts – a search on AuPairWorld gave 56 results for families who would be willing to take on a male au pair in the UK and 445 results for families looking for female au pairs, with 87 per cent of adverts specifying that they would only be willing to take on a female au pair. These adverts commonly specify that the au pair should be aged 18-30, with some asking for an au pair aged 18-23. As the intention of the au pair scheme is to facilitate cultural exchange, au pairs should be migrant workers. The exemption is therefore more likely to exclude migrant workers than UK-born workers from earning the minimum wage.

**8.26** Figure 8.2 shows the number of people who work as a childminder or au pair and are employed by a household. Not all of these workers are subject to the exemption, and workers in domestic settings may be less easily reached by traditional surveys. However, it does indicate that the vast majority (around 90 per cent) of workers who are doing the type of work where they could be subject to the exemption are female. The number of people doing this type of work has also fallen substantially since 2018.

**Figure 8.2: Number of workers who are employed by households as childminders or au pairs, UK, 2016-2021**



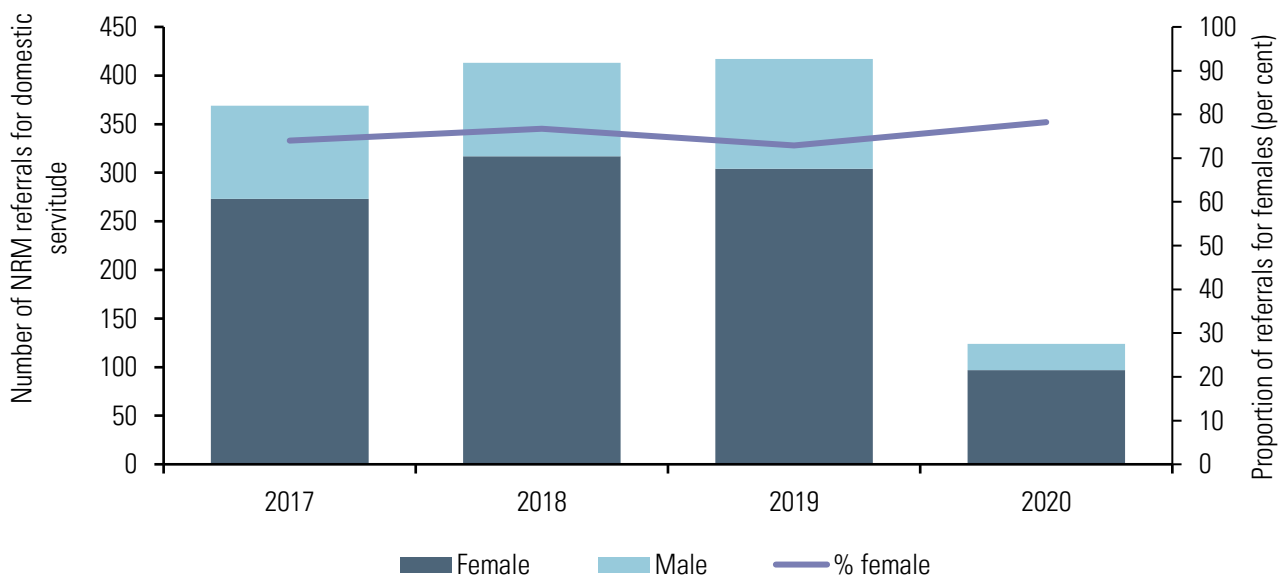
Source: LPC estimates using LFS microdata, population weights, UK, 2016-2021.

Note: Uses SOC code 6122 - au pairs and childminders.

**8.27** Live-in domestic work is dominated by migrant women. Kalayaan told us that 94 per cent of their clients are female, and all of them are migrants. They argued that the exemption perpetuates the devaluation of domestic work and facilitates exploitation in the sector. They believe that the conceptualisation of domestic workers as family members relies on the idea that this work would otherwise be provided for free by women in the family (see also (Cox and Busch, 2018)).

**8.28** In some cases, these workers are seriously exploited and become victims of domestic servitude. NRM statistics on the numbers of referrals for adult victims of trafficking and modern slavery (Figure 8.3) indicate that the majority of people who are victims of domestic servitude are women. While there were fewer referrals in 2020, probably because the pandemic meant that victims were less able to have contact with first responders, 78 per cent of referrals were for women, indicating that women are more likely to be exploited in a domestic setting.

**Figure 8.3: Adult referrals for domestic servitude through the National Referral Mechanism, UK, 2017-20**



Source: LPC estimates using National Referral Mechanism statistics, UK, 2017-2020.

**8.29** Together, the evidence suggests that the exemption is significantly more likely to apply to women and prevent them from earning the minimum wage and from enforcing their rights as employees. It is more likely to apply to migrant workers, and to people of certain ethnic groups. The age profile is complex, with au pairs more likely to be young, while those who are indirectly affected by the exemption as domestic workers are generally older women. Overall, it seems likely that the exemption leads to discrimination based on a number of protected characteristics.

## Conclusion

**8.30** The remit asks 'the Low Pay Commission to gather evidence on the application of the 'live in domestic worker exemption' to minimum wage entitlement (regulation 57(3) of the National Minimum Wage Regulations 2015). We ask the Low Pay Commission to present findings on which sectors make use of this exemption, how often it is used and the impact of this on the labour market, with a special focus on equalities impact'.

**8.31** We have investigated the use of the exemption across low-paying sectors. The requirement for the worker to both live on the employer's premises and be treated as a member of the family is not compatible with most jobs. For this reason, both awareness and use of this exemption is minimal outside of au pairs and domestic work.

**8.32** The exemption was introduced to facilitate au pair arrangements. Due to immigration changes there is no longer a route for most au pairs to legally work in the country. But at the same time the exemption provides a loophole allowing the exploitation of migrant domestic workers. The loophole arises because the law does not define the differences between au pairs and migrant workers in domestic settings. It's hard to prove that someone is not 'treated as a family member' particularly for vulnerable women working long hours with poor English and limited resources. The regulations do not adequately describe what an au pair is or does.

**8.33** In our consultation, we have heard from many migrant domestic workers and groups representing them. Domestic workers are often highly vulnerable migrant women, hidden in private homes without access to their own networks and with language barriers. We have heard several first-hand stories of exploitation. In some cases they may be given a contract that says they will be paid the NMW but then they work longer hours without additional pay, and we have also heard of instances of more serious abuse including physical abuse and being prevented from leaving the home. The exemption is not generally used in contracts or explained to domestic workers, but it is relied on in court when there are claims of underpayment.

**8.34** While the terms of the Overseas Domestic Worker visa require employers to state that they will pay the NMW and not use the exemption, this is not stated in the NMW regulations, and so it is not unlawful for these employers to rely on the exemption if they are taken to tribunal. Several stakeholders have commented on the vagueness of the legislation, and how difficult it is to assess if a worker is treated as a family member. The exemption puts the onus on vulnerable women to prove that they have not been treated as part of the family in order to defend their entitlement to fair pay.

**8.35** We have also heard extensive evidence from au pairs. The sector as a whole is highly unregulated. While au pairs have traditionally been young European women, and this continued to largely be the case for au pairs placed through agencies until the changes in migration law, we have heard that many of the au pairs placed through websites are undocumented workers from countries such as Brazil and the Philippines, who are treated as cheap labour and not as a family member. We have heard evidence that those who have the right to work prefer to seek better paid jobs in nannying or hospitality rather than in au pairing.

**8.36** Au pair agencies tend not to see au pairs' activities as work – they are paid pocket money and treated as a family member. The exemption is seen as necessary to ensure that these placements are affordable for families. However, the language of 'host family' and 'pocket money' obscures an underlying power imbalance. The exemption combined with the lack of regulation of the sector means that when an au pair is subject to exploitative behaviour, they have limited means to challenge their employer. One group talked to us about providing au pairs with emergency housing when they are sacked by their host family.

**8.37** As well as domestic workers and au pairs, the exemption may increasingly be relied upon in the live-in care sector. Experts told us that this is a sector which has the potential for rapid growth as it becomes a popular alternative to residential care. There are few barriers to market entry, with little to no regulation. To improve transparency and minimise the risk of exploitation there is a need for the Government to set out how pay and working conditions for workers in this sector should operate.

**8.38** Overwhelmingly, the evidence that we have heard on the impact of the exemption 57(3) is negative. While it was originally introduced to make it possible for families to host au pairs affordably as part of a cultural exchange programme, it has at the same time provided a loophole for employers to exploit live-in workers and has acted as a barrier for these workers when they seek to protect their rights. Its existence means that the NMW, intended to protect workers and ensure that all work is treated fairly, has been unable to protect some of the workers who are already most at risk of exploitation. Most of these workers are migrant women, meaning that the exemption is likely to be indirectly discriminatory (as found in the Puthenveetil judgement).

**8.39** Our recommendation is that exemption 57(3) should be removed.

**8.40** If the Government intends to introduce a visa route for au pairs and does not wish to repeal the exemption, then 57(3) must be amended so that it does not provide a loophole for exploitation. The exemption should clearly state what is meant by an au pair and the scope of their duties to ensure that it cannot be applied to domestic workers, to care workers, or to au pairs who are de facto working as cleaners and nannies without adequate remuneration or genuine cultural exchange. The exemption should also expressly state that it cannot be relied upon by those employed under an overseas domestic worker visa.

**8.41** Though the remit of the LPC does not cover migration policy, throughout our consultation we have heard concerning evidence on the impact of the overseas domestic worker visa. Because it is restricted to six months, and workers are limited in their ability to move between employers, many domestic workers become trapped in potentially exploitative employment, or else they risk their accommodation, their visa status, and their means of supporting their families at home. The changes that the Government made following previous LPC recommendations and the Ewins report in 2015 did not go far enough in addressing the issue. Although domestic workers are now allowed to change employer, in practice this is very difficult, especially if they have already worked for some of the six-month term. We endorse the recommendations made in the Ewins review, including a right to extend the visa for short periods, and mandatory information meetings to ensure domestic workers are aware of their rights.

# Chapter 9

## Forecasts for the economy

### Key findings

Although the economic outlook remains uncertain, the prospects appear more positive than at this time last year.

The economy has bounced back from the unprecedented fall in output at the onset of the pandemic. GDP is nearly back to its pre-pandemic levels. However, the pace of recovery has been variable with businesses opening up but then finding it difficult to maintain supply chains and hire sufficient workers.

For consumers, the savings ratio has increased over the pandemic and future consumer spending may depend on how quickly the 'enforced' savings will be spent. Lower unemployment forecasts and reports of labour shortages should help maintain household incomes but many families with minimum wage workers will be affected by the removal of the temporary uplift in Universal Credit (UC). In addition, consumer confidence has picked up in 2021 as the economy re-opened.

For businesses, the withdrawal of government support by 1 April 2022 will affect the viability of the business and the ability to trade. This will be compounded by higher levels of indebtedness than prior to the pandemic. These will affect the strength of the recovery. Firms will also be dependent on consumers and overseas trade. The latter will have been affected by changes in our trading relationships across the globe. The outlook for the economy will also be dependent on the level of investment and that will also drive the long-term outlook. Budget measures and improvements in business confidence are expected to boost investment in the next year or so.

Government support for workers has now ended and is being withdrawn for businesses and that has implications for the labour market. With the furlough scheme ended and the additional UC top-up removed on 1 October, the supply of labour is likely to be affected. However, the evidence suggests that those furloughed are likely to be absorbed into the labour market. That continues to be remarkably resilient with unemployment not reaching the expected levels and payroll employment exceeding pre-pandemic levels. Vacancies are at record levels while redundancies have fallen back from the highs seen last autumn. The extent to which skills shortages persist will be important for pay prospects.

Inflation is expected to rise above 4 per cent by the end of the year and remain elevated in the first half of 2022 as supply chain disruptions, energy prices and labour shortages temporarily drive prices higher.

Official measures of wage growth have been distorted during the pandemic by compositional and base effects. They are currently estimated to be above underlying wage growth. Pay awards are expected to increase modestly with record vacancies, staff shortages, inflation elevated, large increases in the National Living Wage (NLW) and the ending of the public sector pay freeze. Other factors may reduce pay pressures. Employers have sought alternatives to pay rises to address staff shortages. Job-to-job moves remain subdued and many of the record vacancies are for low-paid occupations.

The distortion of wage growth measures has implications for our modelling of the NLW. We judge that our projections of the median, particularly between April 2021 and April 2022, are likely to be on the high side. The growth of AWE total pay likely overestimates actual wage growth between April 2021 and August 2021, while wage forecasts for 2021 are also likely to be overestimates, and that will affect our projections out to April 2022.

To reach our target of two-thirds of median earnings for those aged 21 and over by 2024, our central estimate of the NLW path is £9.58 in 2022, £10.18 in 2023 and £10.70 in 2024. Using some sensitivity tests to alternative wage growth assumptions, particularly for April 2021 to April 2022, we judge that the end target for 2024 may well be closer to £10.60 than £10.70.

**9.1** Having set out what has happened to the UK economy since our last report, we now consider what might happen over the coming year or so. In this chapter, we assess the prospects for the UK economy and their implications for the future path of the National Living Wage (NLW). We also summarise evidence from stakeholders on future NLW rates.

**9.2** The economic and health environment remains challenging and there is still much uncertainty about the strength of the recovery and how that affects the labour market in terms of jobs and pay. However, the outlook for the rest of 2021 and 2022 looks more predictable – with greater consensus on the economic recovery continuing and roll-out of vaccines reducing the risk of future lockdowns – than when we last considered our recommendations.

## **Economic prospects look more positive than at this time last year**

**9.3** The ability of firms to cope with the relatively large minimum wage increases required to meet the Government's target is heavily dependent on economic performance over the coming months and years. The aggregate level of, and growth in, GDP is key, as is the balance between its components: consumer spending, government expenditure, investment and trade (exports and imports).

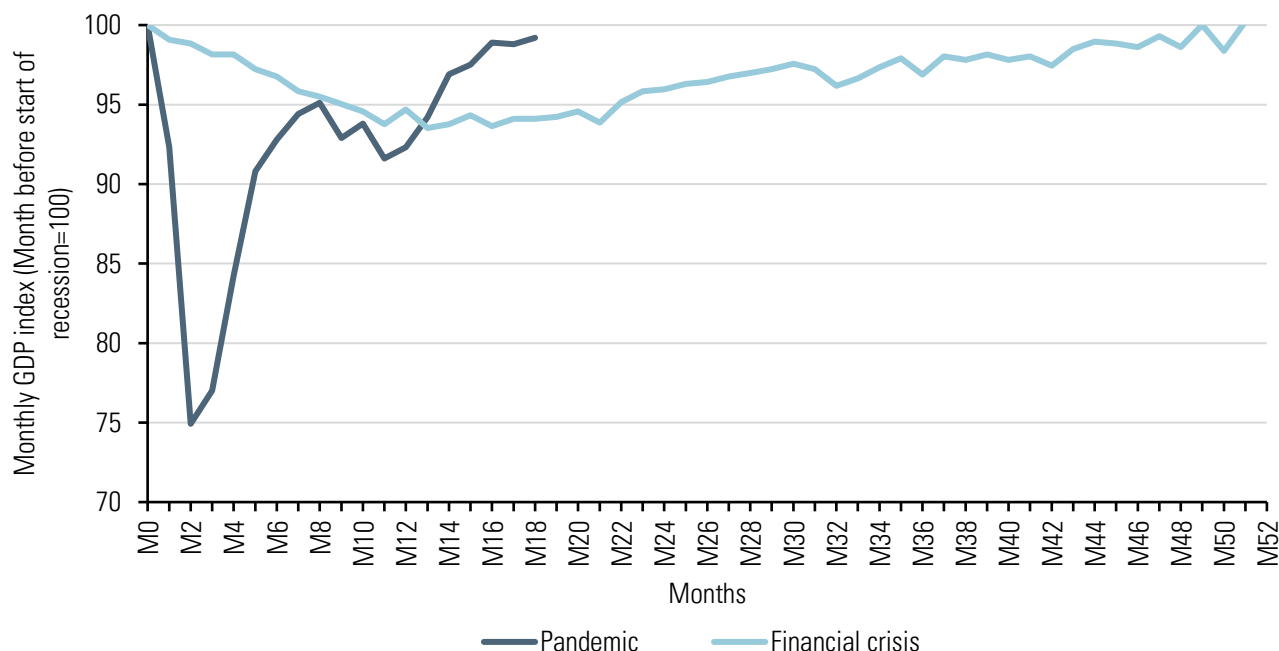
### **The economy has been recovering but GDP in the UK still remains below its pre-pandemic level**

**9.4** As we noted in Chapter 1, the pandemic took hold of the UK economy in the second half of March last year, dragging down the level of GDP in the first quarter of 2020. Quarterly and monthly comparisons give a slightly different picture of the recovery. Quarterly data allow international comparisons and have a historic time series, which shows economic output in the second quarter of 2021 was still 2.2 per cent below its pre-pandemic level (in the fourth quarter of 2019). However, monthly data suggest the UK economy was only 0.8 per cent smaller in August 2021 than it was in February 2021.

**9.5** We can see from Figure 9.1 that the fall in GDP at the onset of the pandemic was dramatic – falling by 25 per cent in those first two months as the economy locked down. Output then bounced back quickly as the economy reopened before falling back with further measures to control the virus. It has again rebounded as pandemic measures have been lifted. In contrast, the fall in output during the financial crisis was slower and the recovery weaker. Eighteen months on from the start of the pandemic

recession, GDP was 0.8 per cent below its pre-recession output. That compares with 5.9 per cent at the equivalent stage of the financial crisis recession which took over four years for the economy to get back to its pre-recession level of GDP.

**Figure 9.1: Comparison of GDP between the financial crisis and the pandemic**



Source: LPC estimates using ONS data. Monthly GDP index (ECY2), monthly, seasonally adjusted, UK, February 2008-August 2021.

Note: M0 is February 2008 in the financial crisis and February 2020 in the pandemic.

**9.6** The growth recorded by the UK in the second quarter of 2021 was the fastest among any nation in the G7. However, of the G20 countries, only Spain had suffered a greater loss in GDP between the onset of the pandemic in the first quarter of 2020 and the first quarter of 2021. That sharp recovery meant that the UK's total loss of output since the start of the pandemic was similar to that of France and Germany.

## The global economic recovery is expected to continue but supply challenges have weakened momentum and pushed up prices

**9.7** The strength of the world economy will have an important bearing on the pace and resilience of the UK economic recovery. Global supply chain disruptions and increases in commodity and energy prices will affect the UK economy.

**9.8** The Organisation for Economic Cooperation and Development (2021b) noted that global economic growth has picked up this year, helped by strong fiscal and monetary policy support, the deployment of effective vaccines and the resumption of many economic activities. But recovery remains uneven with countries emerging from the crisis facing different challenges. There are large differences in vaccination rates across countries. The rapid increase in demand as economies open has led to supply challenges and pushed up key commodity prices. Inflation was expected to rise across the world – moderately in Europe, but sharply in the US and emerging economies – before moderating. The recovery continues to progress but momentum has slowed. Global GDP was projected to grow by 5.7 per cent in 2021 and 4.5 per cent in 2022. The OECD argued that global growth would reflect a strong



rebound in Europe, the likelihood of additional fiscal support in the United States next year, and lower household saving that will boost growth prospects in the advanced economies.

**9.9** The International Monetary Fund (2021) also noted that the global recovery had continued but its momentum had weakened and uncertainty had increased. Headline inflation rates have increased rapidly in the United States and in some emerging markets but price pressures were expected to subside in 2022. Great uncertainty surrounds inflation prospects – primarily stemming from the path of the pandemic, the duration of supply disruptions, and how inflation expectations evolve. The IMF thought that inflation risks were skewed to the upside and could materialize if pandemic-induced supply-demand mismatches continued longer than expected and fed into wage demands.

**9.10** Despite sectoral wage pressures, and a slight uptick in economy-wide nominal wage inflation in the US, few signs of acceleration in economies were visible where data were available through the middle of the year (Canada, Germany, Spain, United Kingdom). After adjusting for composition effects, overall wage growth had remained within normal ranges. Overall, the IMF considered the balance of risks for growth to be tilted to the downside. The major source of concern was that more aggressive Covid-19 variants could emerge before widespread vaccination is reached. It forecast world output forecast to grow by 5.9 per cent in 2021 and 4.9 per cent in 2022. That was similar to OECD forecasts.

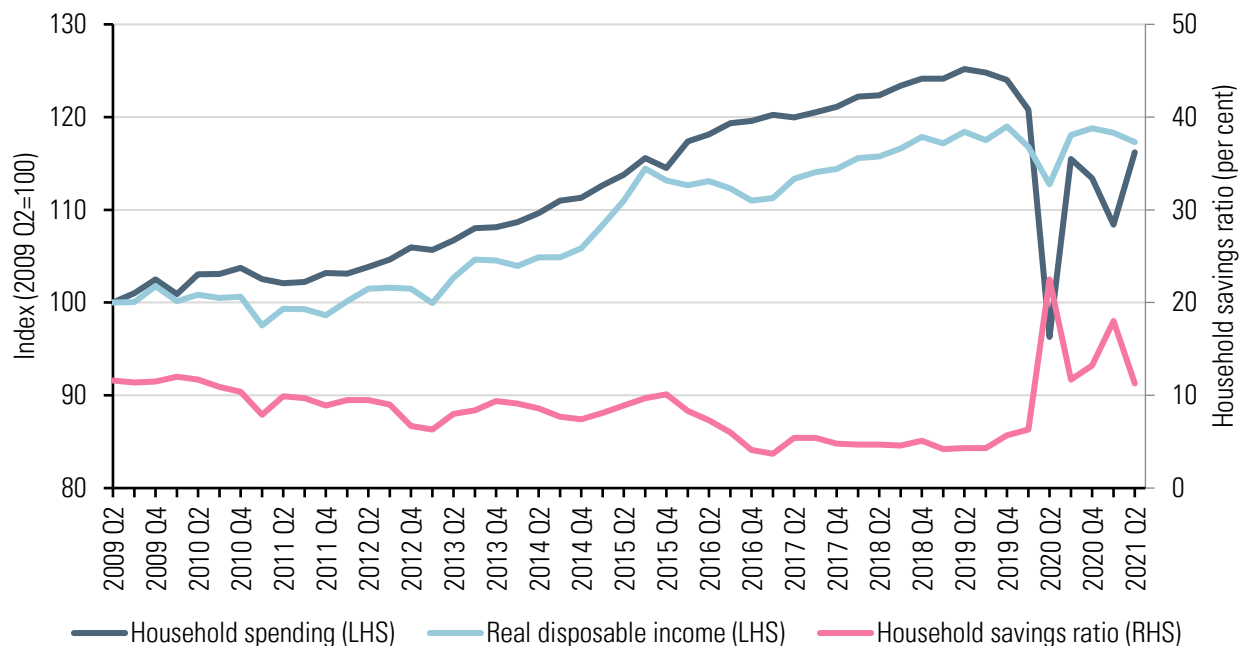
## **Consumer spending will depend on both incomes and whether built-up pandemic savings are spent**

**9.11** Measures to control the pandemic reduced consumption while various government schemes, especially the Coronavirus Job Retention Scheme (CJRS), the Self-Employment Income Support Scheme (SEISS) and the uplift in Universal Credit (UC) supported real incomes. That led to record levels of savings. It will be important for the recovery if, when and on what those savings are spent.

**9.12** With many sectors in lockdown and many goods, particularly restaurants, hotels, recreation, leisure and travel unavailable, as shown in Figure 9.2, consumer spending fell by over 25 per cent in the first half of 2020. It recovered as the economy reopened in the summer of 2020 but fell back again as lockdowns were reimposed in late 2020 and early 2021. It recovered in spring 2021 as the economy again reopened but remained 8 per cent below its level in the fourth quarter of 2019.

**9.13** In contrast, real household disposable incomes fell by only around 5 per cent in the first half of 2020 but recovered by the end of 2020 (with incomes only slightly lower than at the end of 2019). As a result, there was a sharp increase in the savings ratio in the second quarter of 2020, which has remained elevated. Using Bank of England monthly data on the change in M4 (a measure of the notes and coins in circulation plus money in bank accounts) and National Savings, we estimate that cumulative excess saving since February 2020 was around £185 billion (or about 9 per cent of GDP in 2020) in July 2021.

Figure 9.2: Real household incomes, consumer spending and savings, 2009-2021



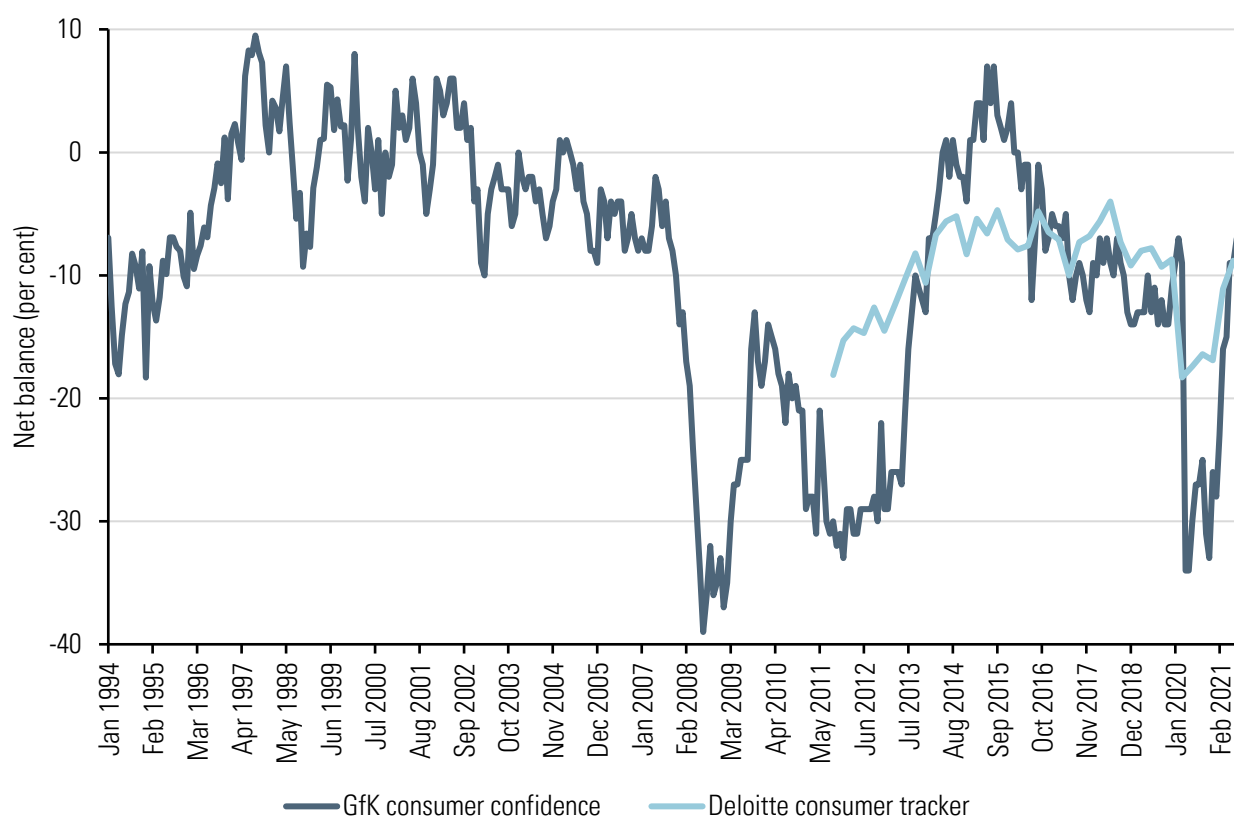
Source: ONS. LPC estimates using real household spending (ABJR); real household disposable income (NRJR); and the household savings ratio ((NRJS), quarterly, seasonally adjusted, UK, Q2 2009-Q2 2021.

**9.14** In its forecasts, the Bank of England (August 2021c) expects the household saving ratio to have declined markedly as restrictions on spending eased, and is projected to continue to fall during the first year of the forecast. And over the forecast period, households in aggregate are assumed to spend around 10 per cent of their additional accumulated savings. That is broadly consistent with the latest (England, 11 June 2021) evidence. Of the 27 per cent who intend to spend some of their savings, only 13 per cent plan to spend more than half of them. Overall, the results imply that around 10 per cent of accumulated savings are expected to be spent over the next three years.

**9.15** However, that increase in savings has not been evenly distributed across the income distribution. Handscomb, Henahan and Try (2021) found that the higher saving accumulated during the pandemic was concentrated in better-off households. They spent less on commuting, holidays and eating out. They were also able to reduce their debts. In contrast, many of the poorest families have spent more and have increased their debts.

**9.16** According to the GfK consumer confidence measure, as shown in Figure 9.3, consumer confidence had been falling since the end of 2015 but it fell sharply with the onset of the pandemic and the imposition of measures to control it (GfK, 2021). Consumer confidence remained low throughout the rest of 2020 and into 2021. However, it began to recover with announcements in March about the gradual reopening of the economy from April onwards. This pick-up continued until July but fell back in August and September as the economy was hit by supply constraints. The Deloitte consumer tracker shows that its tracker has followed a similar path up to June 2021 (the latest data available, Deloitte (2021)).

Figure 9.3: Consumer confidence, UK, 1994-2021



Source: GfK consumer confidence index, monthly, UK, September 1994 – September 2021; and Deloitte consumer tracker, quarterly, UK, 2011-2021.

**9.17** With the savings accumulated by many households over the pandemic, unemployment low and falling, and RTI employment and consumer confidence back to pre-pandemic levels unemployment, consumer spending is expected to drive GDP over the next few years.

## Government spending has helped support businesses, incomes and jobs

**9.18** Since the start of the pandemic, the Government has made substantial interventions to support both households and businesses. This has supported GDP. The CJRS and SEISS formed the bulk of the £80 billion support for households in 2020/21 with a further £60 billion for business support. As a result, total government spending as a share of GDP rose and public sector net borrowing rose to its highest share of GDP since the Second World War. The March 2021 Budget included further measures that loosened fiscal policy in the short-term – the extension of the CJRS and further rounds of SEISS. There was also some support to boost business investment in 2021 and 2022 through a capital allowance super-deduction.

**9.19** While Government spending has boosted GDP in 2021 and the announced measures are likely to continue to support GDP in 2022, the withdrawal of Covid-related measures and the introduction of tightening measures, such as the freeze in personal tax allowances and increases in Corporation Tax, are likely to drag on growth further out.

**9.20** The UK has not been alone in its strong fiscal policy support alongside accommodative monetary policy. Many other countries have adopted similar approaches to support their economies. None more so than in the United States, which has already had a large fiscal stimulus and is likely to get further fiscal boosts in the coming year or so.

### **Although business investment has been subdued, it is expected to be boosted by Budget measures and an improvement in confidence**

**9.21** At the end of the second quarter of 2021, business investment remained around 15 per cent below its pre-pandemic levels. The growth in the first quarter of 2021 had been weaker than expected by the Bank of England, which revised its estimates for 2021 down from 7 per cent to 3 per cent but it expected a stronger bounce next year (revising growth in business investment up by over 5 percentage points to nearly 19 per cent). Part of that boost was from the measures to boost investment in the March 2021 Budget. While business confidence and investment intentions had improved there was still great uncertainty about the length of time that the pandemic would persist and about trading relationships with the EU and other countries.

**9.22** In its Quarterly Economic Survey (BCC, 2021), the British Chambers of Commerce reported that business activity continued to recover in the third quarter of 2021. Around half of respondents overall reported increased domestic sales, which was the highest since the pandemic started. Despite that, concerns remained about investment. The proportion of firms overall reporting an increase in investment in the third quarter was unchanged from the second quarter at around 27 per cent. The BCC noted that ‘the failure to see any positive upward movement in investment is another troubling warning sign for longer term recovery.’

**9.23** In contrast, the Bank of England (2021e) reported a strong improvement in investment intentions in the second and third quarters of 2021. According to its Industrial Trends Survey (CBI, 2021a), CBI reported that overall investment intentions remained strong, despite softening somewhat in the third quarter of 2021. Compared with the last 12 months, firms expect investment to increase in product and process innovation, plant and machinery, and training and retraining. Not surprisingly with the increase in homeworking, investment in buildings was expected to decrease. Firms reporting that uncertainty around demand was limiting investment fell to its lowest since October 2010. However, concerns about labour shortages limiting investment remained elevated

### **Net trade is expected to drag on growth as imports are forecast to grow faster than exports**

**9.24** With the global economy recovering, imports to the UK and exports from the UK were expected to pick up. However, trade with the EU remained subdued. In the second quarter of 2021, net trade boosted GDP as exports grew faster than imports (by 6.2 per cent compared with 2.4 per cent). However, exports remained 20.7 per cent lower and imports 14.0 per cent lower than in the fourth quarter of 2019.

**9.25** Trade will depend on the outlook for the global economy, the exchange rate and how the trade relationships negotiated by the UK with the EU and other countries around the world develop. The exchange rate has been broadly stable so far in 2021 – appreciating against the euro since the end of

2020 but depreciating slightly against the dollar since February 2021. The sterling effective exchange rate – its value against a basket of trade-weighted currencies – has been fairly flat for most of 2021. The Bank of England expects the exchange rate to remain relatively stable. It will thus not be a key driver of trade unless inflation persists and that will depend on how the Bank of England reacts in terms of its interest rate policy.

**9.26** Having acted as a boost to GDP in 2020 as the fall in imports was greater than the fall in exports, the Bank of England (2021c) forecasts imports to rebound faster than exports and act as a drag on GDP. The combination of expected import growth of nearly 5 per cent in 2021 with export growth of just 2 per cent, would reduce GDP by nearly 0.8 per cent. That reduction in GDP is forecast to rise to 2.5 per cent in 2022 – as imports grow by nearly 14 per cent while exports grow by just 5 per cent. With GDP growth in 2021 and 2022 likely to be strong, the drag on GDP from trade may go unnoticed.

## GDP forecasts suggest that economic output will return to pre-pandemic levels within the next six months

**9.27** These developments in consumer spending, government spending, investment and trade will feed into the forecasts for GDP. In its August 2021 Monetary Policy Report, the Bank of England (2021c) expected GDP to be back to its pre-pandemic levels by the end of 2021. It forecast growth of 7¼ per cent in 2021 followed by 6 per cent in 2022. Having recovered, the Bank then judged that the economy would grow by only 1.5 per cent in 2023.

**9.28** It noted that growth in the second quarter of 2021 had been stronger than expected in its May report (the Bank of England, 2021a), as consumer spending grew strongly as some pandemic restrictions were lifted. The global recovery, particularly in the euro area, had also been faster than projected. This was expected to continue into the third quarter although the Bank noted that the number of Covid cases remained high and that may slow growth a little. It still expected strong growth in the third quarter but noted that some high frequency data such as retail footfall and credit card spending had slowed in July. It also highlighted supply chain problems and staff shortages.

**9.29** The OECD (2021b) and the IMF (2021) also forecast strong growth in the UK as it recovered from the largest GDP falls of any G20 country. Reflecting the strong growth in the UK in the second quarter of 2021, the IMF forecasts for the UK are the strongest in the G7 (and only Spain is faster in the EU) with growth of 6.8 per cent in 2021 and 5.0 per cent in 2022. However, the OECD highlighted recent rises in inflation and revised down its forecasts for UK to 6.7 per cent in 2021 and 5.2 per cent in 2022. The median of the HM Treasury panel of independent forecasts (HM Treasury, 2021a and 2021b) was in line with these forecasts – 7.0 per cent in 2021 and 5.1 per cent.

**Table 9.1: Summary of GDP forecasts, 2021-23**

	2021	2022	2023
Bank of England (August)	7.3	6.0	1.5
OECD (September)	6.8	5.0	
IMF (October)	6.7	5.2	
HM Treasury panel median (August/October)	7.0	5.1	2.1
Office for Budget Responsibility (March)	4.0	7.3	1.7

Source: Office for Budget Responsibility (2021); HM Treasury (2021a and 2021b); and Bank of England (2021c); GDP growth (ABMI), quarterly, not seasonally adjusted, UK (GB for AWE).

**9.30** Reflecting the emergence of supply constraints, the Bank of England (2021d) revised its estimate of the level of GDP in the third quarter of 2021 down by 1 per cent since August – leaving it around 2.5 per cent lower than pre-pandemic.

**9.31** The Bank of England (2021d) noted that since its August forecasts, the pace of recovery of global activity had showed signs of slowing. Against a backdrop of robust goods demand and continuing supply constraints, global inflationary pressures had remained strong and there were some signs that cost pressures may prove more persistent. Some financial market indicators of inflation expectations have risen somewhat, including in the United Kingdom. Momentum appears to have picked up in services-orientated sectors where output remains well below pre-Covid levels. Although official estimates of retail sales have weakened somewhat, other indicators of spending have generally remained at strong levels, as has consumer confidence.

## **Business prospects have picked up but concerns for government support, debt and additional costs remain**

**9.32** The affordability of minimum wage increases will depend crucially on the prospects for businesses. We have already considered the general prospects of the economy and its likely impact on business investment, we now consider some other aspects. The Government introduced several measures to help support business throughout the pandemic. As well as those that also supported households, such as the furlough scheme and income support for the self-employed, the Government also helped directly including through making credit available with various loan and grant schemes, delaying payments for Value Added Tax (VAT), reductions in VAT for certain consumer-facing services, business rates relief, rent holidays and protection against eviction.

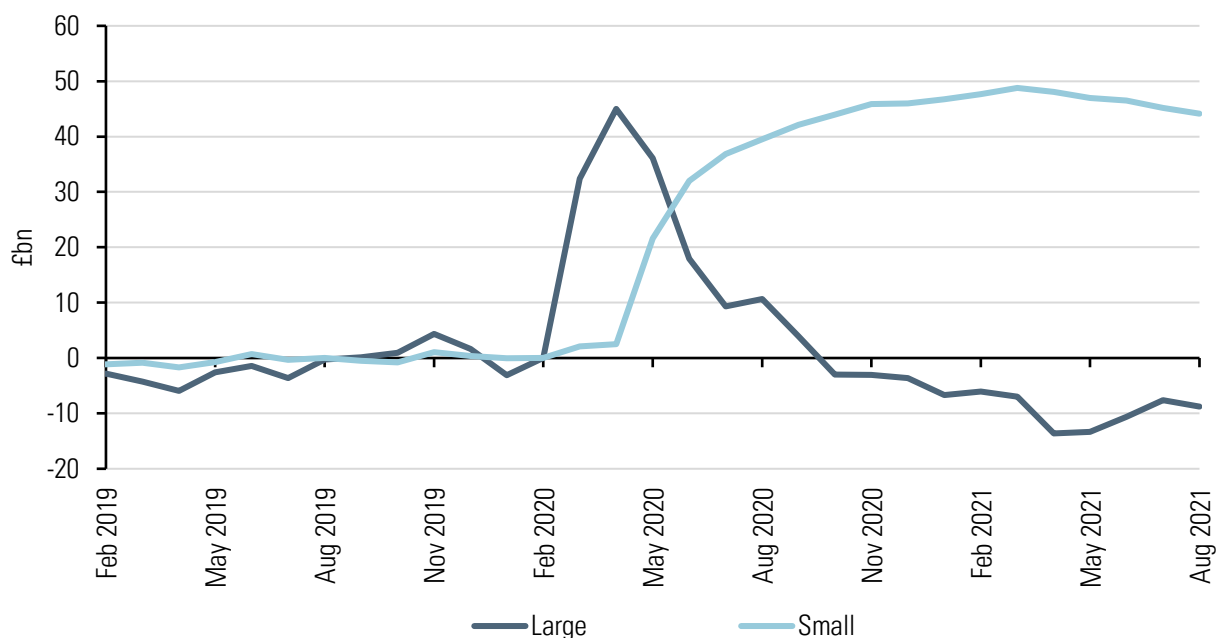
**9.33** Many of these schemes have now ended or are due to end just as the next uprating of the minimum wage is implemented in April 2022. Payments for loans, business rates and VAT will also start. In addition, increases in National Insurance to help support the NHS and social care will also be introduced at the same time. This will provide a challenging environment although the outlook for GDP is for relatively healthy growth.

**9.34** According to the ONS Business Insights and Conditions Survey (BICS) Wave 40, just under a third of all firms received Government-backed loans or finance during the pandemic. Firms in hospitality and wholesale and retail were more likely to have received support but firms in the leisure sector were much less likely. Small firms (those with 10-49 employees) and smaller medium-sized firms (50-99 employees) were more likely than micro firms (fewer than 10 employees) and larger firms (more than 100 employees) to have accessed government support. Along with micro firms, these firms were also least likely to have cash reserves.

**9.35** There has been a distinct difference between small and medium-sized firms (less than £25 million in turnover) and large firms in terms of debt. At the beginning of the pandemic, as shown in Figure 9.4, large firms appeared to get quick access to loans with debt rising by £45 billion between February and April 2020. However, they were able to pay back these loans quite quickly and debt has been lower than pre-pandemic since October 2020. In contrast, with Bounce Back Loans not available until May 2020, small and medium-sized firms seemed to take longer to get access to loans. For these firms, the level of debt relative to February 2020 rose considerably in May 2020 but did not peak at £49 billion until March 2021. As the economy has reopened, these firms have been able to repay some of

that but the level of debt was still £44 billion at the end of August 2021. This will need to be paid back over the coming years.

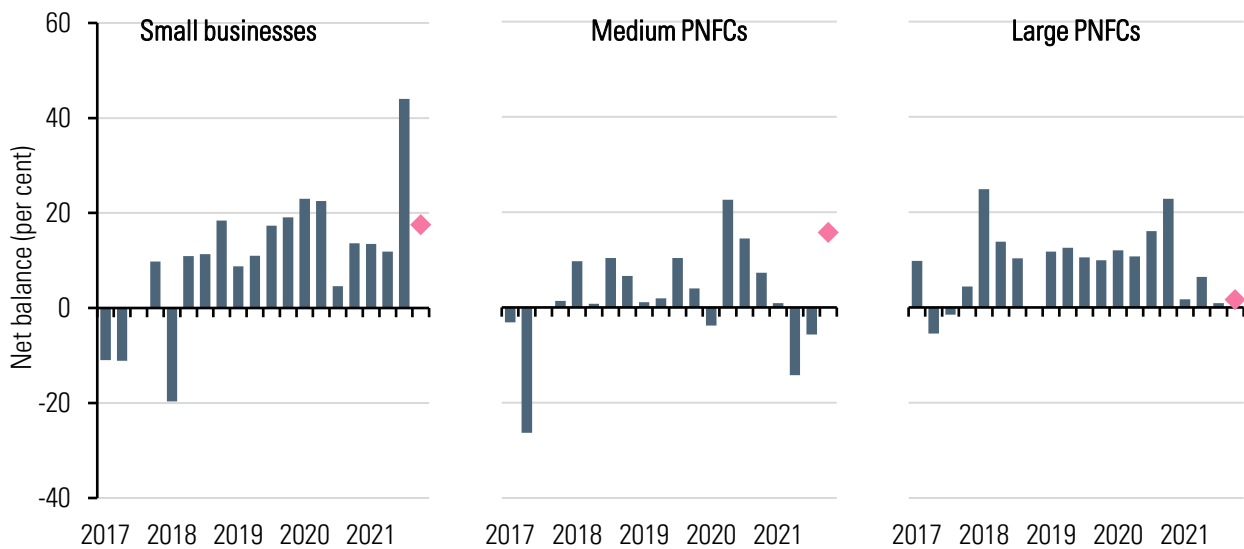
**Figure 9.4: Level of firm debt relative to February 2020, by size of firm, UK, 2019-2021**



Source: LPC estimates using Bank of England series Z8YI and Z8YH (Monthly amounts outstanding of monetary financial institutions' sterling and all foreign currency loans to large and small businesses), UK, February 2019-August 2021.

**9.36** Although debt repayments are higher than normal, according to BICS, most firms do not expect them to increase and are confident in meeting their debt obligations. The proportion of firms that consider themselves at moderate or severe risk of insolvency has fallen since January 2021 from 21 per cent to 11 per cent in September. However, as shown in Figure 9.5, lenders are becoming more concerned about the likelihood of defaults among small and medium-sized businesses. They were particularly elevated for small firms in the third quarter of 2021. Concerns about large firms had peaked at the end of 2020 and the net percentage balance in the third quarter of 2021 was close to zero.

**Figure 9.5: Net percentage balance for changes in default rates on loans to firms, by size, UK, 2017-2021**



Source: Bank of England (2021g). Credit Conditions Survey 2021 Q3. Chart 6, 2017-2021.

Note: Question: 'How has overall demand for lending from small businesses, medium private non-financial corporations (PNFCs) and large PNFCs changed?' Net percentage balances are calculated by weighting together the responses of those lenders who answered the question. The blue bars show the responses over the previous three months. The pink diamond shows the expectation over the next three months. A positive balance indicates an increase in demand.

**9.37** Although an increasing share of firms are finding that their input prices are increasing, they seem to have more room than before the pandemic to increase their own prices. According to the Bank of England's Agents scores, profit margins had been recovering since the middle of 2020 but in the second quarter of 2021 still remained lower than pre-pandemic.

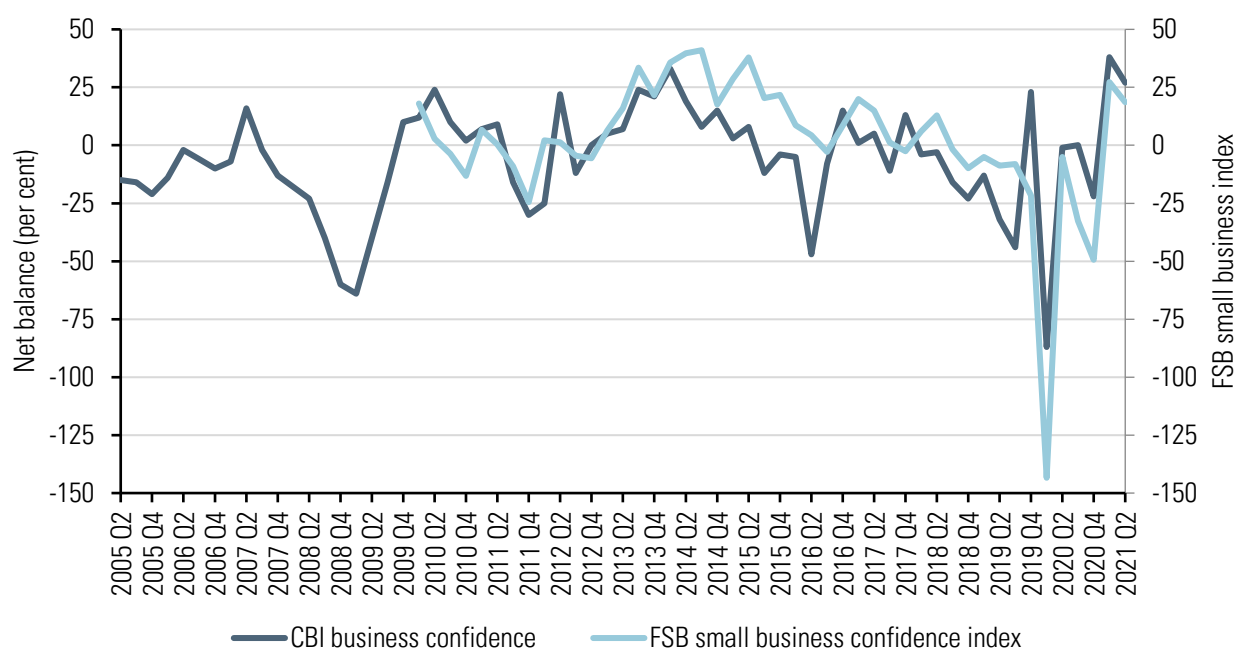
**9.38** According to various indicators using the BICS, such as the proportion of firms confident of meeting debt obligations and firms judging they are less likely to be at risk of insolvency, firms seemed to have become more optimistic about the future during 2021 as the vaccine roll-out has been a success and the economy has reopened. Other measures of business confidence have also reflected this positive outlook. As shown in Figure 9.6, the CBI and FSB quarterly measures of business confidence fell sharply at the onset of measures to control the pandemic, recovered in the summer of 2020 as the economy reopened before falling back again as the UK implemented further lockdowns. As the economy again reopened, business confidence returned and has remained elevated on both measures.

**9.39** A similar picture can be seen if looking at the monthly OECD indicators of business confidence – the Business Confidence Index (OECD, 2021c) and the Composite Leading Indicator (OECD, 2021d). They again show a pattern related to lockdowns and the reopening of the economy. However, both indicators have been above their long-run average since May 2021.

**9.40** Despite concerns about prices and labour shortages, firms are generally quite confident about their prospects in the short to medium term.



Figure 9.6: Business confidence, UK, 2005-2021



Source: CBI (2021a), CBI business confidence, Q2 2005-Q2 2021 and Federation of Small Businesses (2021), FSB small business confidence index, Q1 2010-Q2 2021.

### The National Insurance and Social Care Levy

On 7 September, the Prime Minister announced an increase in National Insurance for both employers and workers, including the self-employed, to fund social care. From April 2022, National Insurance rates will increase by 1.25 percentage points to 15.05 per cent for employers, 13.25 per cent for employees and 10.25 per cent for the self-employed. For those workers earning more than £50,270, the higher rate will increase to 3.25 per cent.

An NLW worker, earning the previously announced on-course rate of £9.42 an hour in 2022/23, would need to work 19.5 hours a week before earning the Primary Threshold of £184 a week in order to start paying National Insurance. An employer of such a worker would be required to pay National Insurance on earnings above £170 a week (working more than 18 hours a week). These thresholds would imply higher hours thresholds for workers entitled to the youth rates. Exemptions for apprentices and those under the age of 21 mean that employers of these workers would not pay any National Insurance. For comparative purposes, Income Tax becomes payable above £12,500 a year at 20 per cent – equivalent to about £244 a week (or 25.7 hours a week) and auto-enrolment is payable for those who earn at least £10,000 a year (equivalent to £192 a week or 20.4 hours at the NLW) but the contribution is based on earnings between the qualifying threshold (£6,240) and the upper earnings threshold (£50,270). Employers must contribute at least 3 per cent and employees 4 per cent with the Government topping up another 1 percentage point.

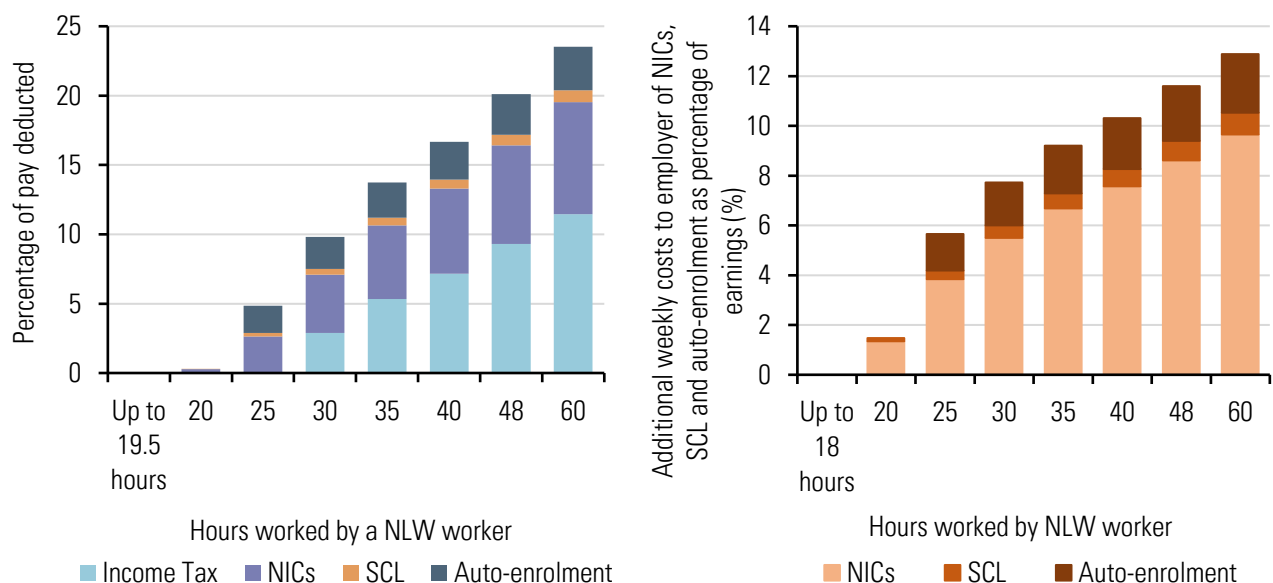
Figure 9.7 shows the impact of the National Insurance changes for NLW workers and their employers. For example, an NLW worker working 20 hours a week on £9.42 an hour would earn gross pay of £188.40 a week. They do not earn enough to pay Income Tax or become auto-enrolled but they would contribute 59 pence a week in National Insurance, including 6 pence as a result of the changes to NI, a total of 0.31 per cent of income. Their employer would pay £2.77 in NI employer contributions, including 23 pence as a result of the change, a total of 1.5 per cent in addition to gross pay.

If that NLW worker then doubled their hours to 40, they would earn gross pay of £376.80. From that they would contribute £27.01 in income tax, £25.55 in National Insurance including £2.41 as a result of the change. They would also contribute £10.27 to their pension. In total, their deductions would be 16.7 per cent (7.2 per cent in income tax, 6.7 per cent in NI, including 0.6 per cent in the new levy and 2.7 per cent in auto-enrolment). Their employer would pay an additional £31.13 in NI, including £2.59 on the new levy, and £7.70 on auto-enrolment. That is an additional 10.3 per cent on top of the worker's earnings – 8.3 per cent on NI, including 0.7 per cent on the new levy, and 2 per cent in pension contributions.

NLW workers are more likely to work fewer hours than those paid above the NLW, thereby fewer will be affected by the changes. However, medium-sized firms have a greater proportion of workers who would be affected than small or larger firms. Among NLW workers, the effects are concentrated in low-paying sectors with more full-time workers. Those working in childcare, cleaning, hair and beauty, retail, and hospitality are least likely to be affected, while those in agriculture, security and processing industries are most likely to be affected.

Overall, while the cost of the National Insurance increase is lower than other deductions from wages for workers and labour costs to employers, it nevertheless represents a cost increase that could put pressure on recruitment and investment decisions. However, nearly a third of NLW workers earn below the thresholds so will not be eligible to pay any income tax or NI.

**Figure 9.7: Potential impact of the National Insurance changes on minimum wage workers and their employers, 2022/23**



Source: LPC calculations based on announced thresholds for income tax, National Insurance contributions and auto-enrolment for the financial year 2022/23.

Note: The NLW for 2022, £9.42, was taken from the LPC Spring Report 2021 (Low Pay Commission, 2021b).

## Labour shortages and skills mismatch may slow the labour market recovery

**9.41** The labour market continues to be remarkably resilient. The labour market has largely recovered with the number of RTI payroll jobs back to pre-pandemic levels and unemployment remaining low, although self-employment has fallen significantly and switches to employee status may flatter the RTI count somewhat. Strong recruitment demand suggests the labour market will remain buoyant in the near term at least.

**9.42** The prospects for the labour market will in part depend on what happens to the remaining 1.3 million who were furloughed at the end of August 2021. There had been concerns that we could see redundancies as the furlough scheme wound up, particularly as this happened in the approach to the first planned end of the CJRS in October 2020. However, there are now many reasons to believe that its ending will be softer than had been expected. With firms increasingly covering part of the costs for these workers since July 2021, it would seem odd waiting to the end of the scheme before ending their employment.

**9.43** Of those workers still furloughed, around half are partially furloughed and have been working some hours for their employer. Having maintained an employment relationship and with the economy continuing to recover, we might think that these workers will seek more hours with their employer as the scheme ends. Firms may have kept workers on furlough as a labour hoarding measure to try and protect against future staff shortages. The extent that this continues will be important but with record vacancies and reports of staff shortages across a range of occupations, there may be less concern about these workers finding new jobs.

**9.44** Many workers fully furloughed in the CJRS data may already have found alternative employment, which was allowed under the rules. Others may have returned to their home countries during the pandemic and have no intention of returning to the UK or their previous jobs.

**9.45** Unlike the first planned end of the CJRS neither HR1 notifications of redundancies (for large numbers of redundancies) or the ONS business survey, BICS, which has better coverage of smaller firms, suggest large scale redundancies.

**9.46** With labour shortages and record vacancies, furloughed workers who are released by their employers may find it easier to get alternative employment. However, there may be mismatch by skills and location – workers may not have the skills to work in areas where vacancies exist, or may not live in areas where jobs are – and that may take time to resolve.

**9.47** There is some concern over the reliability of the CJRS data with other labour market indicators suggesting that the true number of furloughed workers may not be as high. If the CJRS records are not updated in a sufficiently timely manner, that may lead to an overestimate of those who remained on furlough until the scheme was ended. Firms had until 20 October to correct any over claims. There is also the possibility that there has been some fraudulent use of the scheme by some firms and workers. There have been some noticeable recent public cases and the National Audit Office (National Audit Office, 2020) report HMRC estimates that fraud may account for 5-10 per cent of expenditure.

**9.48** In addressing some of the issues in the labour market, the Government has set out its 'plan for jobs'. The Chancellor announced in his Conservative Party Conference speech in September an additional £500 million of funding to help workers get back to work, including support for those leaving furlough in the form of work coaches and careers advice. Other support has been targeted at young people and apprentices. Kickstart, which gives incentives for employers to take on young people, has been extended until March 2022. However, the latest data showed fewer than 80,000 of the 200,000 available jobs for young people had been taken up by 22 September 2021. In addition, the £3,000 incentive for employers of new apprentices was extended until January 2022.

**Table 9.2: Summary of employment and unemployment forecasts, 2021-2023**

	Employment growth (%)			Unemployment rate in Q4 (%)		
	2021	2022	2023	2021	2022	2023
Bank of England (August)	1.5	1.25	0.5	4.75	4.25	4.25
HM Treasury panel median (August/October)	-0.6	0.8		5.1	4.6	4.2
Office for Budget Responsibility (March)	-1.0	0.2	1.2	6.5	5.6	4.8

Source: Office for Budget Responsibility (2021); HM Treasury (2021a and 2021b) and Bank of England (2021c); total employment as measured by workforce jobs (DYDC), unemployment rate (MGSX), quarterly, seasonally adjusted, UK.

**9.49** In summary, the outlook for the labour market suggests short-term strength with record high vacancies and positive employment intentions. This is reflected in forecasts for employment and unemployment, as shown in Table 9.2. The rebound after the pandemic has been much stronger than expected with future unemployment now projected to be much lower than had been feared.

## Productivity growth expected to remain weak

**9.50** The productivity growth performance of the UK had been poor since the financial crisis. Output growth had been weak but the labour market had been strong, generating both jobs and hours. It has been difficult to derive measures of productivity throughout the pandemic with output curtailed, jobs supported and hours reduced.

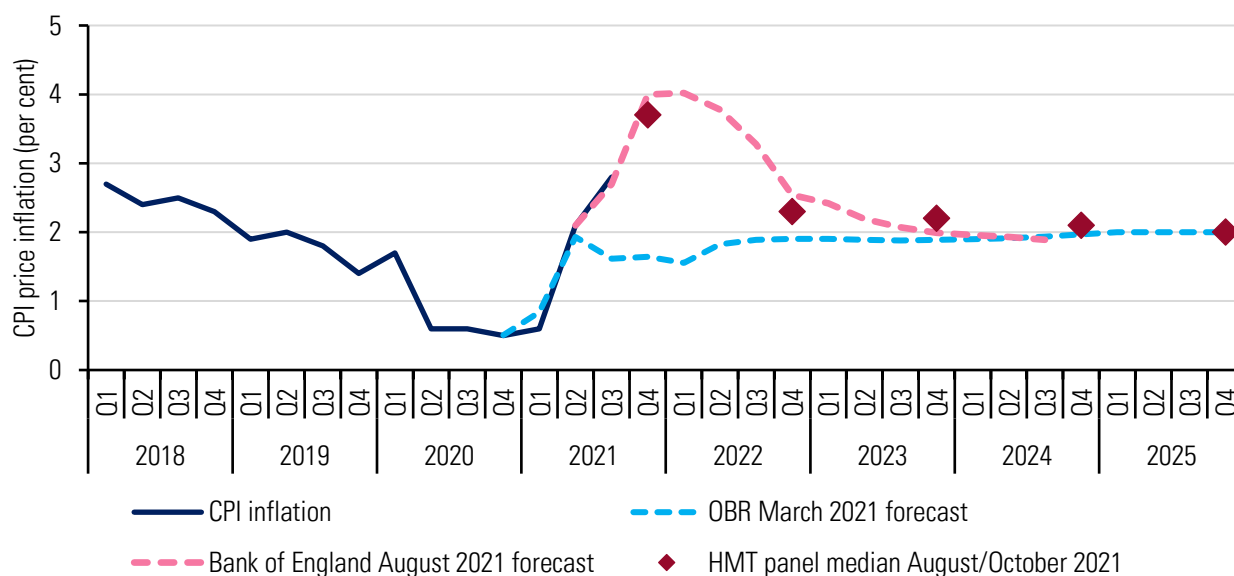
**9.51** Weak investment growth during the pandemic is likely to have held back automation and innovation which in turn will adversely affect productivity growth. However, the Bank of England (2021c) noted that much of that weakness was in buildings and structures with investment in research and development holding up better. That might help future productivity growth. In addition, the pandemic may have encouraged greater investment in digital technologies to support new business models. In contrast, productivity growth may be adversely affected if frictions in reallocating capital resources across sectors persists. The Bank of England (2021c) forecast productivity growth to be 0.75 per cent in 2021 falling to 0.5 per cent in 2022 and 1 per cent in 2023. These are well below the growth rates experienced prior to the financial crisis – just under 2 per cent.

## Inflation was expected to rise above 4 per cent and remain elevated in the first half of 2022

**9.52** During much of the pandemic, as shown in Figure 9.8, CPI inflation has hovered around 0.6 per cent – well below the target of 2 per cent. However, the re-opening of the economy after lockdowns has been accompanied by supply chain issues, especially the availability of gas, and raising the price cap on energy bills. This has led to a sharp rise in inflation in the second and third quarters of 2021. This increase is expected to continue into 2022. The Bank of England (2021c) expected inflation to reach around 4 per cent by the end of 2021 and then start to fall back in the second half of 2022. Unusually, in its Monetary Policy Committee minutes (Bank of England, 2021d), that forecast was revised to suggest that the Bank now expects inflation to rise above 4 per cent in the fourth quarter of 2021 and remain above 4 per cent in the first half of 2022. It noted that around half of the near-term projected above-target inflation was accounted for by energy-related price increases and much of the rest from core goods inflation. It also noted that services inflation had returned to pre-Covid averages.

**9.53** With rising energy prices, shortages in intermediate inputs and ongoing supply chain disruption, and labour shortages, NIESR (2021b) also forecast inflation is likely to remain elevated up to the end of the third quarter of 2022 with the peak above 4 per cent in the first half of 2022. This is in line with the latest Bank of England's forecasts (Bank of England, 2021c and 2021d). In contrast, the path of CPI inflation is expected to be a little lower according to the HM Treasury panel of independent forecasts (2021a and 2021b). The median of those forecasts expects CPI inflation to reach 3.7 per cent in the fourth quarter of 2021 before falling back to 2.3 per cent by the end of 2022.

**Figure 9.8: CPI inflation and forecasts, 2018-2025**



Source: LPC estimates using ONS data. CPI (D7BT), quarterly, not seasonally adjusted, UK, 2018-2021. Forecasts from HM Treasury (2021a) and (2021b), Bank of England (2020c) and the Office for Budget Responsibility (2021).

Note: CPI forecast for market mode from Bank of England parameters from MPC CPI inflation projections.

**9.54** It is important to note that at the time of our deliberations, most forecasters expected these price pressures to be transitory and to fall away in the second half of 2022. However, most also noted that inflation expectations had increased in the financial markets and among households.

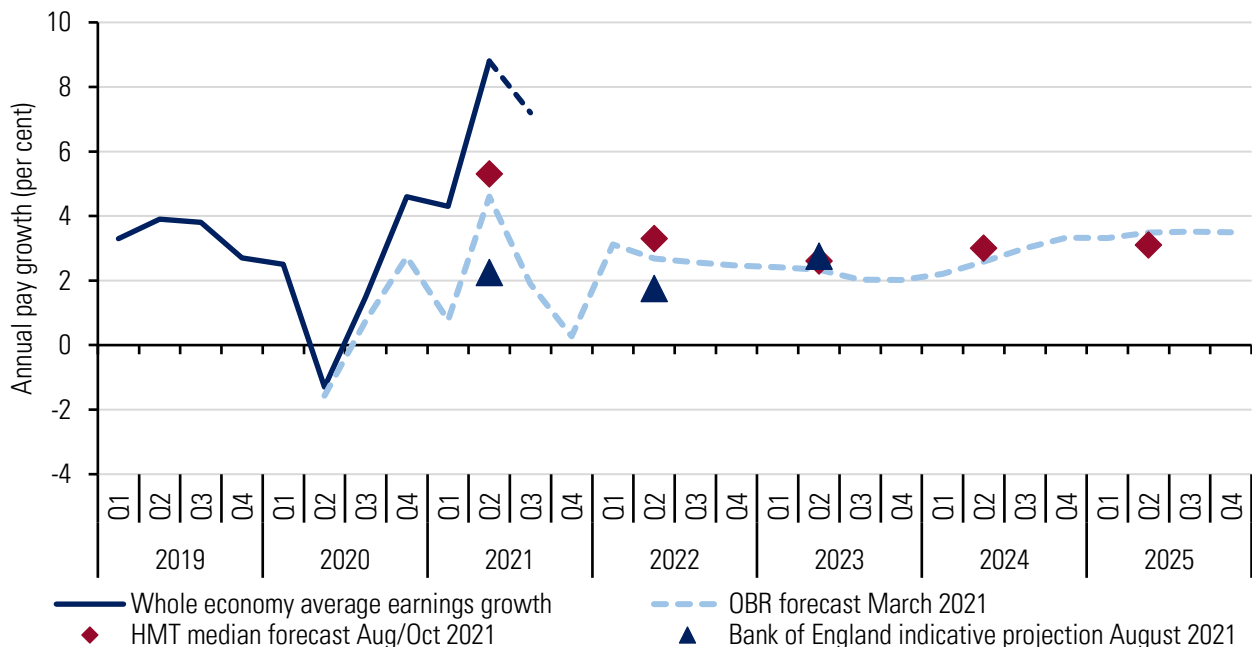
## Pay growth expected to slow despite pick up in pay awards

**9.55** The labour market, as noted above, has been remarkably resilient with payroll employments now above the levels recorded pre-pandemic. As the labour market has recovered so has pay. However, as we showed in Chapter 1, the strong official headline measures of wage growth since the last quarter of 2020 have been distorted by compositional and base effects associated with the pandemic.

**9.56** Most measures of underlying wage growth show it has been weaker than the headline rates but still stronger than during much of the pre-pandemic period. Whether that strength continues will depend on how the economy develops and how the labour market responds. If vacancies continue to be at record levels and availability of workers remains constrained, employers may need to compete on wages to hire the workers needed. We do not believe the ending of the CJRS will result in a large pool of unemployed workers being made available to plug staff shortages.

**9.57** The forecasts, as shown in Figure 9.9, suggest much lower future wage growth than currently observed in the headline data. The median of the HM Treasury panel of independent forecasts for wage growth is 5.3 per cent for the whole of 2021. The median then slows to around 3 per cent in subsequent years. That is still higher than for much of the period since the financial crisis but inflation is also expected to be higher. The Bank of England forecast weaker wage growth of under 2 per cent for 2022 and just under 3 per cent in 2023. (The OBR forecast was made in March 2021 and is shown for comparative purposes only but it does not differ much from the trajectory for the HM Treasury panel for 2022 onwards.)

**Figure 9.9: Average wage growth and forecasts, 2019-2025**

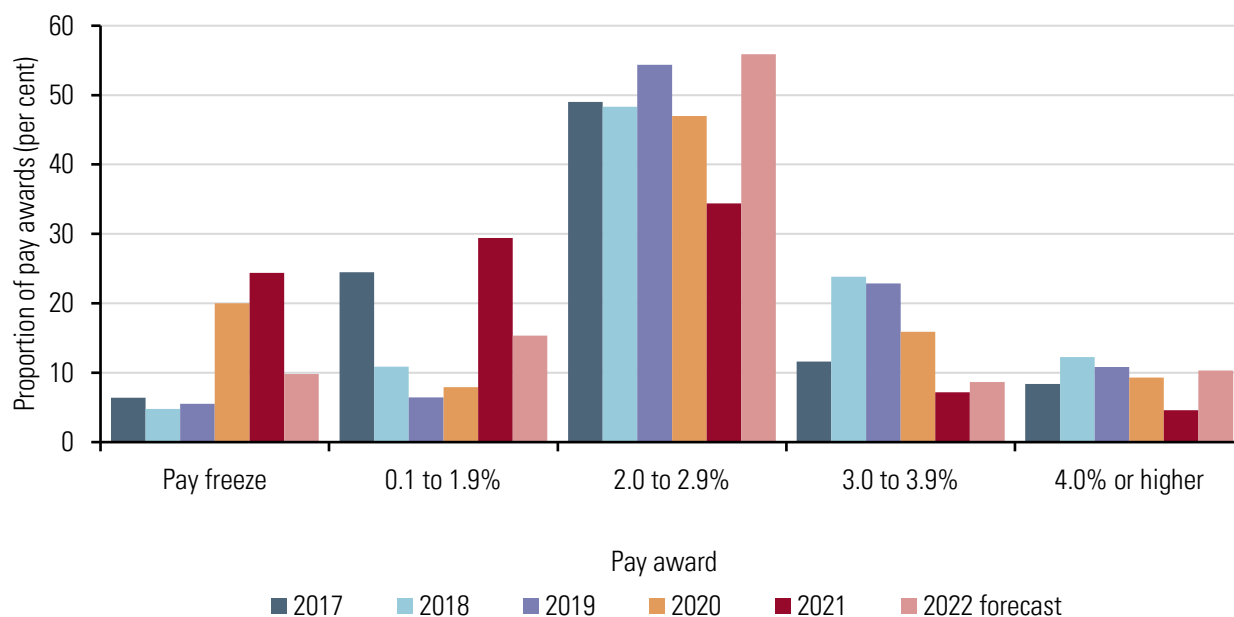


Source: ONS. AWE total pay (KAB9), monthly, seasonally adjusted, Q1 2019-Q2 2021. The Office for Budget Responsibility (2021); HM Treasury (2021a and 2021b); and the Bank of England (2021a).

Note: The dotted line for AWE is to August 2021 (a proxy for Q3 2021).

**9.58** Although forecasts for average wage growth indicate some slowing next year, the settlements data show an improvement, but nothing as dramatic as might be expected from the anecdotes of large pay increases for certain jobs, such as drivers. According to XpertHR (2021), and shown in Figure 9.10, pay awards in 2022 are expected to be higher than in 2021. In its survey of businesses, around 56 per cent were expecting pay awards of around 2.0-2.9 per cent next year. Pay freezes were expected to fall back from around a quarter of all awards to about a tenth. The proportion of pay awards expected to be at least 4 per cent had doubled from around one in twenty in 2021 to one in ten next year.

**Figure 9.10: Pay awards, 2017-2022**



Source: LPC estimates using XpertHR data, 2017-2022.

Note: Data for 2017-2021 are actual pay awards. Data for 2022 are forecasts from a survey of employers conducted in September 2021.

**9.59** In its survey of employers' pay intentions, Incomes Data Research (2021b and 2021c) reported that respondents also expected pay settlements to be higher next year than this year. This was consistent with the Bank of England's Agents (Bank of England, 2021e) who reported companies had increased pay settlements somewhat on average, with awards now typically around 2-3 per cent. For skills in shorter supply, including in hospitality, logistics distribution and warehousing, and construction, increases have ranged from 10-40 per cent. However, firms have also tried to avoid consolidating pay increases for these skills by using one-off bonuses to recruit and retain staff.

**9.60** Key influences on pay awards over the coming twelve months will include: recruitment and retention problems; the direct and indirect impact of minimum wage and living wage increases; Employment Tribunal rulings on equal pay, sleep-ins and worker status; and the ending of public sector pay freezes. Inflation may also have a greater impact than recently. Some of these will lead to increased wage pressures on pay awards, while others will reduce those pressures.

**9.61** Incomes Data Research (2021b) reported recruitment and retention problems were more widespread than last year and that these would be important in influencing pay. It also noted that benchmarking was likely to play a greater role than last year. These labour shortages have led to large increases in pay for some occupations, notably HGV drivers, but there was little evidence of a general

increase in wages for most occupations. For example, Adrjan and Lydon (2021) using data from Indeed's job listings website, show that advertised pay in some transport and construction vacancies had risen by over 8 per cent since the beginning of 2021 to September but that pay for vacancies as a whole had risen just 1.4 per cent.

**9.62** Demands for pay uplifts may continue as drivers may seek parity with agency workers whose rates have increased significantly. There may also be some knock-on effects as refuse lorry and bus drivers also seek better remuneration for their in-demand qualifications. Other notable labour shortages are in food manufacturing and construction. In hospitality, where labour shortages have also been reported, this does not seem to have fed through into increased wages, at least not at an aggregate level.

**9.63** Inflation looks set to rise further with large recent increases in fuel and energy costs but these effects may be temporary and not become embedded in wage inflation. However, the rise in living costs will be a factor in wage negotiations and IDR (2021a) noted that employers regard it as a greater influence in forward plans than it was last year. Workers will be seeking pay increases that at least match inflation, which is expected to remain above 4 per cent by the end of the first half of 2022. But it should be noted that, if they achieved such pay rises, this would be a departure from what we observed in the aftermath of the financial crisis. Despite inflation rising above 5 per cent in 2011-12, pay rises remained subdued. Indeed, prior to the onset of the pandemic, real Average Weekly Earnings for both total and regular pay remained below its February 2008 level throughout that whole period.

**9.64** Achieving the NLW target by 2024 will necessitate some large wage increases for the lowest paid over the next three years. The voluntary Living Wage may also be expected to lead to some wage pressure. Employers may also need to maintain differentials in order to retain more highly-skilled staff and that may feed into higher wage growth. On the other hand, many employers will have concerns about affordability and may try to contain labour costs.

**9.65** Some employers have been concerned by low pay and have started to address pay structures, particularly at the bottom. There are also plans to extend collective bargaining to Scotland's social care sector. These may lead to growing wage pressures. In contrast, there has been an erosion of pay and conditions through fire and rehire in some businesses, notably British Gas. There is also still much job and pay insecurity, particularly in those sectors badly hit by the pandemic such as hospitality, especially at transport hubs.

**9.66** Recent Employment Tribunal and Supreme Court judgements may also affect the level of pay (and pay increases) for particular groups. The ruling against Asda Stores on equal pay may force other similar companies to make changes to their pay structures that result in higher pay for women (Supreme Court Judgement, 2021c). The judgement on sleep-in pay for care workers may have the reverse effect with workers currently paid the NLW for sleep-in shifts being paid an allowance instead (Supreme Court Judgement, 2021b). It is not clear how the judgement against Uber on worker status may affect pay (Supreme Court Judgement, 2021a).

**9.67** Public sector pay freezes and further budget cuts looked set to have downward pressure on pay but recent announcements with regards to both public sector pay and the spending review suggest that some of those measures will be relaxed in the next financial year.



**9.68** The higher rate of National Insurance from April 2022 that will become the Social Care Levy from April 2023 will not only add to the labour costs of employers but will also reduce the take-home pay of workers. This may lead to greater tensions with workers demanding higher pay rises while employers will find it harder to meet those demands.

**9.69** There are also several factors pushing down on pay. Instead of using pay increases to address staff shortages, many firms had adopted alternative strategies. These included improving the non-pay aspects of the reward package; offering flexible working; utilising remote working; investing in training and apprenticeships; greater use of automation; reducing products and services offered; and redeploying staff. Despite the record levels of vacancies, job-to-job moves had remained subdued with few people looking to move, at least up to the end of the second quarter of 2021. Pre-pandemic, job-to-job moves had been a driver of higher pay. Another factor pushing down on pay was that many of these record vacancies were in low-paying occupations.

**9.70** As we saw in Chapter 1, once furlough, and base and compositional effects had been taken into account, the Bank of England estimated underlying private sector wage growth at around 4 per cent in the second quarter of 2021, up from 3.3 per cent in the previous quarter, while ONS estimated that it ranged from 4.1 per cent to 5.6 per cent in the three months to August 2021. That underlying wage growth has also been moving upwards. NIESR (2021c) estimated that the growth in average weekly earnings, excluding base effects, was at 4.2 per cent in the three months to August 2021, unchanged from the three months to July 2021. However, with rising inflation and record vacancies, it expected wage growth to accelerate from 4.2 per cent in the third quarter of 2021 to 4.5 per cent in the fourth quarter.

## Summary of forecasts

**9.71** In summary, the UK economy is expected to grow strongly in the rest of 2021 and in 2022. That growth is likely to return GDP to its pre-pandemic levels by the end of 2021 – much earlier than had been anticipated at this time last year. However, supply chain problems and labour shortages are likely to lead to higher inflation in the second half of 2021 and into 2022 before falling back as those problems are addressed. With pay settlements picking up and the economy recovering, wage growth is forecast to be over 5 per cent in 2021 – albeit driven in large part due to base and compositional effects that arose from the pandemic – and then slowing, as those Covid-related effects dissipate, to around 3.2 per cent in 2022. That would still be stronger than the wage growth experienced for much of the period since the financial crisis.

**9.72** The median of HM Treasury panel of independent forecasts has employment falling in 2021 by 0.6 per cent with the unemployment rate at 5.1 per cent but as employment picks up by 0.8 per cent in 2022, unemployment falls back to 4.6 per cent by the fourth quarter of 2022.

Table 9.3: Summary of forecasts, 2020-2023

	Actual	OBR forecasts			Bank of England forecasts			HM Treasury panel median forecast		
		March 2021			August 2021			August/October 2021		
	2020	2021	2022	2023	2021	2022	2023	2021	2022	2023
GDP Growth (whole year)	-9.8	4.0	7.3	1.7	7.3	6.0	1.5	7.0	5.1	2.1
Average Weekly Earnings AWE (whole year)	1.8	1.9	2.7	2.2	2.25	1.75	2.75	5.1	3.2	2.5
Inflation CPI (Q4)	0.5	1.6	1.9	1.9	4.0	2.5	2.0	3.7	2.3	2.0
Employment growth (whole year)	-1.2	-1.0	0.2	1.2	1.5	1.25	0.5	-0.6	0.8	-
Unemployment rate (Q4)	5.2	6.5	5.6	4.8	4.75	4.25	4.25	5.1	4.6	4.2

Source: Office for Budget Responsibility (2021); HM Treasury (2021a and 2021b); and the Bank of England (2021c); GDP growth (ABMI), total employment as measured by workforce jobs (DYDC), unemployment rate (MGSX), quarterly, and AWE total pay (KAB9), monthly, seasonally adjusted; and CPI (D7G7), quarterly, not seasonally adjusted, UK (GB for AWE).

## Implications for the path of the National Living Wage

**9.73** Our remit tasks us with plotting the path of the NLW to reach two-thirds of median hourly earnings by 2024. We consider the path in three stages – the baseline (hourly pay in April from ASHE); the growth in pay between the baseline and the latest available official data (Average Weekly Earnings available up to August); and the growth from then to October 2024. We use October as our reference month to ensure that the NLW meets its target in the mid-point of the year. Otherwise, it might only reach the target for a limited period in April.

**9.74** Last year the limitations to the ASHE meant we could not derive an estimate of the median consistent with previous years. Instead, we used the median from the 2019 ASHE as the baseline for our projections. This year, those limitations were of a smaller magnitude but still a feature. As discussed in Chapter 3, we have adopted a range of estimates for the median. Using information from additional questions asked about furloughed workers, we were able to generate our central estimate of the median (£14.42). Had we continued to use the 2019 ASHE as a baseline, our estimated median would have been £14.37 – the same as the lower bound of our estimates using the 2021 ASHE.

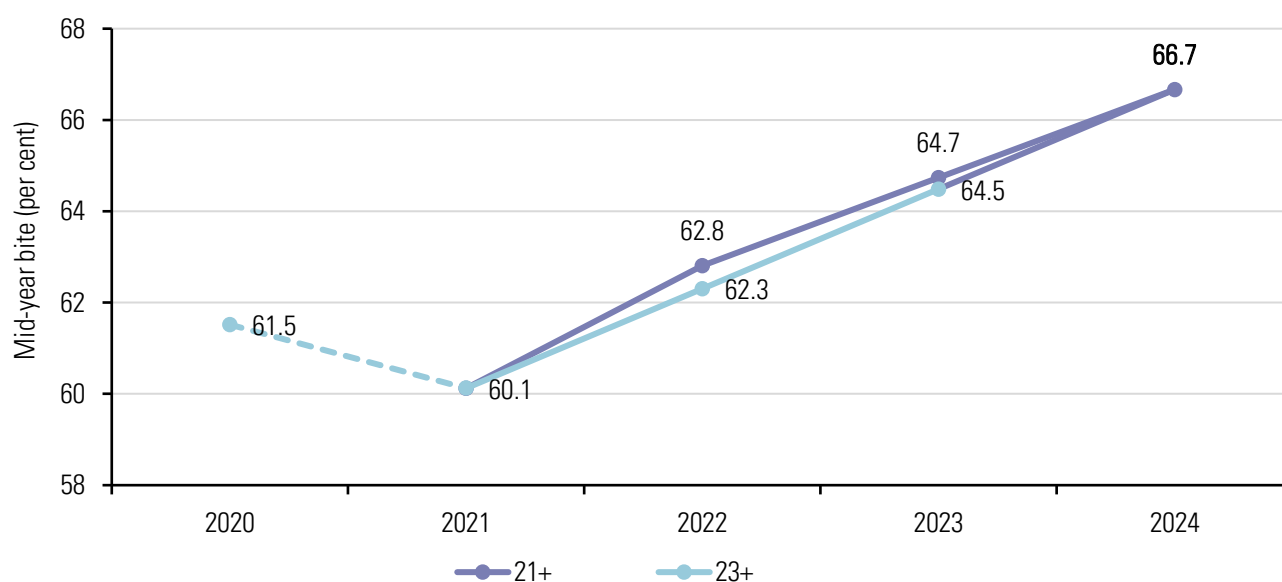
**9.75** Using our central estimate of the ASHE median in April 2021 as our baseline, we project the median to October 2021 using Average Weekly Earnings (AWE) total pay to August 2021, and the latest forecasts to project from then out to October 2021. Our model uses a twelve-month average of AWE total pay compared with the previous twelve-month average. Usually, this smoothing helps take account of some of the volatility in the series. This year, as shown in Chapter 1, the pandemic and measures taken to control it have distorted measures of wage growth, which in turn have affected the estimates derived from our smoothing method. It is this middle part of the path calculation that gives rise to the greatest uncertainty this year, and we discuss the implications of this below.

**9.76** In projecting from the actual data to October 2021, we use the median of the most recent three months' forecasts for average earnings growth from the latest monthly HM Treasury panel of independent forecasts (October 2021) and the latest Bank of England's Monetary Policy Report (August 2021).

**9.77** The median from October 2021 to October 2024 is then projected using the forecasts from the monthly HM Treasury panel of independent forecasts (October 2021) along with its latest quarterly medium-term forecasts (August 2021) and the latest Bank of England's Monetary Policy Report (August 2021). We would use the forecasts from the Office for Budget Responsibility if we had access to timely ones but those available when we made our recommendations were from March 2021, more than six months ago.

**9.78** From this, we can use the projected bite (the values of the NLW relative to the median) to derive our NLW path. The NLW increased by 2.2 per cent to £8.91 on 1 April 2021. The increase was expected to be in line with average earnings growth (and inflation) and maintain the bite at around 61.5 per cent. However, wage growth has been faster than expected between October 2020 and October 2021 as it has been heavily distorted by the pandemic. Using our methodology, as described above, we now estimate that the bite of the NLW for those aged 23 and over will be 60.1 per cent in October 2021. As shown in Figure 9.11, that is likely lower than the bite in October 2020.

**Figure 9.11: Projected path of the bite of the NLW to reach the target, 2020-2024**



Source: LPC estimates using a central estimate of median hourly pay (as explained in Chapter 3), ASHE 2010 methodology, standard weights, April 2019, and ASHE 2010 methodology, loss of pay furloughed weights, April 2021. Forecasts are based on growth in AWE total pay (KAB9) from HM Treasury (2021a and 2021b) and the Bank of England (2021c).

Notes:

- Bites from mid-year 2020 are based on earnings forecasts and may change when out-turn data are available.
- Median pay data excludes first year apprentices.

**9.79** Using those bite projections and our forecasts of median hourly earnings, we derive the 'on course' path of the NLW as set out in Table 9.4. That would imply an increase of 7.5 per cent in 2022 to £9.58 followed by increases of 6.3 per cent to £10.18 and 5.1 per cent to £10.70.

**Table 9.4: Our central estimate of the NLW path to 2024**

	2019	2020	2021	2022	2023	2024
LPC central estimate using information on furloughed workers	8.21	8.72	8.91	9.58	10.18	10.70

Source: LPC estimates using a central estimate of median hourly pay (as explained in Chapter 3) based on ASHE 2010 methodology, loss of pay furloughed weights, April 2021. Forecasts are based on growth in AWE total pay (KAB9) from HM Treasury (2021a and 2021b) and the Bank of England (2021c).

Notes:

- From April 2021 to August 2021, wage growth is derived from a smoothed twelve-month series of AWE total pay (KAB9).
- From August 2021 to October 2021, wage growth is derived from the median of recent forecasts from the HM Treasury panel and the Bank of England.
- From October 2021 to October 2024, wage growth is derived from the median of recent forecasts from the HM Treasury panel and the Bank of England.

**9.80** However, as our analysis above highlighted, we believe that there are some potential issues with our method concerning all three constituent parts of our projections: the baseline; wage growth from that baseline to October 2021; and forecast wage growth out to 2024. We are particularly concerned about the wage growth we project from April 2021 to October 2021 and the wage forecasts used to then project out to April 2022, which both incorporate some of the distortion noted and we judge may be at the upper end of what is likely to happen. We therefore consider below the sensitivity of each part of the projections for the path.

**9.81** Our central estimate of the median (£14.42) is higher than our projection using ASHE 2019 as a baseline (£14.37) but the latter was within the range of our estimates of the median (£14.37-£14.48) depending on how furloughed workers with loss of pay are treated. Using these lower and upper bounds gives a range of estimates for median earnings in October 2021 that is five pence lower, and seven pence higher, than the central estimate. This range makes little difference to our estimated path of the NLW, as shown in Table 9.5, with the on-course rate for 2022 ranging from £9.57-£9.60.

**Table 9.5: Sensitivity of the NLW path to the estimate of the median in April 2021**

Date	2020 Report methodology using AWE	Lower bound including furloughed on loss of pay	LPC central estimate using information on furloughed workers	Upper bound assuming all furloughed on loss of pay at 80 per cent
	2019	2021	2021	2021
2019	8.21	8.21	8.21	8.21
2020	8.72	8.72	8.72	8.72
2021	8.91	8.91	8.91	8.91
2022	9.57	9.57	9.58	9.60
2023	10.16	10.16	10.18	10.21
2024	10.65	10.65	10.70	10.73

Source: LPC estimates using ASHE 2010 methodology, standard weights, April 2019 and ASHE 2010 methodology, April 2021, loss of pay furloughed weights. Forecasts are based on growth in AWE total pay (KAB9) from HM Treasury (2021a and 2021b) and the Bank of England (2021c).

Notes:

- The 2020 Report methodology uses 2019 ASHE as the base for the median and then uses AWE and forecasts to project the NLW path.
- The method for deriving the lower, central and upper estimates is given in Chapter 3.
- The methodology for the projection of the path is given in the notes to Table 9.4.

**9.82** We next consider the sensitivity to the second part of the model: taking our central estimate baseline from the ASHE median in April 2021, we can project out to August 2021 using official data on AWE, which we smooth to take account of some volatility in the series, and then use the forecasts to project from then to October 2021 (and to October 2024). As Chapter 1 noted, measures of pay over the spring and summer of 2021 were heavily distorted, as potentially are the forecasts for 2021. Using our usual method gives an increase in the median of 2.8 per cent between April and October 2021 (5.6 per cent on an annualised basis) and a 4.9 per cent increase in the median between April 2021 and April 2022. Table 9.6 shows what the path would be if we made different assumptions about pay over this period.

**9.83** For the projected NLW in 2022, these range from £9.42 (if using pay settlements) to £9.65 (if using the upper end of the ONS range). We judged it more likely that underlying pay growth would turn out to lower than in our central projection. It should be noted that if pay was weaker than in our central estimate, then the bite would not have fallen to as low as 60.1 per cent in October 2021. Using the Bank of England's underlying pay measure gives a path for the NLW of £9.54 in 2022, £10.11 in 2023 and £10.61 in 2024. Using the RTI median of growth would give a slightly lower path with an NLW of £9.48 in 2022 and a target of £10.50.

**Table 9.6: Sensitivity of the NLW path to the estimate of wage growth between April 2021 and April 2022**

Date	LPC central estimate using AWE and forecasts (4.9%)	Using pay settlements (2%)	Using RTI median of pay growth (3%)	Using Bank of England underlying pay growth (4%)	Using upper bound of ONS pay growth (5.6%)
	2021	2021	ASHE year 2021	2021	2021
2019	<b>8.21</b>	8.21	8.21	8.21	8.21
2020	<b>8.72</b>	8.72	8.72	8.72	8.72
2021	<b>8.91</b>	8.91	8.91	8.91	8.91
2022	<b>9.58</b>	9.42	9.48	9.54	9.65
2023	<b>10.18</b>	9.95	10.03	10.11	10.26
2024	<b>10.70</b>	10.40	10.50	10.61	10.78

Source: LPC estimates using ASHE 2010 methodology, April 2021, loss of pay furloughed weights. Forecasts are based on growth in AWE total pay (KAB9) from HM Treasury (2021a and 2021b) and the Bank of England (2021c).

Notes:

- Instead of using actual AWE data and the forecasts to project the path from April 2021 to April 2022, we use alternative measures for wage growth over that period – ranging from 2.0 per cent to 5.6 per cent.
- The wage growth between April 2021 and April 2022 under each scenario is given in parentheses.
- The methodology for the projection of the path is given in the notes to Table 9.4.

**9.84** We finally consider the sensitivity of the third part of the model: the forecasts of wage growth from October 2021 to October 2024. We test the sensitivity in two ways. The first looking at what would happen if wage growth was 0.5 per centage points higher or lower than the median forecast in each year of the forecast. These generate a range around our central estimate from £9.53-£9.64 in 2022 – around 5-6 pence above and below the central estimate. The range increases to 11-12 pence above and below in 2023 and 18-19 pence in 2024. The second approach takes the lower and upper quartiles of the wage forecasts in each year rather than the median. This generally creates a higher spread than the first approach. It should be noted that these ranges are in line with the ranges produced using similar methods in previous years.

**Table 9.7: Sensitivity of the NLW path to the wage forecasts from October 2021 onwards**

Date	LPC central estimate	Estimate using median of forecast wage growth -0.5 percentage points	Estimate using median of forecast wage growth +0.5 percentage points	Estimate using lower quartile of wage forecasts	Estimate using upper quartile of wage forecasts
	2021	2021	ASHE year 2021	2021	2021
2019	<b>8.21</b>	8.21	8.21	8.21	8.21
2020	<b>8.72</b>	8.72	8.72	8.72	8.72
2021	<b>8.91</b>	8.91	8.91	8.91	8.91
2022	<b>9.58</b>	9.53	9.64	9.53	9.67
2023	<b>10.18</b>	10.07	10.30	10.09	10.36
2024	<b>10.70</b>	10.52	10.89	10.57	10.93

Source: LPC estimates using ASHE 2010 methodology, April 2021, loss of pay furloughed weights. Forecasts are based on growth in AWE total pay (KAB9) from HM Treasury (2021a and 2021b) and the Bank of England (2021c).

Notes:

- The third and fourth columns allow for wage growth to be 0.5 percentage points higher or lower than the median forecast.
- The fifth and sixth columns use the lower and upper quartiles of the wage forecasts instead of the median.

**9.85** In summary, we regard our estimate of the baseline – median hourly earnings for those aged 23 and over in April 2021 in the range £14.37 to £14.48 with a central estimate of £14.42 – to be robust. Our sensitivity analysis shows that using our lower or upper estimates for median earnings makes little difference to the projected path for the NLW. The final part of the path projection using the forecasts out from October 2022 is also similar to previous years and generates similar ranges around the central estimate. However, there are some issues and concerns with the middle part of the projection – the forecast of earnings growth between April 2021 and April 2022. We, and many others, have noted that base and compositional effects as a result of the pandemic may have led to the official estimates of average wage growth that are higher than underlying pay growth. There is evidence to suggest that wage growth between April 2021 and April 2022 will be lower than in our central projection model and we considered a range of alternatives. The main effect is that we judged it more likely that the target in 2024 would be closer to £10.60 than to our central estimate projection of £10.70.

**9.86** We discuss these projections further in Chapter 10 when making our recommendations.

## Stakeholder views on NLW / NMW rates

### Caution for 2022 NLW rate

**9.87** Most employer groups argued for caution on the 2022 NLW rate, often defining this as an increase at or close to inflation. The CBI called for 'moderate increases' in all rates. For the NLW, they recommended an increase to protect the rate's real value and progress up the bite path but advised caution when it came to aiming for the 'moving goal' of two-thirds by 2024. They argued that current high levels of pay growth would unwind and the forecast trajectory to 2024 could change considerably. Given the uncertain outlook, the LPC should focus on the right increase for 2022 rather than risk overshooting the required trajectory. The CBI shared member survey data: 56 per cent of members would back a 'cautious' increase, 12 per cent wanted a freeze and 32 per cent supported the on-course rate. Generally, firms in sectors which had remained open were more optimistic on the rates. SMEs were more likely to back a freeze.

**9.88** The BCC recommended the NLW should rise by one or two percentage points above CPI inflation, ensuring earnings kept pace with price growth. The Federation of Small Businesses (FSB) recommended departing from the on-course path; they told us the projected increase in the NLW could lead to job losses and hamper the recovery.

**9.89** In retail, the British Retail Consortium (BRC) advised caution but did not specify an increase of a particular level: 'With the current trading environment and the very uncertain economic outlook, the BRC calls for a cautious approach to increases in the NLW this year'. The Association of Convenience Stores (ACS) supported an inflation-linked increase: 'all economic evidence on Covid-19 indicates a delicate labour market, therefore proceeding with significant above-inflation increases in the NLW could undermine a jobs-led recovery'. Around 75 per cent of ACS members supported an inflation-capped increase. The Federation of Independent Retailers echoed the support for a modest increase.

**9.90** The Federation of Wholesale Distributors told us that 40 per cent of members believed the on-course rate [£9.42] was likely to lead to both a reduction in staff numbers and a reduction in the hours staff were employed for. This was similar to Community Leisure UK, who told us the on-course rate would be a challenge: 'there needs to be consideration of employers' ability to pay the NLW increase - against the backdrop of the aforementioned precarious financial position, this will be challenging for our members. There also needs to be consideration of the wider financial context (e.g. of local authorities)'.

**9.91** The Chartered Institute of Payroll Professionals similarly argued for caution over an extended period: 'the LPC should take a cautious approach ... for 2022 and the following few years due to the economic turbulence posed by coronavirus and Brexit'. The Recruitment and Employment Confederation told us that 'despite the labour market picking up and employers' confidence increasing, there are factors tending to caution: immigration changes; the impact of IR35 implementation; lingering effects of Covid, and the possibility of further variants causing lockdowns'.

**9.92** UKHospitality noted many businesses were facing uncertainty and in a vulnerable position, arguing now was not the time to make major changes to the structure of the NMW increase and for 2022 there should be 'no big jumps'.

**9.93** The National Farmers' Union Scotland urged 'extreme caution' in raising the NLW, asking us to 'consider only the most modest of increases to NLW in the 2022 rates', citing uncertainty and widespread losses. Only the National Hair and Beauty Federation (NHBF) asked for the rate to be frozen: 'an increase will be counter-productive if businesses (especially the kind of SME and micro businesses which predominate in our sector) cannot afford to pay it'.

## Extension of the 2024 NLW target

**9.94** Among employer representatives, there were widespread calls to move the 2024 target date backwards. The CBI did not make this request, but suggested focusing on the 2022 recommendations instead rather than making recommendations with 2024 in mind, which risked overshooting the sustainable NLW rate. They noted that at the moment the evidence was not there to recommend delaying the two-thirds target. In the future, however, it might become clear that the flightpath to 2024 was unachievable. The LPC's focus, they argued, should be on protecting the real value of the minimum wage in the coming year.

**9.95** The BCC stated that 'the target date for the NLW to reach two-thirds of median earnings should be extended by one year, to 2025', to give businesses time to recover and to avoid a spike in rates in 2023 and 2024. The FSB argued that the target should align with the forecast recovery, which was expected to take until late 2022. 'This will provide businesses with long-term predictability, giving employers sufficient time to recover from the pandemic, adapt to changes in the labour market and deal with the impact of other major policy changes'.

**9.96** The BRC argued 'there is a strong case to adopt an extended timescale to raise the NMW and use other policy initiatives to support productivity growth and in-work progression'. At oral evidence, however, they told us most members were happy to reassess next year if the 2022 increase was a cautious one. The ACS were in favour of extending the target although did not say by how much. The British Independent Retailers Association told us it was 'too soon to predict the recovery period for independent retail. This target needs to be reviewed and linked with the economic forecasts for the high street and ... consumer expenditure'.

**9.97** Whitbread asked us to review the 2024 target in light of 'the multi-year recovery that many businesses are facing'. The target would 'require significant multi-million-pound increases over the next three years that will put at risk our recovery and ongoing ability to invest in skills development and progression for our employees'. They predicted that to meet the target they would look to automation, reduced investment in training and development and fewer entry-level roles.

**9.98** Make UK told us 'there may be a case ... to either revise the target or push back the target'. Among their members, 'almost half (46 per cent) of companies [agreed] that the Government should reconsider the target considering the pandemic, with one in five (21 per cent) disagreeing'. This was despite the fact that 'over half (55 per cent) of respondents agreed that the ambition for the NLW rate to reach two-thirds of median earnings by 2024 would have little or no impact on their business'.

**9.99** The Food and Drink Federation recommended pushing the target back by one year, given the impact of the pandemic was 'not over by a long shot'. They calculated the delay 'would result in a NLW rise of at least 4 per cent year-on-year until meeting two-thirds of median earnings in 2025...this would continue to provide steady, above-inflation pay increases up until 2024'.



**9.100** UKHospitality argued that because of the volatility and uncertainty of the labour market there needed to be a pause to understand what is happening in the market, pushing back the target (to 2025) or reviewing it. It was still too early to tell how many businesses were lost or vulnerable to closure following the pandemic. ‘We support the principle of reaching two-thirds but, given the extraordinary economic turmoil of the last 18 months, believe that a modest adjustment to the time-frame is justified. The sector has lost over a year, and a similar delay in timing may be necessary to maintain jobs and business – and contribute towards economic growth.’

**9.101** The British Beer and Pub Association made a similar argument for the target to be pushed back from 2024 to enable a longer period for recovery. ‘The target for 2024 needs to be viewed against the background of the impact that the pandemic has had on UK businesses and their fragility going forward. Like many sectors, the pub and brewing sectors will be hoping that turnover returns to pre-pandemic levels as soon as possible, but will also be seeking to control costs in order to trade sustainably and aid their recovery.’

**9.102** The NHBF argued for an extension to 2026 ‘to give business breathing space to recover and adapt from the current crisis’.

## Support for the on-course rate or higher

**9.103** Unions tended to tell us that a return in 2022 to the on-course trajectory was the minimum acceptable step, while supporting the 2024 target and advocating for an NLW of £10 per hour or higher. The main arguments for this focused on the fact that the economy and labour market had outperformed the worst forecasts, and that rising inflation was hitting workers’ cost of living. The Trades Union Congress told us they understood the rationale for a modest increase in 2021 but, it was imperative now to get back on track to the 2024 target. They stated that ‘the lowest paid got almost no real pay rise [in 2021], while others did and that reinforces inequality. Low-paid workers are twice as likely to say they’ve cut spending since the pandemic began and other pressures are on their way including NI rises and UC cuts’. They argued that despite common agreement that headline figures were likely overstated, pay was nevertheless increasing, with ONS estimating regular underlying earnings growth at between 3.5 and 4.9 per cent. Failure to deliver ‘a decent uprating’, they told us, would mean more ground to make up in the final years. A ‘smoother glide path’ to the two-thirds target would be important for employers too.

**9.104** Unison argued there was space for the LPC to get back on track for the two-thirds, ‘given the expected general pattern of decline in unemployment across the minimum wage year of 2022-23 and the escalation of average earnings next year’. They told us it was essential to give a real-terms increase: ‘The Commission should recognise that over 3 per cent of any increase in the rate would be wiped out by price increases for the poorest paid workers in the UK and there is no justification for holding rates below the on-target level for a second consecutive year’. They urged the LPC to commit to the 2024 target, stating that the link to median earnings already protects against changes in economic conditions: ‘The inbuilt adjustment ... already represents a powerful insurance against changed economic circumstances without further intervention’.

**9.105** Usdaw stated the 2022 NLW needed to be at least the on-course rate. The LPC ‘should explore the possibility of an increase above the planned trajectory, to help address the very real need to fully recognise the contributions of all key workers’ who had disproportionately borne the pandemic’s

impacts. 'It is important that any growth in average earnings continue to outstrip inflation... Significant growth in the minimum wage is needed as a policy tool to aid economic recovery and reward the nation's key workers'. Unite argued for an increase to £10 immediately and to £15 an hour as soon as possible, to stimulate consumer spending and economic growth: 'the rate would positively impact the economy and would result in increased employment and productivity for low paid workers'.

**9.106** The GMB advocated the replacement of the NMW/NLW with a real living wage of at least £12 per hour. 'An equitable recovery should be led by higher wages, and we call on the Low Pay Commission to recommend a substantial increase to strengthen aggregate demand and reward the key workers who have borne some of the heaviest burdens during the pandemic'. The RMT stated their support for an NLW of £10 per hour for all workers over the age of 18. CAS thought the 2024 target 'should be met by April 2024 at the latest', and that the NLW should aim to match the voluntary living wage as soon as possible.

**9.107** Among employer groups, the Chartered Institute of Personnel and Development (CIPD) supported an on-course increase and the trajectory to 2024: 'Against the backdrop of strong demand for labour, the re-emergence of rising labour shortages and recent CIPD data, the CIPD has no objection to the LPC continuing on its current path to 2024'. The Association of Labour Providers told us 'the 2024 NLW target is a laudable ambition to end low pay' and supported continued progress towards it. The Local Government Association (LGA) agreed in principle with the two-thirds target, while noting it 'will inevitably put further pressure on local government funding'.

## Conclusions

**9.108** The economy has recovered faster than expected and most forecasters expect strong growth in 2022. Alongside this, the labour market has also recovered strongly and most forward indicators suggest this will continue into the near future at least.

**9.109** However, forecasters and others noted tailwinds in the form of supply chain, commodity price and labour shortage issues. Employer representatives noted these concerns and their view that the recovery is not yet complete. Many recommended increases in line with inflation or even pushing the target back. Employee representatives noted the strength of the labour market and recovery and the need to get back on track if the target is to be reached.

**9.110** The outlook for pay is more difficult to discern. Distortions caused by the pandemic skew the growth rates upwards, which has clear implications for the path, as its target is a percentage of average pay. If we plot the path using these data at face value, we see that the NLW requires a series of large increases over the next few years to reach the target. However, when we take account of the skewed earnings data this makes only a moderate – though important – difference to the path. This tells us that what's driving the high increases necessary is not skewed earnings data but the ambitious target for 2024.

**9.111** The next chapter explains how we took all of this into account in coming to our recommendations.



# Chapter 10

## Recommended rates and their implications

### Key findings

Our recommendations for the National Living Wage (NLW) and National Minimum Wage (NMW) rates to apply from April 2022 reflect significant improvements in the economy and labour market compared with twelve months ago.

We have recommended an increase in the NLW of 6.6 per cent, to £9.50. This puts us back on track to reach our target of two-thirds of median earnings by 2024. Current estimates of pay and forecasts give a 2024 target of £10.70. However, because the underlying pay growth is likely overstated, we think a 2024 rate closer to £10.60 is more likely. By next spring the pandemic-related distortions should have dropped out of the data and we expect to have a clearer idea of the path to 2024.

For 21-22 year olds, our recommendation of a 9.8 per cent increase reduces the gap to the NLW, in anticipation of that rate being extended to this age group by 2024.. For 18-20 and 16-17 year olds we recommend increases in line with average pay growth at 4.1 per cent. For apprentices, we recommend an increase of 11.9 per cent, to meet the commitment made last year of alignment with the 16-17 Year Old Rate.

We estimate that around 2.2 million workers will be directly affected by our recommendations. Recent changes to the Universal Credit taper rate and work allowance will mean many low-paid workers will keep more of the NMW and NLW increases.

**10.1** This chapter sets out our recommendations to the Government on the National Living Wage (NLW) and National Minimum Wage (NMW) rates to apply from April 2022. These recommendations were submitted at the end of October 2021 and build on the evidence set out in previous chapters. We also look at the implications of these recommended rates for household incomes.

**10.2** Our remit from the Government is to recommend the rate of the NLW consistent with reaching the target of two-thirds of median earnings by October 2024. The remit asks us to ‘advise on any emerging risks and – if the economic evidence warrants it – recommend that the Government reviews its target or timeframe’. The aim of this ‘emergency brake’ is to ensure the lowest-paid continue to see pay rises without significant risks to their employment prospects. For the other rates of the NMW, including the temporary 21-22 Year Old Rate, our remit is to recommend as high a rate as possible without damaging employment.

**10.3** Last year the extent of the economic shock and uncertainty about the future led us to take the difficult decision to recommend an NLW rate below our estimate of the on-course rate needed to meet the 2024 target in our remit. We also recommended modest increases in the other rates of the minimum wage.

## The National Living Wage

**10.4** The economic situation has improved substantially since last year, with GDP approaching its pre-crisis level earlier than predicted and relatively strong growth expected next year. The labour market has also recovered strongly, with payroll employment above its pre-crisis level and a record level of vacancies suggesting this will rise further.

**10.5** There is good reason to believe the closure of the Coronavirus Job Retention Scheme (CJRS) will not lead to a large spike in unemployment. Few employers are planning redundancies, including the small firms where the majority of furloughed workers remained at the end of the scheme. Measures of hours of work have already returned to pre-crisis levels, suggesting that furlough may have been covering other forms of absence, that workers have already found other jobs, or that they are already counted in unemployment or inactivity figures if they do not believe they have a job to return to.

**10.6** While there are many positives in the current data, inter-related issues affecting global supply chains, rising input costs and staff availability present some near-term risks. Many businesses, particularly smaller businesses, took on debt during the crisis, supported by Government loans.

**10.7** Due to the improved economic situation our aim was to recommend a rate that put us back on course to meet the 2024 target set out in our remit. Calculating this path is complex. Our starting point for calculating the NLW path is the median hourly pay figure from April of this year, which we derive from the Annual Survey of Hours and Earnings (ASHE). Last year we had significant issues with the ASHE data. The large number of furloughed workers distorted the data we rely on for plotting the path and understanding the situation for low-paid workers. This year those data issues are reduced, with fewer workers furloughed and more pay information for those who are furloughed.

**10.8** Overall, while we are better equipped to pinpoint where we are on the path to the 2024 target than last year, there are still some uncertainties in the pay data. While wage growth was faster than expected earlier in the year, the wage data that forms part of our model likely overstates underlying pay growth – with much-discussed issues with the current data resulting from the impact of the pandemic. This, combined with forecasts, creates a very front-loaded path, with a larger increase required in 2022 than in 2023 or 2024. We do not believe this is the right approach in the current economic circumstances.

**10.9** Taking all of this into account we recommend an increase in the NLW of 6.6 per cent to £9.50. We believe this will put us back on track to reach our estimate of the target of two-thirds of median earnings in 2024, with a smoother path to that target.

**10.10** This increase is greater than last year's, reflecting the significant improvement in economic conditions. It is also greater than the anticipated rise in inflation, meaning living standards should be protected and those on the NLW should see their pay rise faster than the average.

## National Minimum Wage(s)

**10.11** Last year the picture for young workers was bleak. They overwhelmingly worked in shut-down sectors, were more likely to be furloughed and lost pay as a result. As things stand currently, the situation is very different.

**10.12** Younger workers have been the fastest to move off the CJRS despite being the most likely furloughed workers last summer. Since 1 July 2020, when 1.14m under-25s were on the CJRS, numbers have fallen around 90 per cent, with 120,000 left on the scheme at the end of August. At the same time, employment rates and RTI payrolled employment have recovered quickly and are now approaching their pre-pandemic levels, suggesting young workers have either gone back to their old jobs or found new ones after leaving the CJRS.

**10.13** This year was the first that 23 and 24 year olds became eligible for the NLW. This appears to have gone smoothly so far. They are increasingly paid the NLW without a spike in underpayment and their employment has not been negatively affected.

**10.14** As we previously set out, the intention for 21 and 22 year olds is to move them onto the NLW by 2024 and the majority of our stakeholders continue to tell us that this is the right move. We have seen that use of both the NMW and NLW has fallen for this age group, as a greater share of them are now paid above the NLW. Their employment rates have also improved, particularly rapidly over the summer, so that they are just below where they were at the pandemic's outset. To avoid a large step change in the year they become eligible, we judge it sensible to reduce the gap between the 21-22 Year Old Rate and the NLW next year (see Paragraph 6.48 and Figure 6.16 for further detail). For this group we recommend an increase of 9.8 per cent to £9.18.

**10.15** However, for those aged 20 and below there has been an increase in the use of the minimum wage rates by their employers. This is usually a sign of pressure. And while their employment rates are recovering, they fell by more and have more ground to make up than the older age groups. For both 16-17 year olds and 18-20 year olds we recommend an increase of 4.1 per cent, taking them to £4.81 and £6.83 respectively. These increases balance our aim to stay in line with underlying wage growth and ahead of inflation while recognising the higher risk of unemployment for this group.

**10.16** Last year we committed to aligning the Apprentice Rate with the 16-17 Year Old Rate over two years and we have no significant evidence to suggest a change in this approach. For this group we recommend an increase of 11.9 per cent, aligning it to the 16-17 Year Old Rate of £4.81.

## Accommodation Offset

**10.17** For the last few years we have made significant increases in the Accommodation Offset to meet our aim of aligning it with the 21-22 Year Old Rate. As this rate is being phased out, this year we have judged it best to increase the Accommodation Offset rate in line with underlying wage growth – by 4.1 per cent to £8.70. Next year we intend to review the operation of the offset.

### Evidence on the Accommodation Offset

The evidence we receive on the accommodation offset typically focuses on the agriculture and horticulture sector, although these are far from the only sectors where worker accommodation is provided. The National Farmers Union (NFU) stated their support for increases in the offset 'in step with increases to NMW and NLW. Given widespread provision of accommodation in the sector, this will help with maintenance and improvement costs, as well as in encouraging more employers to provide accommodation'. They noted, however, that the offset 'will rarely equate to the cost workers would incur if they had to seek accommodation via the housing market in rural locations, nor typically cover the employer's costs in providing and maintaining accommodation'.

NFU Scotland's evidence focused on the separate accommodation provisions which exist in Scotland, under the Scottish Agricultural Wages Board. There, the maximum offset for provision of a house is limited to £1 per week. NFUS argued this rate was too low, particularly given improved housing standards, leaving farmers unable to invest in housing for worker accommodation, instead using them as a separate income stream (i.e., from tourism). They argued for a single UK-wide offset rate to simplify regulations, support employers and improve availability and standards for workers.

The Association of Labour Providers (ALP) requested the LPC review the offset, asking us to take 'a deeper dive' into the policy. Their core areas of concern are that the offset rules are complex; that the level of the offset only allows for the lowest standard of accommodation; and that the 'bluntness' of the policy does not allow any distinction between accommodation which is optional and that which is a condition of employment.

The ALP noted that rules on the offset are ambiguous and HMRC's approach to enforcement is not straightforward or transparent.

We heard about the importance of worker accommodation for hotels, particularly in rural areas. We spoke to hotels which had invested in accommodation and were frustrated that the offset limited the charge to workers. UKHospitality told us that housing costs were a major challenge in some parts of the country in attracting and retaining staff; an increase in the offset could help the sector's issues with labour supply, by making it more feasible to provide worker accommodation.

Unions opposed the offset. Unite told us workers were abused by employers who controlled accommodation and transportation. They gave an example of seasonal workers housed in low quality caravans with high rent costs. When Unite intervened the 'employer transferred the UK nationals to newer caravans off-site with better facilities but EU nationals who faced the same issue were ignored'.

Focus on Labour Exploitation (FLEX) presented evidence that migrant agricultural workers in Scotland were routinely housed in poor-quality accommodation. Workers reported beds being too short, mould and broken windows. The cost of accommodation was seen by many workers as unfair and excessive. They gave an example of six workers in a caravan with three bedrooms and a small fridge, where the total rent taken by the employer amounted to £1,700. Rent was deducted from workers' pay, but there were additional deductions made by the farm without workers' consent, such as penalties for the caravans being dirty, as well as additional unexplained deductions.

As in previous years, RMT highlighted the unfairness faced by seafarers for whom accommodation charges are deducted from their pay. In some cases, shipping companies or agencies who do not own the vessel charge seafarers for poor accommodation. RMT requested we seek evidence on the use of the offset in the maritime sector and asked for the offset to be 'scrapped'.

## Implications of the recommended rates

**10.18** In this section we look at how the rates we have proposed may affect the bite of each minimum wage and the number of workers who will benefit from the increases. We also examine how the changes will affect the post-tax and benefit income for workers. First we consider the path to 2024.

### The path to 2024

**10.19** The 2022 recommended rate of the NLW – £9.50 – is slightly below the on-course estimate we set out in Chapter 9, of £9.58. That chapter also set out our concern that pay data was artificially skewing measured pay upwards and the target with it. It also showed that a path to 2024 based on £9.58 would be front loaded, with larger increases required in 2022 than in 2023 or 2024.

**10.20** The starting point of £9.50 in 2022 alters the path to 2024. It allows a smoother path with more even increases each year. Table 10.1 shows our estimates of the path to 2024 though we reiterate that this path remains highly uncertain. We show the path from £9.50 to the 2024 target based on our central estimate and on the Bank of England's underlying pay growth assumption. For the sake of comparison, we also include the central estimate based on £9.58.

**Table 10.1: The NLW path including our 2022 recommendation**

Date	LPC central estimate in Chapter 9	LPC central estimate with 2022 NLW recommendation	The path using the Bank of England's underlying pay growth
ASHE year	2021	2021	2021
2019	8.21	8.21	8.21
2020	8.72	8.72	8.72
2021	8.91	8.91	8.91
2022	9.58	9.50	9.50
2023	10.18	10.14	10.09
2024	10.70	10.70	10.61

Source: LPC estimates using ASHE 2010 methodology, April 2021, loss of pay furloughed weights. Forecasts are based on growth in AWE total pay (KAB9) from HM Treasury (2021a and 2021b) and the Bank of England (2021c).

Notes:

- The LPC central estimate is as set out in Chapter 9. The methodology for the projection of the path is given in the notes to Table 9.4.
- The LPC central estimate with 2022 NLW recommendation sets the 2022 NLW at £9.50. The path is then recalibrated from there using the median of wage forecasts.
- The final column uses the Bank of England's underlying pay growth for April 2021 to April 2022 but imposes the NLW to be £9.50 in 2022. It has a weaker path for median hourly pay than our central estimate.

**10.21** The central estimate puts the final 2024 rate at £10.70, however we think that the path based on the Bank of England (2021d) estimate is more likely. In the spring of next year, we will have more reliable information on pay growth over 2021 and early 2022 and we anticipate the measures of headline and underlying pay to be more closely aligned, giving us a better sense of the likely path going forward.



## Estimated bite of the recommended rates

**10.22** The ratio between the minimum wage and the median wage – the ‘bite’ – is a widely used measure of the toughness of the wage floor. Therefore, to examine how our recommended minimum wages would change the bite we need to forecast the level of wage growth in the median wage. In this section we have done this in two ways. The first approach uses our central estimate of pay growth (4.9 percent between April and September 2021). This uses smoothed outturn Average Weekly Earnings data to estimate pay growth between April and September 2021 and the median of a panel of wage forecasts collected by HM Treasury (and the Bank of England forecast) to estimate pay growth between September 2021 and April 2022. As discussed in Chapter 8, this approach is affected by composition and base effects which bias headline pay growth upwards. The second approach is to assume pay grows by 4 percent between April 2021 and April 2022 based on Bank of England estimated underlying pay growth (stripping out composition and base effects). Both approaches assume that the median of each age group grows in line with the overall median. In the last few years, median pay has tended to grow faster for younger age groups, so this may underestimate the median for workers under 23.

**10.23** Table 10.2 shows how the bite of each of our recommended minimum wages would change next year under each wage growth assumption. The bite of the NLW increases in both scenarios from 61.8 percent in April 2021 to 62.8-63.3 percent in 2022. Similarly, the bite of the Apprentice Rate and 21-22 Rate increases in both scenarios, as these rates are due to grow faster than median pay in either scenario. The bite for the 21-22 group could reach 88 percent. The 16-17 Year Old Rate and 18-20 Year Old Rate will increase by 4.1 percent in 2022. The bite for these groups would grow if pay grew by 4.0 percent (Bank of England underlying pay growth) but fall if pay grew by 4.9 percent (LPC central estimate).

**Table 10.2: Bite of the NMW/NLW and forecasts after uprating, UK, 2021-2022**

Minimum wage band	April 2021			April 2022	LPC central estimate using AWE and forecasts (4.9 per cent)		Bank of England underlying pay growth (4.0 per cent)	
	NMW/NLW	Median wage	Bite (per cent)		Median wage	Bite (per cent)	Median wage	Bite (per cent)
NLW	£8.91	£14.42	61.8	£9.50	£15.13	62.8	£15.00	63.3
21-22	£8.36	£10.00	83.6	£9.18	£10.49	87.5	£10.40	88.3
18-20	£6.56	£9.00	72.9	£6.83	£9.44	72.3	£9.36	73.0
16-17	£4.62	£6.73	68.6	£4.81	£7.06	68.1	£7.00	68.7
Apprentice	£4.30	£7.47	57.6	£4.81	£7.84	61.4	£7.77	61.9

Source: LPC estimates using ASHE 2010 methodology, standard weights, central pay estimate, UK, April 2021. Forecasts are based on AWE total pay from ONS (2021) and HM Treasury (2021) and Bank of England (2021) average weekly earnings predictions. Bank of England underlying pay growth taken from minutes of September 2021 meeting.

## Number of jobs directly affected by the recommended rate increases

**10.24** Another way that we can forecast the size of the impact of our recommended rates is by looking at the number of jobs that will be directly affected by the increases. This is the number of jobs whose pay would have to grow faster than it otherwise would to stay above the pay floor. Again, the level depends on what assumptions are made about wage growth in the absence of the increases and we use the same two assumptions for pay growth as we did in the previous section – the LPC central estimate and the Bank of England’s estimates of underlying pay growth.

**10.25** For this projection, we make a stronger assumption than we need for the bite projections. For the bite projections we only forecast median pay. For these projections we assume that, without a minimum wage increase, pay for everyone would grow evenly at either 4.9 per cent or 4.0 per cent. It is likely that pay would grow at different rates across the distribution, even if the minimum wage did not change. Our scenario should therefore be seen as an illustrative scenario, rather than a precise projection.

**10.26** The estimates in this section are not a prediction for the numbers of workers who will be paid the various rates next year. We have evidence that employers often choose to increase pay for some jobs more than directly required to comply with a higher wage floor. They choose to do this for a variety of reasons: the main ones being to maintain differentials between different job grades, to recognise skills and to help recruitment. These ‘spillovers’ from the minimum wage mean that workers higher up the pay distribution benefit from increases in the floor, and that increases in the minimum wage do not cause all workers between the previous wage floor and the incoming one to be paid exactly the new minimum wage.

**10.27** Table 10.3 shows the number of jobs that are likely to see a pay increase due to the higher wage floor. Using the LPC central estimate of pay growth (4.9 per cent), we expect that over 2.2 million jobs will see a pay increase next year due to our recommendations. If we instead use the Bank of England estimate of underlying pay growth (4.1 per cent), we anticipate pay increases for over 2.5 million jobs directly due to the higher wage floors.

**Table 10.3: Coverage of the NMW/NLW and numbers directly affected by uprating, UK, 2021-2022**

Minimum wage band	April 2021 Coverage (central estimate)		Numbers directly affected in April 2022 assuming			
	(thousands)	(per cent)	LPC central estimate using AWE and forecasts (4.9 per cent)		Bank of England underlying pay growth (4.0 per cent)	
			(thousands)	(per cent)	(thousands)	(per cent)
NLW	1,417	5.4	2,024	7.7	2,241	8.5
21-22	94	11.3	141	17.0	152	18.3
18-20	132	15.5	54	6.3	132	15.5
16-17	29	14.6	27	13.7	29	14.6
Apprentice	19	13.9	30	21.5	31	22.1
<b>Total</b>	<b>1,691</b>	<b>5.9</b>	<b>2,277</b>	<b>8.0</b>	<b>2,585</b>	<b>9.1</b>

Source: LPC estimates using ASHE 2010 methodology, low-pay weights, central pay estimate, UK, 2021. Forecasts are based on AWE total pay from ONS (2021) and HM Treasury (2021) and Bank of England (2021) average weekly earnings predictions. Bank of England underlying pay growth taken from minutes of September 2021 meeting.

Notes:

- a. ASHE undercounts apprentices, so the number benefiting from the increase is likely to be larger than the estimate in the table.

## Impact of the rates on household incomes

**10.28** What matters most for the living standards of minimum wage workers is the net income received by their household. It is therefore important to understand what households with a minimum wage worker will receive once we account for tax and benefits. Net income varies according to household circumstances. Universal Credit (UC) supplements the earnings of low-income households, with the amount of benefits received decreasing as earnings increase according to the 'taper rate', which reduces the return to higher earnings. At the 2021 Budget, the Chancellor announced that the taper rate would fall from 63 per cent to 55 per cent by December 2021, which will enable households to receive higher benefit payments while they are in work. For every £1 a UC recipient earns above the work allowance, the amount they receive under UC will be reduced by 55 pence. The work allowance will also increase from April 2022.

**10.29** Income Tax and National Insurance contributions (NICs) also reduce the take-home element of increases in earnings. The personal tax allowance is £12,570 in the 2021-22 financial year and will remain at this level for five years. The National Insurance Primary Threshold, at which employees start paying NICs, is £184 per week in 2021/22.

**10.30** The following estimates, provided by HM Treasury, illustrate the change in household incomes between October 2021, immediately following the spending review, and 2022/23, after the increase in the NLW and NMW rates and other changes to the tax and benefit system. The intention is to show how net income will change for households with one earner on the NLW or NMW, once the new rates come into effect. For these purposes, we assume that households receive no housing costs support, no council tax support and are not subject to the marriage tax allowance.

**10.31** Table 10.4 shows that before any adjustment for tax and benefits, an NLW worker working 35 hours per week will see an increase of £20.65 in their weekly pay when the NLW is increased from £8.91 to £9.50 in April 2022. This is equivalent to an increase of £1,077 in their annual salary.

**10.32** After adjusting for tax and benefits a single NLW worker over 25 will keep 63 per cent of the increase in the NLW. Their weekly household income will rise by £12.98, while their equivalent hourly income (calculated as their net income after tax and benefits divided by the number of hours worked) will rise by 37 pence from £8.07 to £8.44. Their after-tax pay will grow by 4.6 per cent.

**10.33** Meanwhile, a household consisting of a cohabiting couple with two children, where both parents are aged over 25 and one is working 35 hours per week on the NLW, would see their net weekly income rise by £34.81 in cash terms in April compared to October. This is equivalent to an increase in their hourly income (net income divided by hours worked) of £1, from £12.89 to £13.89 per hour. Their after-tax pay will grow by 7.7 per cent, which is higher than the 6.6 per cent increase in the NLW. This is due to the change in the UC taper rate announced at the Budget and the increased work allowance from April 2022, which will both enable families with at least one worker to be able to receive higher UC payments.

**Table 10.4: Change in household incomes for NLW workers aged 25+, 2021/22-2022/23**

25+ worker, 35 hour week		2021/22	2022/23	Increase £	Increase %
<b>Pre-tax hourly rate</b>	£	8.91	9.50	0.59	6.6
Annual Pay	£	16,261	17,338	1,077	6.6
Tax Threshold	£	12,570	12,570	0.0	0.0
Taxable Pay Annual	£	3,690.75	4,767.50	1,076.75	29.2
Weekly Pay Before tax/NICs/UC	£	311.85	332.50	20.65	6.6
<b>Single, no children</b>					
Weekly household income after tax/NIC	£	282.35	295.33	12.98	4.6
Post-tax/benefit change	£	-29.50	-37.17		
Post-tax/benefit change	%	-9.46	-11.18		
<b>After-tax hourly rate</b>	£	8.07	8.44	0.37	4.6
<b>Couple, one working, 2 children</b>					
Weekly household income after tax/NIC	£	451.21	486.02	34.81	7.7
Post-tax/benefit change	£	139.36	153.52		
Post-tax/benefit change	%	44.69	46.17		
<b>Average hourly rate (at 35h) after tax and UC</b>	£	12.89	13.89	0.99	7.7

Source: LPC estimates using HM Treasury data, November 2021.

Notes:

- Estimates assume that the household is in receipt of Universal Credit with no housing costs.
- Estimates exclude Council Tax Support.
- "Average hourly rate" refers to the hourly rate when working 35 hours. This rate decreases as hours worked increases.
- The baseline 21/22 scenario refers to the position immediately after the spending review.
- Estimates assume the couples in the examples are of the same age. Families with 2 children are assumed to have one child born prior to 2017. Child Benefit is included in the calculations for families with children.

**10.34** In April 2021, workers aged 23-24 became eligible for the NLW for the first time, marking a substantial increase in their pay floor. However, we continue to consider them separately when modelling the impact of tax and benefits, as workers under 25 receive a lower standard allowance on UC. Table 10.5 shows that as for older workers, a minimum wage worker in this age group working 35 hours per week will see an increase of £20.65 in their weekly pay, a 6.6 per cent increase.

**10.35** After tax and benefits, a single worker aged 23-24 will see an increase of £12.98 in their net weekly pay, or 4.6 per cent.

**10.36** A cohabiting couple with two children, where one parent is working 35 hours per week on the NLW, will see an increase in their net weekly income of £34.05, or 8 per cent, giving them an effective hourly rate of £13.17. Their annual net income will increase by £1,775, boosted by both the increase in the NLW and the changes in the UC taper rate and work allowance.

**Table 10.5: Change in household incomes for NLW workers aged 23-24, 2021/22-2022/23**

23-24 year old worker, 35 hour week		2021/22	2022/23	Increase £	Increase %
<b>Pre-tax hourly rate</b>	£	8.91	9.50	0.59	6.6
Annual Pay	£	16,261	17,338	1,077	6.6
Tax Threshold	£	12,570	12,570	0.0	0.0
Taxable Pay Annual	£	3,690.75	4,767.50	1,076.75	29.2
Weekly Pay Before tax/NICs/UC	£	311.85	332.50	20.65	6.6
<b>Single, no children</b>					
Weekly household income after tax/NIC	£	282.35	295.33	12.98	4.6
Post-tax/benefit change	£	-29.50	-37.17		
Post-tax/benefit change	%	-9.46	-11.18		
<b>After-tax hourly rate</b>	£	8.07	8.44	0.37	4.6
<b>Couple, one working, 2 children</b>					
Weekly household income after tax/NIC	£	426.82	460.88	34.05	8.0
Post-tax/benefit change	£	114.97	128.38		
Post-tax/benefit change	%	36.87	38.61		
<b>Average hourly rate (at 35h) after tax and UC</b>	£	12.19	13.17	0.97	8.0

Source: LPC estimates using HM Treasury data, November 2021.

Notes:

- Estimates assume that the household is in receipt of Universal Credit with no housing costs.
- Estimates exclude Council Tax Support.
- "Average hourly rate" refers to the hourly rate when working 35h. This rate decreases as hours worked increases.
- The baseline 21/22 scenario refers to the position immediately after the spending review.
- Estimates assume the couples in the examples are of the same age. Families with 2 children are assumed to have one child born prior to 2017. Child Benefit is included in the calculations for families with children.

**10.37** Table 10.6 shows the same analysis for workers aged 21-22 who are on the 21-22 Year Old Rate of the NMW. For this rate, we have recommended a large increase of 9.8 per cent, to reduce the size of the jump in the pay floor when this group become eligible for the NLW. As a result, the gross weekly pay for a full-time worker aged 21-22 has increased by £28.70, or £1,497 per year.

**10.38** After tax and benefits, workers in this age group will still experience a substantial increase in their net income. A single full-time worker aged 21-22 who is paid the NMW will receive an extra £18.59 per week, an increase of 6.9 per cent. Their effectively hourly rate will be £8.22.

**10.39** A cohabiting couple aged 21-22 with two children, where one parent is working 35 hours per week on the NMW, will see an increase in their net weekly income of £35.53, or 8.4 per cent, giving them an effective hourly rate of £13.07. Their annual net household income would increase by £1,850, a substantial boost, due to the combined effects of the increase in the NMW and the reduced taper rate of UC.

**Table 10.6: Change in household incomes for NMW workers aged 21-22, 2021/22-2022/23**

21-22 year old worker, 35 hour week		2021/22	2022/23	Increase £	Increase %
<b>Pre-tax hourly rate</b>	£	8.36	9.18	0.82	9.8
Annual Pay	£	15,257	16,754	1,497	9.8
Tax Threshold	£	12,570	12,570	0.0	0.0
Taxable Pay Annual	£	2,687.00	4,183.50	1,496.50	55.7
Weekly Pay Before tax/NICs/UC	£	292.60	321.30	28.70	9.8
<b>Single, no children</b>					
Weekly household income after tax/NIC/UC	£	269.26	287.86	18.59	6.9
Post-tax/benefit change	£	-23.34	-33.44		
Post-tax/benefit change	%	-7.98	-10.41		
<b>After-tax hourly rate</b>	£	7.69	8.22	0.53	6.9
<b>Couple, one working, 2 children</b>					
Weekly household income after tax/NICs/UC	£	421.98	457.51	35.53	8.4
Post-tax/benefit change	£	129.38	136.21		
Post-tax/benefit change	%	44.22	42.39		
<b>Average hourly rate (at 35h) after tax and UC</b>	£	12.06	13.07	1.02	8.4

Source: LPC estimates using HM Treasury data, November 2021.

Notes:

- Estimates assume that the household is in receipt of Universal Credit with no housing costs.
- Estimates exclude Council Tax Support.
- "Average hourly rate" refers to the hourly rate when working 35h. This rate decreases as hours worked increases.
- The baseline 21/22 scenario refers to the position immediately after the spending review.
- Estimates assume the couples in the examples are of the same age. Families with 2 children are assumed to have one child born prior to 2017. Child Benefit is included in the calculations for families with children.

**10.40** These are illustrative examples showing the effects of our recommended increase for full-time workers. It should be noted that many minimum wage workers work part-time (see Figure 3.10 on this point). Overall, the evidence suggests that many households with minimum wage workers will significantly benefit from the increases to the NLW and NMW rates. Increases to the rates over time have meant that the annual pay of a full-time minimum wage worker is now comfortably above the income tax threshold, meaning that increases in earnings are more likely to be subject to taxation. The taper rate of UC also affects the share of the increase in the rate that minimum wage workers and their households can keep for themselves. The change in the taper rate announced at the Budget is welcome and will ensure that low-income households with at least one worker will be able to keep more of their earnings. It reduces the effective taxation on additional hours of work for these households.

## Conclusion

**10.41** This year's improvement in both the quality of the evidence and economic conditions enabled us to recommend an increase that got us back on track to the NLW's 2024 target. The recommendation for 21-22 year olds closes the gap with the NLW, avoiding a very large increase in the wage floor when that age group becomes eligible for the NLW by 2024 at the latest. For those aged 20 and below the increase in use of the rates and generally weaker labour market performance led us to recommend lower increases in line with forecast wage growth. Lastly, we saw nothing in the data that gave us cause to rethink the alignment of the Apprentice Rate with the 16-17 Year Old Rate proposed a year ago. Changes to Universal Credit mean that its recipients will keep more of any increase in the minimum wage they receive than in previous years.

# Appendix 1

## List of consultation respondents

**A1.1** We are grateful to all those people and organisations that contributed to the preparation of this report. We would like to thank, in particular those who provided evidence, either written or oral, and those who organised or participated in Low Pay Commission meetings. All such individuals and organisations are listed below, unless they expressed a wish to remain unacknowledged.

Able Radio

ACS (the Association of Convenience Stores)

Anti Trafficking and Labour Exploitation Unit

Association of Directors of Adult Social Services

Association of Directors of Social Services (ADSS) Cymru

Association of Labour Providers

Birkbeck, University of London

British Au Pair Agencies Association

British Beer & Pub Association

British Chambers of Commerce

British Independent Retailers Association

British Retail Consortium

Care England

Chartered Institute of Payroll Professionals

Chartered Institute of Personnel and Development (CIPD)

Citizens Advice

Citizens Advice Scotland

Community Leisure UK

Disability Rights UK

Dr Agnes Turnpenny, Oxford Brookes University

Durham Law School, Durham University

Early Years Alliance

Employment Lawyers Association



Equity  
Federation of Small Businesses  
Federation of Small Businesses Northern Ireland  
Federation of Small Businesses Scotland  
Federation of Small Businesses Wales  
Federation of Wholesale Distributors  
Focus on Labour Exploitation (FLEX)  
GMB Union  
Greater Manchester Chamber of Commerce  
Greggs  
HM Government  
Homecare Association (formerly United Kingdom Homecare Association)  
Hope for Justice  
Hospitality Ulster  
Incomes Data Research  
Institute for Fiscal Studies  
Institute of Directors  
Institute of Employment Rights  
Institute of Workplace and Facilities Management  
Intergenerational Foundation  
John Lewis Partnership  
Jonathan Rainey  
Joseph Rowntree Foundation  
Kalayaan  
Kanlungan Filipino Consortium  
Labour Exploitation Advisory Group (LEAG)  
Labour Research Department  
Latin American Women's Rights Service  
Lincolnshire Co-op  
Local Government Association  
London Chamber of Commerce and Industry  
Low Incomes Tax Reform Group  
McDonald's Restaurants Ltd

Make UK  
Manufacturing NI  
Michael Nisbet  
Nanny Solidarity Network  
National Care Association  
National Care Forum  
National Day Nurseries Association  
National Farmers' Union  
National Federation of Retail Newsagents  
National Hair & Beauty Federation  
National Institute of Economic and Social Research  
National Union of Rail, Maritime and Transport Workers  
NFU Cymru  
NFU Scotland  
Nicholas Shaw  
Nicola Alison  
Northern Ireland Hotels Federation  
Organise  
Otter Controls Ltd  
Professor Shereen Hussein, London School of Hygiene and Tropical Medicine  
PSSRU at the University of Kent  
RBH Hotels UK Ltd  
Recruitment & Employment Confederation  
Resolution Foundation  
Royal Mencap Society  
Scottish Grocers' Federation  
Scottish Women's Convention  
Sheffield Chamber of Commerce  
Sheffield Needs A Pay Rise  
Skills for Care  
Stella Ibeh  
Surrey Care Association Ltd  
The Equality Trust

The Food and Drink Federation  
The Prince's Trust  
The Trees Swindon Old Town Ltd  
The Voice of Domestic Workers  
Thirteen Housing Group  
Trades Union Congress  
UK Fashion & Textile Association  
UKHospitality  
Union of Shop, Distributive and Allied Workers  
UNISON  
Unite the Union  
Unite the Union Wales  
United Response  
Voluntary Organisations Disability Group  
Welsh Government  
Whitbread PLC  
Women's Budget Group  
XpertHR  
Youth Employment UK C.I.C.

# Appendix 2

## Research evidence

**A2.1** As well as our in-house analysis and evidence gathered from our visits and stakeholder consultations, our commissioned research programme has played an essential role in establishing an evidence base that informs Commissioners in our deliberations about minimum wage rates. Commissioned and independent research findings improve our understanding of the impact of minimum wage rates in the UK and the context in which we make our recommendations.

**A2.2** Alongside this report, we are publishing six commissioned research projects. The first, which we commissioned last year, is a comprehensive evaluation of the first phase of the National Living Wage (NLW) from 2016-20, when we were tasked with increasing the NLW to 60 per cent of median earnings. It looks at the impact on earnings, employment, hours and household incomes. Unfortunately, measures to control the pandemic have affected the usual data sources – the Labour Force Survey (LFS) and the Annual Survey of Hours and Earnings (ASHE) – upon which much of the econometric analysis depends. That has particularly affected the ability to investigate the impact of the minimum wage increases in 2020 – the year when the objective of reaching 60 per cent was met. Thus, this comprehensive project focuses on the increases from 2016-19, prior to the onset of the pandemic.

**A2.3** Those data limitations also altered our approach to investigate the impacts of the latest minimum wage increases. We sought innovative ways to try and disentangle the effects of the pandemic from the effects of the minimum wage. To that end, we commissioned two research projects that adopted novel approaches and a third, more qualitative study. The first of these used vacancy data for the whole economy and separately for apprentices. The second used a dataset on social care firms and workers in England to look at the impacts from the pandemic and the UK exiting the EU. The third continued a series of such projects that give insights into how firms have reacted to minimum wage changes.

**A2.4** The other two projects in part address aspects of our remit concerning workers with protected characteristics and spatial considerations of the levelling up agenda. The first of these takes a novel approach of using life satisfaction measures to look at the total reward package for the job and not just wages. The second of these combines two very different methods. The first part uses official data sources to look at the impact of minimum wages by disability, ethnicity and gender. The second part uses company payroll data to look at the impacts of adopting the UK Living Wage, which is set at a higher rate than the NLW, in parts of the UK where it is a contractual obligation but not elsewhere.

**A2.5** This year we held three research workshops. The first two, in April and June, were focused on discussing the data sources and methodology to be used for newly commissioned research. The third was our annual research symposium which focused on the findings from our commissioned research. In addition, these workshops also included independent research and an overview from the Office for National Statistics (ONS) on data source developments during the pandemic. The independent research covered low pay transitions, the ethnic earnings gap, pandemic-related labour market changes in local areas and use of vacancy data to understand recent labour market developments. We provide an overview of the proceedings of the research symposium after discussing the commissioned projects.

## Impact of the NLW on earnings, employment, hours and incomes

**A2.6** We start by giving an overview of the comprehensive evaluation of the NLW up to March 2020, when the onset of the pandemic makes it difficult to disentangle minimum wage effects from those of the pandemic. It assessed the impact of the NLW on earnings, employment, hours and incomes. As well as investigating the impact on those aged 25 and over (the age group covered by the NLW), it also looked at the impacts on some sub-groups and any spillover effects on those aged under 25. This research looked at the period when the NLW target was to reach 60 per cent of median earnings by 2020.

**A2.7** Cribb, et al. (2021) adopt new empirical methods to estimate the effects of the introduction and subsequent upratings of the NLW from 2016-19. They study the impact of the NLW on individual labour market outcomes by adapting the bunching approach developed by one of the researchers when assessing minimum wage effects in Hungary (Harasztosi and Lindner, 2019) and the US (Cengiz, et al., 2019). They use ASHE and the Annual Population Survey (APS) to estimate the effects of the NLW on the number of jobs within wage bands, thus capturing employment and wage effects in a single, internally consistent framework. To identify these impacts, they exploit differences in wage levels across the UK. They compare employment changes across the wage distribution in low-wage areas to employment changes of similar workers living in high-wage areas, who are less exposed to minimum wage increases.

**A2.8** In assessing the impacts of the NLW on the distribution of incomes, they use the Family Resources Survey (FRS) and apply another innovative approach. They exploit the detailed estimates of the impacts on wages and employment from the first part of their analysis, which accounts for any employment effects and spillover effects on those with higher wages. In simulating those effects within the household survey data, they take account of interactions between wages, taxes paid, and benefits and tax credits received by combining these data with the IFS tax and benefit microsimulation model, TAXBEN. This therefore provides an integrated, internally consistent analysis of impacts on household incomes alongside impacts on labour market outcomes.

**A2.9** They found that the NLW and its upratings had substantial effects on wages towards the bottom of the distribution. Averaged across the four increases in the minimum wage from 2016-19, they estimate that each increase reduced the number of people, aged 25 and over, paid below the new NLW in lower-wage areas by around 5.4 per cent compared to the highest-wage areas. They also find statistically significant increases in the number of jobs not only at the new NLW but also up to £1.50 an hour above it (approximately up to the 20<sup>th</sup> percentile) indicating spillover effects on the wages of some

workers a little above the minimum. Those spillover effects are a little bit lower than those estimated previously in the UK. Butcher, Dickens and Manning (2012) found significant spillovers up to the 25th percentile, while Avram and Harkness (2019a) found them up to the 30th percentile.

**A2.10** Consistent with much of the previous literature on the UK, they found that impacts from the NLW and its subsequent upratings on employment were not statistically significant. Their central estimate of the average effect of the four increases in the minimum wage from 2016-19 is that each increase reduced employment by 0.1 per cent of the pre-policy workforce in lower-wage regions relative to higher-wage regions with a 95 per cent confidence interval that ranges from -0.4 per cent to +0.2 per cent. They conclude that large effects on employment can be ruled out. That lack of statistically significant effects was consistent across various specifications. The conclusions did not change when considering each of the four minimum wage increases in isolation or as a whole.

**A2.11** They estimate, in their base model, that the own-wage elasticity of employment is -0.17 but with a confidence interval from -1.25 to +0.47. Although not significant, the own-wage elasticity is in line with other studies. In his review of the international literature on minimum wage effects, Dube (2019) estimated the median of own-wage elasticities from previous research was -0.17.

**A2.12** They estimate the effects on the number of full-time and part-time jobs separately to investigate evidence of hours adjustments. Neither was statistically significant. They note that the effects of the NLW on wages came mostly from its effects on female part-time workers, who accounted for nearly half of the reduction in jobs paid below the new NLW and half of the corresponding increase in jobs paid above it.

**A2.13** In their analyses looking at differences by gender, they find evidence of stronger negative effects on employment for women. In their baseline specification, they estimate that female employment in low-wage areas fell by 0.44 per cent more than in high-wage areas. This marginally crosses the threshold for statistical significance at the 5 per cent level. In alternative specifications the central estimate remains similar but sometimes falls just short of statistical significance at the 5 per cent level. This highlights the liabilities of fixating on arbitrary (and binary) standards of statistical significance, but the takeaway is that there is somewhat stronger evidence of some negative employment effects for women than for the population as a whole. They also looked at different age groups among those aged 25 and over. The estimated employment effects were not statistically significant for any of the age groups considered: 25-34, 35-54 and 55-64.

**A2.14** They also investigated the impact on those aged under 25 who were not legally entitled to the NLW. They find substantial and significantly positive spillover effects on wages. This is consistent with previous research and stakeholder evidence that has found that many firms pay adult rates from age 18 or 21. They estimate a positive but not statistically significant effect on employment. They conclude that the wages for those aged under 25 have increased substantially with no evidence of any negative impact on employment.

**A2.15** Cribb, et al. (2021) then take the estimates of the effects on wages and employment to calculate the impacts on household incomes taking account of household composition, taxes and benefits. They are not able to take account of any non-wage or non-employment responses that firms might make to prices and profits, which may affect real incomes.

**A2.16** The main results on household incomes look at all households containing a 25-64 year old. These will include some workless households which cannot benefit directly from increases in minimum wages (although increases in the NLW may change incentives to get into work). Thus, the effects will be more muted than for just working households. They estimate that, on average, each NLW increase raised net household incomes across the population by 0.13 per cent, after a third of the increase in pre-tax earnings was clawed back through reduced benefits and higher taxes.

**A2.17** The average ‘mechanical’ increase in weekly individual earnings among existing minimum wage workers, given the number of hours they work a week, was £8.15. After accounting for taxes and reductions in means-tested benefits, the increase in the net household weekly incomes of that same group of people was less, at £5.75. With average household incomes of minimum wage workers around £588 a week, that increase equates to just under 1 per cent of their net income on average.

**A2.18** The effects across the wider population are diluted much further because only 5 per cent of working age households contain a minimum wage worker. When including all households, and incorporating spillovers and disemployment effects, the biggest gains go to the middle-income households, who get a weekly increase of £1.50 in net income from each NLW increase on average. The picture is quite symmetric around that, with the bottom and top deciles gaining similar amounts – less than 35 pence a week on average.

**A2.19** One of the reasons that the effects are not more progressive is that poorer families see their means-tested benefits reduced (and they pay higher taxes) when their earnings increase. In the second and third deciles of the household income distribution, almost half of the increase in earnings is clawed back in this form. Another reason why the effects by household income are not more progressive is that some of the lowest income households have no-one in paid work. A third reason is that minimum wage workers are not necessarily in the lowest-income households: the lowest decile of wage earners are spread across most of the household income distribution, with over half lying in the middle 40 per cent of the distribution.

**A2.20** If we look only among households with someone in paid work before the introduction of the NLW, the impact is more progressive: each NLW increase on average raised incomes among the bottom 30 per cent of working households by about 0.35 per cent, with effects steadily declining above that.

**A2.21** Their simulation approach to estimating the effect on household incomes also demonstrates that the results are sensitive to the employment effect, the size of which is of course estimated with uncertainty, highlighting the value of this approach which attempts to incorporate any such effects in the analysis. That said, it also shows that it is very unlikely that any disemployment effect was large enough to extinguish all of the gains to household income.

## Impact of the 2021 minimum wage upratings

**A2.22** Three of the projects we commissioned give insights into the impact of the two most recent minimum wage increases – in April 2020 and April 2021.

**A2.23** Delaney and Papps (2021) used online vacancy adverts to look at the effects of the National Minimum Wage (NMW) on firms' hiring behaviour. They scraped data weekly from two online sources – findajob.gov.uk and findapprentice.gov.uk. The former is maintained by the Department for Work and Pensions. It contains adverts for public and private sector jobs. The latter is managed by the Department for Education and contains adverts for apprenticeships. They collected the vacancy data from July 2020 to August 2021 and the apprentice data from May 2019 to August 2021.

**A2.24** A strength of these datasets is that they are collected in real time so that they enable analysis of the effects of the pandemic and the upratings of the minimum wage in April 2021. As well as information on wages and work hours, they also contain information on location, job title, detailed job description, when the vacancy was advertised and when the job will begin. However, they only contain information on these aspects of a firm's hiring behaviour. There is no information on existing employees or vacancies that are not advertised.

**A2.25** An average of around 37,000 adverts are posted on findajob.gov.uk a week but around 38 per cent have missing wage data. There are around 2,700 adverts per week that specify the National Living Wage (roughly 12 per cent of the adverts with wage data). The number of adverts posted on findapprentice.gov.uk is much lower. It has averaged around 3,000 a week since May 2021, having fallen to well below 1,000 at the onset of the pandemic. It had averaged about 2,500 prior to then. Their dataset on apprenticeship adverts consists of 260,786 observations, of which 93 per cent give wage information. Around 45 per cent of apprenticeship adverts specified the Apprentice Rate. That was the case prior to the pandemic when it was £3.90, and between April 2020 and March 2021, when it was £4.15.

**A2.26** The research consisted of four parts: they examined the overall effect of a change in the minimum wage on the job vacancy rate; they analysed the effects of the minimum wage on the number of adverts specifying various benefits or restrictions; they investigated whether there were wage spillovers within firms in response to the minimum wage; and they explored the relationship between job vacancies and job seekers.

**A2.27** They built on the bunching approach developed by Cengiz, et al. (2019) and incorporated the recent application to UK data by Cribb, et al. (2021). They constructed job advert wage bins by exploiting the geographic variation in the real value of the minimum wage across the country. They then compared the loss of jobs immediately below the new minimum wage with the gain in jobs immediately at and above it.

**A2.28** In the first part of their research, they examined how the change in the NLW in April 2021, from £8.72 to £8.91, affected the number of adverts offering pay immediately below and above £8.91. As expected, the uprating of the National Living Wage reduced the number of ads specifying a wage rate in the two 10p wage bins below the bin containing the new National Living Wage. It also increased the number of ads at the new National Living Wage and in the wage bins above this rate. These positive effects decline as the wage increases and are very small above £3 above the National Living Wage. They estimated that the April uprating was associated with a 22.8 per cent increase in the number of adverts. Since the National Living Wage rose by 2.2 per cent, this implied a very large elasticity of adverts per population with respect to the minimum wage of 10.4. Taking account of job titles moderated this effect somewhat but the elasticity was still 2.9.



**A2.29** The authors note that the estimated elasticities have increased as more data have become available. However, it is more likely that these large co-efficients are reflecting the pick-up in the economy after lockdown measures started to be eased in April rather than the NLW increase at that time. That is particularly so as the increases in vacancies have been concentrated in the low-paying sectors and in jobs paying close to the NLW. Attempting to take account of these issues, they restrict their analysis to a shorter period – up to May 2021. They then estimated that the elasticity of adverts per capita to the NLW was around 0.2. They concluded that the April NLW uprating had a modest positive effect on hiring.

**A2.30** They found that the increase in the Apprentice Rate in 2020 led to a large increase in the number of apprenticeships advertised, whereas the 2021 uprating of the Apprentice Rate reduced the number of adverts. When the sample is similarly restricted to a narrower post-treatment window, they also found smaller effects.

**A2.31** In the second part of the research, they examined how the minimum wage affected the number of job adverts with specific characteristics. The NLW appeared to raise the quality of the jobs that were advertised, with adverts featuring the terms “bonus”, “training” and “flexible” in the job description becoming relatively more frequent as a consequence of the 2021 uprating. The role of experience appears to be pivotal – the minimum wage had a large positive effect on the number of job adverts that mentioned “experience” in the job description, but no significant effect on the number of adverts that did not mention “experience”. The NLW raised the number of adverts specifying “experience” by roughly the same percentage as total adverts, but it raised adverts specifying “training”, “flexible” or “bonus” by about twice as much as total adverts.

**A2.32** In the third section of the research, they exploited the job adverts data to examine whether the minimum wage upratings in 2021 had an effect on jobs that paid above the minimum wage across firms and across regions. The presence of spillover effects would suggest that firms seek, at least in part, to maintain pay differentials after a minimum wage uprating.

**A2.33** From the general vacancy data, they found that the NLW has spillovers up to £1 further up the wage distribution. They note that the spillovers were concentrated only up to 30 pence above the NLW with pronounced spikes at around 90 pence above the NLW (around 10 per cent higher) and at around £2.10 above the NLW (employers paying £12 an hour). These spillover effects are generally smaller than those found in previous research, including Cribb, et al., (2021), although that research analysed individual wage data rather than vacancy data. The vacancy data would not capture pay raises for existing staff but there might be less measurement error than in surveys. About 60 per cent of the adverts that offer hourly pay of less than £10 report an hourly wage figure and even those that report a weekly salary have hours such that in many cases the wage works out to be exactly £8.91 – the NLW.

**A2.34** They found that the average wage offered increased by approximately 3 per cent after the minimum wage increase on 1 April 2021. At companies that had paid more people the minimum wage for the same occupation prior to April 2021, advertised wages rose significantly. A 10 percentage point increase in the proportion of adverts that specified the minimum wage for a given job title was associated with a 0.4 per cent increase in the wages offered for that job title after 1 April.

**A2.35** At companies that had paid more people the minimum wage on other occupations prior to April 2021, advertised wages rose significantly. A 10 percentage point increase in the proportion of adverts that specified the minimum wage for all other adverts posted by the firm is associated with an increase in wages of approximately 0.5 per cent. This suggested that spillover effects exist and that firms offer higher wages to jobs that pay above the minimum wage in response to a minimum wage hike.

**A2.36** Similar results were found when repeating the analysis using the fraction of minimum wage adverts calculated across all firms in a region (not just the firm posting the job advert). The results again suggest that firms are seeking to maintain pay differentials. A 10 percentage point increase in the proportion of all other jobs that specify the minimum wage was associated with an increase of 1.3 per cent in the wage offered for that particular job. However, this result was not statistically significant at any of the conventional levels.

**A2.37** Results appeared slightly stronger when analysis was restricted to the care sector, which is one of the largest employers of minimum wage workers. A 10 percentage point increase in the proportion of minimum wage job offers for a given job title is associated with a 0.6 percent increase in the hourly pay offered for that particular title after the minimum wage increase. Similarly, a 10 percentage point increase in the proportion of other job titles that offer the minimum wage is associated with a 0.5 per cent increase in the wage offered for that particular job. The researchers concluded that there was evidence of care sector firms maintaining pay differentials in response to an increase in the minimum wage by increasing the wage offered in job ads that pay above than the minimum wage.

**A2.38** In the final section, they combined the job adverts data with the LFS to estimate the Beveridge curve (the relationship between vacancies and unemployment). They found that there was a much more responsive relationship between unemployment and job vacancies in May to July of 2021 compared with previous periods during the pandemic. This reflected the pick-up in the economy as it re-opened. They found that London, North East, Wales and Northern Ireland displayed a much more inelastic relationship between unemployment and vacancies. They also found there was a more responsive relationship between unemployment and vacancies for professional type jobs than for service and elementary occupations.

**A2.39** Georgiadis and Franco Gavonel (2021) conducted an in-depth analysis of the impacts of NLW on workers and businesses in a low-paying sector in England – adult social care (ASC) – in light of the pandemic and the introduction of the new trade relationship of the UK with the EU. They adopt a difference-in-differences (DID) approach to estimation. Its novelty in this case is that it identifies effects of multiple treatments – the NLW, Covid 19, and Brexit, and their interactions. (Alternatively, it allows investigation of heterogenous effects for each treatment).

**A2.40** They use a matched employer-employee quarterly panel data set – the Adult Social CareWorkforce Data (ASC-WDS). It covers approximately half of the ASC sector in England and includes information on 8,000 care-providing organisations, with around 25,000 establishments and 650,000 employees. They then link these data to information on deaths due to Covid-19 across local authorities in England from the Office of National Statistics (ONS), and deaths due to Covid-19 across care homes from the Care Quality Commission (CQC), the body regulating the ASC sector in England. The analysis employs quarterly data between December 2019 and June 2021.

**A2.41** They found that, on average, the NLW increases in April 2020 and April 2021 had a positive and significant effect on care homes' wage growth, but no significant effect on employment and hours. There was also no evidence of any effects on staff turnover, the recruitment rate, vacancies and the use of zero-hour contracts. They did, however, find that the NLW increases significantly reduced employees' absenteeism. But their results also suggest that the NLW led to a significant decrease in training and significant increases in deaths due to Covid-19 at the care home level. There was also evidence of significant spillover effects on deaths at the area level.

**A2.42** A novel finding of their analysis is that NLW effects are heterogeneous and depend on both the impact of Covid-19 in the locality care homes operate, as measured by the change in deaths due to Covid-19, and the impact of Brexit at the care home, as measured by the share of EU employees in the care home's total employment. They found that wage growth and reductions in training, triggered by the NLW, were smaller in magnitude in care homes in areas with higher increases in deaths due to Covid-19. Moreover, in these care homes, increases in deaths due to Covid-19 at the care home, resulting from NLW, were larger. Their results also suggest that in care homes with a higher share of EU employees, there were smaller reductions in employees' absenteeism, larger reductions in staff training, and smaller increases in deaths due to Covid-19 at the care home, resulting from the NLW.

**A2.43** They proposed three potential explanations for the absence of a significant employment effect. First, the effects on wage growth were small. The increase in the NLW in April 2021 was 2.2 per cent, lower than average wage growth. Second, employers were able to make other adjustments to offset the increase in the NLW. They reduced training costs but benefited from reduced absenteeism rates. They may also have reduced the quality of care, as evidenced by increases in the number of Covid-19 deaths. Their third and final explanation related to the structure of the adult social care labour market. They presented some evidence of imperfect competition and monopsony. Employment growth was weakest among care homes that had experienced the weakest wage growth.

**A2.44** They also found evidence that Covid-19 and Brexit, apart from moderating NLW effects on care homes' outcomes, had significant independent impacts on these outcomes. Their results suggested that higher increases in Covid-19 in the area care homes operate and a higher share of EU employees at the care home, on average, led to a significant reduction in employees' absenteeism and to a significant increase in deaths due to Covid-19 at the care home.

**A2.45** Incomes Data Research (2021) provided qualitative insights on the impact of the latest increase in the level of the NLW. It built on previous research. It conducted in-depth semi-structured interviews with HR managers of 16 organisations from across four key low-paying sectors – social care, retail, leisure and hospitality. These covered: the effects of the latest NLW uplift on pay rises, and associated pay structures and terms and conditions; the use of youth rates following the extension of the adult rate in April 2021 to include workers aged 23 and 24; the impact of the Covid-19 pandemic on pay and reward for low-paid workers (including the use of the Coronavirus Job Retention Scheme (CJRS)); and any labour supply issues employers were facing.

**A2.46** The research was consistent with much of what we heard on our visits and in meetings with stakeholders. There were several common themes: differentials (and the difficulty in maintaining them); non-consolidated bonuses to reward staff; recruitment and retention difficulties; and the lack of strategic planning for future NLW increases.

**A2.47** Across the interview sample, the organisations had a median minimum pay rate that equalled the NLW. However, this year's lower-than-forecast increase in the NLW had enabled three of these employers to create or reinstate pay differentials with the NLW. However, employers remain concerned about the potential for wage compression. Four employers, including all three in the leisure sector, reported that Covid-19 had affected their 2021/22 pay review for higher-paid staff, with pay increases only going ahead for the lowest grades. Several employers reported that their highest hourly rates now encroached on first-line manager salaries. At the same time, pressure on differentials between the lowest grades was making it hard for organisations in sectors, such as social care, to encourage staff to take on greater responsibility.

**A2.48** Virtually all interviewees had made some use of the CJRS to furlough staff during the pandemic. In sectors such as social care, this was primarily for shielding reasons, and mostly involved a minority of staff, whereas one hospitality employer had furloughed 98 per cent of its team members.

**A2.49** None of the employers interviewed had reduced terms or conditions – in large part because any such measures had already been taken prior to the pandemic. A number temporarily improved sick pay provisions in response to the pandemic, to deter staff from coming into work when unwell.

**A2.50** There was evidence that firms were avoiding giving consolidated pay increases by giving one-off bonuses. These included 'thank you' payments to staff who had continued to work on the front line, such as care staff and supermarket workers. Some businesses, affected by lockdowns, paid enhanced rates to the skeleton staff that were not furloughed, such as a leisure company that rewarded security and facilities staff who worked throughout these closures.

**A2.51** Few organisations had modelled or planned for pay increases as far ahead as 2024. A handful called for a restrained approach to future increases in the NLW while they were recovering from the economic impact of the pandemic. Indeed, the most pressing employment issues for many related to recruitment and retention. Other IDR research this year noted in the research report had found recruitment difficulties particularly hard in many sectors, such as housing and social care, hospitality, leisure and retail.

**A2.52** Staff retention was also a problem across many sectors. Employers in the hospitality and leisure sectors had lost staff to essential retail and social care earlier on in the pandemic. However, these sectors were now experiencing difficulties themselves. There was hope that these pressures may be eased as the CJRS came to an end in September with furloughed employees looking for work. Then again, a number of interviewees reported that staff had used this time to retrain and/or re-evaluate their career options.

**A2.53** There were particular issues among the low-paying sectors covered by the research. Within hospitality, the pandemic had exacerbated existing staffing difficulties, particularly for certain roles such as chefs. Brexit was a contributory factor but there are other Covid-related influences too, such as a reduction in the usual student workforce in some areas due to distance learning. There was some limited evidence of increased pay rates, with one hospitality employer reporting that some franchisees had implemented targeted increases in hotspot areas or enhanced youth rates. However, others had sought to tackle the problem by multi-skilling or retraining staff or moving workers between branches. In its pay monitoring since the research had been conducted, IDR had observed large general awards in recent months at some hospitality companies. It will be interesting to see if other firms follow suit.

**A2.54** While the social care sector continued to operate throughout the pandemic, recruitment and retention pressures have arisen since the economy reopened. The pandemic has made conditions in this sector particularly difficult, with many workers spending long hours in personal protective equipment, causing some to reassess their career options and leave care work altogether. The requirement for mandatory vaccination for care home staff from 11 November could reduce the potential workforce further. Brexit is perceived to have had an impact, albeit indirectly in some cases, with one large social care employer suggesting that there has been a knock-on effect from EU workers leaving hospitality. Another interviewee called for care assistants to be added to the shortage occupation list for migrants. Local authority funding limited employers' ability to increase pay. One social care provider was looking at implementing retention bonuses and improving unsocial hours payments, while another paid a £1 hourly premium in hotspots and more difficult services. It had also implemented a new career path and competency framework, to make progression opportunities clearer and more appealing. Two others had used technology to reduce the working hours required.

**A2.55** Within the leisure industry, one employer reported that seasonal roles had been harder to fill and it was taking longer than anticipated to fill the vacancies through the Government's Kickstart Scheme for young people on Universal Credit. In the short term, it sought to multi-skill some staff to work in various jobs at the same level of pay. Another employer in the sector told us that the rising NLW and associated impact on differentials has made recruiting team leaders and assistant managers more difficult.

**A2.56** For some of the retailers, recruitment for logistics roles had been more challenging than for frontline staff with these difficulties largely attributed to leaving the EU. However, one supermarket felt company culture was more significant than pay rates in terms of retaining staff. It should be noted that it did pay well above the current NLW and more generously than many of its rivals.

**A2.57** Seven employers in the sample operated separate rates for younger workers; the majority of these were in the hospitality industry where age-related pay was commonplace. However, just two of these followed the youth rate structure of the NMW. Pay structures at the other organisations were simpler.

## Full returns to low wage jobs

**A2.58** To estimate the full value for the returns to workers in the labour market, one would ideally have information on wages, on all the non-wage benefits and a measure of how they were valued by the workers. Non-wage benefits are often unobservable, but even if they can be observed they are often measured with error. Even if levels (and changes in) non-wage benefits could be measured, there is a lack of information on the relative importance placed on them. To attempt to overcome these limitations, Clark, Cotofan and Layard (2021a) adopted an innovative approach by using the worker's life satisfaction to capture the non-wage benefits that matter to workers and place a value on them. Net of the associated wage, a worker's occupation-specific residual subjective well-being should reveal the value of their job's non-wage benefits.

**A2.59** Using this approach, they found that non-wage benefits and wages were positively correlated in the UK labour market as a whole, so that higher-paying jobs offered better amenities while workers in lower-paid occupations had worse-than-average benefits. The total inequality in the UK labour market, when taking both wages and non-wage benefits into account, was estimated to be about one-third higher than data on wages alone.

**A2.60** Building on that previous work, Clark, Cotofan and Layard (2021b) attempted to measure the non-wage benefits of low-paid workers by looking at the non-pecuniary aspects of jobs and show how these are related to earnings. They used data from Understanding Society and the Annual Population Survey. They define low-paid workers by using the Low Pay Commission definitions of low-paying occupations and industries – identifying 86 low-paying occupations and 176 low-paying industries. They then used data on subjective wellbeing to construct a measure of full earnings in each of the low-paid occupations and industries. This was composed of the earnings in each occupation or industry and the amenities in each occupation or industry.

**A2.61** Using this measure they were able to evaluate the real level of labour market inequality experienced by low-paid workers; to measure the correlation between earnings and full earnings; and look at differences across disadvantaged groups, such as by gender, ethnicity and age.

**A2.62** Their main finding was that wages and amenities in the low-paying sector were related in the same way as in the rest of the UK economy. In line with previous work by Clark, Cotofan and Layard (2021a) they found a positive correlation between earnings and amenities. In other words, there is no evidence that workers in the low-paying sector were compensated with better amenities.

**A2.63** According to their analysis, even within the low-pay sector, there is more inequality in labour-market outcomes than earnings alone would suggest. However, in contrast to findings for the whole UK economy, the sources of inequality in the low-paid sector differ.

**A2.64** On the one hand, earnings inequality in the low-paying sector is lower than that found for the whole economy, consistent with the minimum wage compressing the bottom of the earnings distribution. On the other hand, the amenities inequality in the low-pay sector was found to be very similar to that experienced by workers in the rest of the economy.

**A2.65** Robustness checks using panel data indicate that this inequality cannot be entirely explained by the selection of workers into these types of jobs, and is at best a lower bound on the full level of labour-market inequality experienced by workers in the low-paying sector.

**A2.66** As for the whole economy, they found that members of disadvantaged groups have particularly poor outcomes in the low-paying sector. Women, young people, and ethnic minorities have both lower earnings and lower amenities. This indicates that the gender, ethnic and age gap in the labour market is even larger than the earnings of these groups alone would suggest.

**A2.67** In terms of the inequality experienced by these groups, the picture is particularly bleak for young workers and ethnic minorities. While men and women in the low-paid sector experience similar dispersion in both earnings and amenities, young workers and members of ethnic minorities experience significant inequality which is almost entirely driven by inequality in non-pecuniary outcomes.

**A2.68** With the levelling-up agenda in mind, the research also considered how labour-market inequality in the low-paying sector differed across regions in England. They found that dispersion in amenities is particularly severe in London and in the South of England and that the intra-regional variation in earnings dispersion maps poorly onto the intra-regional variation in terms of full earnings dispersion.

**A2.69** They found no evidence that the introduction of the National Living Wage in 2016 significantly affected labour-market inequality in the low-paying sector, either in terms of earnings or amenities.

However, the time span of their analysis is relatively short. Furthermore, the fact that they are analysing the response in the low-paying sector overall, as opposed to the specific workers who were directly affected by this change may make it more difficult for their empirical analysis to pick up relatively small changes in labour-market inequality in this case.

## Impact of minimum wages by disability, ethnicity and gender

**A2.70** People with disabilities and ethnic minorities have relatively low employment rates and relatively high rates of minimum wage coverage. This less advantaged labour market position has the potential to make these groups particularly exposed when minimum wage rates increase. Datta, Machin and McKnight (2021) conducted a comprehensive study of minimum wages over the last decade by ethnicity and disability status, and their intersections with gender, including estimates of the impact on employment retention and wage progression. In addition, they undertook an assessment of the impact of higher than mandate minimum wage floor on a firm.

**A2.71** The first part of the research that focused on protected characteristics used the Annual Population Survey (APS) and the UK Household Longitudinal Study (UKHLS). The second part used a firm level data set (the firm is anonymous but it is national and the majority of business is through procurement contracts with local authorities).

**A2.72** In the first part, they provided new estimates of minimum wage coverage by ethnicity, disability and gender over the last decade using an imputed wage measure that addressed measurement error and overestimates of minimum wage coverage present in household survey wage data.

**A2.73** They found minimum wage coverage rates were higher among men and women with disabilities relative to their non-disabled peers and considerable variation was found between types of impairment. There were, at least initially, relatively large increases in coverage rates for people with disabilities after the introduction of the NLW. This occurred against a backdrop of increasing employment rates and a fall in the disability employment gap, as the UK labour market tightened in the second half of the decade. Although employment retention was found to be lower for people with disabilities, they found no evidence of a fall in retention associated with the introduction of the NLW.

**A2.74** Minimum wage employees with disabilities were found to be relatively more likely to leave paid employment over the course of a year, and relatively less likely to move to higher-paid employment. However, they found no evidence that the likelihood of being stuck at the minimum wage or progressing to higher-paid employment changed over the decade, including after the introduction of the NLW.

**A2.75** New estimates of minimum wage coverage by ethnicity showed higher rates among BAME employees relative to White. Considerable differences in coverage rates between ethnic minority groups were estimated, with higher rates among Bangladeshi followed by Pakistani employees and low rates among Indian employees. Employment rates were particularly low among BAME women, largely due to markedly lower rates of employment among Bangladeshi and Pakistani women, but both groups experienced large increases in employment over the decade.

**A2.76** Following the introduction of the NLW, no negative effects on employment retention were found for BAME or Non-BAME employees. Although Pakistani and Bangladeshi women had high rates of minimum wage coverage and low employment rates, which could suggest that they were most at risk from the uprating, there were no estimated negative impacts on employment retention (using the imputed wage to define treatment and control groups).

**A2.77** They found some negative effects on employment retention for Indian men, a group which might be least expected to be at risk (high rates of employment and low minimum wage coverage rates). They concluded that while Indian men, on average, enjoy an advantaged position in the labour market, low-paid Indian men in the treatment group appeared to be particularly disadvantaged and at risk from the minimum wage uprating.

**A2.78** They found that BAME employees were less likely to remain stuck in minimum wage employment and more likely to transition to low-paid employment the following year, relative to the general population, but there were no statistically significant changes over the decade.

**A2.79** Evidence of increased ‘stickiness’ in minimum wage employment was found among men following the introduction of the NLW and, conversely, progression from minimum wage employment to higher wage employment fell.

**A2.80** Overall, in the first part of the research, they concluded that the evidence showed that ethnic minorities and people with limiting disabilities have largely benefited from minimum wage upratings over the last decade, leading to higher earnings without large detrimental impacts on employment prospects. The two exceptions they found were that after the introduction of the NLW, employment retention fell for Indian men in the at-risk group and men in minimum wage employment were more likely to become stuck (albeit at a higher wage).

**A2.81** The second part of the research used a bespoke firm level dataset to estimate the impact of the Living Wage, which is voluntary but is higher than the nationally mandated one, on workers and firms. In particular it investigated the impact on pay, extensive and intensive margins of employment, career progression, workforce composition along both age and skill margins, and the use of flexible working contracts.

**A2.82** They found a generally positive impact of the Living Wage on workers. Wages for the most highly exposed saw very sizeable increases, while the evidence suggested that a higher wage floor can go some way in reducing the within-establishment BAME wage gap. Impacts on employment were negligible, and examination of the dynamic treatment effects actually suggested that the impacts could be positive. Furthermore, the changes in skill composition for affected establishments indicated that entry-level workers saw their relative numbers increase in response to the introduction of the Living Wage.

**A2.83** They found that adoption of the voluntary Living Wage led to a strong impact on wages – an increase of 7 per cent for entry level workers. It also led to a 50 per cent reduction in the within-establishment BAME wage gap. They found no negative impacts on the extensive or intensive margin of employment despite ease of adjustment through zero hours contracts. They also found no negative impact on career progression. However, there was evidence of a coarser wage structure – fewer pay bands – with spillovers to jobs not directly affected. They also recorded an increase in the ratio of entry level workers to supervisors.



**A2.84** The company operates a pay scale with discontinuity at age 18. In untreated establishments, pay rises by 12-13 per cent at age 18, and workers responded by increasing hours by 10-17 per cent. In Living Wage centres, pay rises by 20 per cent at age 18 but hours fell by 25-30 per cent. They found that the Living Wage reduces hours worked by the young, zero hour contract workers in entry-level positions (and even earnings) by a sizeable amount. But they found no impact on overall hours. It seems that there is some considerable redistribution of hours from young (around 18) to older workers (20 and above).

**A2.85** The company under study was likely only able to do this because of increased labour supply to the firm from older workers. This is likely to occur because it is only one firm increasing wages. It is unlikely that the firm would be able to reallocate hours like this if all firms were exposed to the same voluntary Living Wage.

**A2.86** For a firm that moves from the NLW to the Living Wage (£8.91 to £9.50), wages would increase by 6.6 per cent for minimum wage jobs. As a result, they estimated that the number of job applicants for each minimum wage vacancy would increase by 23.1 per cent and that separations would reduce by 10.5 per cent. However, these findings are restricted to when an individual firm increases its wages. If all other firms in the market did the same it is very unlikely that the magnitude of this effect would be this large.

**A2.87** These results are a strong indication of the presence of monopsony power in the labour market. In a perfectly competitive setting, an increase in the relative wage would be expected to result in a weak decrease in the relative employment composition for entry-level workers. However, the demand response is dominated by a positive labour supply response, resulting in an increase in the skill composition of unskilled to skilled workers.

**A2.88** On the whole, they found minimal negative effects, as even intensive margin employment adjustments for highly exposed workers (those on causal, zero-hours contracts where hours adjustment is frictionless) were non-existent. This is the first study to also examine progression effects for minimum wage workers within an establishment, by examining the impact on promotions for exposed establishments. They found no obvious impacts on the rate of promotions for workers in exposed establishments. They did, however, find a reduction in the number of unique pay points with exposed firms, and this reduction had spillover effects to non-minimum wage jobs. The researchers noted that this result was likely to be indicative of the compression of the within-establishment wage variation, and an increasing coarseness of pay-scales. This latter finding likely means that wage variation will be less able to replicate variation in productivity across workers. Furthermore, as the minimum wage increases, it may well become the going rate for a much larger proportion of workers.

## Ninth Annual Research Symposium 2021

**A2.89** As part of our research programme, we usually hold two research events a year. The first, usually in April, is a half-day workshop that focuses on the data sources and methodology to be used by the researchers in newly commissioned research. The second, in September, is a research symposium that showcases the findings of that research. This year we held three research events. Delays in the confirmation of our budget led to delays in commissioning the research. The first event in April covered a couple of our commissioned research projects but also included presentations of relevant, independent research. The second, in June, focused on the data sources and methods of four newly commissioned projects. We are grateful to the participants in those events and for the feedback that has helped develop those research projects. The third, in September, was our annual symposium.

**A2.90** We held our ninth annual research symposium on 2 September 2021, giving an opportunity for the researchers on our commissioned research projects to present, discuss and receive feedback on their findings. These findings are detailed above and in Table A2.1 below. In addition to those projects, we also had presentations from the Office for National Statistics (ONS) and some independently funded research projects.

**A2.91** In her comments that concluded the event, Professor Sarah Brown – one of the Commissioners – set out four main challenges for the research programme. There were issues with data quality during the pandemic. There was uncertainty regarding the economic effects of the pandemic and the UK leaving the EU. There had been budget issues, which had delayed the research procurement process. And, at the same, we were starting on the journey to the new NLW target of 2/3rd median earnings by 2024.

**A2.92** She then gave an overview of the various sessions. In the first, David Freeman (ONS) gave a presentation on the latest developments in ONS labour market data sources. The discussion of the composition and base effects behind earnings growth was particularly informative given that the NLW is a target of median earnings. It was also positive to note that the RTI data indicated that employment among young people and in the hardest hit sectors, many of which were low-paying, had started to recover. The second presentation, given by Andreas Georgiadis (Brunel University) focused on the complex interactions between NLW, the pandemic & Brexit in the adult social care sector. Sarah thought it reassuring to see no evidence of significant impacts from the NLW on employment or hours in this sector. However, the impacts found on recruitment and the vacancy rate amongst firms more exposed to Brexit were clearly worth monitoring.

**A2.93** The next session focused on labour market developments and the minimum wage. The first presentation by Jesse Matheson (University of Sheffield) analysed the impact of Zoomshock. This is the increase in the extent of working-from-home determined by the Covid-19 health crisis that has led to a substantial shift of economic activity across geographical areas. He focused on retail and hospitality – both low-paying sectors that employ a lot of young workers. The estimated increase in post-pandemic working from home is clearly large and the estimated negative effect on low-paid workers in these two sectors is of concern. The time and the nature of any adjustments were clearly crucial factors in determining the full impact of this development. The second presentation in this session, given by Kerry Papps (University of Bath) focused on hiring behaviour and the National Minimum Wage, with a small positive effect of the NLW on job vacancy rates found in 2021. Sarah noted that it will be interesting to see how this unfolds in the context of current labour shortages. There was no evidence that firms were

taking away benefits in response to the NLW. It was useful to hear about the estimates of recent spillover effects from the NLW by looking at what happens within firms. The last presentation, given by Abi Adams-Prassl (University of Oxford), focused on an independent project exploring data from online job vacancy adverts. Vacancies that advertised flexible arrangements were found to be disproportionately low wage, lower skilled and non-salaried. It was clearly important to think about what is actually meant by flexibility by different groups in the labour market.

**A2.94** The third session focused on the impact of the NLW. In the first presentation, Louisa Withers (Incomes Data Research) presented findings from her research. Those that related to differentials were particularly interesting with issues found higher up the pay structure but with less pressure at the bottom of the pay distribution. The research findings confirm the evidence from our stakeholder meetings that labour supply issues are currently a big concern for employers. The second presentation in this session, given by Robert Joyce (Institute for Fiscal Studies), focused on the impact of the UK NLW on earnings, employment, hours and incomes from a comprehensive evaluation of the NLW. It was reassuring to hear that the evidence from applying the adaptation of the bunching approach suggests little employment effects of the NLW from 2015-2019. Hence, the findings tie in with the findings from using the traditional methods. In addition, it is a valuable addition to our toolkit in terms of estimating minimum wage effects. The effects on household income (incorporating employment and wage spillover effects) were very interesting and represent important analysis of wider impacts of the NLW including interaction with the tax and benefit system. This work ties in with one of the recommendations in the Arin Dube (2019) report on the international evidence on minimum wages to HM Treasury.

**A2.95** The final session covered the impact of the NLW on groups of workers, which tied in with the specific ask in our 2021 remit: to 'gather particular evidence on groups of low-paid workers with protected characteristics'. The first part of the first presentation by Abigail McKnight (London School of Economics) presented summary statistics that indicated the importance of disaggregating by ethnicity rather than just BAME and non-BAME. In the second part of the first presentation, Nikhil Datta (London School of Economics) presented findings that looked at how a British firm had adopted different practices throughout the UK in relation to the voluntary living wage. His findings, which suggested that firms may be able to cope with a much higher minimum wage, are important in the context of our more ambitious NLW target. Sarah highlighted one obvious caveat relating to the extent to which findings from a specific firm in this context can be generalised. However, this is a really valuable addition to our evidence base, covering a large firm with 350 establishments operating across the UK.

**A2.96** In the penultimate presentation, Alex Bryson (University College London) presented findings from the Wage and Employment Dynamics project, which is externally funded. He noted that 'we need to know more about the role of the firm in understanding wage gaps at the bottom end of the wage distribution.' That tied in with a number of interesting findings discussed in the workshop from within-firm analysis. The findings further indicated the importance of enhancing our understanding of the role of the firm, as illustrated by the variation in the importance of the firm specific wage effects.

**A2.97** The focus on non-wage benefits in the final presentation, given by Maria Cotofan (London School of Economics) was an important reminder that the well-being of workers is determined by the overall job package. This was very evident from our meetings with low-paid workers when issues with a range of non-wage aspects of work are often raised alongside issues with low pay. The findings

suggesting that, within the low-paid sector, there is more inequality than earnings alone would suggest, highlighted the importance of conducting research in this area.

**A2.98** Sarah Brown concluded that the findings discussed covered a range of areas and methods (including quantitative and qualitative analysis) and that all the findings will form an important part of our evidence base in October when we meet to discuss our recommendations for 2022.

**A2.99** As well as thanking all those who have participated in our research events, we would also particularly like to thank all of those who acted as discussants at our research events: Alex Bryson (University College London), Giulia Giupponi (Università Bocconi, Milan), Arne Baumann (German Minimum Wage Commission), Abi Adams-Prassl (University of Oxford), Jonathan Cribb (Institute for Fiscal Studies), Gerwyn Davies (Chartered Institute of Personnel and Development), John Forth (City University), Sarah Welfare (Reed in Partnership), Nikhil Datta (LSE), Melanie Jones (Cardiff University), Anthony Morris (Department for Business, Energy and Industrial Strategy), Mike Brewer (Resolution Foundation), Gregory Thwaites (University of Nottingham and Resolution Foundation), Nicola Allison (Office of Manpower Economics), Rebecca Riley (King's College London), Felix Ritchie (University of the West of England), and Steve Machin (London School of Economics). The comments and suggestions were of great help in the development of our research programme.

Table A2.1: Low Pay Commission research for the 2021 Report

Project title and researchers	Aims and methodology	Key Findings
<p><b>The distributional and employment impacts of nationwide minimum wage changes</b></p> <p><b>Jonathan Cribb, Giulia Giupponi, Robert Joyce, Attila Lindner, Tom Waters, Tom Wernham, and Xiaowei Xu</b></p> <p>(Institute for Fiscal Studies, University of Bocconi and University College London)</p>	<p>The research project provided a comprehensive assessment of the impact of the NLW on earnings, employment, hours and incomes.</p> <p>The research:</p> <ul style="list-style-type: none"> <li>• adapts the bunching approach in Cengiz, Dube, Lindner and Zipperer (2019) to estimate the effect of NLW on employment and wages jointly.</li> <li>• exploits differences in wage premia across geographical areas.</li> <li>• extends analysis to hours and earnings.</li> <li>• extends analysis to impacts on those aged under 25 (not directly 'treated') and other subgroups.</li> <li>• uses estimates of labour market impacts in combination with micro-simulation techniques to estimate impacts on distribution of household incomes.</li> <li>• provides informative and transparent visualisation, and sense-check, of employment changes across wage distribution.</li> <li>• provides an integrated, internally consistent analysis of impacts on household incomes alongside impacts on labour market outcomes.</li> </ul> <p>The analysis on earnings, employment, and hours used ASHE (for high quality wage data) and the Annual Population Survey (APS) at Travel-to-Work-Area (TTWA) level. The analysis on household income used the Family Resource Survey (FRS).</p>	<p>The main findings were:</p> <ul style="list-style-type: none"> <li>• The NLW had substantial effects on wages towards the bottom of the distribution.</li> <li>• They found statistically significant increases in the number of jobs not only at the new NLW, but also up to at least £1.50 per hour above it (up to the 20th percentile). These offset the loss of jobs below the new NLW.</li> <li>• Consistent with previous research from the UK, they estimated that any impacts on employment of the introduction of the NLW and its upratings were small, and not statistically significantly different from zero.</li> <li>• The lack of a statistically significant employment effect is consistent across alternative specifications. It also holds if they consider each of the four increases in isolation, or if they examine the 'long difference' between 2015 and 2019.</li> <li>• There was somewhat stronger evidence of some negative employment effects for women than for the population as a whole.</li> <li>• There was no evidence of adjustment in hours when they estimated effects on the number of full-time and part-time jobs separately.</li> <li>• Their estimates demonstrated substantial, statistically significant positive 'spillover' impacts on the wages of those aged under 25.</li> <li>• The impact on disposable household incomes is somewhat progressive within the population of households with someone in paid work in the absence of the NLW: each NLW increase on average raised incomes among the bottom 30% of working households by about 0.35%, with effects steadily declining above that.</li> <li>• Their simulation approach to estimating the effect on household incomes also demonstrated that the results are sensitive to the employment effect.</li> </ul>

Project title and researchers	Aims and methodology	Key Findings
<b>Hiring behaviour and the National Minimum Wage</b>  <b>Judith Delaney and Kerry Papps</b>  (University of Bath)	<p>This study analysed the effects of the UK National Minimum Wage (NMW) on firms' hiring behaviour, primarily drawing on data scraped weekly from two online job advert services.</p> <p>There were four parts to the research:</p> <ul style="list-style-type: none"> <li>• Analysing the effects of the minimum wage on vacancies using wage bins;</li> <li>• Analysing the effects of the minimum wage on job and applicant characteristics;</li> <li>• Analysing the effects of the minimum wage on pay structure within the firm; and</li> <li>• Comparing vacancies and job seekers.</li> </ul> <p>The data scraped from the DWP's findajob.gov.uk, which contains ads for any job in the public or private sector (collected for the period July 2020-August 2021), and the DfE's findapprentice.gov.uk, which contains ads for apprenticeships only (collected for May 2019-August 2021). They also use the Labour Force Survey.</p>	<p>The main findings were:</p> <ul style="list-style-type: none"> <li>• They estimated that the elasticity of adverts per capita to the NLW was around 0.2. They concluded that the April NLW uprating had a modest positive effect on hiring.</li> <li>• They found that the increase in the Apprentice Rate in 2020 led to a large increase in the number of apprenticeships advertised, whereas the 2021 uprating of the apprentice rate reduced the number of adverts. When the sample is similarly restricted to a narrower post-treatment window, they also found smaller effects.</li> <li>• The NLW appeared to raise the quality of the jobs that were advertised, with adverts featuring the terms "bonus", "training" and "flexible" in the job description becoming relatively more frequent as a consequence of the 2021 uprating.</li> <li>• They found that the NLW increase had spillovers up to £1 further up the wage distribution. But these were concentrated only up to 30 pence above the NLW.</li> <li>• These spillover effects are generally smaller than those found in previous research.</li> <li>• At companies that had paid more people the minimum wage on other occupations prior to April 2021, advertised wages rose significantly. Spillover effects exist and firms offer higher wages to jobs above the NLW in response to a minimum wage hike.</li> <li>• Results appeared slightly stronger when analysis was restricted to the care sector.</li> <li>• The relationship between unemployment and job vacancies was much more responsive in May to July of 2021 compared with previous periods during the pandemic.</li> <li>• The relationship between unemployment and vacancies was more responsive for professional type jobs than for service and elementary occupations.</li> </ul>

Project title and researchers	Aims and methodology	Key Findings
<p><b>The impact of the National Living Wage on the adult social care sector in England in light of the Covid-19 pandemic and Brexit</b></p> <p><b>Maria del Carmen Franco Gavonel and Andreas Georgiadis</b></p> <p>(University of Exeter and Brunel University London)</p>	<p>The aim of this research project was to provide an in-depth analysis of the impacts of NLW on workers and businesses in the English adult social care sector, in light of the pandemic and Brexit.</p> <p>It assessed the impact of NLW increases, Covid-19 and leaving the EU on:</p> <ul style="list-style-type: none"> <li>the average wage at the home level; employment and hours; prevalence of flexible working arrangements; and business survival;</li> <li>care home outcomes, including employment; mortality rates; investment in training; and absenteeism/sick days taken; and</li> <li>individual employee outcomes and outcomes of low-wage groups of employees, such as care assistants, including pay, employment and hours, and exposure to job-related risk arising from Covid-19 infection.</li> <li>the extent to which magnitudes of impacts of the NLW on homes' and employees' outcomes depend on the impact of Covid-19 pandemic in the localities homes operate; as well as on the impact of Brexit at the care home level, as measured by the reliance of the home on EU employees.</li> </ul> <p>The empirical strategy is based on difference in differences (DID) estimation. The key novelty of the approach is that it identifies effects of multiple treatments, i.e., the NLW, Covid-19, and Brexit, and their interactions. (Alternatively, it allows investigation of heterogenous effects for each treatment).</p> <p>The investigation used econometric analysis of the Adult Social Care-Workforce Data (ASC-WDS), a panel of matched employer-employee data, which was linked to ONS data on Covid-19-related deaths at local authority level; and to data on quality ratings, and deaths of service users at the home level collected by the Care Quality Commission (CQC). The study used quarterly data between December 2019 and June 2021.</p>	<p>The main findings were:</p> <ul style="list-style-type: none"> <li>On average, NLW increases in April 2020 and April 2021 had a positive and significant effect on care homes' wage growth, but no significant effect on employment and hours.</li> <li>The NLW led to a significant decrease in employees' absenteeism and training, as well as to significant increases in deaths due to Covid-19 at the care home level, but also at the area level, due to spill-over effects.</li> <li>A novel finding of our analysis is that NLW effects are heterogeneous and depend on the impact of Covid-19 in the locality care homes operate, as measured by the change in deaths due to Covid-19, and the impact of Brexit at the care home, as measured by the share of EU employees in the care home's total employment.</li> <li>Care homes in areas with higher increases in deaths due to Covid-19, wage growth and reductions in training, triggered by the NLW, were smaller in magnitude, whereas growth in deaths due to Covid-19 at the care home, linked to the NLW, was larger.</li> <li>In care homes with higher share of EU employees, there were smaller reductions in employees' absenteeism, larger reductions in staff training, and smaller increases in deaths due to Covid-19 at the care home.</li> </ul>

Project title and researchers	Aims and methodology	Key Findings
<p><b>The impact of future targets for the NLW</b></p> <p><b>Katherine Heffernan, Ken Mulkearn, Catherine Rickard, Louisa Withers and Zoe Woolacott</b></p> <p>(Incomes Data Research)</p>	<p>The aim of this report was to provide qualitative insights from employers across four key low-paying sectors – social care, retail, leisure and hospitality – on the impact of the latest increase in the level of the NLW.</p> <p>It also explores the extent to which such employers have been affected by this year's changes to the age threshold for the NLW and whether they have started planning for the second stage of the proposed changes to youth rates.</p> <p>The research also covered how the ongoing pandemic had affected employers, including workforce changes, pay awards, non-consolidated recognition payments and recruitment challenges.</p> <p>This report is based on primary evidence gathered by 30-45 minute semi-structured interviews with HR managers of 16 organisations from all four target sectors (six from hospitality, three from the leisure sector, three retailers and four social care providers), many of which are household names</p> <p>Research was conducted on the basis that all contributors would be anonymous in the report, although company names have been shared with the LPC</p> <p>As with last year's research, the pandemic caused challenges securing interviewees and the truncated timetable for 2021 also had an impact.</p>	<p>The main findings were:</p> <ul style="list-style-type: none"> <li>• This year's lower-than-forecast NLW increase enabled three employers to create or reinstate differentials.</li> <li>• Employers remain concerned about the potential for wage compression. Pressure on differentials was making it hard for organisations in some sectors to provide incentives for progression.</li> <li>• A few employers reported that Covid-19 had affected their 2021/22 pay review for higher-paid staff, with pay increases only going ahead for the lowest grades. This included all three leisure sector employers.</li> <li>• None of the employers interviewed had reduced terms or conditions – mainly because such measures had already been taken.</li> <li>• Some organisations, especially in the social care sector, have been able to derive cost savings from a greater use of technology.</li> <li>• Few organisations have modelled or planned for pay increases as far ahead as 2024. A handful were doubtful that the current target was attainable.</li> <li>• Some employers operated separate rates for younger workers; age-related pay was commonplace in hospitality. But age-related pay structures were generally simpler than the NMW framework.</li> <li>• Virtually all interviewees have made some use of the Coronavirus Job Retention Scheme (CJRS) to furlough staff during the pandemic.</li> <li>• Businesses awarded non-consolidated 'thank you' payments to staff rather than pay rises.</li> <li>• Most businesses are more concerned about recruitment and retention than the NLW.</li> <li>• Employers in the hospitality and leisure sectors lost staff to essential retail and social care during the pandemic.</li> <li>• Some hope staff shortages may be eased when the CJRS comes to an end.</li> </ul>



Project title and researchers	Aims and methodology	Key Findings
<p><b>The full returns to low wage jobs</b></p> <p><b>Andrew Clark, Maria Cotofan and Richard Layard</b></p> <p>(Paris School of Economics and the London School of Economics)</p>	<p>The aim of the research was to measure the non-wage benefits of low-paid workers by looking at the non-pecuniary aspects of jobs and show how these are related to earnings.</p> <p>The research was in three main parts:</p> <ul style="list-style-type: none"> <li>• assessing how individual wellbeing is related to personal characteristics, earnings, and occupation or industry;</li> <li>• investigating how different vulnerable sub-groups fare in terms of their non-wage benefits between and within low-paying occupations and industries; and</li> <li>• identifying the effect of the National Living Wage after its introduction in 2016 on non-wage benefits between and within low-paying occupations and industries.</li> </ul> <p>The research used data from Understanding Society and the Annual Population Survey (APS).</p> <p>The method builds on a paper by the same authors that looked at the returns to education (Clark, Cotofan and Layard, 2021a).</p>	<p>The main findings were:</p> <ul style="list-style-type: none"> <li>• There was a positive correlation between earnings and amenities. Workers in the low-paying sector were not compensated with better amenities.</li> <li>• Even within the low-paying sector, there was more inequality in labour-market outcomes than earnings alone would suggest.</li> <li>• On the one hand, earnings inequality in the low-paying sector was lower than that found for the whole economy, consistent with the minimum wage compressing the bottom of the earnings distribution.</li> <li>• On the other hand, the amenities inequality in the low-paying sector was found to be very similar to that experienced by workers in the rest of the economy.</li> <li>• Members of disadvantaged groups have particularly poor outcomes in the low-paying sector. Women, young people, and ethnic minorities have both lower earnings and lower amenities. This indicates that the gender, ethnic and age gap in the labour market is even larger than the earnings of these groups alone would suggest.</li> <li>• The picture is particularly bleak for young workers and ethnic minorities: for these groups there is also significant dispersion in the amenities they experience.</li> <li>• With the levelling-up agenda in mind, they found that dispersion in amenities was particularly severe in London and in the South of England and that the regional variation in earnings dispersion mapped poorly into the regional variation in terms of full earnings dispersion.</li> <li>• They found no evidence that the introduction of the National Living Wage in 2016 significantly affected labour-market inequality in the low-paying sector, either in terms of earnings or amenities.</li> </ul>

Project title and researchers	Aims and methodology	Key Findings
<p><b>Living wages and heterogeneous impacts by ethnicity, disability and gender</b></p> <p><b>Nikhil Datta, Steve Machin and Abigail McKnight</b></p> <p>(London School of Economics)</p>	<p>The research project had two main components:</p> <ul style="list-style-type: none"> <li>• A comprehensive study of minimum wages over the last decade by ethnicity and disability status, and their intersections with gender. This component analysed large scale secondary data sources (Annual Population Survey /LFS/ Understanding Society) to provide a comprehensive picture and any differential impacts of recent upratings (including the introduction of the NLW) on employment retention and pay progression.</li> <li>• Using a bespoke firm-level dataset, they estimated the impact of a minimum wage that is higher than the nationally mandated one on workers and firms. In particular, it looked at the impact on pay, extensive and intensive margins of employment, career progression, workforce composition along both age and skill margins, and the use of flexible working contracts. In addition, it looked at heterogeneous impacts along ethnicity and disability lines.</li> </ul>	<p>The impact of minimum wages by ethnicity, disability, and gender:</p> <ul style="list-style-type: none"> <li>• Some ethnic minorities and people with limiting disabilities would appear to be highly exposed with high rates of minimum wage coverage and low rates of employment.</li> <li>• However, minimum wage upratings over the last decade has largely benefited ethnic minorities and people with disabilities. These higher wage gains have happened without large negative effects on employment.</li> <li>• The exception was evidence of falling employment retention among low-paid Indian men in the treatment group.</li> </ul> <p>The impact of minimum wages on pay progression:</p> <ul style="list-style-type: none"> <li>• BAME employees are relatively less likely to remain stuck in minimum wage employment and more likely to transition to low-paid employment the following year.</li> <li>• Minimum wage employees with disabilities are relatively more likely to have left paid employment the following year, and relatively less likely to move to higher-paid jobs.</li> <li>• There was no change in these progression patterns over the last decade.</li> <li>• After the introduction of the NLW, men in minimum wage employment were more likely to remain stuck at the minimum wage rate.</li> </ul> <p>From the company payroll data:</p> <ul style="list-style-type: none"> <li>• Wages for the most highly exposed saw very sizeable increases, while the evidence suggests that a higher wage floor can go some way in reducing the within-establishment BAME wage gap.</li> <li>• Impacts on employment were negligible.</li> <li>• The changes in skill composition for affected establishments indicated that entry-level workers saw their relative numbers increase in response to the Living Wage introduction.</li> <li>• Results from the analysis suggest firms in low-pay sectors still exercise considerable monopsony power.</li> </ul>



# Appendix 3

## Main data sources

**A3.1** In this appendix we outline the main data sources that we have used in our analyses, including any major changes that have occurred since our 2020 report. We use three main sources of data to measure earnings in this report: the Annual Survey of Hours and Earnings (ASHE), Average Weekly Earnings (AWE), and the Labour Force Survey (LFS). We use two main sources to understand employment: the LFS and the Employee Jobs series. The LFS captures the number of people in employment, whereas the employee jobs series measures the number of jobs in the economy. This is an important distinction as one individual can have more than one job. All of these data sources are published by the Office for National Statistics (ONS).

**A3.2** In addition to employment and earnings data, we also look at a wide variety of macroeconomic data and statistics. This appendix outlines the two main macroeconomic series on inflation and gross domestic product (GDP) used in our analyses, as well as summarising any revisions that ONS have made to GDP estimates.

**A3.3** This year, there are again more limitations with these data sources than in previous years. The Covid-19 pandemic and resulting policy measures have made it much more difficult to understand what is happening to earnings and employment. The surveys already mentioned were not designed to monitor the unprecedented changes in the labour market that we have seen over the last few months. The ONS has reacted to these issues and modified the methodology used in many of these surveys. It has also created new surveys and statistics to fill in some of the evidence gaps that have arisen. In this appendix we describe these changes and the additional data sources that we have used in our report this year.

## Annual Survey of Hours and Earnings

**A3.4** The Annual Survey of Hours and Earnings (ASHE) is the main source of structural earnings data in the UK and is regarded by the ONS as the best source of earnings information for cross-sectional analysis. It provides information on the level, distribution, and composition of earnings, as well as information on hours worked, gender, age, geography, occupation and industry. It is a survey of employees completed by employers and conducted in April each year. The sampling frame consists of a one per cent sample of employee jobs in Pay As You Earn income tax schemes obtained from HM Revenue & Customs (HMRC). Self-employed workers are excluded.

**A3.5** ASHE data for the latest year used in our report is always provisional and therefore subject to revision. Final data is received a year later and used within subsequent reports: i.e. for this report we received 2020 final data at the same time as receiving provisional data for 2021.

## Changes to the data arising from Covid-19

**A3.6** This year, the reference date for ASHE was 21 April 2021, when social distancing measures were still in place and many businesses were still unable to trade. At that point, 12.4 per cent of workers were furloughed, down from 23.8 per cent of workers in April 2020. The fact that many businesses had paused trading or had limited capacity meant that the response rate to the survey was reduced by around a quarter – with 140,000 returns in 2021 compared to 184,000 in 2019. Response rates were weakest for younger workers and in sectors including hospitality and leisure, which were more exposed to the lockdown. The survey weights are designed to account for this response bias.

**A3.7** This year, the ONS included an additional question in the ASHE survey, to ask if the worker was furloughed on the reference date. Using this variable, we can identify that 11.5 per cent of workers in the data were furloughed, which is comparable with the published Job Retention Scheme statistics.

**A3.8** The ASHE survey includes the question “Did the employee earn less in the pay period due to absence from work?”. Using the response to this question, we are able to distinguish between furloughed workers with no loss of pay – whose employers topped up their wages to normal levels – and those who were furloughed with a loss of pay. In a normal year, we would exclude workers that have experienced a loss of pay from our analysis; many of them may be on sick pay or parental leave and their pay would skew the distributions. However, this year they make up a large proportion of the data set and excluding them would create a sample that is compositionally very different to previous years. In 2020, the ONS therefore developed a new weighting system ('lpcalwghtf') that would allow us to include any workers who had a loss of pay due to furlough in our analysis.

**A3.9** However, estimates of hourly pay in 2020 and 2021 are not comparable to previous years. We would normally base our analysis on the derived hourly pay. This rate, calculated as the total pay received divided by the number of hours that they would normally work, is artificially low for furloughed workers whose pay was not topped up. When this amount is divided by their normal hours the calculation would give an hourly rate that is only a fraction of their actual pay.

**A3.10** Low-paid workers were more likely to be furloughed and experience a loss of pay. If we were to exclude these workers from our analysis, we would remove a large part of the distribution and estimates of pay would be biased up substantially. Including these workers biases median pay downwards by a lesser extent. The ONS included additional questions that give further detail for furloughed workers, including the number of hours actually worked if they were on flexible furlough, and the percentage of pay received for hours not worked. We can use this information to estimate the ratio between the derived hourly pay figure in ASHE, and the hourly pay that these furloughed workers would normally receive.

**A3.11** Throughout our analysis, we present a range of pay estimates. We calculate a lower estimate for pay, where furloughed workers with loss of pay are included without adjustment. The ONS uses this approach in their publication. We also present an upper estimate, where furloughed workers with loss of pay are assumed to receive 80 per cent of their usual pay, and so we adjust their pay by a factor of 1.25.

Finally, we present a central estimate, where we adjust the pay for furloughed workers with loss of pay using the additional questions in ASHE 2021 on the hours worked and pay received by furloughed workers. We use these questions to determine the ratio between their measured pay and what they would normally receive, and adjust their pay upwards accordingly. In cases where these questions are not answered, we use the median ratio to adjust their pay, and we limit the ratio to range between 80 and 100 per cent.

**A3.12** We derive our estimate of furloughed workers pay as a percentage of normal pay using the equation set out below. If the adjustment is above 1, we change it to 1. If the adjustment is below 0.8 we change it to 0.8. We then divide hourly pay by that adjustment for all furloughed workers who report loss of pay.

$$\text{Percent of normal pay} = \frac{\text{Current hours worked}}{\text{Usual hours worked}} + \left(1 - \frac{\text{Current hours worked}}{\text{Usual hours worked}}\right) * \text{Percent of normal pay for hours not worked}$$

**A3.13** Our central estimate could be biased by potential data issues with the additional variables collected. The ONS have not carried out their normal level of validation on the additional variables regarding furlough, which we used to produce our central estimate. This means that some of the responses may be inconsistent with other variables in the dataset. For instance, some respondents recorded having no loss of pay due to absence, but then also reported being topped up to less than 100 percent of their normal pay. We also only have the additional data for 70 percent of furloughed workers in the sample. We use the median adjustment for workers without data.

**A3.14** We carried out robustness checks for some potential biases within our pay adjustment. One concern is that the workers with the additional data were not representative of the wider furloughed population. We found small differences between the average age and gender of workers with the additional data relative to those without. We found larger difference in average pay. If lower paid workers are less likely to receive top ups, this could mean we make too large an adjustment and overestimate pay, although the effect is likely to be fairly small given it only effects 30 percent of furloughed workers. The additional data is sufficiently reliable to use for our central estimate, but data quality issues mean that we present a range throughout our analysis.

## Further limitations

**A3.15** Employees not on an adult rate of pay are excluded from the headline ASHE earnings estimates produced by ONS, but we include them in our own analysis of earnings from ASHE. This means that our earnings estimates may differ from those of ONS.

**A3.16** From 2011, ASHE data have been reweighted to SOC 2010 codes. Thus, earnings estimates for 2011 onwards are not directly comparable with those prior to 2011. As a result of this and previous methodological changes there is no official, consistent time series of structural earnings in the UK. The best source available now consists of five overlapping New Earnings Survey (NES)/ASHE data sets: NES, 1975-2003; ASHE without supplementary information, 1997-2004; ASHE with supplementary information, 2004-2006; ASHE 2007 methodology, 2006-2011; and ASHE 2010 methodology, 2011 onwards. From next year, ASHE will be reweighted to SOC 2020 codes.

**A3.17** In 2013 two new questions on apprentices were included in ASHE as experimental statistics. These required employers to identify whether an employee was an apprentice and, if so, to record the date that their apprenticeship had commenced. The identification of apprentices also means that we can examine earnings separately for workers and apprentices. Until 2014 the grouping together of apprentices and non-apprentice workers had a downward effect on earnings for young people, as apprentices tend to have lower earnings. From 2014 onwards it is possible to distinguish between first and second year apprentices and other workers. We are therefore able to identify rate populations in the data, grouping people by the rate of the NMW that they would be eligible for.

**A3.18** The introduction of the National Living Wage (NLW) in 2016 had important implications for our analysis and interpretation of ASHE data. A key change is that the NLW was introduced in April, coinciding with the ASHE data collection period. Previously, new minimum wage rates were introduced in October, with measurement of earnings, the bite and underpayment occurring six months after implementation of the new rates. Both the bite of the minimum wage, and measured underpayment, are at their highest upon introduction, and correspondingly lower when measured six months after implementation. In April 2017 all minimum wage rates were updated to ensure alignment with the NLW. This introduced a break in the time series, with a jump in estimates of both the bite and underpayment.

**A3.19** The increase in measured underpayment poses particular difficulties. In addition to a time-lag in implementing the new rates, employers are not legally required to increase pay to the new minimum wage until the first full pay period after the introduction of the minimum wage. In order to identify these workers ONS introduced a new question in 2016 ASHE to identify the start of the pay period, the results of which are shown in the variable 'ppstart'. The timing of the ASHE survey largely determines the number affected by this variable.

## Average Weekly Earnings

**A3.20** AWE is the lead monthly measure of the level of average weekly earnings per employee in Great Britain, based on data from the Monthly Wages and Salaries Survey. AWE provides a monthly measure of regular pay, bonus pay and total pay. It replaced the previous measure of short-term changes in earnings, the Average Earnings Index (AEI) in January 2010. AWE uses current industry weights that are updated each month to take account of the distribution of jobs across sectors. The ONS also produces a decomposition of the growth rates to show how much growth is due to wage growth, and how much growth results from changes in employment across sectors. The AWE estimates do not just measure pay, but also reflect industry-based compositional changes within the workforce (but not job-type or occupation-based changes within industries).

**A3.21** In 2013, the ONS released three AWE historic time series, all of which are monthly in frequency and include bonus payments: the whole economy series runs from January 1963 to 2010, while public and private sector series are available from January 1990 to 2010. The method used to compile these time series takes into account the observed relationship between AEI and AWE, in particular that AWE increased faster than AEI for most of the period between January 2000 and July 2010. The difference between the AEI and AWE wage growth should not be over-interpreted, as there is considerable uncertainty introduced by the estimation process. As these historic time series are only available up to 2010, when the AEI was discontinued, there is no fully consistent complete time series for these data sets up to the present time.

**A3.22** Further AWE revisions were carried out in 2017 and 2019 following regular reviews of the methodology used to calculate estimates of earnings of employees in small businesses. Businesses with fewer than 20 employees are excluded from the Monthly Wages and Salaries Survey, which is largely used for the calculation of the AWE. To compensate for this omission, pay is estimated using a factor derived from ASHE which does cover small businesses. Changes were announced that aim to better reflect earnings of employees in small businesses as well as reflecting improvements to the coverage of small businesses on the main sampling frame, the Inter-Departmental Business Register.

**A3.23** The results of these reviews were released by the ONS in March 2017 and January 2019 respectively. The 2017 results show that, while at the whole economy level (between July 2010 and December 2015) the trend in earnings remained similar, total pay levels had decreased by between £7 and £10 (1.6-1.9 per cent). At the sectoral level there were two distinct phases to the changes: the first covered July 2010-July 2015 (the last time the small business factors were modified), with the second covering the period post-July 2015. This step-change occurred due to inconsistencies introduced at the point at which the small business factors were last modified compared with the revised historical estimates. The 2019 results also showed similar trends in pay growth, with a maximum impact during 2015 to 2016 on the percentage change in three-month year-on-year total pay for the whole economy of 0.2-0.3 per cent.

**A3.24** In 2017, the ONS released an article on ASHE and AWE, presenting an overview of both measures. It highlighted which source was better for certain types of analysis and analysed movements of the whole economy series between 2005 and 2016. The article explained the differences in the headline measures and outlined the reasons for a divergence between the headline series in 2011 that has since continued.

**A3.25** In April 2020, lockdown measures and furloughing led to significant changes in employee pay, making it necessary to change the way that AWE data is processed. Normally, when companies do not respond their employee and pay information is imputed based on their most recent previous response. But in a period where there have been substantial pay changes, this imputation may not always be accurate. The ONS has therefore increased the level of data validation over this period.

## Labour Force Survey

**A3.26** The LFS is the official data source used to measure employment and unemployment. It is a quarterly survey of around 60,000 UK households conducted on a rolling monthly basis and provides information on: employment; unemployment; earnings; and personal and socio-economic characteristics, including gender, ethnicity and disability.

**A3.27** Analyses of aggregate employment, unemployment and hours worked use seasonally adjusted monthly and quarterly LFS data published by ONS using the latest 2019 population weights. For detailed analyses of the labour market by age, ethnicity, disability and other personal characteristics, we conduct analyses using the non-seasonally adjusted LFS microdata. In our analyses, we generally use the four-quarter moving average of these outputs to take some account of seasonality, which is different to the seasonal adjustment method used by ONS. Consequently, our analyses based on LFS microdata may produce estimates of levels that differ from headline aggregates published by ONS.



**A3.28** ASHE contains limited personal characteristic details – there is no information on disability, ethnic background, country of birth, nationality or education level. The LFS is our only timely source of data on earnings for disabled people, ethnic minorities, migrants and people with no qualifications. However, data on pay and hours in the LFS tend to be less reliable than in ASHE. Reasons for this include: a smaller sample; people answering the earnings questions without reference to pay documentation (although they are prompted to consult available documents); and some information being provided by proxy respondents. ASHE collects information from employers about employees' paid hours, whereas the LFS collects information from individuals about their actual and usual hours of work, which might include unpaid hours. This generally means that the derived hourly earnings variable in the LFS is lower than the derived hourly pay rate recorded in ASHE.

**A3.29** For some workers, a stated hourly rate of pay is available in the LFS. For these workers, hourly pay is similar to that in ASHE. Where a stated hourly rate of pay is unavailable from the LFS, the ONS has developed an imputation method using a nearest-neighbour regression model, which also takes account of information on second jobs in estimating the median earnings of various groups of workers. This methodology reduces the differences between hourly earnings estimates from the LFS and ASHE.

**A3.30** In March 2020, in response to the Covid-19 pandemic, the LFS changed the way that it contacted people for interviews from face-to-face to telephone-based. This introduced an increased non-response bias to the survey, which was partially mitigated by the introduction of housing-tenure based weights into the survey in October 2020.

**A3.31** However, it was found that further improvement work was needed to deal with the increase in non-response from those with a non-UK country of birth or nationality. A new weighting methodology was introduced in July 2021, which calibrates to UK, EU and non-EU born weighting populations for periods from January to March 2020. The impact on headline measures of rates is small but there is a larger impact on estimates of levels, changes in levels, and for certain subgroups.

**A3.32** Additional questions were introduced into the LFS to understand the impact of Covid-19. These questions sought to determine whether absences and changes in hours were related to Covid-19, and whether they were due to sickness, self-isolation or caring for others.

**A3.33** It is possible to group LFS responses by the week that the response refers to. The ONS developed a method for weighting the weekly LFS data to produce UK aggregates, which makes it possible to look at how key labour market measures change on a weekly basis. They have published these series as experimental statistics since May 2020 in order to monitor any sudden change in labour market conditions arising from the pandemic and lockdown measures.

**A3.34** From April 2020, ONS started to provide us with LFS microdata on a monthly basis so that we can look at the groups of people who are most affected by our recommendations and monitor how they have been affected by the lockdown measures. Although we do not have access to the weekly weights that the ONS has produced, we have used the normal population weights multiplied by the number of weeks as a proxy. The sample in any individual week is not representative, and the number of responses changes between weeks, and so the weekly time series that we have produced are intended only as a way of monitoring trends and not as an estimate of absolute levels. We are very grateful to the ONS for providing us with the LFS microdata on a monthly basis since the start of the pandemic.

## Employee Jobs

**A3.35** The employee jobs series provides a timely breakdown of jobs in the UK. A number of Short-Term Employer Surveys, which collect data from businesses across the economy, are used to compile the employee jobs series. Figures at a more detailed industry level, however, are available only for Great Britain and are not seasonally adjusted. We therefore use a four-quarter moving average in our analyses to remove some of this seasonality, in line with LFS microdata.

**A3.36** In 2014, the ONS revised estimates of workforce jobs, including the employee jobs series, back to 1981. These revisions were caused by benchmarking to estimates from the annual Business Register and Employment Survey (BRES), updating the seasonal factors and taking on board late information such as later responses to the survey. A consistent back-series, based on the Standard Industry Classification (SIC) 2007, is also available back to the second quarter of 1978.

## Real-time information (RTI)

**A3.37** An additional data source that allows us to understand trends in the number of employees and their earnings is from Pay As You Earn Real Time Information (PAYE, RTI) administrative data. PAYE data covers the whole population of employees paid through PAYE, rather than a sample. This makes it possible to produce monthly statistics on the number of employees and their distribution of pay.

**A3.38** However, administrative data sources cannot be directly compared to estimates from surveys where the administrative system is measuring a different concept to the survey, or where the population coverage is different. Statistics derived from RTI are not directly comparable to statistics from AWE, ASHE and LFS because of differences in measurement and coverage.

**A3.39** The number of people receiving pay from PAYE employment is higher than in the LFS employee series, and has shown more substantial falls since the start of the lockdown measures. This is likely to be because RTI covers a different population to the LFS. RTI includes all individuals who are employed in a PAYE scheme and who were paid in the reference period, while the LFS sample has no coverage of those under 16 or temporary residents in the UK, but has a stronger coverage of people who are in work but not being paid. A further difference arises because RTI classifies any person receiving pay through a company payroll as being an employee, while the LFS only classifies a person as an employee if the interviewee describes themselves as an employee in their main job.

**A3.40** Statistics on pay are also not directly comparable to AWE or ASHE. RTI estimates include earnings of employees whose pay was reduced for any reason. RTI estimates are calculated on a person basis while AWE estimates are calculated on a job basis. This difference causes RTI estimates to be higher than AWE estimates. RTI estimates also include redundancy payments paid through payroll.

## Inflation

**A3.41** The ONS publishes monthly inflation indices which reflect changes over twelve months in the cost of a 'basket' of goods and services on which people typically spend their money. In our analyses, we have used two main inflation measures: the Consumer Prices Index (CPI), and the Retail Prices Index (RPI).

**A3.42** Each measure uses the same basic price data, but the CPI (which follows international definitions) excludes Council Tax and a number of housing costs faced by homeowners that are included in the RPI. Other differences include: the methodologies used to combine individual prices at the first stage of aggregation; the sources used to derive the weighting that each component contributes; and the population that the 'basket' is designed to represent. The RPI is never revised and the CPI, although revisable in theory, has only ever been revised in exceptional circumstances.

**A3.43** Our 2017 Report (Low Pay Commission, 2017) detailed the chronology from 2013 onwards concerning the push for ONS to make CPIH its main measure of inflation. This included its removal and re-designation of National Statistic status. CPIH includes costs associated with owning, maintaining and living in one's own home (known as owner occupiers housing costs) along with Council Tax which are excluded from CPI.

**A3.44** In 2020, the Covid-19 pandemic and subsequent lockdown measures have presented issues for the measurement of inflation. Some products that would ordinarily be included in the basket of goods, including theatre tickets and international train fares, have been unavailable to buy. This means that there is some uncertainty in measures of inflation this year, and that true inflation is likely to be lower. Furthermore, the type of goods and services that households are buying has changed substantially and the current basket is unlikely to be representative of household spending. A final issue arises due to difficulties in gathering information on prices remotely; in some cases where the sample has been too small, the ONS has estimated the inflation rate from a related product or from the wider class of products.

**A3.45** Our analyses in this report use RPI, CPI and CPIH as measures of current price inflation.

## Gross Domestic Product

**A3.46** GDP provides a measure of total economic activity. It is often referred to as one of the main 'summary indicators' of economic activity and is used to measure growth in the economy.

**A3.47** In 2018, the ONS introduced a new publication model for GDP, reducing the number of published estimates of quarterly GDP from three to two. The new model seeks to balance timeliness with accuracy of GDP estimates, with the aim of reducing the likelihood and frequency of revisions. The model also enables the publication of monthly estimates of GDP.

**A3.48** Quarterly GDP: The first quarterly estimate of GDP is published 40 days after the quarter to which it refers. This is two weeks after the previous model's preliminary estimate (but in line with other G7 release schedules) and so will contain higher quality output data. It will also contain information from the income and expenditure approaches two weeks earlier than the previous model although data for these measures will be lower than the former second estimate. A comprehensive (second) estimate of GDP will continue to be released as part of the Quarterly National Accounts, available 85 days after the end of the reference quarter as previous.

**A3.49** Monthly GDP: the ONS brought forward the Index of Services release by two weeks, which, alongside the Index of Production and the Index of Construction allow production of a combined monthly estimate of GDP using the output measure, the timeliest of the three GDP measures, and the only one available on a monthly basis.

**A3.50** The new publication model hopes to achieve a balance between timeliness and accuracy. The previous model gave greater weight to output data in the early estimates as they are the timeliest and therefore provide the best short-term picture. The new model will still be balanced to the output estimate but will benefit from using more robust data from that source as a result of a two-week delay. This time lag also enables the measure to incorporate both income and expenditure data to quality assure the output GDP measure, ensuring a more reliable initial estimate.

## Apprentice Evaluation Survey

**A3.51** DfE commissions the Apprenticeship Evaluation Surveys (AEvS) with the overarching purpose to collect data on the apprenticeship programme through the experience of apprentices and apprentice employers. The AEvS provides integral sources of data for evaluating the success of apprenticeships and captures key information on the quality of apprenticeships and employer and learner satisfaction with the program. The 2021 survey was the seventh in a series, first conducted in 2011, and was conducted by IFF Research. The AEvS is a telephone survey and fieldwork for the 2021 survey took place between May-July 2021.

**A3.52** The AEvS surveys both employers (with current or completer apprentices) and apprentices (current, recent completers, longer-term completers, and non-completers). This year, the Learner Survey included additional questions that asked apprentices about their pay. Apprentices were asked to give their gross pay from a recent payslip. If they did not have a payslip to hand, they were asked to recall their pay. All figures were converted to an estimate of gross hourly pay. The pay questions were modelled on questions previously asked in the Apprentice Pay Survey. The pay questions were piloted and were found to be understood well.

**A3.53** The AEvS Learner Survey pay data used in this report is based on analysis of 'current' apprentices (a subset of the larger overall learner sample). Overall, the sample size for the 2021 Learner Survey was 5122 interviews, including 3047 current apprentices, with an average survey time of 23 minutes. The AEvS learner sample is drawn proportionately from the ILR (Individualised Learner Record) by subject area, level, age, gender and region. The sample for the 2021 survey was drawn from the January 2021 ILR release, the most up to date at the time the sampling process was undertaken.

**A3.54** The AEvS learner data is weighted to be representative of the ILR-based populations of apprentices. An additional non-response weight was created specifically for the purpose of pay analysis for the current/ paused learners to account for non-response in the hourly pay question, which was answered by 64 per cent of respondents (1957 current apprentices in the 2021 survey provided an hourly pay figure). This additional weight enables analysis of pay data in a way which represents the whole population. The weight was constructed using logistic regression from the weighted sample size, following a similar methodology to other non-response weights. The final model included cohort (current or paused), sector subject area, planned length, region and apprentice age as predictors. The new weight was multiplied by the individual apprentice weight to produce the composite pay weight.

**A3.55** The full findings from the 2021 AEvS are expected to be published by DfE in 2022. The most recent published 2018/19 AEvS report can be found here:

<https://www.gov.uk/government/publications/apprenticeship-evaluation-2018-to-2019-learner-and-employer-surveys>

## Family Resources Survey

**A3.56** This year, we have used the Family Resources Survey (FRS) to explore the household circumstances of minimum wage workers. The FRS is a continuous household survey which collects information on a sample of private households in the UK. It collects detailed information on respondents' incomes from all sources including benefits, tax credits and pensions, housing tenure, caring needs and responsibilities, disability, childcare, family circumstances, and child maintenance.

**A3.57** The FRS is used to develop the Households Below Average Income publication, which measures household disposable incomes as a proxy for living standards. It is also used to feed into other publications, and to model the costs of benefit policies. We have used the surveys from 2015/16 to 2019/20 to investigate the impact of the minimum wage on households.

## Monitoring the impact of Covid-19

**A3.58** Since the start of the pandemic and the resulting policy measures that the government introduced, there have been questions that the main data sets that we normally rely on are ill-equipped to answer. New data sources have been introduced to start to understand the rapidly evolving nature of the labour market this year, and we list those that we have used here.

### Coronavirus Job Retention Scheme statistics

**A3.59** The Government announced the Coronavirus Job Retention Scheme (CJRS) on 20 March 2020 as part of its response to the Covid-19 pandemic. CJRS provides employers with financial support of 80 per cent of their employees' salaries, up to a cap of £2,500 per month per employee.

**A3.60** HMRC began to publish statistics on the take-up of the scheme from April 2020, initially posting a daily count on Twitter and then publishing weekly and later monthly data. The statistics cover the number of employments that are furloughed on a jobs basis, such that one person can be counted twice if they work for two employers and both of those jobs are furloughed.

**A3.61** HMRC matched data from their RTI system on to the CJRS data to produce breakdowns of claims by the daily number of employments furloughed, employer size, sector, geography, age, gender, and use of flexible furlough.

### Business Insights and Conditions Survey (BICS)

**A3.62** ONS began a new fortnightly business survey in March 2020 to understand how firms have been affected by the pandemic and lockdown measures. It captures firm level data on how their turnover, workforce prices, trade and business resilience have been affected in the two-week reference period. Prior to Wave 7, results were unweighted but apportioned by responding business employment size. From Wave 7 onwards results were weighted by employment for industries sampled in the survey.

**A3.63** In November 2020, the Business Impact of Coronavirus (Covid-19) Survey was superseded by the Business Insights and Conditions Survey. At this time (Wave 17) the survey increased its representative sample to 39,000 businesses with a response rate around 25 per cent. The published

data continues to provide weighted estimates from businesses on financial performance, workforce, prices, trade and business resilience.

## Blue Book changes

**A3.64** The Blue Book, published annually by ONS, presents a full set of economic accounts for the UK. It outlines any methodological changes made to the National Accounts in addition to the normal quarterly process of incorporating new information into its estimates of economic activity. Changes to the Blue Book 2021 involve new volume estimates of GDP in the Supply and Use Tables (SUT) framework, with estimates of double deflation and improved reconciliation of current prices and volume estimates. Blue Book 2021 also aims to improve the international comparability of the UK GDP estimates.

**A3.65** As a result of these changes, average annual volume GDP growth over the period from 1998 to 2007 is revised down from 2.9 per cent to 2.7 per cent, and average annual volume GDP growth from 2010 to 2019 is revised up from 1.9 per cent to 2.0 per cent.

## Low-paying sectors

**A3.66** Throughout this report we refer to low-paying sectors. We define these as occupations or industries which contain a high number or large proportion of low-paid workers based on the Standard Occupation Classification (SOC) and Standard Industrial Classification (SIC) codes published by ONS. We have two distinct definitions of low-paying sectors, one based on industries and one on occupations. These definitions are used when conducting detailed analysis of low-paying sectors using ASHE or the LFS. Some sectors thought of as low-paying e.g. retail and hospitality will tend to include higher paid roles such as buyers and managers when looked at on an industry basis. On the other hand, there are some low-paying occupations i.e. cleaning which are found across different industries.

**A3.67** In 2017 we reviewed the low-paying classifications to identify new low-paying sectors arising from the NLW, considering the 2020 NLW target of 60 per cent of median pay for workers aged 25 and over. As a result, we added two new groups to the industry classification: security and wholesale food (including agents), both of which included above average proportions of low-paying workers. Small changes were also made within the cleaning and maintenance and social care groups. We also added two new groups within the occupation classification: security and enforcement and call centres. As with the industry classification we also made several small changes within some of the other occupational groups.

**A3.68** Our 2017 Report provides full details on the review including new definitions of each low-paying occupation and industry based on the latest SIC 2007 and SOC 2010 codes (Low Pay Commission, 2017). Table A3.1 shows our revised list of low-paying sectors.

**A3.69** We will conduct a review of low-paying sectors and industries in 2022, based on SOC 2020 codes and hourly pay in ASHE 2021.

Table A3.1: Definitions of low-paying industries and occupations, by SIC 2007 and SOC 2010

Low-paying industry/occupation	Current industry definition (SIC 2007)	Old industry definition (SIC 2007)	Current occupation definition (SOC 2010)	Old occupation definition (SOC 2010)
Retail	45, 47, 77.22, 95.2	45, 47, 77.22, 95.2	1254, 5443, 7111, 7112, 7114, 7115, 7123-7125, 7130, 7219, 925	1254, 5443, 7111, 7112, 7114, 7115, 7123-7125, 7130, 7219, 925
Hospitality	55, 56	55, 56	5434, 5435, 9272-9274	5434, 5435, 9272-9274
Social care	86.10/2, 87, 88.1, 88.99	86.10/2, 87, 88.1	6145, 6146, 6147	6145, 6147
Employment agencies	78.10/9, 78.2	78.10/9, 78.2	-	-
Cleaning and maintenance	81, 96.01	81.2, 96.01	6231, 6232, 6240, 9132, 9231, 9233-9236, 9239	6231, 6240, 9132, 9231, 9233-9236, 9239
Leisure, travel and sport	59.14, 92, 93	59.14, 92, 93	3413, 3441, 3443, 6131, 6139, 6211, 6212, 6219, 9275, 9279	3413, 3441, 3443, 6131, 6139, 6211, 6212, 6219, 9275, 9279
Food processing	10	10	5431-5433, 8111, 9134	5431-5433, 8111, 9134
Wholesale food incl. agents	46.1, 46.2, 46.3	-	-	-
Childcare	85.1, 88.91	85.1, 88.91	6121-6123, 9244	6121-6123, 9244
Agriculture	01, 03	01, 03	5112-5114, 5119, 9111, 9119	1213, 5112-5114, 5119, 9111, 9119
Security	80.1	-	7122, 9241, 9242	-
Textiles and clothing	13, 14	13, 14	5411, 5414, 5419, 8113, 8137	5412-5414, 5419, 8113, 8137
Hairdressing	96.02, 96.04	96.02, 96.04	622	622
Office work	-	-	4129, 4133, 4216, 7213, 9219	4129, 4216, 7213, 9219
Non-food processing	-	-	8112, 8115-8116, 8119, 8121, 8125, 8127, 8131, 8134, 8139, 9120, 9139	5211, 5441, 8112, 8114-8116, 8125, 8131, 8134, 8139, 9120, 9139
Storage	-	-	9260	9260
Transport	-	-	5231, 8135, 8212, 8214	5231, 8135, 8212, 8214
Call centres	-	-	7113, 7211	-

Note: '-' denotes not applicable.

# Appendix 4

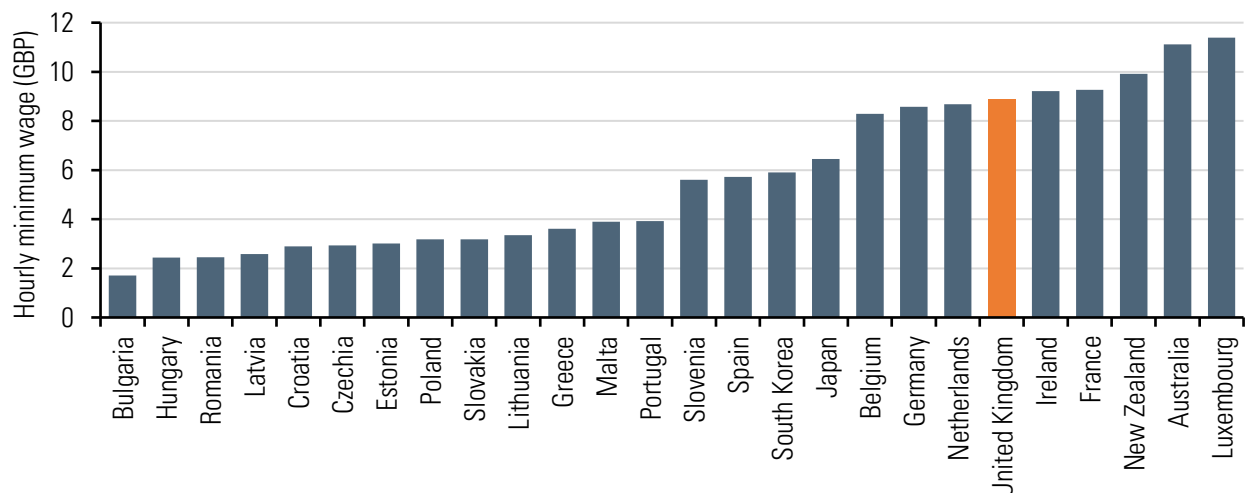
## International evidence

**A4.1** As part of our work we routinely make comparisons with other countries' minimum wages. We have regular contact with officials and counterpart bodies in a number of other countries and hold a workshop each autumn to share experience of monitoring and setting minimum wages during the pandemic. At this year's event, we were joined by minimum wage commissioners and officials from several other countries, as well as from Eurofound and the OECD.

**A4.2** Direct comparisons of the values of minimum wages are inexact for a number of reasons. These include differences in eligibility, particularly regarding age, experience and exclusions for specific types of workers; whether rates are hourly, weekly and monthly, with the problems of converting between these figures; and differences in tax and benefit regimes which affect both what workers are paid and what they cost employers. In addition, exchange rates and the cost of living influence comparisons of the value of minimum wages.

**A4.3** Figure A4.1 below compares the value of minimum wages between a range of countries. We compare the April 2021 NLW to the values of minimum wages in other countries as of January 2021. The minimum wage in the majority of countries is a monthly figure, which we have converted to an hourly figure using data on average working hours in each country. Rates are then converted into GBP using the January 2021 exchange rate. On this measure, the UK has a relatively high minimum wage, slightly behind Ireland and France and further behind Australia, New Zealand and Luxembourg.

**Figure A4.1: Comparison of international minimum wages, January 2021**



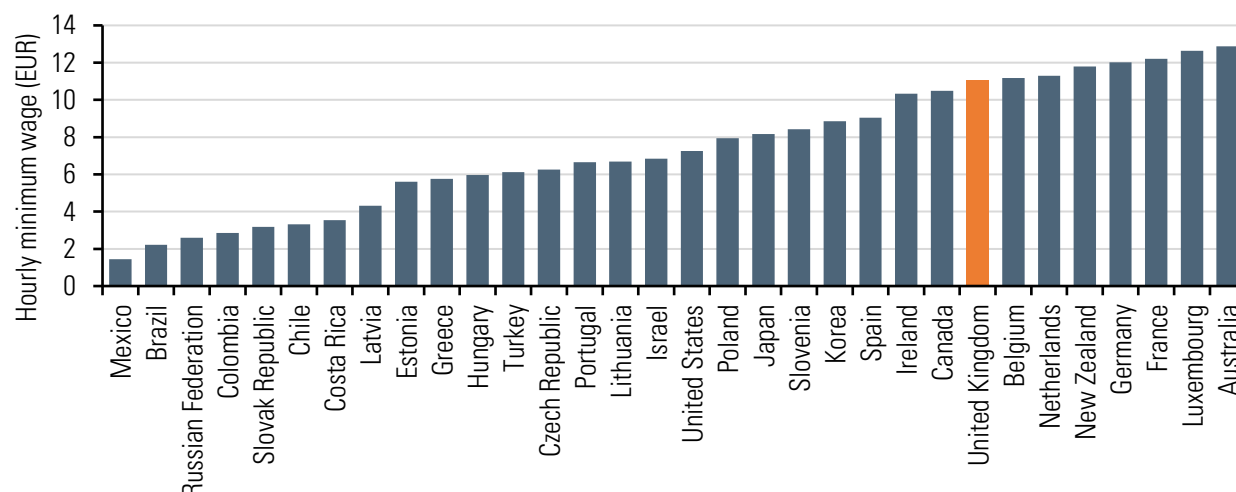
Source: LPC estimates using Eurofound Minimum wages in 2021: Annual review and [wageindicator.org](https://wageindicator.org).

Note: Figures represent the minimum wage applicable in January 2021.



**A4.4** Adjusting for purchasing power parity attempts to address differences in exchange rates and the cost of living between countries. They are more stable than market exchange rates and account for different prices of goods and services but are also harder to measure than market exchange rates as they rely on periodic price surveys. The OECD produce such a comparison, although the most recent available data are from 2020. On this comparison, the UK is leapfrogged by a number of EU counterparts.

**Figure A4.2: Comparison of international minimum wages adjusted for purchasing power parity, OECD, 2020**



Source: OECD Real minimum wage data.

## Recent upratings in other countries

**A4.5** Eurofound's report on minimum wage upratings highlighted that the majority of EU states had opted for cautious increases in 2021, with a median increase of 3 per cent compared with 6 per cent in 2020 (Eurofound, 2021). In four countries, minimum wages were frozen (Belgium, Estonia, Greece and Spain). In four other countries, the uprating was lower than the 2.2 per cent increase in the National Living Wage (France, Ireland, Malta and the Netherlands).

**A4.6** In Germany, a back-loaded two year trajectory of upratings was announced in June 2020, taking into account the economic impact of the pandemic. This meant relatively small increases in January and July 2021 (of 1.6 and 1.1 per cent respectively), ahead of larger increases scheduled for 2022 (2.3 and 6.4 per cent). The 2020 increases will take the rate from a level of €9.60 to €10.45.

**A4.7** The Irish Low Pay Commission recommended a rise of 30 cents or 2.9 per cent, to take effect from January 2022. This will take the minimum wage in Ireland to €10.50 per hour. At our workshop in the autumn, we heard from Irish counterparts about their work to examine two separate commitments made by the Irish Government. The first is to progress to a living wage over the lifetime of the Government, with the commission looking at the structure and implications of introducing a living wage in Ireland. The second is to examine Universal Basic Income.

**A4.8** In Japan, minimum wages vary across the country's 47 separate prefectures. At our autumn workshop, officials told us the average uprating for 2021 had been 3.1 per cent, compared to just 0.1

per cent in 2020. The current average minimum wage was 930 yen, although there was considerable variation between prefectures (the highest level was 1040 yen in Tokyo, the lowest 820 in Okinawa). The Japanese Government has set a target to reach an average of 1000 yen as soon as possible, but has not set a target year to meet this goal.

## International research evidence

**A4.9** In addition to the monitoring outlined above, we also closely follow international research into minimum wages. Several recent papers have looked for minimum wage effects, in particular focusing on the US and Germany.

**A4.10** Clemens and Strain (2021) investigate the medium run impacts of minimum wage rises between 2011 and 2019 in the US. They look at the change in outcomes for workers in states with different minimum wages policies. They find statistically significant negative effects of large minimum wage rises in the US on employment for young, low skilled workers. In contrast, their estimates of the effect of smaller or inflation linked wage increases are insignificant in most of their estimates and are around zero. They also find that the effects of large minimum wage hikes become larger over time. Their findings contrast with other recent studies which find no significant employment effects (Cengiz, et al., 2019; Dube, Lester and Reich, 2010). They argue this is due to their focus on large increases in minimum wages. They suggest firms can absorb minimum wage increases up to a certain point, but recent large increases do start to impact employment. They also focus on a narrow treatment group (young, low skilled workers), their findings could be explained by reallocation of employment from that group to other workers.

**A4.11** Gopalan, et al. (2021) also find negative employment effects of minimum wage rises in the US. They use administrative data to compare employment in firms either side of state borders, following six large increases in minimum wages. They find that for every 1 per cent rise in the minimum wage, employment falls by 0.43 per cent. They find that the negative employment effects occur through reduced hiring rather than through firing. They also find that the negative employment effects only occur in tradable sectors. They include only six minimum wage raises, relative to the 138 covered by Cengiz et al. (2019) who find no employment effects. This may mean their estimates are less easily generalisable, although it may also show more evidence that large minimum wage hikes have different impacts than small rises. As their finding focus on firms in tradable sectors, they cannot rule out that firms switch which state they hire workers from rather than how many workers they hire.

**A4.12** Dustmann, et al. (2021) study the introduction of a federal minimum wage in Germany in 2015 and find no statistically significant employment effects. They compare workers in lower paying areas (more exposed to new minimum wage) to workers in higher paying areas, controlling for pre-existing trends. They find significant wage effects with spillovers and no employment effects. They also find that introduction of the minimum wage caused workers to move to larger, higher-paying and more productive firms. A similar reallocation of workers may explain the recent fall in employment in low-paying sectors discussed in paragraph 5.52. Engbom and Moser (2021) study a minimum wage rise in Brazil. They have similar findings. There are no statistically significant employment effects and workers are reallocated from less productive to more productive firms.

**A4.13** Derenoncourt, et al. (2021) measure the effects of large firms (such as Amazon, Walmart, Costco) raising their minimum wages on the advertised wages of other firms and total employment in

low wage areas and occupations. They use an event-study framework, where they track how wages and employment changes before and after large firms raise their minimum wages. They compare outcomes for low-wage areas and occupation cells with higher wage areas and occupations cells. They find a statistically and substantively significant positive effect of voluntary minimum wage increases on the wages other firms advertise. A 10 per cent increase in Amazon wages, increases wages by 2.3 per cent for other firms in the same commuting zone. They also find the largest voluntary minimum wage rises have statistically significant effects on employment, but the effects are small and in line with the previous literature. They estimate that for every 1 per cent rise in wages caused by voluntary minimum wage increases, there is a 0.04 to 0.13 reduction in employment.

# Appendix 5

## Covid Timeline

### Introduction of local tiers and a return to lockdown: October-November 2020

**A5.1** As the R number rose to 1.3-1.6 on 2 October, about 16.8 million people were in local lockdowns. That was around a quarter of the population of the United Kingdom including 23 per cent of people in England, 76 per cent of people in Wales and 32 per cent of people in Scotland. On 7 October, Scotland announced a two-week closure of pubs and restaurants across its central belt. On 8 October, the Chancellor announced an expansion of the Job Support Scheme, with the Government paying two-thirds of the wages of employees of firms forced to close because of Covid-19 restrictions. This was more generous than the scheme open to those businesses not forced to close. Small firms would not have to make any contribution to their workers' wages if they are legally forced to shut down while large ones would only have to contribute about 5 per cent of employee costs in the form of National Insurance and pension contributions.

**A5.2** On 12 October, the Prime Minister announced a new three-tier system to replace the local lockdowns in England to take effect from 14 October. Areas were classified as medium (Tier 1), high (Tier 2) or very high (Tier 3). Medium areas were subject to the rule of six and the 10pm curfew, high areas had restrictions on indoor meetings but groups of six could continue to meet in outdoor settings, and very high areas saw the closure of businesses such as pubs and casinos, but not restaurants. The Scottish Government set out a similar three-tier system on the same date. On 14 October, only Liverpool City Region was assigned to Tier 3. On 16 October, there were 27,900 new Covid-19 cases a day in England, a 60 per cent increase on the previous week. Hospitality businesses in Northern Ireland were limited to take-away only from this date. The high case numbers prompted Wales to introduce a travel ban on people from Covid-19 hotspots in other parts of the UK. On 20 October, 241 Covid-19 deaths were recorded, the highest daily number since 5 June.

**A5.3** On 21 October, the Chancellor announced further changes to his Job Support Scheme with employers paying less and employees able to work fewer hours before qualifying for extra financial help. The number of daily cases continued to increase while the number of Covid-19 deaths recorded on 27 October was its highest since May. On 23 October, Wales began a two-week 'firebreak' lockdown, closing hospitality and non-essential retail.

**A5.4** On 31 October, as the UK reached a million Covid-19 cases, the Prime Minister announced a one-month lockdown for England from 5 November and the extension until December of the furlough scheme, which had been due to end on 31 October. The next day, mortgage payment holidays for

people financially impacted by the Covid crisis were extended. Case numbers and Covid-related deaths continue to rise. On 5 November, as the lockdown in England takes effect, the Chancellor extended the CJRS furlough scheme to the end of March 2021.

**A5.5** On 9 November, there were reports that Pfizer had produced vaccines that are 90 per cent effective in initial trials. The next day, the number of weekly Covid-related deaths topped 1,000 for the first time since June and ONS reported UK unemployment increased to 4.8 per cent in the three months to September 2020

**A5.6** On 11 November, the UK recorded 595 Covid-related deaths to take the total passed 50,000 – the fifth country to reach that milestone and first in Europe. ONS also reported that the UK economy had grown by 15.5 per cent in the third quarter of 2020 – the largest quarterly growth since records began in 1955. But GDP remained well below its pre-pandemic levels.

**A5.7** On 16 November, UK ordered 5 million vaccine doses from Moderna, a US biotechnology company. It had announced that the vaccine was 95 per cent effective in its trials.

**A5.8** On 18 November, SAGE warned that for every day that regulations are relaxed, five days of tighter restrictions may be required. Further data released by Pfizer indicated their vaccine to be highly effective for people of all ages and ethnicities. The next day, the Oxford University Covid vaccine (which was to become AZ) was reported to show a strong immune response. The UK government announced £300m of emergency funding for sports affected by the absence of spectators.

**A5.9** Over the next few days, the Government announced that it would set up vaccination centres, provide a £500m package to support mental health services in England, an extra £3 billion for the NHS and an extra £7 billion for Test and Trace. It also confirmed that, when the lockdown ended, a new three-tier system of restrictions in England would be established. Gyms and non-essential shops will reopen throughout England, while collective worship and weddings will be allowed again, as well as some spectator sport. The status of tiers would be reviewed but this approach was expected to last until March 2021.

**A5.10** Christmas plans were agreed on 24 November by the four leaders of the UK's nations. In England, Scotland and Wales, up to three households could meet up for five days, while in Northern Ireland a seven-day period was allowed.

**A5.11** On 25 November, the Chancellor set out departmental budgets for 2021-22 and devolved administrations' block grants in his Spending Review 2020. Office for Budget Responsibility forecast that the UK economy would shrink by 11.3 per cent in 2020, with unemployment rising to 7.5 per cent. The following day, regions were allocated to the new tier system in England. Most were in Tier 2 with large parts of the Midlands, the North East and the North West in Tier 3. Just the Isles of Scilly, Cornwall and the Isle of Wight were placed in Tier 1. Nadhim Zahawi was appointed as Minister for Vaccines on 28 November. The next day, the UK bought a further 2 million doses of the Moderna vaccine. Cases and deaths continued to be high: 696 deaths were reported for the UK on 25 November, the highest daily figure since May 2020.

## Local lockdowns: December 2020

**A5.12** On 2 December, the UK became the first country to approve the Pfizer Covid-19 vaccine and the tier system of pandemic restrictions in England was brought in. The next day, the UK passed 60,000 deaths. The vaccines arrive in the UK and the major supermarkets commit to repay £1.7 billion in business rates relief. Covid rates start to fall.

**A5.13** The UK's vaccination rollout began on 8 December when a grandmother aged 90, Margaret Keenan, became the first person to receive the Pfizer vaccine. William Shakespeare, an 81 year old from Warwickshire was second.

**A5.14** On 14 December, the Health Secretary told MPs that a new variant had been identified. That would become known later as the Kent or alpha variant. ONS labour market data showed 819,000 fewer people on company payrolls at the end of November when compared to March and the start of the first lockdown, with a third of the jobs lost being in the hospitality sector.

**A5.15** On 16 December, following an increase in case numbers in those areas, London, and parts of Essex and Hertfordshire, were placed into Tier Three. Three days later, the Prime Minister announced that these areas along with other parts of the South East and East of England would go into a new tier, Tier 4. The rules in places under Tier 4 were similar to those in the national lockdown, with non-essential retail, hairdressers and gyms closing. Plans for Christmas bubbles in Tier 4 were scrapped, while they were limited to just Christmas Day in the rest of England. The total number of Covid cases across the UK reached 2 million. Cases started rising again.

**A5.16** In the first week of the vaccination roll-out 137,897 people received their first dose. On 17 December, the Chancellor extended the CJRS scheme for a further month until the end of April 2021. ONS data showed that UK retail sales fell by 3.8 per cent during the November lockdown. This was less than the fall in the first lockdown.

**A5.17** Between 20-21 December, with concerns about the alpha variant rising, more than 40 countries suspended flights to and from the UK. The Northern Ireland Executive voted against a travel ban with the UK mainland. France and the UK then reached an agreement to reopen their border subject to travellers having a recent negative Covid test. Tesco reintroduced a purchasing limit on some items everyday products to prevent panic buying.

**A5.18** On 23 December, a South African variant was identified. As the border re-opened with France, there was a large backlog of freight to clear. The military were sent in to help. There was a sharp rise in cases in England and Wales although they appeared to have fallen in Scotland. On Christmas Day, the total number of UK Covid-related deaths passed 70,000. And the US imposed travel restrictions on the UK.

**A5.19** On Boxing Day, tougher restrictions were imposed on much of the UK, with Tier Four restrictions extended to more areas of England, four tiers of restrictions introduced for mainland Scotland, and lockdowns in Wales and Northern Ireland. On 29 December, Margaret Keenan received her second dose of the Pfizer vaccine to become the first fully vaccinated person in the UK. There was further positive news the next day, as the UK regulator approved its second vaccine – the Oxford University/AstraZeneca (AZ) vaccine – for national rollout. But Tier Four measures were further extended

to cover the Midlands, the North East, parts of the North West and the South West. These now covered around 44 million people in England. The Government also announced an increase in the gap between first and second doses from three weeks to twelve. The year ended with a further 55,892 confirmed cases – the largest daily number of the pandemic so far.

## **Rising case numbers and another national lockdown: January-March 2021**

**A5.20** The new year started with rising cases and concerns about hospital capacity as Covid patients surpassed 26,000 – around 30 per cent of total NHS hospital capacity. But batches of the new AZ vaccine arrived in hospitals ready for the roll-out. On 4 January, an 82 year old became the first person in the UK to receive the AZ vaccine. But, with case numbers continuing to rise, the Prime Minister announced that England would go into a national lockdown with restrictions similar to the first lockdown. Schools would again be closed to all except children of key workers and vulnerable children. Scotland also announced a national lockdown. These came into effect on 5 January. On that day, the Chancellor announced that businesses affected by the new lockdown will receive grants of up to £9,000 per property. Covid cases rose to the highest daily number yet – 60,916. And 1.3 million people in the UK had so far received their first dose of the vaccine.

**A5.21** On 6 January, the UK had record case numbers, deaths at their highest since April, those in hospital topped 30,000 and daily hospitalisations peaked at just under 4,000. 1.5 million vaccine doses have been given so far. National Express stopped running any coach services on 7 January. On the following day, the UK recorded its largest number of daily Covid-related deaths 1,325. It was also the day that Moderna was given approval for its vaccine.

**A5.22** British Retail Consortium reported that 2020 was the worst ever that retailers had experienced with sales in non-food retail down by 5 per cent. By 11 January, 2.3 million people had received a vaccine. Daily deaths continue to rise to record levels but case numbers appear to have plateaued. On 15 January, the Supreme Court ruled that thousands of small businesses should receive insurance payments covering losses accrued during the first lockdown of March 2020. Record deaths were reported on 19 and 20 January but case numbers had slowed, falling by over a quarter on the previous week. But over 4 million vaccines had been given with half of all those aged 80 and over vaccinated. The Covid-related death total passed 100,000 on 26 January.

**A5.23** By the end of the month, over 9 million people had been vaccinated with two-thirds of those aged 75–79 and five-sixths of those aged over 80 having received the vaccine. On 31 January, following a legal dispute, AstraZeneca agreed to supply the European Union with an extra nine million doses.

**A5.24** By 2 February, 10 million doses of vaccine had been administered, including 9.6 million first vaccinations. Case numbers continue to fall but concerns are raised about a new variant that has mutated from the Kent/alpha variant.

**A5.25** On 4 February, the Bank of England forecasted that the UK economy would shrink by 4.2 per cent in the first quarter of 2021, but then bounce back strongly as the vaccination programme enabled the UK to open up its economy. The next day, the Chancellor announced that small businesses would

now have 10 years instead of six to repay government-sponsored Covid loans. On 7 February, the number vaccinated passes 12 million.

**A5.26** By 9 February, 1.7 million people in England and Wales had been asked by the NHS Covid App to self-isolate since its launch. The Government announced that people returning to England from red list countries from 15 February would be required to pay £1,750 for a ten-day quarantine stay in government authorised hotels. All travellers arriving by air into Scotland would be required to quarantine at a hotel for ten days.

**A5.27** On 12 February, ONS recorded that the UK economy shrank by 9.9 per cent in 2020, the largest economic contraction on record. The UK had vaccinated 15 million people by 14 February. The daily number of cases continued to fall. On 16 February, shielding was extended until the end of March and an additional 1.7 million people in England were advised to shield. On 21 February, Insolvency Service data suggested 250 companies made plans to make a total of 32,000 people redundant in January 2021, the lowest monthly figures since the beginning of the pandemic. Around a third of all adults had now had a first vaccination.

**A5.28** On 22 February, as the Covid alert level was reduced from five to four and research found that vaccination significantly reduced serious illness even from one dose, the Prime Minister unveiled a four-step plan for ending Covid restrictions by 21 June: schools and colleges were to re-open on 8 March with outdoor gatherings for up to six people and grass roots sport to resume on 29 March; non-essential shops, hairdressers, gyms and outdoor hospitality were to re-open on 12 April; two households would be able to mix indoors, with the rule of six applied to pub settings from 17 May; and all legal limits on social contact were to be lifted by 21 June. This timetable was subject to tests on vaccines, infection rates and new variants being met. Airlines reported a surge in holiday bookings after the announcement. The following day, a similar plan was announced for Scotland. Primary pupils, and older secondary pupils were to return to the classroom on 15 March, with others not returning until after Easter. Four people from two separate households were to be allowed to meet up outdoors from 15 March. Scotland's stay at home restrictions were to be lifted on 5 April with the reopening of non-essential retail, restaurants, pubs, gyms and hairdressers expected to start from 26 April.

**A5.29** By 24 February, 18 million had received their first dose of the vaccination. On 25 February, the UK's Covid alert level was lowered from five to four as the threat of the virus to the NHS had receded. By 28 February, more than 20 million had received their first dose of the vaccination.

**A5.30** On 1 March, Public Health England published data that suggested that a single shot of the two most common vaccines (AZ and Pfizer) reduced the chance of hospitalisation by over 80 per cent. On 2 March, Northern Ireland announced its exit strategy from the restrictions but no timetable was given.

**A5.31** In the Budget on 3 March, the Chancellor confirmed that the furlough scheme would be extended until the end of September 2021 along with the Universal Credit top-up of £20 a week. Other measures included: three-month extensions to the end of June 2021 for the business rates holiday, and the stamp duty holiday; Corporation Tax increasing from 19 per cent to 25 per cent in April 2023; the contactless payment limit increasing from £45 to £100 later in 2021. NHS staff were given a 1 per cent pay rise with pay freezes for other public sector workers. Office for Budget Responsibility forecasted that GDP would not get to its pre-pandemic level until mid-2022 – growing by 4 per cent in 2021 and 7.3 per cent in 2022.



**A5.32** On 5 March, Office for National Statistics data for the week up to 27 February indicated that Covid cases in the UK had fallen by a third on the previous week. The R number remained below 1. On 7 March, 82 deaths were recorded in the UK – below 100 for the first time since 9 October 2020). 22.2 million people had received their first vaccine.

**A5.33** On 10 March, the House of Commons Public Accounts Committee found that there was no clear evidence that the Test and Trace scheme had reduced Covid rates or prevented lockdowns.

## **The first phase of the roadmap out of lockdown: March-May 2021**

**A5.34** By 20 March, 26.9 million people, or half of the UK's adult population, had received their first Covid vaccine. But at the same time there was some discussion that the virus could be with us for some time – government advisers said that summer holidays overseas were extremely unlikely, and suggested that measures such as social distancing and wearing face coverings could be in place for several years. On 25 March, MPs voted to extend the emergency powers in the Covid-19 Act 2020 for a further six months.

**A5.35** On 27 March, Boris said that despite a surge of cases in Europe, there was nothing in the UK's data to dissuade him from continuing on the 'roadmap to freedom'. On 29 March, the stay at home order for England came to an end, as two households or six people were allowed to meet up outside. Weddings with up to six people were also permitted again. From 1 April, the four million people in England and Wales told to shield by their GPs were no longer required to do so.

**A5.36** On the same day, the Medicines and Healthcare products Regulatory Agency said it found 30 cases of rare blood clots that developed in people after they had the Oxford-AstraZeneca vaccine. Following increasing concern, on 7 April it was announced that adults under 30 would be offered an alternative vaccine to the Oxford–AstraZeneca vaccine.

**A5.37** On 12 April, Covid-19 rules were eased in all of the Home Nations as planned, with changes including the reopening of non-essential retail in England and Wales, the end of the 'stay at home' order in Northern Ireland, and the return of school pupils in Northern Ireland and Scotland. From the 13 April, adults in the 45-49 age group became eligible for their first vaccine.

**A5.38** On 16 April, health officials confirmed that 77 cases of a strain of Covid-19 from India had been discovered in the UK. India was added to the UK's 'red list' of countries from where most travel is prohibited on 19 April, with the rules coming into effect from 23 April. On 24 April, official figures showed that 33.5 million people, half the UK's population, had received their first Covid-19 vaccine, while 12 million had received both vaccines. Between 26 April and 27 April, the vaccine rollout was extended to those aged 42 and above in England.

**A5.39** Amid concerns about the links between the Oxford-AstraZeneca vaccine and blood clots, alternative vaccines were extended to adults under 40 on 4 May. On the same day, Public Health England declared that the Indian variant was a 'variant of concern'. By 13 May, the government was concerned about the increase in the Indian variant, and suggested that it may be necessary to reimpose

some restrictions at a local level. In order to help tackle this variant, the gap between first and second vaccinations was narrowed to eight weeks for people in the top nine priority groups from 14 May.

## The Delta variant and third wave: May-July 2021

**A5.40** On 17 May, Matt Hancock confirmed that the Indian variant was now the dominant strain of the virus in England, with data indicating that it spreads more easily but could be prevented with vaccination. Covid rules were eased as planned in England, Scotland and Wales: hospitality could reopen, and indoor mixing was allowed for up to six people from two separate households. However, in eight areas where the variant was spreading fastest, people were advised not to meet up indoors. On 22 May, research by Public Health England showed that both Pfizer and AstraZeneca vaccines were effective against the Indian variant, but one dose was less effective than for the Kent variant.

**A5.41** From 27 May, Covid vaccinations were opened to everyone aged 18 and over in Northern Ireland, making it the first part of the UK to offer the vaccine to all adults. On 28 May, ONS figures showed signs of a small increase in Covid cases across the UK, largely driven by the Indian variant. Professor Ravi Gupta suggested that there were early signs that the UK was entering a third wave. The Government announced a drive to get everyone over 50 or classed as clinically vulnerable fully vaccinated by 21 June. On 31 May, the Kent variant was renamed the Alpha variant, and the Indian variant was renamed the Delta variant.

**A5.42** On 1 June, the UK recorded its first day with zero Covid-related deaths since March 2020, and on 2 June figures showed that 75 per cent of adults had received their first dose of the vaccine. But on 4 June, ONS figures suggest the number of cases rose by as much as two thirds compared to the previous week. With concerns about the Delta variant ongoing, on 14 June, the Prime Minister said that the relaxation of restrictions planned for 21 June would be delayed by four weeks, until 19 July. The following day, Nicola Sturgeon said that Scotland's move to the lowest level of restrictions would be delayed by three weeks. On 17 June, plans to ease restrictions in Northern Ireland were pushed back until 5 July. On 18 June, the First Minister of Wales confirmed that lifting of restrictions in Wales would be postponed for four weeks.

**A5.43** From 1 July, the Coronavirus Job Retention Scheme began to wind down, with plans for it to cease at the end of September. On 5 July, the Prime Minister set out the last stage of the roadmap for lifting restrictions, planned for the 19 July. At this point, the compulsory wearing of masks, social distancing, the rule of six, and the work from home rule would end. On 6 July, Health Secretary Sajid Javid confirmed that people in England who have received both vaccines will no longer be required to self-isolate when a close contact tests positive for Covid, from 16 August. On 8 July, government confirmed that fully vaccinated UK residents arriving into England from amber list countries would no longer be required to quarantine after 19 July, but would still be required to pay for Covid tests. Northern Ireland confirmed it would adopt the same policy from 26 July.

**A5.44** On 12 July, the Health Secretary and the Prime Minister Boris Johnson confirmed almost all Covid restrictions would be removed in England on 19 July. The following day, Nicola Sturgeon announced that Scotland would move to level zero restrictions from 19 July, but that wearing of face coverings would remain mandatory for some time after that. On 14 July, the Welsh Government announced that most restrictions in Wales would be lifted on 7 August.

**A5.45** On 17 July, the Government confirmed that all adults in the UK had been offered a first vaccine. On 19 July, the final restrictions were lifted in England, allowing nightclubs to reopen and abolishing social distancing rules, with no limits on how many people can meet or attend events, while the wearing of face coverings was advised but no longer required. At the same time, Scotland moved to level zero restrictions, allowing larger numbers of people to meet up indoors, as well as to attend weddings and funerals.

## Living with the virus: July-October 2021

**A5.46** On 22 July, the Government announced that key workers within the food industry would be allowed to take daily Covid tests rather than self-isolating if they were a close contact. This was subsequently expanded to include police, fire, Border Force, transport and freight staff. The government confirmed that fully vaccinated US and EU citizens arriving into England from an amber list country would no longer be required to quarantine from 2 August. On 29 July, the Welsh Government announced that fully vaccinated people who were close contacts of someone testing positive would no longer be required to self-isolate from 7 August. From 16 August, people in England and Northern Ireland who had received both vaccines, and those aged under 18, were no longer required to self-isolate if they had been in contact with someone who had tested positive for Covid-19.

**A5.47** The vaccine programme was extended to younger age groups, with people aged 16 and 17 invited to get their first vaccine from 6 August. 12-15 year olds were offered a single dose from 13 September. With winter approaching, the Health Secretary confirmed on 19 August that a Covid jab booster programme would take place from September, prioritising those with weakened immune systems.

**A5.48** On 5 September, vaccines Minister Nadhim Zahawi confirmed that vaccine passports would be required for nightclubs and other indoor venues in England from the end of September. But opposition to these plans was substantial, and on 12 September, the Health Secretary confirmed that these plans had been scrapped. On 7 September, the Prime Minister announced a new Health and Social Care Tax worth £12bn designed to deal with the backlog caused by Covid and improve social care in England.

**A5.49** On 14 September, the Prime Minister and Health Secretary unveiled the Covid Winter Plan for England, which included a Plan A and a Plan B, the former designed to prevent the NHS from coming under pressure, and the latter designed to be enacted as a last resort if the NHS does come under pressure. Plan B included the introduction of mandatory vaccine passports for large events, a return to a legal requirement for face coverings in some indoor settings, and possible advice to work from home. The booster vaccination program began in England and Wales on 16 September.

**A5.50** On 30 September, the Coronavirus Job Retention Scheme ended. Chancellor Rishi Sunak announced a £500m package of grants to help vulnerable households over the winter with essentials such as food, clothing and utilities. Social distancing restrictions for shops, theatres and a number of other indoor settings came to an end in Northern Ireland.

**A5.51** On 4 October, changes to the travel list came into effect, with the green and amber list merged, and changes to the rules regarding tests for fully vaccinated people. On 6 October, the temporary £20 increase in Universal Credit payments came to an end.

**A5.52** On 19 October, a further 43,738 new Covid cases are recorded, along with 223 deaths, the highest daily number since March 2021. With the number of new cases above 40,000 for the seventh consecutive day, Downing Street said it was "keeping a very close eye" on the situation, but that the Cabinet had not yet discussed enacting its Plan B for the winter. The following day, the NHS Confederation called for the immediate reintroduction of some Covid measures in order to prevent England "stumbling into a winter crisis". The Health Secretary warned that the reintroduction of some Covid measures through the UK government's Plan B, such as compulsory face coverings and advice to work from home if possible, is more likely if not enough people get vaccinated.



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