National Minimum Wage

Low Pay Commission

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Low Pay Commission Report 2022

National Minimum Wage: Low Pay Commission Report 2022

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

January 2023

CP 758

This publication is available at www.gov.uk/official-documents.

Any enquiries regarding this publication should be sent to us at lpc@lowpay.gov.uk.

ISBN 978-1-5286-3741-1

E02810433 01/23

Printed on paper containing 40% recycled fibre content minimum

Printed in the UK by HH Associates Ltd. on behalf of the Controller of His Majesty's Stationery Office

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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 work follows a remit set by the Government. This year, as since 2020, our remit for the NLW has been to recommend a rate consistent with reaching the target of two-thirds of median hourly earnings by October 2024. We were asked to 'advise on emerging risks' and, if the economic evidence warranted it, 'to advise the Government to review the target or its timeframe'. For the other rates of the NMW, including the temporary 21-22 Year Old Rate, our remit has remained to recommend as high a rate as possible without damaging the employment prospects of each group affected by the rates.

2 Our remit this year included some further tasks. As last year, we were asked to consider the impact of minimum wages on different parts of the country; and on different groups of workers with protected characteristics. In addition, the Government recognised our intention, stated in last year's report, to review the Accommodation Offset. As well as our recommendation on the offset rate for April 2023, this report sets out our views on the policy framework surrounding the offset and our future approach to making recommendations on it.

3 This annual report – our 24th – provides the evidence and rationale behind our recommendations on the rates to apply from April 2023. Our recommendations reflect a consensus between all members of the Commission, including representatives of workers, employers, and labour market experts, reached through careful consideration and discussion of the available evidence.

4 We submitted our recommendations to the Government on Monday 24 October 2022. This was in the middle of a turbulent period – around a month after the former Chancellor's 'mini-budget', immediately following the former Prime Minister's resignation and before the current Chancellor's Autumn Statement. The evidence we present and the conclusions we draw are based on information available up to Wednesday 19 October, when we met to agree our recommendations. We do not include data and forecasts published after this point, for example those published in November by the Office for Budget Responsibility. The Chancellor announced the Government's acceptance of our recommended rates in the Autumn Statement on Thursday 17 November.

5 Last year's recommended 6.6 per cent uprating for the NLW came into effect in April 2022 and aimed to put the NLW back on course to hit the 2024 target, having recommended a below on-course rate in the midst of the pandemic. In preparation for extending the NLW to 21-22 year olds by 2024, we recommended a higher increase (9.8 per cent) for this group to avoid a very large jump when they become eligible. For those aged under 21, we recommended increases in line with forecast increases in average earnings. This year our decision was whether to recommend continuing on the path to the Government's 2024 target in the face of high inflation and a worsening economic outlook but strong demand for labour.

6 After two years of disruption caused by the pandemic and lockdowns, this year has seen an improvement in the quality of our evidence base. Our key data source, the Annual Survey of Hours and

Earnings, was no longer distorted by large numbers of furloughed workers, although the sample size has yet to return to pre-pandemic levels. The pandemic restricted us from meeting workers and employers in person, but this year, alongside online meetings, we were able to return to in-person visits and meetings across the UK. We visited Walsall and Wolverhampton, Hastings, Conwy and Llandudno and Londonderry/Derry, as well as holding virtual visits of Glasgow and Leicester.

7 Despite the improvements in the available evidence, the challenges of separating the effects of the NMW and NLW upratings in 2020 and 2021 from those of the pandemic remain. For that reason, we have made less of year-on-year comparisons, focusing instead on changes across the period from 2019 to 2022 and comparing these with the preceding three years from 2016 to 2019.

8 We received 52 written consultation responses and met with more than one hundred businesses, unions, 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 over the year, and who agreed to be listed.

9 We commissioned three research projects to inform this year's report: providing crucial evidence on employers' responses to the rising NLW; the effects of the extension of the NLW to 23 and 24 year olds on that age group; and the use and impacts of the Accommodation Offset. The research which informed this year's report is summarised in Appendix 2. We have also commissioned three longer-term projects which will report in future years.

10 The improvement in evidence sources meant we were again able to undertake econometric analysis of the impacts of the NLW and NMW increases for first time since 2019. Our internal econometric analysis is summarised alongside other research in Appendix 2 and will be published in full in the near future.

11 This time next year we expect to recommend the rate needed to achieve the Government's target of two-thirds of median hourly earnings by 2024, subject to economic conditions and the emergency brake. This is a close horizon for businesses in particular, and we have already heard representations from employers and workers on what should happen after 2024. This report does not address that question in detail. We stand ready to advise and gather evidence on the minimum wage framework beyond 2024 to inform the Government's decision on this policy, including by reflecting the views and evidence we have heard so far.

12 In our 2021 Report, we reviewed the domestic worker exemption to the NMW. We recommended that this exemption should be removed. This recommendation was made to protect a group of vulnerable workers, predominantly female, whose work is generally hidden and voices unheard, but whose lives are greatly affected by minimum wage regulations. We take this opportunity to restate our recommendation. We continue to believe it is important that the Government takes action to protect this group and we await a response to our recommendation.

13 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 and their experiences in and out of the workplace.
- Chapter 4 looks at the strength of the labour market for workers eligible for the NLW.
- Chapters 5 and 6 do the same as Chapter 4, but for younger workers affected by the age rates of the NMW and apprentices respectively.
- Chapter 7 then looks at other ways employers have responded to the rising minimum wage, including through prices.
- Chapter 8 considers the workings of the minimum wage, including our review of the Accommodation Offset and certain aspects of compliance and enforcement.
- Chapter 9 discusses the path of the NLW to 2024, including stakeholder views on the two-thirds target.
- Chapter 10 sets out recommendations and their rationale.

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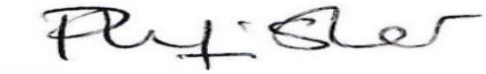

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The Government's Remit to the Low Pay Commission

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 around 2 and a half million low-paid workers.

The National Living Wage was introduced in April 2016, and in 2019, the government set a target for the National Living Wage to reach two-thirds of median earnings by 2024 for workers aged 21 and over, taking economic conditions into account.

Having accepted the Low Pay Commission's recommendations in full, on 1 April 2022 the National Living Wage will increase by 6.6 per cent to £9.50 an hour, applicable for workers aged 23 and over. The government is also introducing increases between 4.1 per cent and 11.9 per cent to each of the National Minimum Wage rates for younger workers and apprentices.

National Living Wage and National Minimum Wage rates

As we continue to navigate our way out of the pandemic, the labour market has shown strong signs of recovery, but workers and employers continue to face economic challenges.

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 2023 in order to reach two-thirds of median earnings (of those eligible for the National Living Wage) by 2024, taking economic conditions into account. We remain committed to lowering the age threshold for the National Living Wage to aged 21 and over by 2024. We ask the Low Pay Commission to comment on the impacts to date of an increased wage for workers aged 21-22 ahead of the further lowering of the age threshold.

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 to expand its evaluation capabilities and commission minimum wage research from leading experts, using new methods and sources of evidence for its assessment of the impact of the National Living Wage.

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 2023, 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 2023.

To further expand the evidence base, the government asks the Low Pay Commission to continue to gather particular evidence on groups of low paid workers with protected characteristics. As identified in the government's impact assessment, groups more likely to be affected by changes to the minimum wage rates include younger, older, disabled, women, and ethnic minority workers.

Additionally, to continue supporting the government's levelling up agenda we ask the Low Pay Commission to continue to gather evidence on the differing impact across the United Kingdom of increases to the minimum wage rates, to inform how the minimum wage contributes to the mission to improve pay, employment, and productivity in all areas of the UK.

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, business impacts, and relevant policy changes.

Accommodation offset review

We note the Low Pay Commission's intention in their 2021 report to review the operation of the accommodation offset. Government asks the Low Pay Commission to consider on what basis the accommodation offset should increase in the future.

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 2022.

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 24th, contains the evidence and rationale for our recommendations to apply from April 2023. We met to agree our recommendations on 19-21 October 2022.

2 Our remit from Government is to recommend increases that raise the NLW up to two-thirds of median hourly earnings of those aged 21 and over by 2024. In providing this advice, Government asked us 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 Our recommended 6.6 per cent increase of the NLW in April 2022 aimed to put it back on course to hit the 2024 target, having recommended a below on-course rate in the midst of the pandemic. In preparation for extending the NLW to 21-22 year olds by 2024, we also recommended a higher increase (9.8 per cent) for this group. This was to avoid a very large jump when they become eligible. For those aged under 21, we recommended increases in line with forecast growth in average earnings. Since we made those recommendations in October 2021, the economic situation has transformed.

The economy

4 In October 2021 the Bank of England expected inflation to peak at just over 4 per cent. Since then, post-pandemic supply chain issues, exacerbated by the Russian invasion of Ukraine, have caused prices – especially for energy – to soar. This has driven the highest levels of inflation seen in decades, reaching 10 per cent in September 2022.

5 Rising prices mean rising costs for businesses, which are then passed on to consumers, fuelling further inflation. Core inflation has risen above 6 per cent for the first time in thirty years. Producer input and output prices have increased sharply over the last 18 months – reaching their highest growth rates in over 40 years. Though price pressures may be easing, the inflation outlook is unclear, as imminent policy decisions will have a direct impact.

6 The energy price guarantee (EPG) will reduce headline inflation by around 5 percentage points up to April 2023. At the time of our recommendations, however, there were few details for the scheme

beyond that point. Bank of England decisions on interest rates and the Government's Autumn Statement on 17 November were also expected to affect inflation.

7 Business investment had been weak even before the arrival of Covid-19. It fell sharply during the pandemic and remains well below pre-pandemic levels. With margins under pressure from increasing costs, decreasing credit availability and a weaker medium-term outlook, business investment is likely to remain subdued.

8 Real household disposable incomes fell from the middle of 2021 as inflation rose and wages and other incomes lagged behind. Despite substantial Government support, real disposable incomes are set to continue falling over the next two years as interest rate rises add to housing costs.

9 Together this means that while GDP recovered faster than in previous recessions, growth has been negligible since the end of 2021. Inflation has sapped consumer confidence and spending power and the outlook is for much weaker GDP growth in 2023 and 2024. The most recent forecasts expect lower growth than in the US and the Euro area, but stronger than in Germany or Italy.

Labour market

10 Employment levels have recovered rapidly, but remain below pre-pandemic highs, largely because of lower self-employment. Demand has been key for the jobs recovery. While they have softened in recent months, vacancy levels remain close to historic highs, with many employers struggling to find staff.

11 As we emerged from the pandemic, employers cited a range of causes for their recruitment challenges. These included the intense competition as firms sought to restore their workforces, changes in lifestyle and career choices among workers and reduced access to EU workers. The composition of the migrant workforce has shifted from EU-born to Non-EU born workers. Though increases in the latter group have overwhelmingly been in non-low paying occupations. While lower access to migrant workers may have exacerbated recruitment challenges in low-paying sectors, the fall in UK-born workers was far greater in these sectors.

12 Inactivity has risen, driven by an increase in movements from work into retirement among older workers and worsening health for young and old alike. Worsening health may explain why movements from inactivity into work haven't increased alongside the rise in vacancies as they have done in the past. This in turn may limit employers' options for filling their vacancies. While inactivity rose particularly among lower qualified workers, we don't believe this is connected to the minimum wage.

13 International comparisons show that sectors like hospitality are struggling to recruit across the EU, where inactivity has not risen and access to migrant workers has not changed. This suggests other factors, including workers' choices about their careers and lifestyles, may also play a role. We have heard many stories of workers seeking to move away from anti-social hours to spend more time with family for example.

14 Record demand for new workers means there is little slack in the labour market. Unemployment is at a historic low, but underemployment also fell sharply after the pandemic. Underemployment is where workers want more hours of work than offered. This labour market tightness has driven

increases in wage growth as employers compete to attract workers. Pay growth in the second quarter of 2022 was in line with what we would expect given slack in the labour market is at its lowest in at least 20 years. Nominal (Average Weekly Earnings) annual pay growth has returned to pre-financial crisis levels of 5-6 per cent. Likewise, median pay settlements reached levels last seen before the financial crisis (around 4 per cent by August 2022). Despite this strong nominal growth, wages have not kept up with inflation and the gap between the two is the widest for decades.

15 The key question is what happens next if the economy continues to falter. Current vacancy levels are high but labour market indicators tend to lag the macro economy. As the effects of the substantial hits to real incomes and low investment start to work through, we should expect vacancies to continue falling and unemployment to rise. Indeed, the majority of HMT panel of independent forecasters expect unemployment to rise next year. In turn, a looser labour market will mean less pressure on wages and, again, the HM Treasury panel expect lower wage growth next year than this year.

Low-paid workers

16 The April 2022 NLW and NMW upratings came into effect in a tight labour market with record vacancies and high nominal wage growth. While employment had not fully recovered in low-paying occupations, this mainly reflects the economic effects of the pandemic-induced recession, difficulties in recruiting, and long-term trends such as the decline in retail employment. Vacancies remain high in most low-paying sectors. Both our descriptive and econometric analysis find little evidence that recent NMW and NLW rises had harmed employment, either in the lowest-paying parts of the country or among the groups of workers most likely to be paid the minimum wage.

17 Instead, we heard that difficulties recruiting in low-paying sectors were leading to higher wages. Between April 2019 and April 2022, hourly pay grew fastest for the lowest-paid jobs (17.5 per cent at the 10th percentile, compared with 10.8 per cent at the median). Pay has also grown fastest in the lowest-paying areas of the country. While the NLW is a key driver – growing 15.8 per cent over this period – many jobs at the bottom of the pay distribution saw pay grow by more than the NLW, suggesting the tight labour market is a factor.

18 The tight labour market has meant particularly large pay rises for young people. For example, between 2019 and 2022 median hourly pay grew more than twice as fast for 16-17 year olds than for those aged 23 and over (25 per cent compared with 11 per cent respectively).

19 Strong pay growth for low-paid workers of all ages led in part to the number of minimum wage jobs – what we term 'coverage' – falling between 2019 and 2022. For NLW workers, coverage has fallen by 15 per cent. This fall is counter to the long-term trend of rising coverage as a share of jobs since the introduction of the NMW in 1999. Also, it is not what we would expect given the increasing bite of the NLW (the NLW's value relative to median hourly pay).

20 Coverage has also fallen for young people. They are increasingly paid at rates above the NMW for their age, including a growing share at the NLW and above. For example, as 21 and 22 year olds approach entitlement to the NLW in 2024, 85 per cent were already paid at or above this rate in 2022, up from 79 per cent in 2019. Many employers continue to tell us they do not use the youth rates, with recruitment difficulties an increasing factor in this.

21 Underpayment is the number of workers who appear to be paid below the legal minimum. Despite a tight labour market, it was notable that underpayment rose as a share of coverage in 2022. While difficulties in measurement cause some uncertainty around this rise, it is not what we would expect in a flexible labour market with record vacancies, rising wages and employers desperate to recruit.

22 This emphasises the importance of enforcement, but also shows that some workers may be trapped in low-paying jobs. A consistent message we have heard from low-paid workers over the years is that moving jobs is seen as a significant risk. Workers fear 'last in, first out' style recruitment practices; losing hours of work, poorer working schedules or T&Cs; and 'starting from scratch' in terms of accruing both statutory and non-statutory rights or the tenure workers believe is necessary to move from a temporary to permanent contract. This reluctance to move jobs may also contribute to employers' recruitment difficulties. This unexpected combination of a tight labour market with significant underpayment is something we will return to in a future report on non-compliance.

23 While we welcome stronger nominal wage growth, adult wages are not keeping up with inflation, a particular issue for low-paid workers. Lower-income households spend a higher share of their income on energy, food and fuel, which are all subject to higher inflation rates. This is driving workers to cut back on food and heating and, in some instances, forcing them to miss meals or choose between food and fuel.

24 As in previous years, we heard how the difficulty of living on low pay is exacerbated by insecure working arrangements, unpredictable shift patterns and fluctuating incomes. These are areas where we have previously made recommendations (Low Pay Commission, 2018). Union evidence showed the growth of insecure work including zero-hours contracts, agency, casual, seasonal and other fixed-term contracts.

25 Low-paid workers who worked throughout the pandemic told us they felt undervalued and overstretched and that staff shortages led to still further work intensification and risk of 'burnout'. We heard that unpredictable working hours and pay made budgeting extremely challenging. They also expressed fear over how fluctuating hours interacted with their Universal Credit payments.

Employer responses to the NLW

26 Employer responses to the rising NLW this year reflected the tight labour market and high inflation. While the most common response remained to absorb the added cost and accept lower profits, this year a growing share of employers told us they were raising prices. Though for most employers, their chief concerns were energy prices and labour supply rather than rising wage costs. While businesses were reluctant to pass on price increases to consumers, many felt they had few other options.

27 The recruitment and retention difficulties faced by many employers appear to have affected their response to the NLW. Compared with 2019, fewer said they were reducing overtime or bonuses; reducing headcount through redundancies or reduced recruitment; reducing pay growth for the wider workforce; or cutting hours in response to the NLW.

28 Both employer and worker representatives expressed concerns over shrinking pay differentials between minimum wage workers and those in more senior positions. Employers argued that lower differentials reduced the incentive to take on additional responsibility and progress at work. While it remained a common response for employers to reduce differentials, this was less the case than in previous years.

29 As labour becomes harder to resource, there is more incentive to invest in productivity-enhancing technology, including automation. As profits were squeezed, however, we heard this was not always possible. This is especially for smaller businesses, who remained far more likely to reduce investment in response to the NLW. Conversely, we heard from several larger firms looking at ways to improve productivity.

Apprentices

30 Last year we recommended aligning the Apprentice Rate and the 16-17 Year Old Rate. This implemented a commitment we made in 2020 and reflected strong feedback from stakeholders that there was room for the Apprentice Rate to increase. This involved a large increase in the Apprentice Rate of 11.8 per cent.

31 This increase has seen coverage rise among younger apprentices, in strong contrast to the other NMW rates. Coverage among older apprentices has fallen though. This was likely driven by the continued shift to higher-level apprenticeships seen across the four nations.

32 We heard little negative feedback about the large increase in the Apprentice Rate. Indeed, many employers thought there was room to increase it further, though others were concerned by falling starts. Employers were unhappy with the direction of apprenticeship policy in England, particularly the inflexibility of the apprenticeship levy. Unions continued to call for a major increase to the Apprentice Rate. They argued the current rate restricted opportunity, as low pay discouraged young people from applying for roles.

Recommended rates

33 We recommend the NLW increases by 9.7 per cent (92 pence) in April 2023 to £10.42. This is the on-course rate consistent with achieving the target of two-thirds of median earnings by 2024. We estimate an increase of 6.3 per cent will be required in 2024 to achieve this target, which we currently estimate to be £11.08. We judge this balance, with a higher increase in 2023 than 2024, is appropriate given prevailing economic conditions. While the economy has slowed recently, the labour market is very strong. It is sensible to have a larger increase to reach the Government's target while the labour market is still robust.

34 The consensus among forecasters is for GDP growth to slow in 2023, and among more recent forecasts to turn negative over the year. The labour market is also expected to soften over the course of 2023, meaning a lower increase to meet the target may be more appropriate in 2024.

35 Younger workers – those aged under 23 – were the most likely to lose employment during the pandemic. But their recovery was rapid throughout 2021 and 2022 and their employment rates are now

close to pre-pandemic levels, aided by the tight labour market and strong demand for labour in youth-friendly sectors.

36 This tight labour market has also improved pay for these workers, where pay has increased substantially, particularly for those aged under 21. Because of this labour market strength for 16-17 and 18-20 year olds, we recommend increases of 9.7 per cent – in line with the increase in the NLW – for both of these groups, to £5.28 and £7.49 respectively.

37 We continue to support the alignment of the Apprentice Rate with the 16-17 Year Old Rate, and have seen no evidence of negative effects stemming from this change. With this in mind, we are considering if there is a need for a separate Apprentice Rate long term. Next year we expect a new Apprenticeship Evaluation Survey, which would provide the level of evidence necessary to see if a separate rate for apprentices is still justified.

38 The evidence continues to support the decision to bring 23 and 24 year olds into the NLW and the Commission's view remains that 21 and 22 year olds should also be brought into the NLW by 2024. To smooth this transition and avoid a very large increase once they become eligible, we recommend a 10.9 per cent increase for this group, taking them to £10.18 in 2023.

Accommodation Offset

39 We recommend the Accommodation Offset be increased by 4.6 per cent (40 pence), which is in line with forecast average earnings growth, to £9.10. We have also reviewed the operation of the Accommodation Offset, and this report sets out our evidence and conclusions.

40 Employers have strong incentives to invest in good-quality accommodation, especially in a tight labour market; the need to attract and retain a workforce makes decent accommodation an important part of many employers' recruitment offer. Despite this, workers we spoke to were unimpressed by their accommodation, especially where conditions were cramped and they were located away from essential utilities. Workers were reluctant to speak out about problems with accommodation or working conditions. A key finding was that accommodation charges risked pushing some workers into situations of low or no pay if their working hours fell. Employers we spoke to were aware of this risk and some had safeguards in place, reducing or removing accommodation charges for workers on low weekly hours.

41 There are two areas where we would like to see changes to better protect low-paid workers affected by the offset. Firstly, there needs to be greater assurance of the quality of the accommodation for which the offset can apply before we recommend further changes that could increase the value of the offset more quickly. We think it is imperative that a quality standard and suitable enforcement regime are put into place as soon as possible. If and when there is a reliable standard in place, employers' ability to deduct the offset should be dependent on meeting this. Until such a standard is in place, increases in the offset will be restrained, so that the value of the offset as a proportion of the NLW is not significantly increased until Commissioners have some assurance that there are robust minimum standards in place for accommodation and that these are enforced.

42 Secondly, Commissioners are concerned that current arrangements leave workers with low weekly hours at risk of very low income if the offset is taken in full. We have seen and heard evidence

of workers with cancelled shifts or short hours having to pay the full offset with little earnings. We have also seen examples of employers with measures in place to protect workers against this risk. We therefore recommend a minimum hours requirement for these workers before accommodation costs can be deducted.

43 We also recommend that seafarers be exempt from the Accommodation Offset while on board ship. This would prevent employers from deducting accommodation costs from their pay below the NMW. This reflects the distinct position of seafarers while at sea. They are confined to their work premises, which also happen to be their only available accommodation. And their presence on the vessel is required even while asleep in case of an emergency.

44 Finally, the policy interacts with the Seasonal Workers visa scheme, which since April 2022 has set a minimum hourly rate of £10.10 for seasonal workers in agriculture. The offset creates a loophole in this higher hourly rate, and we recommend that BEIS and the Home Office work together to address the interactions of these policies. We also urge the Government to provide more notice to employers in low-paying sectors of future changes in the seasonal workers rate and to align the process as far as possible with NMW upratings.

Recommendations

The National Living Wage and other minimum wage rates

We recommend that the following rates apply from 1 April 2023:

	2023 rate	Annual increase (£)	Annual increase (%)
National Living Wage	£10.42	0.92	9.7
21-22 Year Old Rate	£10.18	1.00	10.9
18-20 Year Old Rate	£7.49	0.66	9.7
16-17 Year Old Rate	£5.28	0.47	9.7
Apprentice Rate	£5.28	0.47	9.7
Accommodation Offset	£9.10	0.40	4.6

Accommodation Offset

The value of the Accommodation Offset as a proportion of the NLW will not significantly increase until we have some assurance that there are robust minimum standards in place for accommodation and that these are enforced.

We recommend a minimum hours requirement before accommodation costs can be deducted, for workers at risk of no or very low pay as a result of accommodation charges.

We recommend that seafarers be exempt from the Accommodation Offset while on board ship.

We recommend that BEIS and the Home Office work together to address the interactions between the Accommodation Offset and the minimum hourly rates set for seasonal workers visas in agriculture.

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Chapter 1

Economic context and outlook

Key findings

- GDP growth has not recovered to pre-crisis levels and is now slowing down, with output largely unchanged since the beginning of 2022. The UK is the only G7 country not to have recovered pre-pandemic levels of output.
- Inflation is rising rapidly, driven initially by supply chain disruptions as the global economy reopened post-Covid, but then by energy costs following Russia's invasion of Ukraine.
- This substantial increase in prices has hit consumers and workers hard, cutting real incomes and reducing consumer confidence to levels last seen during the financial crisis.
- Price increases have hit businesses too, with producer and input inflation at 30-40 year highs and a corresponding fall in business confidence.
- Businesses are concerned about the monetary policy response to rising inflation as they built up substantial debts during the pandemic. Rising interest rates increase the burden of those debts and businesses, particularly smaller businesses, have reported a deterioration in credit conditions.
- Business struggles with debt and borrowing have a direct impact on business investment, which was weak even before the pandemic. It then fell sharply during the pandemic and is still well below pre-pandemic levels.
- The outlook is for poor GDP growth in the near term. Inflation, while difficult to predict, is likely to remain high for some time. The combination of ongoing high energy costs and higher interest rates to tackle inflation mean disposable incomes are expected to continue falling in real terms. With margins under pressure from rising costs, decreasing credit availability and the weaker medium-term outlook, business investment is likely to remain subdued.

1.1 We met on 19-20 October 2022 to discuss and agree our recommendations. These recommendations are based on the evidence available at that time: ONS publications on the macroeconomy, inflation and the labour market up to 20 October; economic forecasts published by 19 October; Bank of England reports and minutes from August and September; the Labour Force Survey microdata up to the second quarter of 2022; and a pre-release version of the Annual Survey of Hours and Earnings for 2022. We made our recommendations and presented them to the Government on 24 October, before the OBR forecasts and the Budget on 17 November.

1.2 The economic backdrop looked very different when we considered our recommendations in the autumn of 2021. Table 1.1 shows that growth was expected to slow but remain historically strong (with GDP recovering to its pre-pandemic level in 2022) and inflation was expected to peak at just over 4 per cent in the autumn of 2021 before falling back towards its target. Average wage growth was also

expected to slow. There was also considerable uncertainty as evidenced by the range of forecasts available for each of these measures.

1.3 Using those forecasts, we projected that the National Living Wage (NLW) would need to reach around £10.70 to meet the target of two-thirds of median earnings for those aged 21 and over by 2024. Because furlough and compositional effects had artificially pushed wage growth measures upwards, we judged that projection a little high. This, combined with forecasts, created a very front-loaded path, with a larger increase required in 2022 than in 2023 or 2024. We did not believe this to be the right approach in the economic circumstances at that time. We therefore recommended that the NLW increase by 6.6 per cent to £9.50 an hour. This was slightly lower than the on-course rate of £9.58 but we expected it to be much faster than average wage growth and give a real wage increase to NLW workers.

1.4 Conditions, however, have not turned out as forecast. Growth has been weaker and inflation much stronger. Instead of peaking at just over 4 per cent in the fourth quarter of 2021, CPI inflation is now expected to peak at around 11 per cent in October 2022. Post-pandemic increases in demand for energy, supply chain difficulties, and labour shortages raised business costs and that has fed into higher prices. This was exacerbated by Russia's invasion of Ukraine in February 2022, which caused energy prices to rise further and affected world food supplies. This meant our recommendation did not keep up with inflation.

Table 1.1: Forecasts available in mid-October 2021 for GDP growth, CPI inflation and average wage growth, 2021-22

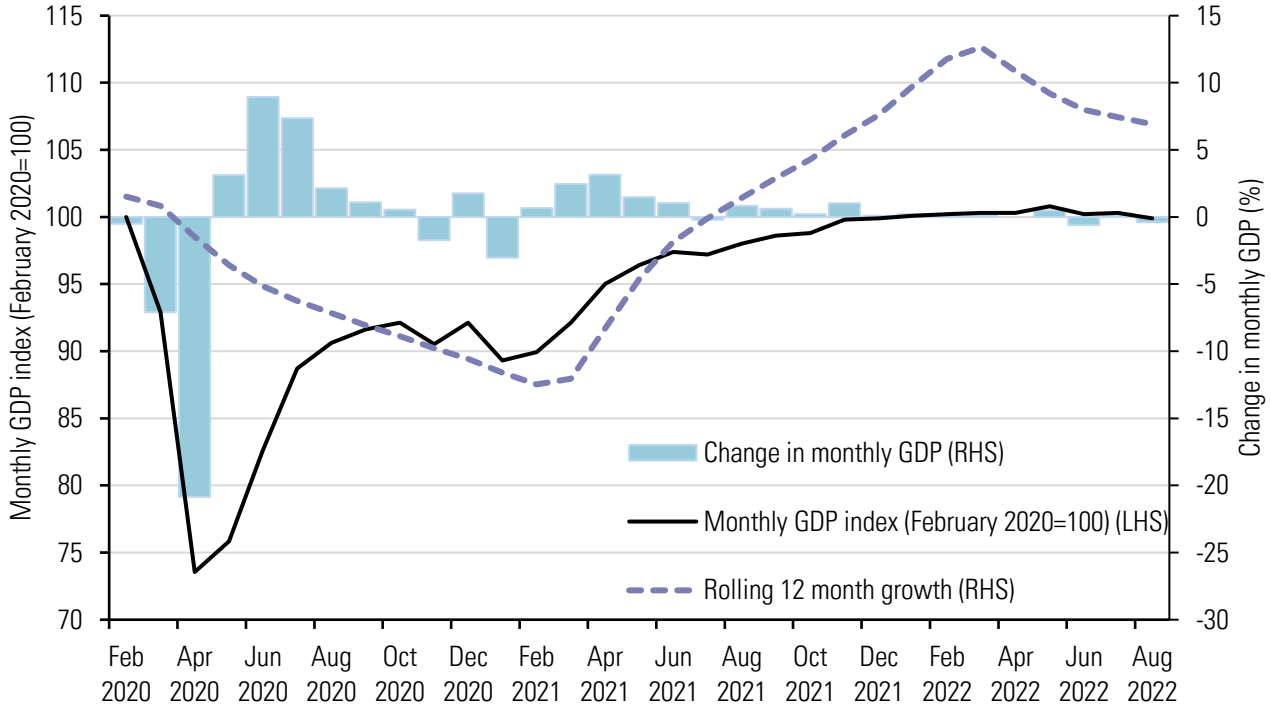
	GDP growth (%)		CPI price inflation in Q4 (%)		Average wage growth (%)	
	2021	2022	2021	2022	2021	2022
Bank of England (August 2021)	7.3	6.0	4.0	2.5	2.3	1.8
HM Treasury panel (October 2021)						
Median	7.0	5.1	3.7	2.3	5.1	3.3
Lower quartile	6.8	4.8	2.6	2.0	4.5	2.7
Upper quartile	7.1	5.8	4.0	3.0	5.4	4.2
Lowest	6.0	3.5	2.1	1.3	2.4	1.2
Highest	8.2	8.2	4.5	5.4	5.9	7.5

Source: HM Treasury panel of forecasts (HM Treasury, 2021b) and Bank of England (2021a). Forecasts made in three months to October 2021 for HM treasury panel. Indicative projections consistent with the MPC's forecast for Bank of England.

The recovery in GDP has stalled

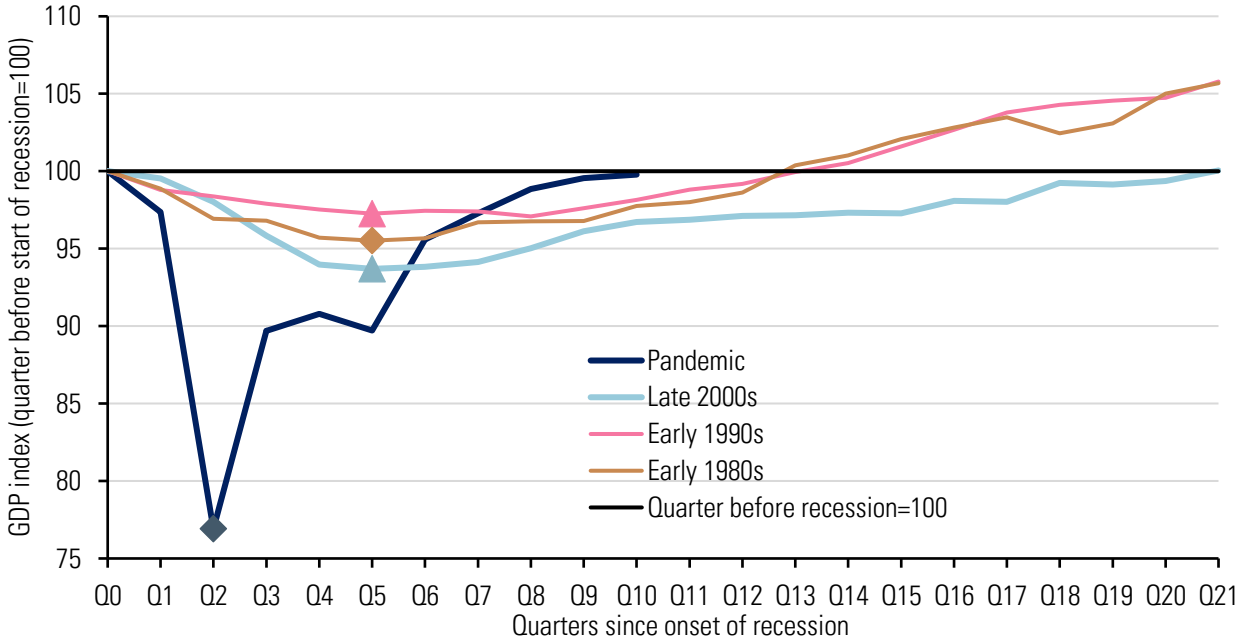
1.5 After falling by over 25 per cent at the onset of the pandemic, as shown in Figure 1.1, the UK economy rebounded strongly and had returned to just below its pre-pandemic level of GDP at the start of 2022. Compared with previous recessions (Figure 1.2), this was a fast recovery. Although the fall in GDP was much greater, it lasted only two quarters. The previous three recessions had five consecutive quarters of falling growth. It had taken thirteen quarters for GDP to return to its pre-recession level in the 1980s and 1990s, and twenty-one quarters after the financial crisis. This time, it had only taken ten quarters to get within 0.2 percentage points of its pre-recession level.

Figure 1.1: GDP growth, February 2020-August 2022



Source: LPC estimates using ONS data. Monthly GDP index (ECY2), monthly, seasonally adjusted, UK, February 2018-August 2022.

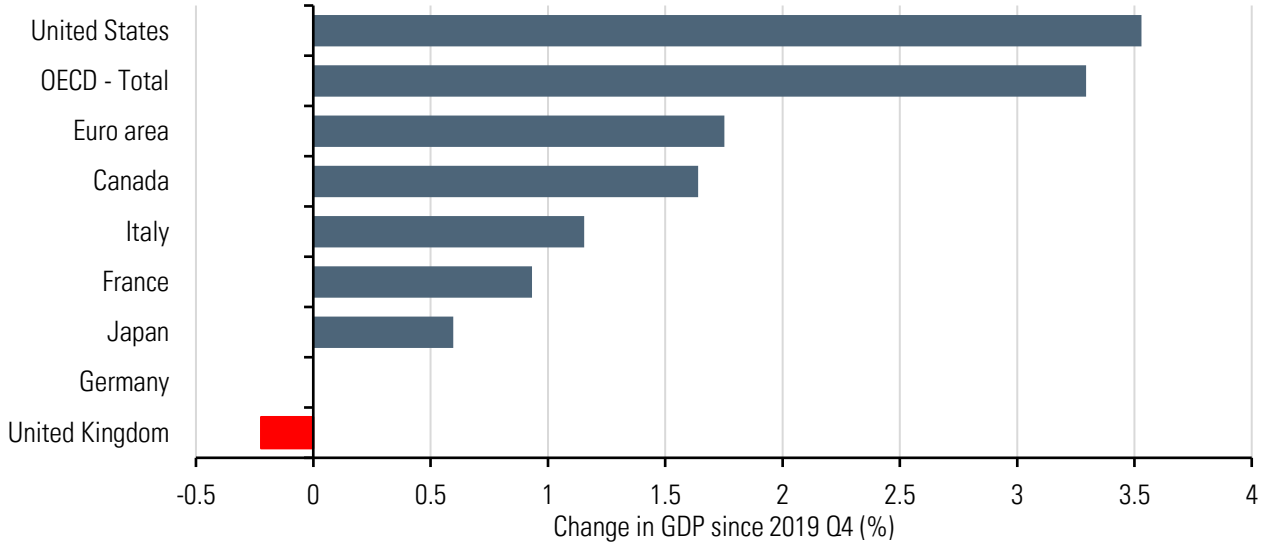
Figure 1.2: Recessions compared, GDP, UK, 1979-2022



Source: LPC estimates using ONS data. Real GDP (ABMI), quarterly, seasonally adjusted, UK, Q4 1979-Q2 2022.
Note: Q0 is defined as 1979 Q4 (for early 1980s), 1990 Q2 (for early 1990s), 2008 Q1 (for the late 2000s), and 2019 Q4 in the pandemic.

1.6 However, GDP growth has since stalled and in August 2022 remained around 0.1 percentage points below its pre-pandemic level. Of the G7 countries, the UK is the only one not to have recovered to its pre-pandemic level of output (Figure 1.3). Large stimulus packages helped the US economy to recover quickly, while the Euro area as a whole recovered more quickly than the larger EU economies, with Germany particularly affected by the Russian invasion of Ukraine.

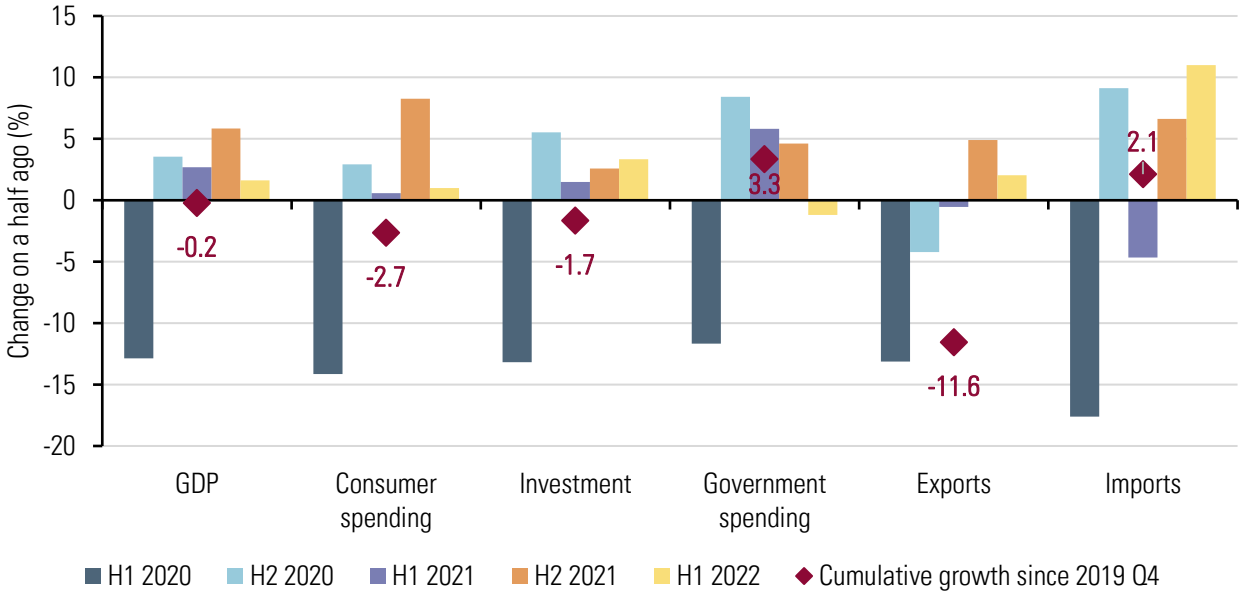
Figure 1.3: GDP growth, G7 countries and Euro area, 2019 Q4-2022 Q2



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 2022.

1.7 The fall in GDP was felt across all of its expenditure components (Figure 1.4). Consumer spending, total investment (public and private sector), government current spending, exports and imports all fell by over 10 per cent in the first half of 2020 compared with the second half of 2019. The recovery has been more uneven. Government spending on pandemic support, boosted by the roll-out of vaccines and test and trace, drove much of the growth in the second half of 2020 and the whole of 2021. However, government spending fell in the first half of 2022, as the vaccine and test and trace schemes were scaled down and the pandemic support was removed.

Figure 1.4: GDP growth by expenditure component, UK, 2020-2022



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, Q4 2019-Q2 2022.

1.8 Government consumption is the only component that has surpassed its pre-pandemic level. It was 3.3 per cent higher in the second quarter of 2022 than it was in the fourth quarter of 2019. Consumer spending and investment picked up from the second half of 2020 but remain 2.7 per cent and 1.7 per cent respectively below pre-pandemic levels. Imports recovered much more quickly than exports so net trade has dragged down overall growth. Imports were 2.1 per cent higher in the second quarter of 2022 than in the fourth quarter of 2019, while exports were 11.6 per cent lower.

Energy costs have caused inflation to increase rapidly

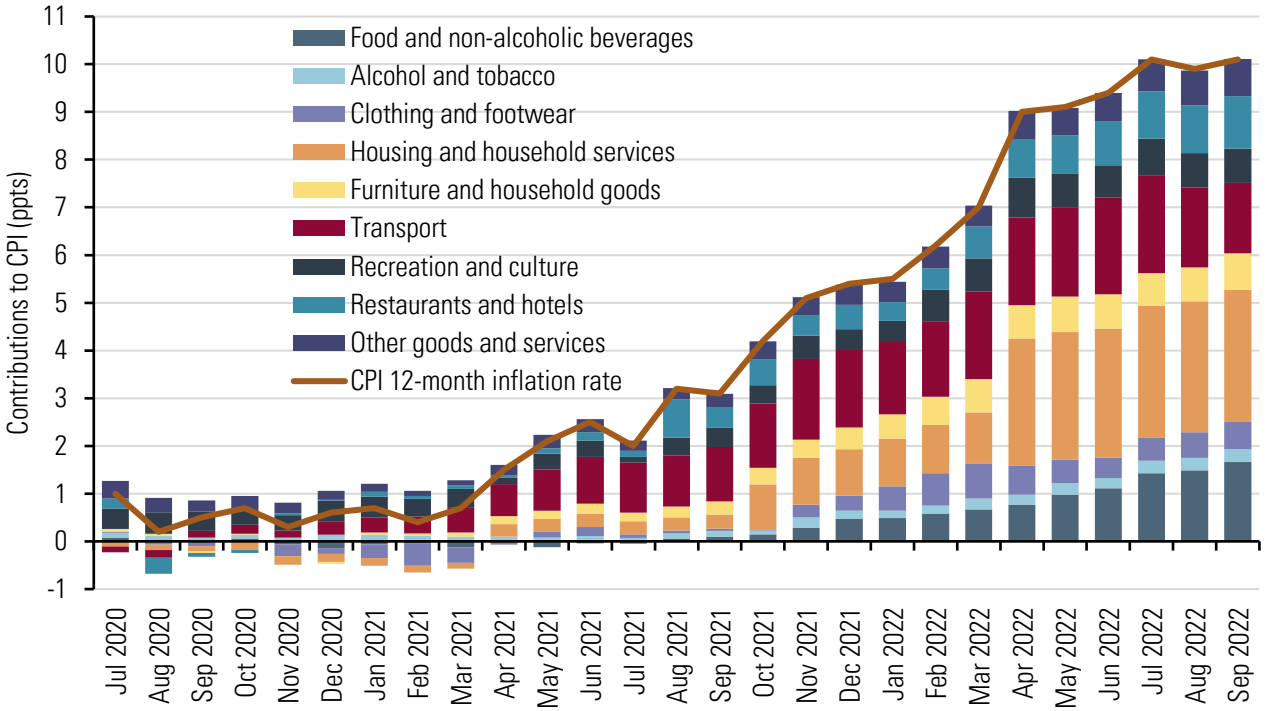
1.9 The current feature of the UK economy is inflation, where CPI reached 10.1 per cent in September 2022. This is a substantial change on the situation a year ago, when we made our recommendations for April 2022, when CPI inflation was 2.8 per cent (September 2021). Inflation had begun to rise from the 1-2 per cent lows of 2018 and 2019 because of supply constraints felt around the world as economies emerged from the pandemic. At that time though, the Bank of England (2021b) expected CPI inflation to peak around 4 per cent in the fourth quarter of 2021, before falling back close to its target of 2 per cent in the medium term.

1.10 However, CPI continued to increase towards the end of 2021 as supply chain issues and global cost pressures proved more prolonged than anticipated. CPI reached 5.5 per cent in January 2022, a month before Russia invaded Ukraine, with energy and oil prices already increasing. With Europe heavily dependent on Russian gas, gas prices rose sharply after the invasion.

1.11 In the third quarter of 2022 (July-September), energy prices were over 40 per cent higher than a year before, while food and transport prices had increased by 10 per cent or more. Core inflation, which removes the effects of more volatile price categories (energy, food, alcohol and tobacco), has also increased in 2022 reaching 6.1 per cent in September 2022 – its highest rate since the aftermath of the Gulf War.

1.12 Figure 1.5 shows that the increase in energy bills, particularly since April, has contributed to the housing and household services category of CPI, accounting for 2.8 percentage points of the 10.1 per cent CPI inflation rate in September 2022. However, energy costs also feed into the rises in fuel pump prices and food and non-alcoholic beverages, which in turn feed into the contribution of restaurants and hotels.

Figure 1.5: Contributions to consumer price (CPI) inflation, UK, 2020-2022



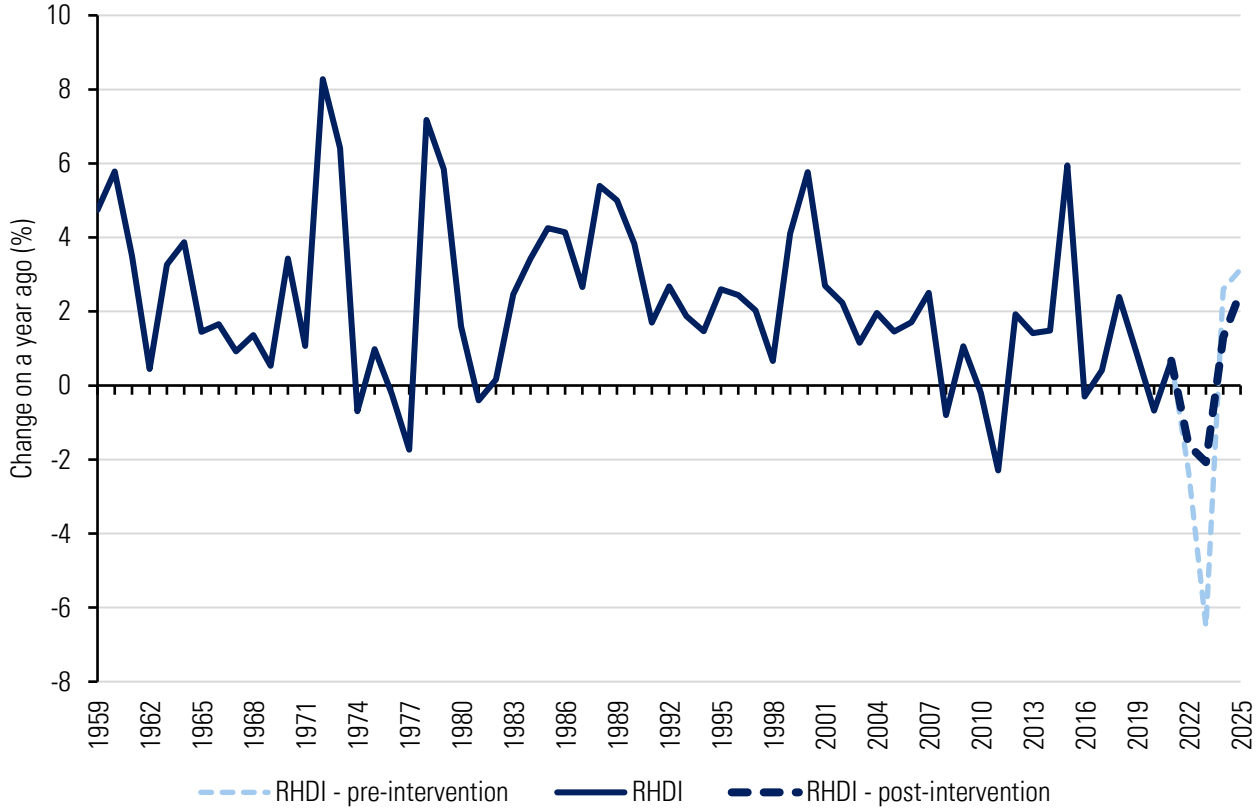
Source: LPC estimates based on ONS data. Consumer price index (CPI) inflation, UK: Food and non-alcoholic beverages (D7BU); Alcohol and tobacco (D7BV); Clothing and footwear (D7BW); Housing and household services (D7BX); Furniture and household goods (D7BY); Transport (D7C2); Recreation and culture (D7C4); Restaurants and hotels (D7C6); and other goods and services (includes Health (D7BZ), Communication (D7C3), Education (D7C5), and Miscellaneous goods and services (D7C7)), monthly, UK, July 2020-September 2022.

Inflation is hitting household incomes hard and damaging consumer confidence

1.13 Real household disposable incomes have been falling since the middle of 2021 as wages and other incomes have failed to keep up with prices – we look in detail at wages in Chapter 2. Between the late 1950s and the onset of the financial crisis, as shown in Figure 1.6, real disposable household incomes had only fallen in four years – during the recessions of the 1970s and early 1980s – but these falls were more than offset in subsequent years. In five of the years since the onset of the financial crisis in the late 2000s, real household disposable income has fallen. It is also expected to fall in 2022 and 2023.

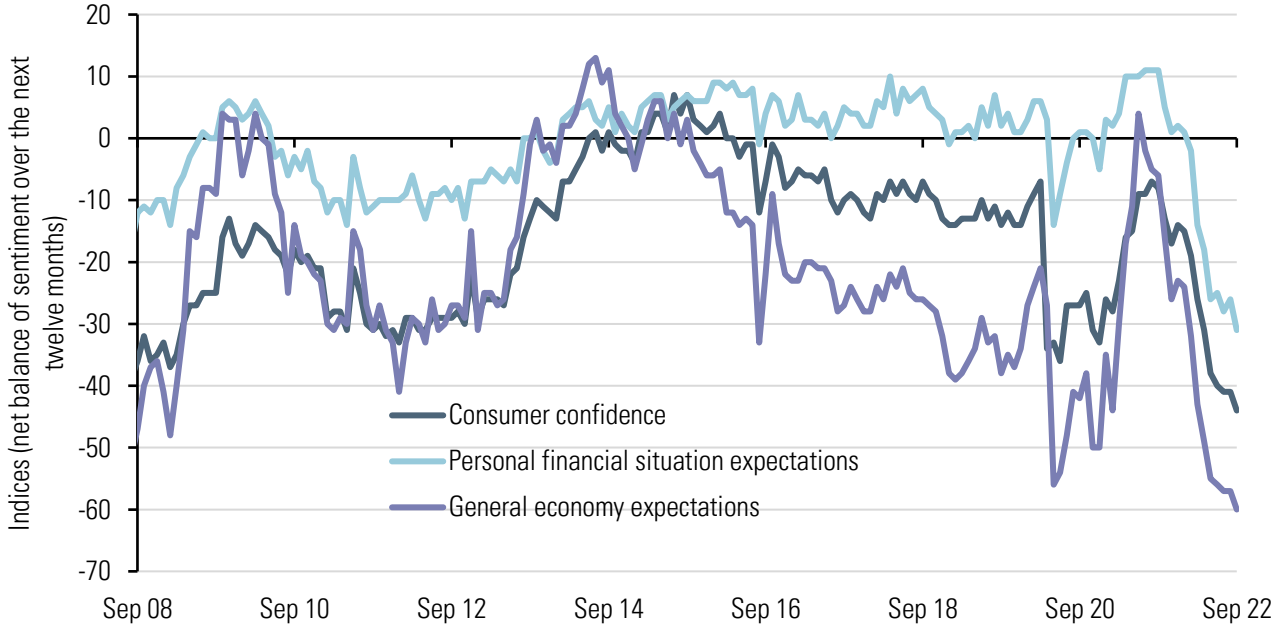
1.14 Having fallen at the start of the pandemic to levels last experienced during the financial crisis, consumer confidence recovered as the economy re-opened, as shown on Figure 1.7. However, confidence has evaporated since the middle of 2021 as consumers began to worry about rising bills and potential interest rate rises. These sharp falls have not yet bottomed out and all three measures in September 2022 were below where they were during the financial crisis of 2008-2009.

Figure 1.6: Real household disposable income, actual and forecast, UK, 1959-2025



Source: IFS (2022). Real household disposable income (RHDI) annual growth and forecast growth, annual, 1959–2025.
Note: Pre-intervention is based on measures up to and including the March 2022 Spring Statement. Post-intervention was based on measures taken since then including the Energy Price Guarantee (EPG), the £15 billion May package and the further £22 billion in personal tax cuts. Around £5 billion of the latter has since been reversed.

Figure 1.7: Consumer confidence, UK, 2008-2022



Source: GfK consumer confidence index. Consumer confidence, Personal financial situation expectations, and General economy expectations, monthly, UK, September 2008-September 2022.

1.15 This fall in consumer confidence can also be observed in other countries, particularly in the United States and the EU, but according to the OECD's international consumer confidence indicators, consumer confidence has fallen more sharply in the UK than in the US or EU.

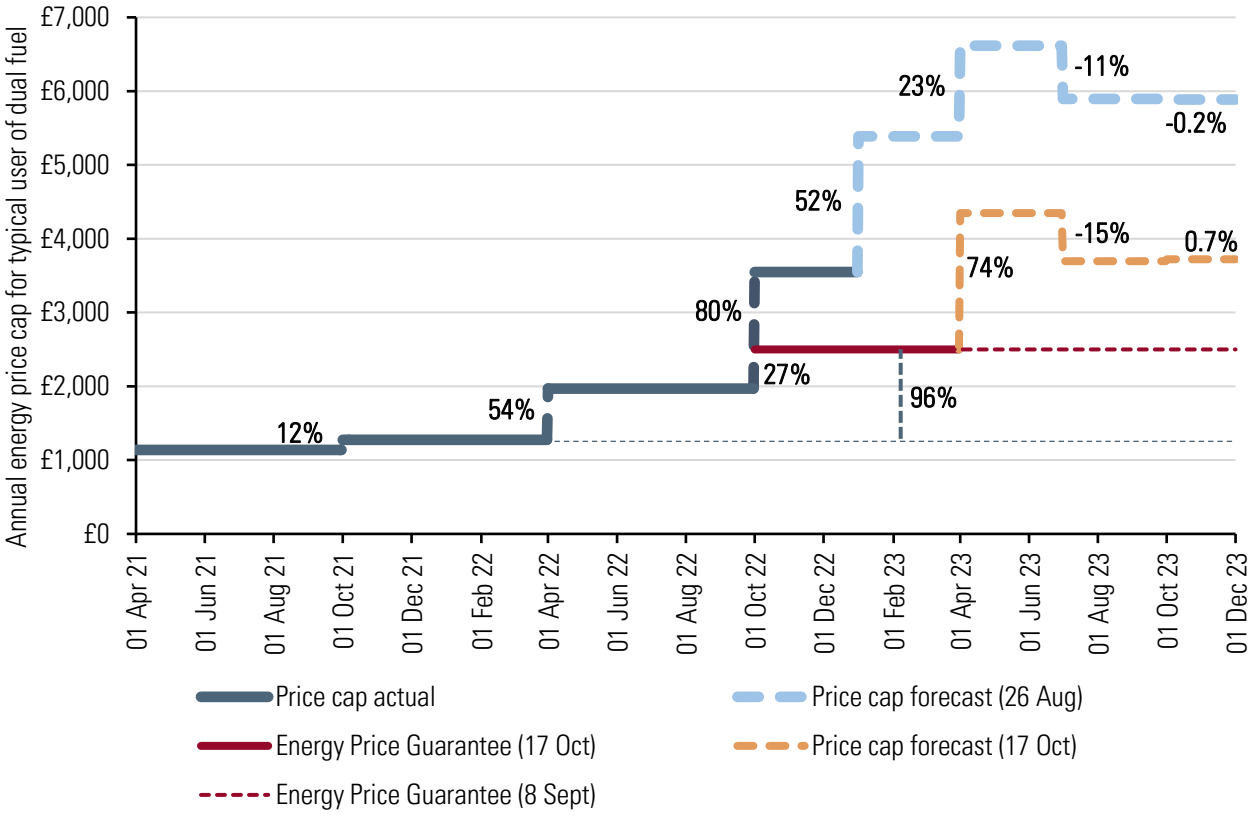
1.16 In June 2022 we heard from stakeholders that there was a fall in consumer confidence particularly in retail caused by uncertain economic conditions. The British Retail Consortium (BRC) thought 'it is becoming increasingly likely that consumers will adopt a cautious pattern of spending over the next year'. The Union of Shop, Distributive and Allied Workers (Usdaw) reported that discretionary spending in retail was down as consumers prioritised spending in hospitality. Their consultation submission quoted John Allan, chair of Tesco, on a visit to a store: 'I was hearing for the first time for many years of customers saying to check-out staff, 'stop when you get to £40' or 'I don't want to spend a penny over that.' The substantial hit to household incomes prompted a significant policy response, the details of which can be found in the below box.

Government support for energy bills

Utility prices for households in Great Britain are regulated by Ofgem. The default energy price cap rose by 54 per cent in April 2022 from £1,138 to £1,971 and was due to increase by around 80 per cent in October 2022. However, the Government has intervened in the utility market to support both households and businesses. In May, the Government announced the Energy Support Scheme with all households receiving £400 off their utility bills in six instalments starting in October. Households in Council Tax bands A-D also received a £150 rebate. In addition, more than 8 million households on means-tested benefits (including pensioners, job seekers, those on Working Tax Credits and those on Universal Credit) also received a one-off payment of £650 this year. ONS announced in August that the discounts on utility bills would not be included in its calculation of CPI inflation. In September, the Government announced an Energy Price Guarantee (EPG) to help households and the Energy Bill Relief Scheme (EBRS) to help businesses. Initially, the EPG covered two years with the EBRS for six months but with a review. Since that announcement, the length of the EPG scheme has been reduced to six months but with a review of its future.

The impact of the Government intervention is shown in Figure 1.8. Prior to the Government intervention on 8 September, the price cap was expected to rise by 80 per cent in October 2022 from £1,971 to £3,549 but the Government capped this at £2,500 under the EPG – still an increase of 27 per cent and around 96 per cent higher than before April. The EPG was set to be in place for two years. This implied a considerable saving compared with the default price cap, which had been forecast to rise to around £6,000 for much of 2023. On 17 October, the Chancellor announced that the EPG would now only apply for six months (with more targeted support to help the most vulnerable after that). At the time of the announcement, the forecast default price cap had been revised down but was still expected to be over £4,300 in April 2023 (an increase of 74 per cent on the EPG) before falling to around £3,700 from July-December 2023. That is around £2,000 lower than the forecast in September. The EPG and any subsequent intervention from April 2023 will have a major impact on the forecasts for inflation.

Figure 1.8: Energy price guarantee and default price cap, UK, 2021-2023



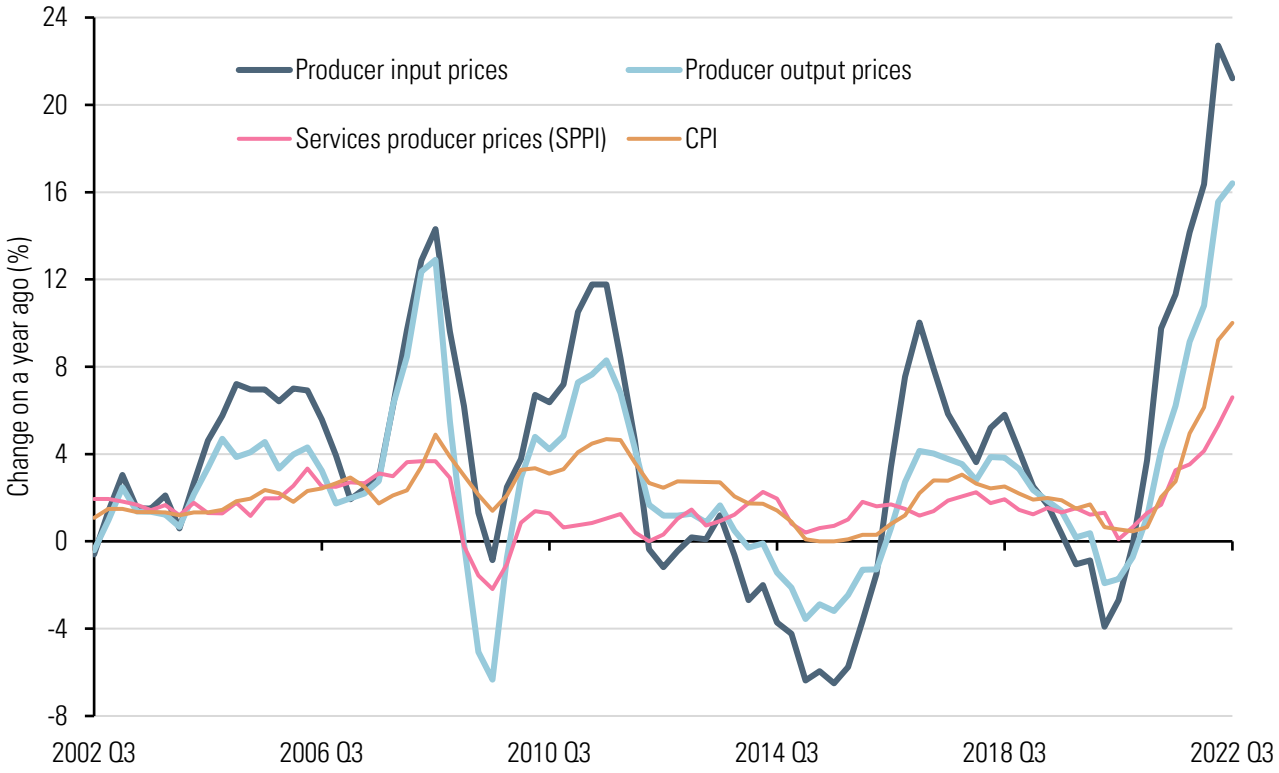
Source: LPC estimates using data from Ofgem (2022), Cornwall Insights (Lowrey, 2022 and Miller, 2022), Prime Minister's Office (2022) and HM Treasury (2002f).

Business costs have also been hit hard, damaging confidence and investment

1.17 Energy cost rises and other supply chain issues and shortages have fed into producer prices (those of materials and fuels purchased), output prices (factory gate) and services producer prices (the price of services provided to UK-based customers for a range of industries). All three of the producer price series depicted in Figure 1.9 were at their highest rates of inflation for over 20 years the first three quarters of 2022. USA

1.18 There are signs that producer price inflation may be slowing. After reaching a record high of 24.1 per cent in June 2022, producer input price inflation has now slowed for the third consecutive month. Producer output price inflation slowed in both August and September 2022 as petrol prices fell, though it also remains elevated at 15.9 per cent in September. In contrast, services producer inflation continued to increase in the third quarter of 2022.

Figure 1.9: Producer prices and consumer prices, UK, 2000-2022



Source: LPC estimates using ONS data. Producer input prices, inputs into manufacturing (GHIP); producer output or factory gate price, manufactured products for domestic market, excluding duty (GB7S); Services Producer Price Index (SPPI), top level, sections H to U excluding K (HQTI); and Consumer price index (D7BT), seasonally adjusted, quarterly, Q3 2001-Q3 2022.

1.19 Many businesses expressed concern about rising business costs, though while they were concerned about the forthcoming rise in the NLW, they were more concerned about other cost pressures – primarily unpredictably high energy and input costs. The majority thought pay would need to rise because of the tight labour market and because low-paid workers needed a response to the increase in inflation. The majority of businesses we spoke to cited energy costs as their number one concern.

1.20 In June 2022, Community Leisure UK told us that a range of cost increases made for an extremely challenging economy in the leisure and culture sector. Energy price increases particularly affected high energy venues such as swimming pools. 'Energy bills for 2022 for our members have increased by 86 per cent as compared to 2019, with a projected 114 per cent increase for 2023 as compared to 2019.' They told us the increase in the cost of living would result in households re-prioritising their budgets and reducing time spent in leisure and culture centres.

1.21 The Federation of Small Businesses (FSB) told us that around a third of businesses reported that their net costs had increased by more than 10 per cent compared to a year earlier. The Association of Convenience Stores (ACS) said 'Many retailers perceive the shift in increased energy costs as a structural change in their operating costs that will have to be reflected in their pricing'.

1.22 UKHospitality (UKH) told us that hospitality businesses faced 'a perfect storm of rising costs and weaker revenue'. That higher inflation was reducing discretionary spending and increasing costs. UKH reflected that 'how this affects an individual firm will depend on its ability to increase prices'.

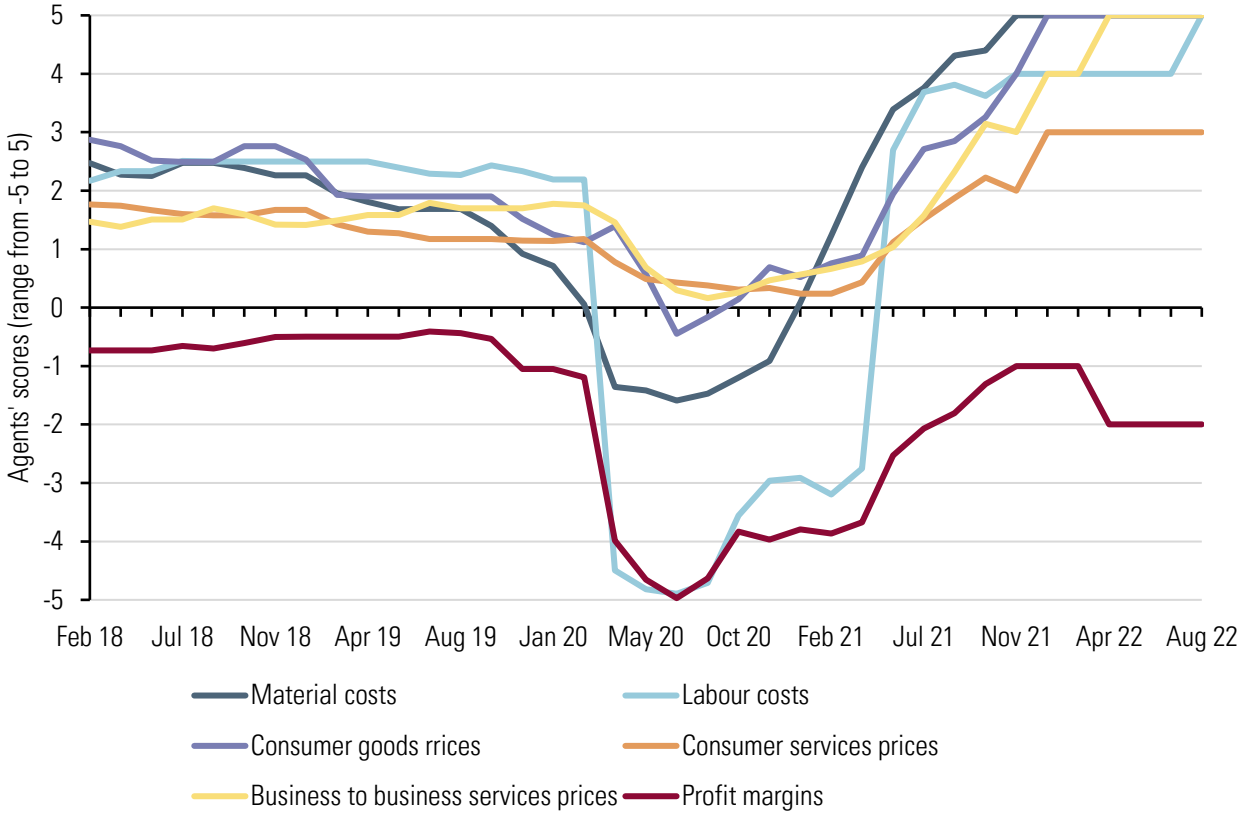
1.23 Make UK told us that inflation was even more acute for manufacturers and expected to endure. They added that energy costs were affecting the whole sector with 22 per cent of businesses describing increases as causing 'catastrophic disruption' and 46 per cent describing 'major disruption'.

1.24 The National Farmers' Union (NFU) told us of unprecedented rises in total input costs in the farming sector, which the Department of Environment Food and Rural Affairs (Defra) reported were 25.4 per cent higher compared with a year earlier. However, they were struggling to pass prices 'onto retailers and processors who are trying to protect consumers from rising costs.' Smaller producers were being forced out of businesses as they were unable to handle the squeeze on profits.

Firms have passed on some of their cost increases through higher prices, but profits have been hit too

1.25 Bank of England Agents make judgement-based assessments of economic conditions, based on conversations with businesses. These judgements are scored from -5 to 5, where 0 is generally unchanged or normal conditions. According to them, as shown in Figure 1.10, firms have been able to pass some of these cost increases onto consumers in higher prices, particularly for goods and business-to-business services. However, while profit margins improved post-pandemic, they did not return to pre-pandemic levels before falling again following the recent cost increases. It should be noted that these Bank of England Agents' scores are for the economy as a whole.

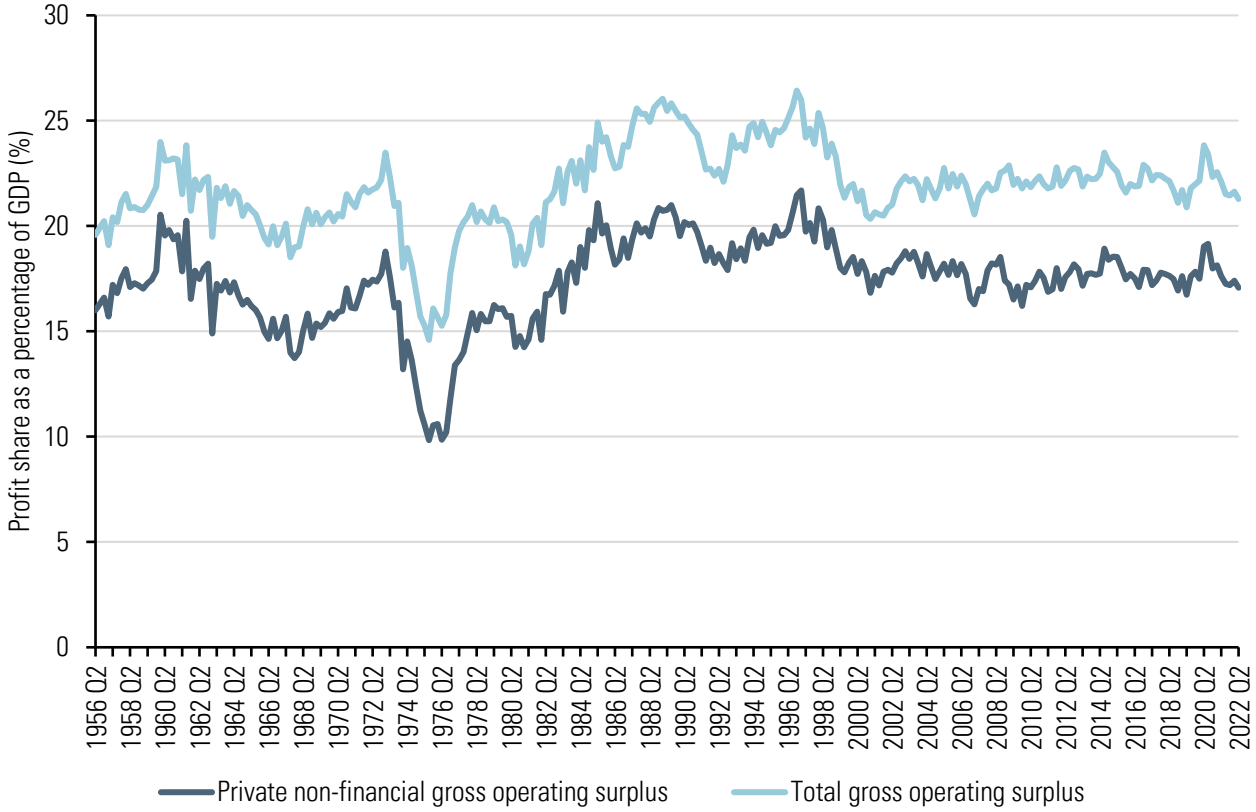
Figure 1.10: Business prices, costs and margins, UK, 2018-2022



Source: Bank of England (2022d) Agents' scores: Material costs; total labour costs per employee (new scores); consumer goods prices; consumer services prices; business to business services prices; and profit margins (new scores), monthly, February 2018-August 2022.
Note: The score for each variable ranges from +5 to -5. For all of these variables except profit margins, +5 indicates a rapidly rising level, 0 indicates an unchanged level and -5 indicates a rapidly falling level. They compare the level of the variable in the past three months with that in the same period a year earlier. For profit margins, the scores instead reflect conditions relative to normal. Here, 0 indicates normal conditions, and a score of +5 or -5 indicates extreme conditions.

1.26 Although profits, as measured by gross operating surplus have picked up in the first half of 2022 following a squeeze during the pandemic, the profit share of GDP, as shown on Figure 1.11 has not changed greatly over the last two decades.

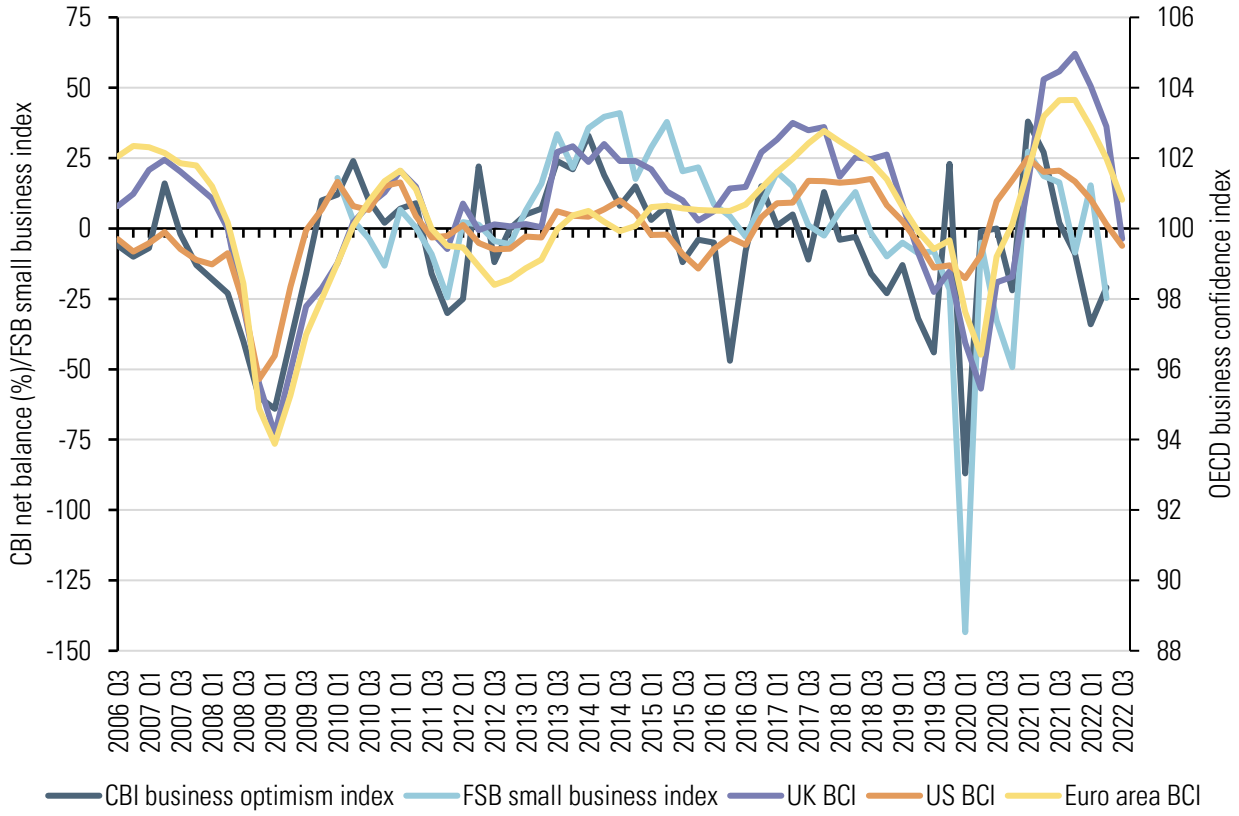
Figure 1.11: Profit share, UK, 1956-2022



Source: LPC estimates using ONS data. Private non-financial corporations gross operating surplus (CAER), and total gross operating surplus of corporations (CGBZ) minus alignment adjustment (DMUQ) as a share of gross domestic product at current prices (YBHA) seasonally adjusted, quarterly, Q2 1956-Q2 2022.

1.27 Despite collapsing consumer confidence and rising costs, business sentiment has been more resilient. Figure 1.12 shows that the Confederation of British Industry (CBI) and FSB business confidence indexes have fallen back since peaking in the first quarter of 2021, but remain well above the levels observed in the first quarter of 2020 as the pandemic struck. Likewise, OECD business confidence index remain well above the levels reported during the financial crisis and the pandemic, though sentiment in the UK has fallen more sharply than in the US and EU.

Figure 1.12: Business confidence, 2005-2022

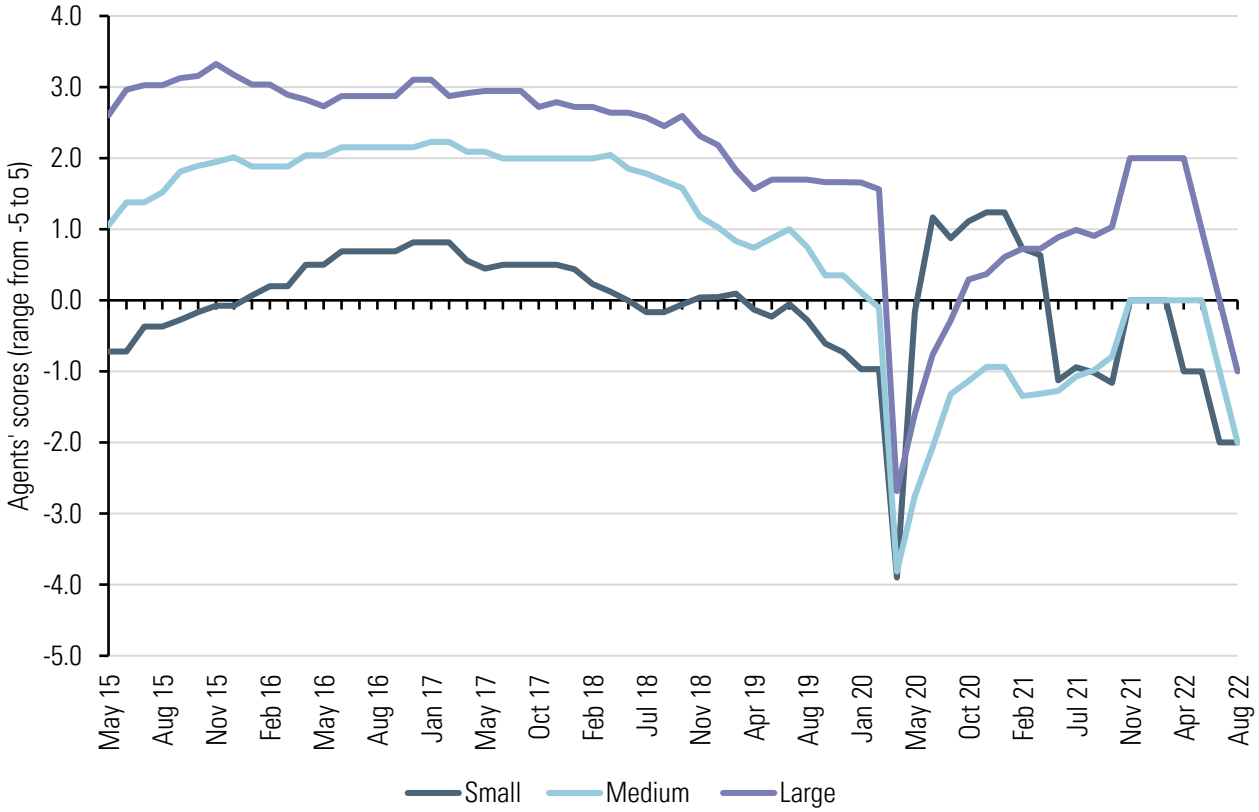


Source: CBI, FSB and OECD. CBI business optimism index net balance, quarterly, Q3 2006-Q3 2022; FSB small business index, quarterly, Q1 2010-2022 Q3; OECD business confidence index (BCI) for the United Kingdom (UK), United States (US) and Euro area, monthly, March 2006-September 2022.

Businesses are concerned about debt costs rising and the impact on investment

1.28 As interest rates have increased to attempt to tackle inflation, the cost of credit has increased and, according to the Bank of England's Agents as shown in Figure 1.13, credit availability has fallen, making it harder for firms to take on new orders and invest. For small firms (those with up to 50 employees), credit conditions have worsened since the start of 2021. Credit has become more costly and access to a wide range of bank and non-bank sources of finance has more difficult. In contrast, medium and large firms had seen improvements in credit availability up to April 2022. However, since then, they have also experienced more difficulty in accessing credit.

Figure 1.13: Bank of England Agents' scores for credit availability, by size of firm, 2015-2022



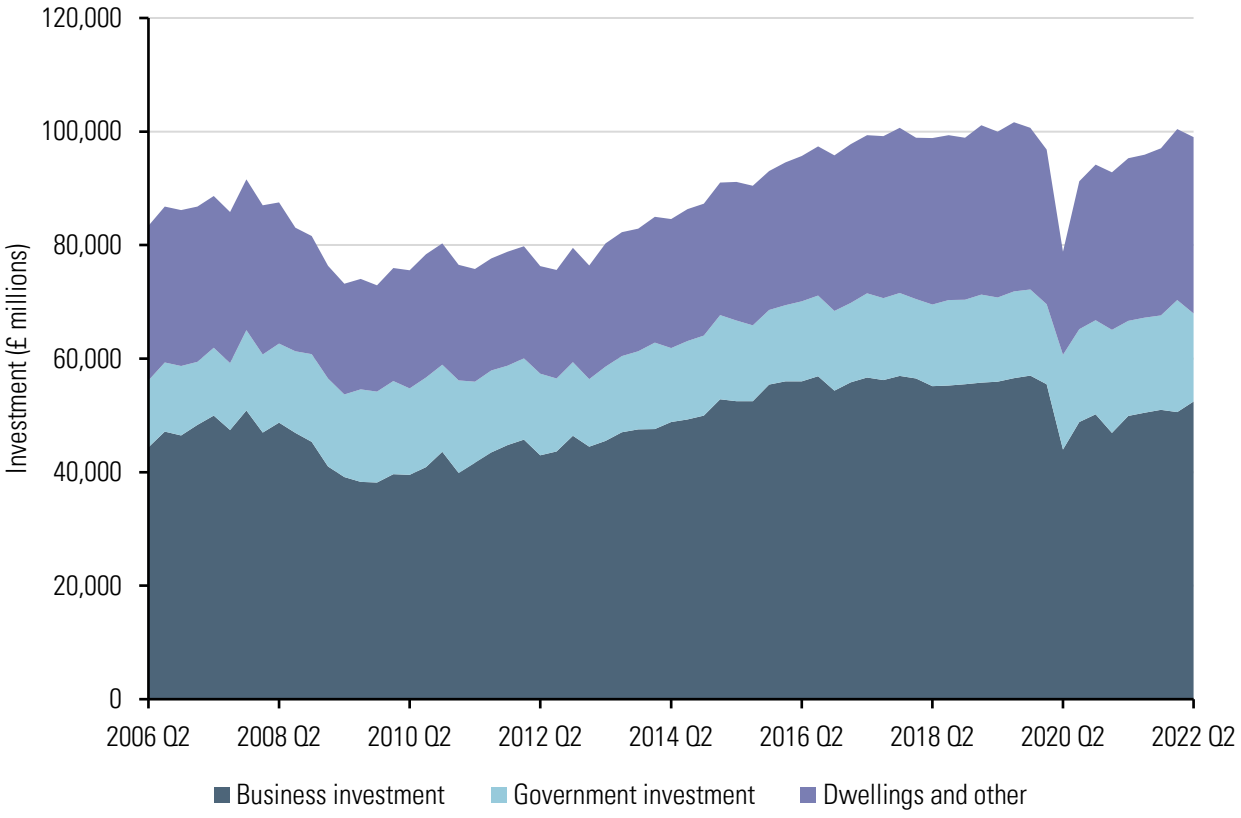
Source: Bank of England (2022d) Agents' scores. Credit availability: small (up to 50 employees); medium (51-250 employees); and large (more than 250 employees), monthly, May 2015-August 2022.
Note: The Agents' scores are based on businesses' perception of the supply of credit over the latest three months relative to normal for firms in the size bracket. Consideration is given to the availability of all forms of debt instruments that carry an obligation to repay the principal and interest.

1.29 Credit conditions have clear implications for investment, which fell by over 20 per cent at the start of the pandemic, as shown in Figure 1.14, and although it has recovered somewhat, it remains 1.7 per cent below its pre-pandemic level. That rebound in investment has been driven by dwellings and government investment, while business investment has remained weak. Business investment grew steadily after the financial crisis but stalled around the time of the EU Referendum until the onset of the pandemic. It then fell by 22.9 per cent before starting to recover, but was still 8.0 per cent below its pre-pandemic level in the second quarter of 2022.

1.30 Business debts were a concern for several groups. Among small business the FSB reported high levels of debt and employers struggling to access finance, with the smallest businesses spending the highest proportion of their turnover on debt repayments. Make UK told us that debt levels had increased with many SMEs being exposed to debt for the first time, which 'with the steady withdrawal of support, heightens the likelihood of business failure in the coming months and years.' The British Beer &Pubs Association (BBPA) told us that over the course of the pandemic pubs accumulated debt: 'this has resulted in an average debt per pub of £20,575 … which will need to be repaid over the coming years'.

1.31 The outlook for investment does not look hopeful. As we noted above, margins are likely to come under extensive and sustained pressure as costs increase. At the same time, firms are facing higher financing costs (as interest rates rise and credit becomes more difficult to access), and the economic outlook in the medium term looks weaker both in the UK and globally.

Figure 1.14: Total, business and government investment, UK, 2006-2022



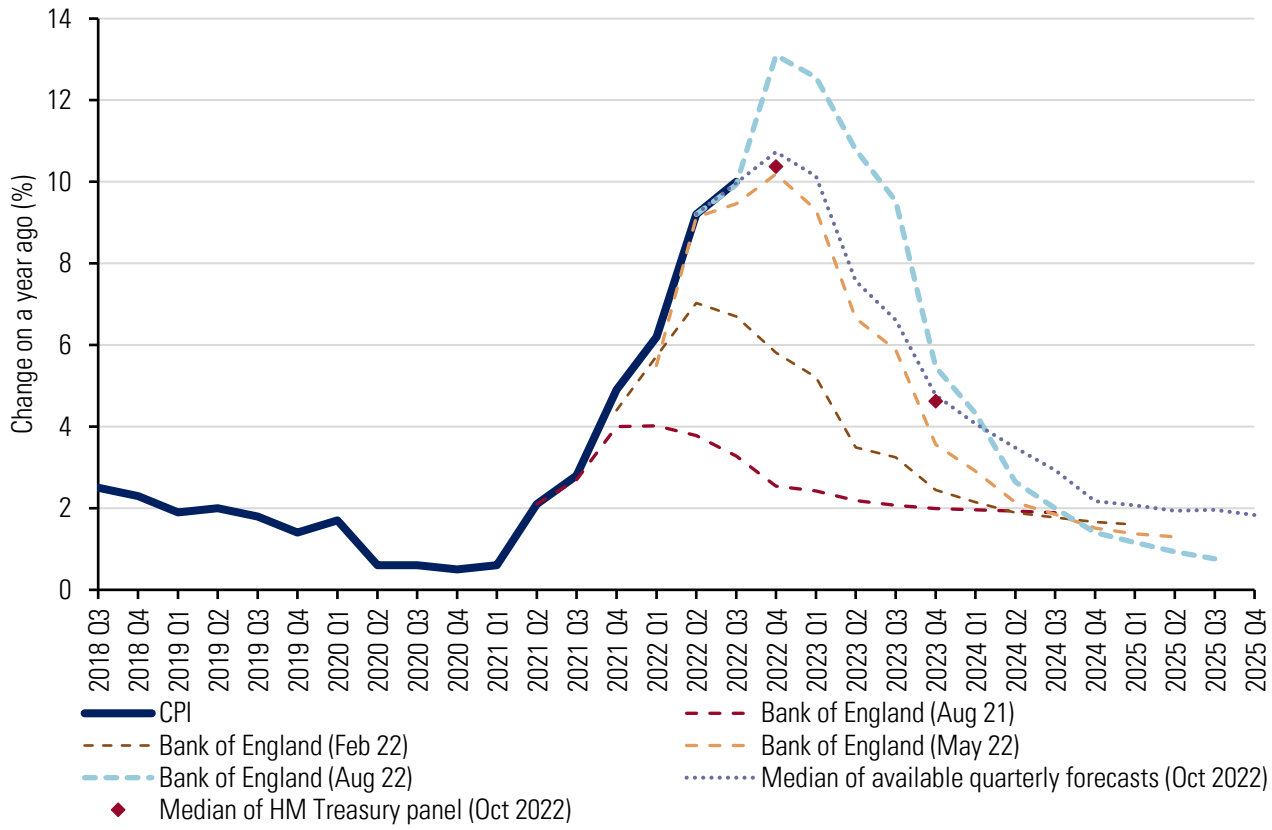
Source: LPC estimates using ONS data. Total investment (NPQT), business investment (NPEL), government investment (DLWF), dwellings and other includes public non-financial corporations' total dwellings excluding land (L634), public non-financial corporations' total transfer of ownership (L635), private sector total dwellings excluding land (L636), private sector total transfer of ownership (L637), seasonally adjusted, quarterly, UK, Q2 2006-Q2 2022.

With high inflation expected to continue cutting real incomes, the economic outlook has weakened

1.32 Inflation is particularly difficult to predict, dependent as it is on policy decisions around the EPG, the ongoing war in Ukraine and global economic position more generally. Figure 1.15 shows how the Bank of England's inflation forecasts for 2021-2023 evolved across 2021 and 2022. The increase in utility prices in April 2022 because of the Ofgem energy price default cap and higher fuel prices had already increased the Bank's forecast of peak inflation from around 4 per cent in the fourth quarter of 2021 (August 2021) to 7 per cent in the second quarter of 2022 (February 2022). The Russian invasion of Ukraine elevated it further to over 10 per cent in the fourth quarter of 2022 (May 2022) and then to 13 per cent in the fourth quarter of 2022 (August 2022) as the war continued to affect gas supplies, energy markets and food prices.

1.33 Compared with the anticipated level of Ofgem's default price cap, based on the latest wholesale gas prices, the EPG was expected to reduce CPI inflation by a little over 5 percentage points in the first quarter of 2023. This implied that inflation would be around 6 per cent in the second quarter of 2023. We concluded, at the time of our deliberations, that the inflation outcome was likely to be in a range from 6-12 per cent up to April 2023, but that was dependent on whether the Government replaced the EPG with a similar scheme. It would also depend on the evolution of interest rate increases from the Bank of England and the severity of the winter weather. A harsh winter would increase the demand for oil and gas and would disrupt supply chains.

Figure 1.15: Evolution of inflation forecasts in 2021 and 2022, UK, 2018-2025



Source: LPC analysis using data from ONS, and forecasts from the Bank of England (2021a, 2022a, 2022b, 2022c); the HM Treasury (2022g) panel of independent forecasts; and Citibank, CEBR, Oxford Economics, and Heteronomics. Consumer price index (D7BT), quarterly, Q3 2018-Q2 2022; and forecasts of CPI, quarterly, Q2 2021-Q2 2025.
Note: Bank of England forecasts for CPI assume market interest rates. Only October forecasts (post-Energy Price Guarantee) from the HM Treasury (2022g) panel are used and these are only available for Q4 of 2022 and 2023. Quarterly forecasts from Citibank, CEBR, Oxford Economics, and Heteronomics are post-Energy Price Guarantee.

1.34 Despite the uncertainty, as shown in Table 1.2, all forecasters expect inflation to slow over 2023 but to remain above the Bank of England's target of 2 per cent. Both inflation itself and the resultant interest rate rises, were expected to erode real household incomes and slow private consumption. Household savings are likely to decline. Some richer households may be cushioned to some extent by the savings accumulated during the pandemic lockdowns, but others will take on more debt to try and keep up with the cost of living. Monetary policy tightening will make this more expensive and thus more difficult. Rising interest rates and uncertainty about the economic outlook both in the UK and globally will dampen business investment, which has been weak since 2016. Public investment is expected to pick up in 2023 with planned increases to improve infrastructure and tackle climate change.

1.35 The CBI told us there was a real risk of recession, with consumer and business confidence both declining. The British Chambers of Commerce (BCC) told us that their survey results portrayed 'a weakening economic outlook, caused by political and economic uncertainty, spiralling inflation, and skills shortages'. The FSB told us that 'both employers and employees face the most uncertain economic environment in decades.'

1.36 The Trades Union Congress (TUC) acknowledged 'the economy is faltering as incomes fail to keep up with the rising cost of living'. They pointed, however, to strong business profitability to argue that 'there is room to increase wages and it is imperative that we do so. As wages fall further behind inflation the risk of a painful recession grows.' The TUC also highlighted a 'decade of pay stagnation and austerity which has left households ill-equipped to deal with economic crises'.

1.37 As shown in Table 1.2, the forecasters expect growth to weaken in 2023. The Bank of England (2022c) forecast GDP to fall by 1.5 per cent in 2023, while the IMF (2022c) and OECD (2022c) expect the UK economy to weaken into 2023 and they are both more optimistic than the Bank of England. The most recent forecast we had was from the HM Treasury panel, which had a median forecast of zero GDP growth in 2023. OECD also expected the economy to stagnate in 2023 due to depressed demand.

Table 1.2: GDP and inflation forecasts, 2022-2023

Forecaster	Date of forecast	GDP		CPI inflation	
		2022	2023	2022	2023
Bank of England	4 August	3.5	-1.5	13.0	5.5
OECD	26 September	3.4	0.0	8.8	5.9
Citigroup (IFS Green Book)	8 October	3.4	-0.5	10.8	4.9
IMF	11 October	3.6	0.3	11.3	6.3
HM Treasury panel (median)	19 October	3.6	0.0	10.4	4.2
HM Treasury panel (range)	19 October	2.3 to 5.5	-1.9 to 2.0	7.4 to 14.0	0.9 to 6.8

Source: HM Treasury (2022g), Bank of England (2022c), OECD (2022c), IMF (2022c), and IFS (2022); Forecasts of GDP growth (ABMI) and CPI (D7G7), quarterly, UK, 2022-2023.
Note: All forecasts are for the calendar year except the median of the HM Treasury panel of independent forecasters for CPI, which are for the fourth quarter of 2022 and 2023.

Conclusions

1.38 The economic situation has transformed since we last provided advice in the Autumn of 2021. At that point inflation had begun to rise and was expected to peak at 4 per cent, it recently (September 2022) breached 10 per cent.

1.39 The economy had almost recovered its pre-pandemic levels of output when growth sputtered out at the beginning of 2022. As of August 2022 the UK remains the only G7 country not to have surpassed its pre-pandemic output levels and, with inflation and interest rate rises cutting real household incomes and business investment, it is unlikely to in the near term. Most forecasters expect far weaker GDP growth in 2023 than in 2022.

Chapter 2

The labour market

Key findings

- While employment has recovered more quickly from its pandemic downturn than in previous recessions, it is not quite back to pre-Covid rates, with self-employment well below its pre-pandemic level.
- This recovery has been driven by vacancies increasing from exceptionally low levels during the pandemic and reaching record levels well beyond those seen before the pandemic. While some of this may have been a 'bounce back' effect, vacancies have been well above pre-pandemic levels for 18 months. However, vacancy levels appear to have peaked and are starting to decline slowly.
- Employers are finding it very difficult to recruit, citing competition from other employers, changes in lifestyle and career choices among workers, and changes in access to migrant workers. Recruitment is more difficult in those parts of the economy that lost the most jobs during the pandemic.
- Labour supply has been disrupted by a range of factors, likely contributing to recruitment difficulties. One factor is a change in migration policy. Total net migration has risen in the last few years, but the composition has changed, with slightly fewer EU-migrant but many more non-EU workers. EU worker numbers have fallen the most in low-paying occupations, while the growth of non-EU workers has been in better-paying occupations. This is one factor that has contributed to a 10 per cent reduction in employment in low-paying occupations over the last three years, although UK-born workers still account for most of the reduction.
- Inactivity has risen, driven by an increase in movement from work into retirement among older workers and worsening health for young and old alike. Movements from employment into activity have increased far more in non-low paying occupations, but the worsening health of the inactive group is likely hindering movements the other way, from inactivity to employment. This, in turn, may be make recruitment more difficult.
- High demand and restricted supply combine to make a tight labour market. Unemployment is even lower than the already low pre-pandemic levels, but the biggest change is in underemployment, (workers wanting more hours than those on offer). Underemployment was still above pre-financial crisis levels as the pandemic struck. Subsequently, however, it has fallen sharply to rates last seen before the financial crisis.
- The combination of low unemployment and falling underemployment has driven the highest nominal wage growth since before the financial crisis (5-6 per cent). Wage growth, though, has not kept up with inflation. Real wages are falling sharply.
- While vacancy levels are very high they have passed their peak and started to fall, albeit slowly. Labour market indicators tend to lag behind changes in the macro economy. As the effects of the

substantial hits to real incomes and low investment outlined in Chapter 1 start to emerge, we should expect vacancies to continue falling and unemployment to rise. Indeed, the majority of HM Treasury's panel of independent forecasters expect unemployment to rise next year. A looser labour market will mean less pressure on wages and, again, the HMT panel expect lower wage growth next year than this year.

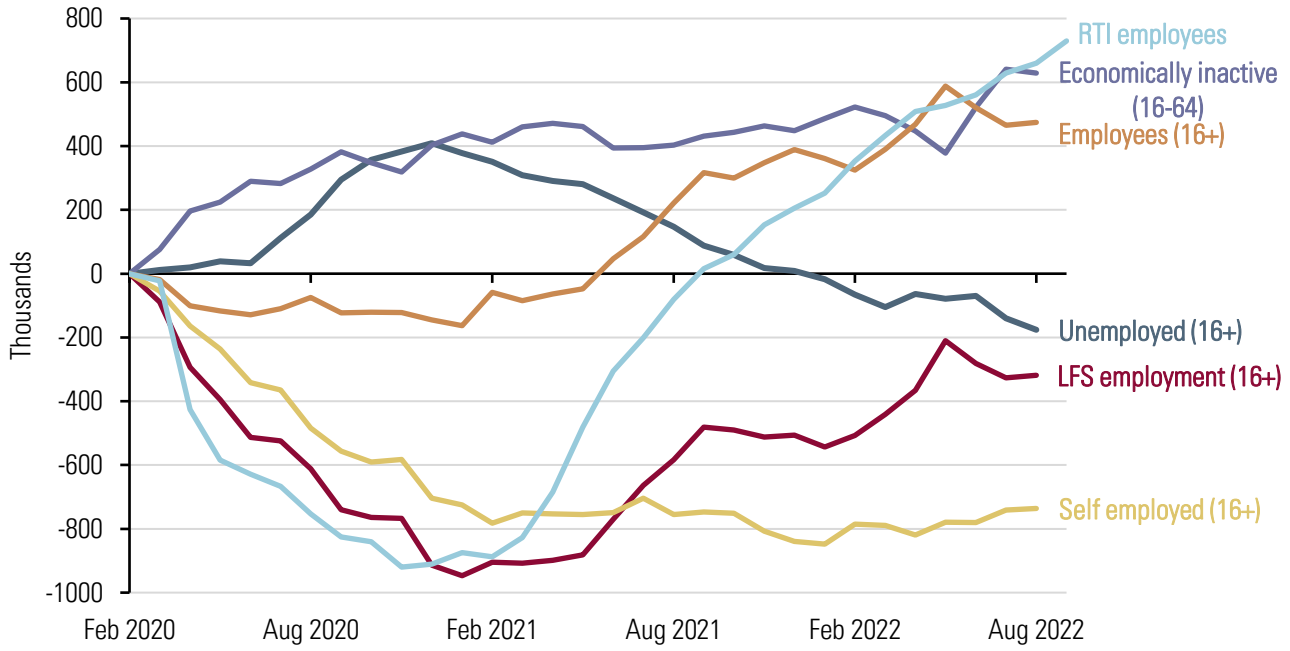
2.1 In this chapter we discuss the major changes within the labour market in the last twelve months. This period has seen a continuation of the post-Covid recovery in the labour market that started in 2021 – with increased demand for workers illustrated by record levels of vacancies. These employment opportunities have led to more people in work and reduced unemployment. But firms have faced challenges. Employers seeking to recruit at the same time have faced competition for workers and disruptions in the labour supply due to changes in migration patterns, workers making different choices about careers and working patterns, and higher levels of inactivity. This tightness in the labour market resulted in higher nominal wage growth for workers.

2.2 This chapter tracks those changes by looking at the numbers in employment and unemployment, levels of vacancies, changes to the labour supply, inactivity, Universal Credit, job flows and redundancies. After considering these changes we try to look ahead to what might happen next to the labour market.

2.3 There have been significant changes in the key labour market indicators since the onset of the pandemic (Figure 2.1). After an initial period of job loss and increasing unemployment, the last 18 months have seen a strong recovery in employment data. This is most evident in the HMRC Real Time Information (RTI) data, where the number of payrolled employees is over 700,000 higher than in February 2020 – an increase of 1.6 million since the trough in November 2020. There has been strong growth in numbers of both Labour Force Survey (LFS) employees and total employment (employees and self-employed workers), although the latter remains below pre-Covid levels.

2.4 After sharp falls in the first year of the pandemic, self-employment has levelled off but remains more than 700,000 lower than prior to the pandemic. As people entered employment in higher numbers we saw unemployment fall, such that by summer 2022 it was lower than in February 2020. Inactivity, which jumped during the initial phase of the pandemic, has continued to rise steadily over the last twelve months, though it remains to be seen if this change is temporary or permanent. We discuss this topic in more detail later in the chapter.

Figure 2.1: Change in economic activity, UK, February 2020 – September 2022



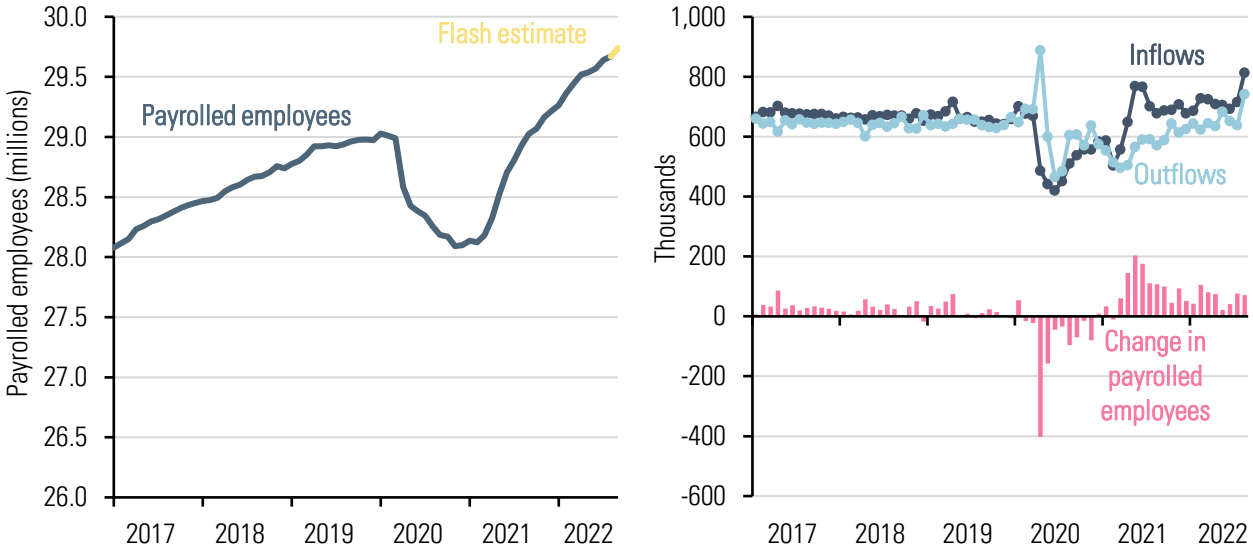
Source: LPC estimates using ONS data: 16+ employment (MGRZ), 16+ unemployment (MGSC), 16-64 inactivity (LF2M), 16+ self-employment (MGRQ), 16+ employees (MGRN) and RTI payrolled employees, monthly, seasonally adjusted, UK, Feb 2020-Aug 2022 (Sep 2022 for RTI).

The recovery in employment continued throughout 2022

2.5 The recovery in employment gathered pace in early 2021 following the Covid-induced lockdowns. Pent-up demand from sectors that had been forced to close for the best part of a year resulted in plenty of employment opportunities for workers who may have lost their job as the pandemic struck or those now looking for new or additional work.

2.6 RTI employment data has continued to grow strongly in the last year, albeit at a slightly slower pace than the preceding twelve months. The flash estimate for September showed there were 29.7 million payrolled employees, an increase of around 700,000 on a year ago. Figure 2.2 also shows monthly RTI inflows and outflows. It highlights how inflows have been fairly steady across the period and have consistently exceeded outflows.

Figure 2.2: RTI employments, inflows and outflows, UK, 2017-2022

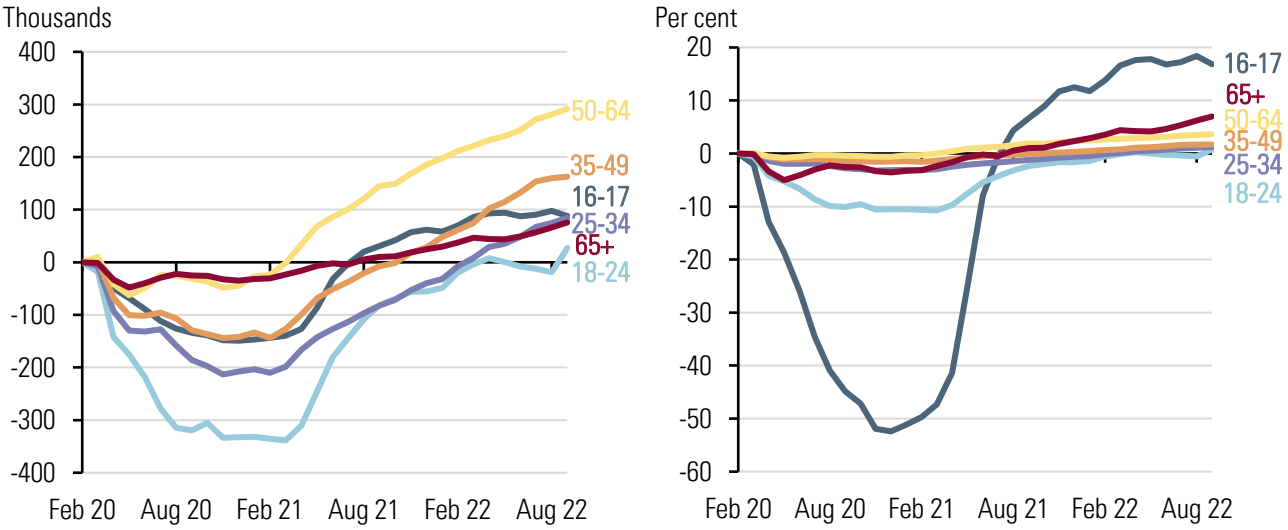


Source: LPC estimates using HMRC RTI data, monthly, seasonally adjusted, UK, Jan 2017-Sep 2022.

Employment among 16-17 year olds has grown more than any other age group

2.7 The pace of recovery in RTI employment has not been even across ages, regions and sectors. Figure 2.3 shows how employment among 16-17 year old workers is the fastest growing, having more than recovered their pandemic losses in the last year, such that there are now 88,000 or 17 per cent more in employment than in February 2020. Those aged 65 and over have performed next best with 7 per cent growth in September 2022. The slowest recovery is among 18-24 year olds – having lost the most workers in absolute numbers (340,000) they had only just recovered those losses by September 2022. The percentage increase for this group has also been the weakest. We discuss younger workers in more detail in Chapter 5.

Figure 2.3: Change in RTI employment since February 2020 by age, UK, 2020-2022



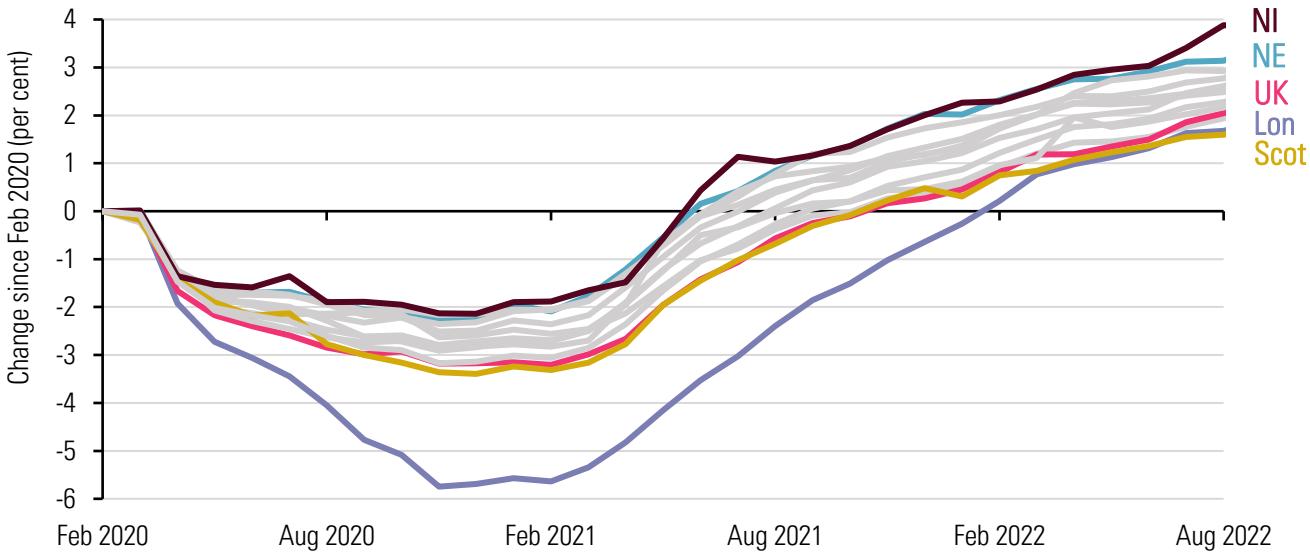
Source: LPC estimates using HMRC data: RTI payrolled employees, monthly, seasonally adjusted, UK, Feb 2020-Sep 2022.

The North East and Northern Ireland have seen the fastest recent jobs growth

2.8 We have also seen widespread geographical variation in the recovery of RTI employment. Figure 2.4 looks at the growth by country and region since February 2020 and shows that employment in Northern Ireland fell the least and has grown the most overall across the whole period. London, which had been growing faster than Northern Ireland at the onset of the pandemic, had the largest employment losses and took the longest of all regions to recover. It nevertheless saw strong growth through 2021 and into 2022, regaining those losses and more.

2.9 Employment growth has been slowest in Scotland. The region with the lowest rate of growth alongside the North East before into the pandemic, Scotland recovered slowly and RTI employment is now 1.6 per cent higher than in February 2020, lower than all other regions and nations. The North East however, with low employment growth in the years leading to the pandemic, witnessed a shallower pandemic fall in employment compared with most regions. And with the exception of Northern Ireland, it had seen the strongest recovery in employment by August 2022 relative to February 2020 of 3 per cent.

Figure 2.4: RTI employment by nation and region, UK, 2020-2022



Source: LPC estimates using HMRC data: RTI payrolled employees, monthly, seasonally adjusted, UK, Feb 2020-Aug 2022.

Some sectors have recovered more quickly than others

2.10 Sectors have had very different experiences over the last two and a half years since the onset of the pandemic. Some were forced to temporarily shut down, others remained open but with severe restrictions while some attempted to adapt to changing conditions.

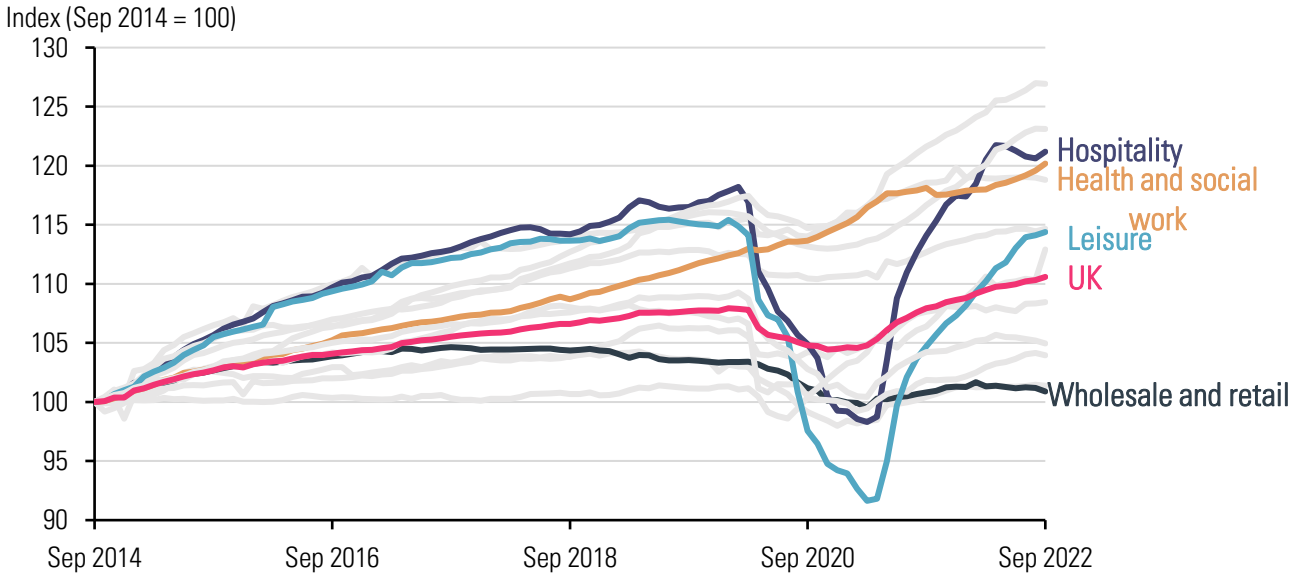
2.11 The last year has seen industries that significantly reduced their workforces during the pandemic attempt to reverse those employment losses as the economy recovered. Hospitality, the sector that lost the most workers, witnessed an equally swift recovery following re-opening in April 2021 and had regained those lost employees by February 2022. This contrasts somewhat with data from the LFS which shows a considerable fall in hospitality employees. There are signs however that this RTI

recovery has stalled, with numbers reducing between April and August 2022. This may be partly explained by the sector's struggles to recruit, which we discuss in the next section on vacancies.

2.12 While wholesale and retail recovered to some extent from the pandemic low of March 2021, the sector has since returned to the downward trend in RTI employment that was apparent before the pandemic began. There were 160,000 fewer employed in September 2022 than the pre-pandemic peak in September 2017. Health and social work has steadily increased in size over the last decade and this growth has continued, largely in response to pandemic demands. In September 2022, there were over 250,000 additional RTI employees in this sector compared with February 2020.

2.13 These developments chimed with evidence we received from stakeholders. Make UK told us manufacturers had record vacancies and growing numbers of vacancies unfilled for twelve months or more. Members also faced challenges retaining staff: 'overall staff turnover in manufacturing in 2021 was 25 per cent, significantly higher than in previous years…Our most recent research found that 89 per cent of manufacturers are concerned about skills leaving their business this year'. The Food and Drink Federation (FDF) told us that employment in its sector was increasing but labour shortages were hampering growth.

Figure 2.5: RTI Employees by industry, UK, 2014-2022



Source: LPC estimates using HMRC data: RTI payrolled employees, monthly, seasonally adjusted, UK, Sep 2014-Sep 2022.

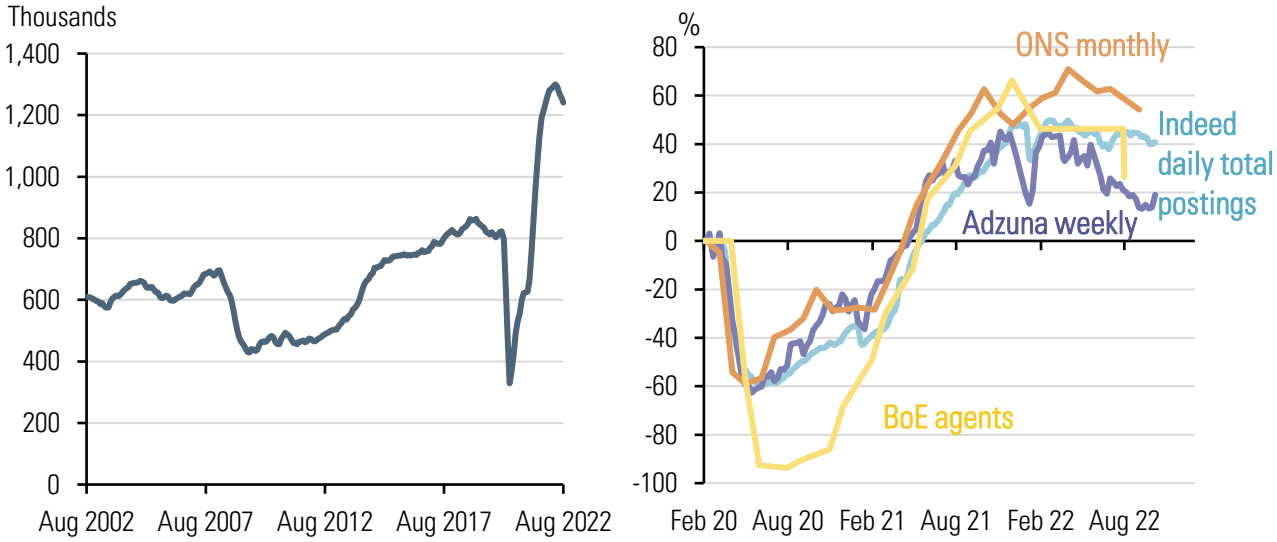
High recruitment demand has driven the recovery in employment

2.14 The recovery in employment has been driven by record demand for new workers from employers, measured by job vacancy numbers. This began in the summer of 2020, when non-essential retail and then hospitality re-opened before additional lockdowns muted labour demand. Vacancies took off after the Government outlined its plan to fully reopen the economy in February 2021. While some of this growth may be a 'bounce-back' effect, whereby recruitment was paused and then brought forward again once restrictions were lifted, vacancies rose to record highs in 2022 and have remained well above pre-Covid levels for 18 months.

2.15 Figure 2.6 highlights this change in job vacancies across a range of data sources. ONS vacancy data reached a record peak of 1.3m in April 2022, over half a million higher than at the onset of the pandemic. More timely online data sources, such as Indeed and Adzuna, follow a similar pattern although there is some divergence between them in the most recent data.

2.16 Bank of England Agents score employment intentions on a range from +5 to -5. This measure fell from -0.3 in Jan 2020 to the maximum low of -5 in July 2020. Increased demand resulted in a rise in the score, reaching +3 in November 2021. Across all measures however there appeared to be signs of weakening demand for labour heading into the autumn of 2022 yet vacancy levels remained historically very high.

Figure 2.6: ONS vacancy levels 2002-2022 and change in vacancies since February 2020

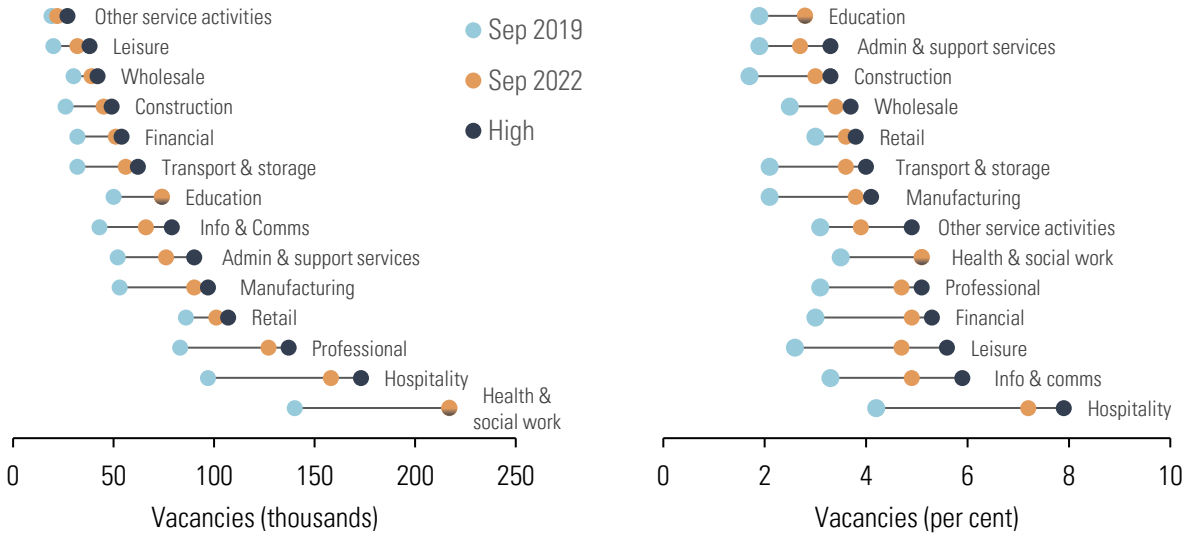


Source: LPC estimates using Indeed weekly job postings tracker, Adzuna weekly online job ads, ONS single month vacancy estimates (X06) and Bank of England Agents' summary of business conditions (2022 Q3), Feb 2020-Oct 2022.

2.17 There has been growth in vacancies across all sectors, particularly among sectors that needed to rebuild their workforces after the pandemic. Figure 2.7 compares vacancies in September 2022 with those in September 2019, prior to the pandemic and the peak reached between the two. The largest numbers in 2022 are found in health and social work, where levels have increased by over 50 per cent from 140,000 to 217,000. Hospitality, which lost the most jobs during the pandemic (Figure 2.5) saw a similar rate of increase – with vacancies growing from 97,000 to 158,000 as the sector struggled to increase its workforce.

2.18 Prior to the pandemic, vacancy rates across sectors were typically between 2-4 per cent. In September 2022 they remained elevated at around 3-5 per cent despite falling back slightly from their peaks in most sectors. Hospitality vacancies however rose from 4 per cent in September 2019 to over 7 per cent in September 2022. Whilst vacancies remained much higher than the rest of the economy, the sector has also shown signs of a weakening in demand, with vacancies falling back from their peak of 7.9 per cent in May and June earlier this year.

Figure 2.7: Vacancies by sector, UK, 2019-2022



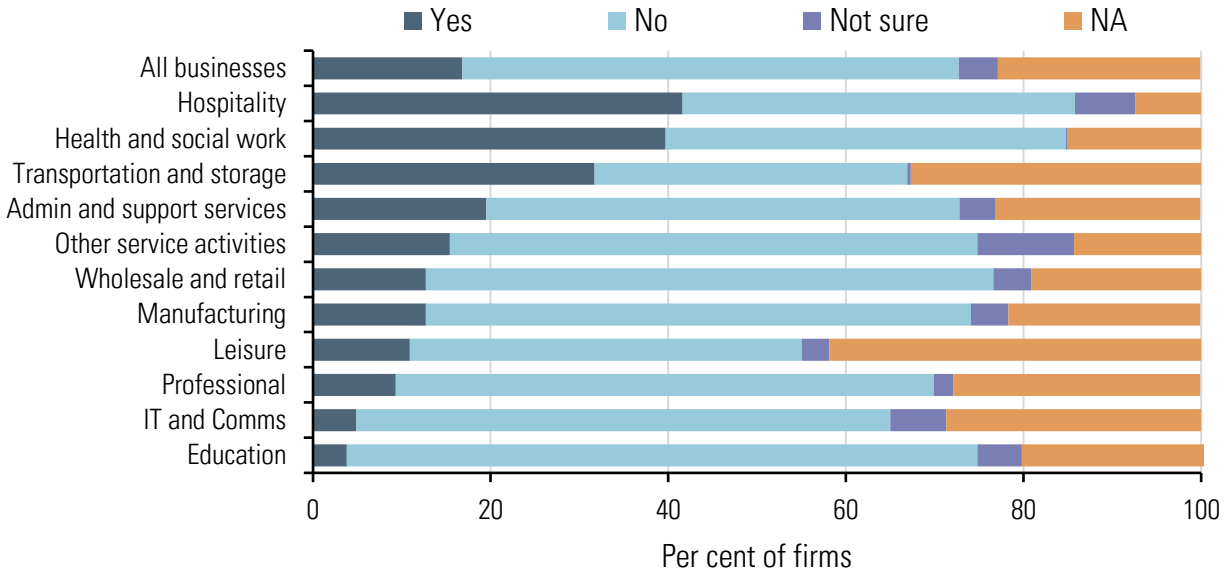
Source: LPC estimates using ONS vacancy data (VACS02), quarterly, seasonally adjusted, UK, Sep 2019 – Sep 2022.

Many employers are struggling to recruit the workers they need

2.19 As vacancies have increased to record levels, employers have consistently noted how difficult it is to recruit. The BoE Decision Maker Panel estimated 84 per cent of businesses with 10 or more employees found it harder than normal to recruit new employees in September. The ONS Business Insights and Conditions Survey (BICS) collected in September showed that one in six firms experienced worker shortages. Excluding the smallest micro firms this increased to more than one in three firms.

2.20 The Chartered Institute of Personnel and Development's (CIPD, 2022) found in the summer of 2022 that '47 per cent of employers report having hard to fill vacancies'. The British Chambers of Commerce (BCC) found 71 per cent of their members were experiencing skills shortages due to both lack of candidates and unaffordable salary expectations. Shortages varied across sectors (Figure 2.8) but hospitality and health and social work were most affected.

Figure 2.8: Worker shortages by industry, BICS, UK, August 2022



Source: LPC estimates using ONS Business Insights and Conditions Survey Wave 64, UK, survey reference period 1-31 Aug 2022.

2.21 The consequences of worker shortages include having to hire more expensive temporary workers, making existing staff work additional hours, pausing trading of part of the business, or even being unable to meet the demands of the firm (as shown in the ongoing BICS). UKHospitality (UKH) told us of record vacancies in hospitality 'curtailing trade by an estimated £21 billion'. The Confederation of British Industry (CBI) told us that businesses were 'pulling every possible lever' to deal with labour shortages, including training and automation as well as pay.

2.22 Wave 66 BICS data (ONS, 2022b) showed in August 2022 around a third of employers with a shortage of workers had existing staff working more hours. Where workers are underemployed and want more hours, this may be welcomed. This may have contributed to the recent falls in underemployment, which we explore later in this chapter. Though in some cases workers are under pressure to work very long hours, with the stress and absence of work-life balance that this entails. Chapter 3 explores workers' experiences of work intensification.

2.23 In agriculture and horticulture, recent surveys by the Association of Labour Providers (ALP) had found that three-quarters of businesses were experiencing shortages of low-skilled workers and nearly half had reduced output as a result. It quoted one member: 'The present crisis in production is entirely due to government policy and if left unchanged will lead to very large increases in imports and an equal reduction in home produced food'. The National Farmers' Union (NFU) reported that farms were investing time and money to make themselves attractive for job seekers and retain staff, including pay rises. National Farmers Union Scotland (NFUS) supported this and added that the soft fruit industry in particular is facing labour shortages. The National Hair & Beauty Federation (NHBF) told us its sector was experiencing a more acute recruitment crisis than other areas of the economy. Around 57 per cent of firms had unfilled vacancies and there had been a reduction in the workforce of 7,000 in 2020 and 18,500 more in 2021, as a result of a staff leaving the sector.

2.24 Reasons for these recruitment difficulties are varied. UKH ascribed them to reduced migration, long Covid and a desire among workers to work more social hours. The Bank of England's agents (Figure 2.9) noted that increased demand and higher wages offered by other employers were the main

drivers, followed by issues relating to EU labour, and workers' choices about their career and lifestyle. The BCC cited issues with inactivity, which we discuss later. In previous years stakeholders told us the pandemic had disrupted the pipeline of new workers into some sectors by preventing training, including apprenticeships, from taking place; we discuss apprenticeships in more detail in Chapter 6. We look at these causes in more detail below, beginning with migration.

Figure 2.9: Sources of recruitment and retention difficulties for firms, August 2022

Source: Bank of England Monetary Policy Report - August 2022.

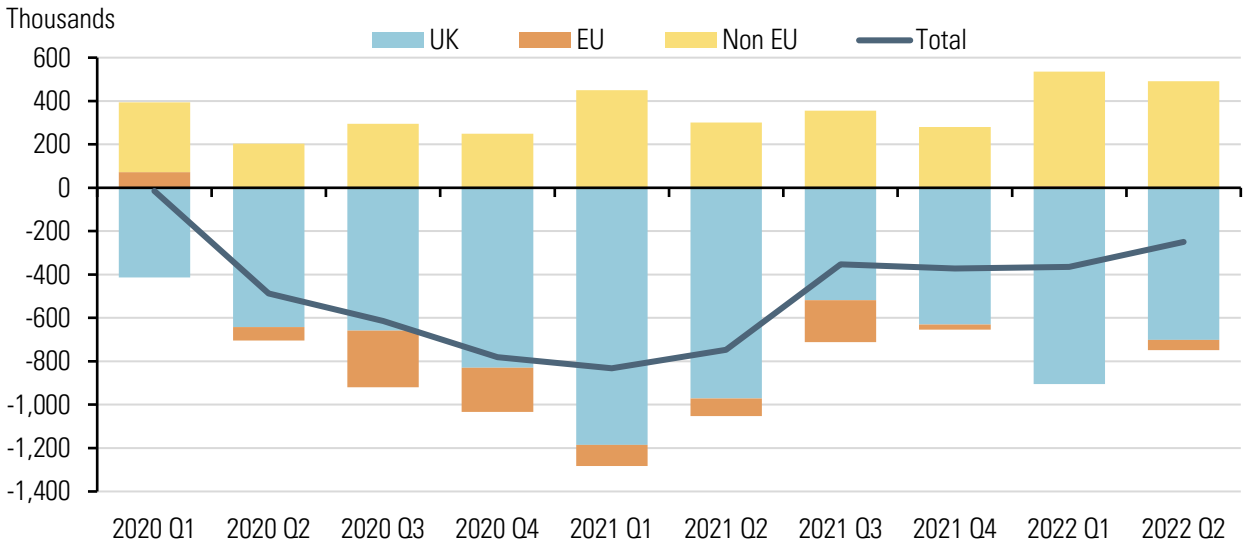
There has been a shift from EU worker to non-EU workers

2.25 Stakeholders in low-paying sectors frequently cited the loss of freedom of movement with the EU as a major driver of the tight labour market. The Union of Shop, Distributive and Allied Workers (Usdaw) explained that Brexit and Covid had caused a tightening in warehousing and distribution: 'previous migrant workers have returned home, frequently as a result of Covid concerns, and the restrictions on freedom of movement'. The British Beer & Pub Association (BBPA) and UKH members have told us that historically employees had travelled from the EU to work in positions that have been hard to fill with UK-based workers. In agriculture and food manufacturing evidence from the ALP noted that 'labour availability is the most constricted experienced this generation', due to a strong jobs market, a smaller labour force and 'a mismatch between the UK immigration to work system and business need'.

2.26 The composition of the migrant labour force in the UK has shifted away from EU-born workers to those from the rest of the world. In the fourth quarter of 2019 there were 27.2 million UK-born employed, with 2.4 million and 3.4 million EU and non-EU born respectively. Figure 2.10 shows that the number of EU workers has fallen – in the third quarter of 2020 there were more than a quarter of a million fewer. This subsequently recovered somewhat, but there were still 47,000 fewer in the second quarter of 2022. The growth of non-EU workers has remained positive across the period, with an additional 490,000 by the second quarter of 2022. It is not clear whether these changes are a result of Brexit, the pandemic or migration policy. What is evident is that the overall drop in employment is a result of 700,000 fewer UK-born employed workers rather than changes in the number of foreign nationals.

2.27 In Chapter 4 we look in more detail at how this shift differs between low-paying and non-low paying sectors. We show that EU-born workers have declined in low-paying industries but increased slightly in non-low-paying industries and that that the growth in non-EU workers is overwhelmingly in non-low-paying industries. Stakeholders told us of the difficulties of attaining visas for non-EU workers in low paying industries. The Federation of Wholesale Distributors (FWD) explained that 'the loss of temporary labour and English language requirements preventing labour being brought over to the UK on skilled workers visas has led to a shortfall in the supply chain.' UKH also reported that 'the 'stock' of EU migrants fell as a result of Covid and the absence of 'a new supply' because the design of the Points Based System has led to fewer EU migrants being available for work.'

Figure 2.10: Change in employment by UK, EU and Non-EU by country of birth, 2020-2022

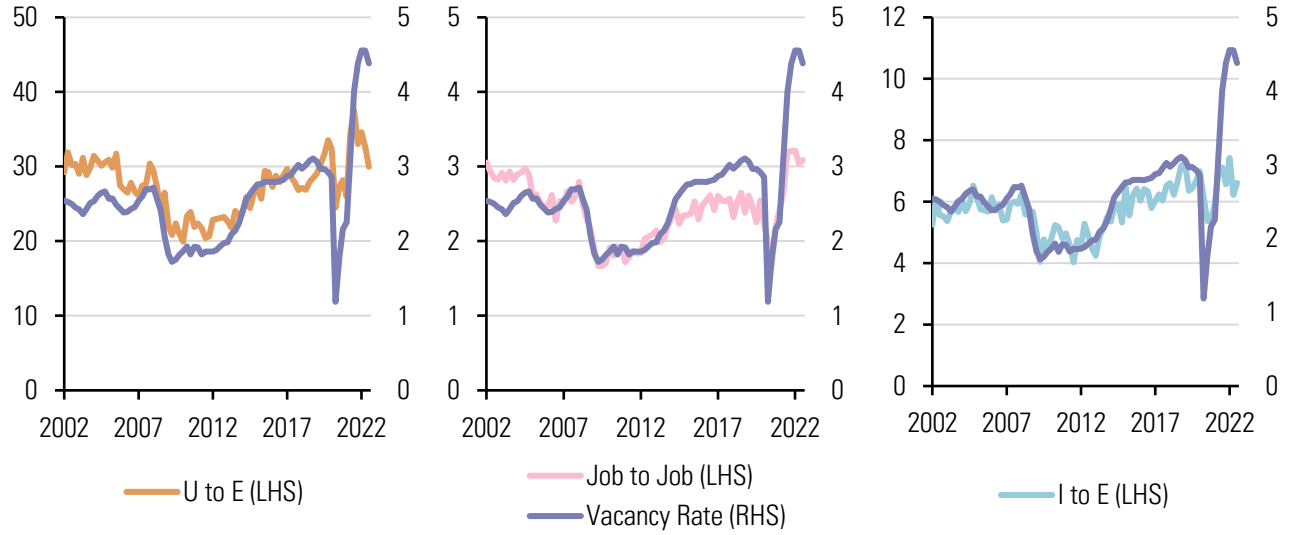


Source: LPC estimates using ONS employment data by country of birth – UK (JF6F), EU (EQ4Q) and Non-EU (EQ4S), quarterly, not seasonally adjusted, UK, 2019 Q4 – 2022 Q2.

Workers are taking the opportunity to switch jobs, but less than we might expect

2.28 Labour market flows describe moves between various states in the labour market: employed, unemployed and inactive, as well as moves from one job to another. When there are more job vacancies there are more opportunities to move into a new job. Figure 2.11 shows the share of people moving out of unemployment and inactivity into employment and the share of employees who move to another job. Collectively we refer to these moves as 'hires'. Broadly, vacancy rates (vacancies as a share of employees) and hires track one another, but over the pandemic the vacancy rate has outstripped hires.

Figure 2.11: Flows to employment, job to job moves and vacancies, UK, 2002-2022



Source: LPC estimates using ONS flows (X02) vacancies (AP2Y) and employees (MGRN) data, quarterly, seasonally adjusted, UK, 2002-2022.

2.29 The bulk of hires (~45-50 per cent) are people moving from one job to another. If workers are reluctant to do this it might explain why job-to-job moves are lower than expected, and therefore help explain why employers are struggling to recruit. A consistent message we have heard from workers in low-paying sectors over the years is that moving jobs is seen as a significant risk. We heard the same this year, despite record vacancies and a cost-of-living crisis incentivising a move to a better-paying job. For example, supermarket workers in the Black Country told us they risked losing generous contract terms and conditions if they moved to another company. Others worry about 'last in, first out' style recruitment practices; losing hours of work, poorer working schedules or T&Cs; and 'starting from scratch' in terms of accruing both statutory and non-statutory rights or the tenure workers believe is necessary to move from a temporary to permanent contract. The following quotes from workers on our visits this year capture some of the risks and stresses felt by workers.

'I'm a single mum. If I then take the risk of going for another job, in this market the jobs are like 'last one in first one out', the fear and the anxiety that would give me. At the moment I know I'm in a job where I've signed a contract and as long as I don't do anything wrong, I've still got that job. Yeah, I might have to work a tremendous amount of hours. But at least I know I've got the job.'

Supermarket worker, Wales

"It's such a risk if I was to move to another bar, I'm looking at that bar and wondering how do I know how they treat their staff? But I have absolutely no idea. I could go in there and it'd be worse. You're kind of trying to figure out if the situation that you're in is better, even if you're getting paid less."

Hospitality worker, Wales

2.30 In Chapter 4 we look at how these flows vary between low-paying and non-low-paying sectors. We show that net job-to-job flows from low-paying occupations to non-low-paying occupations have increased but only by a small amount.

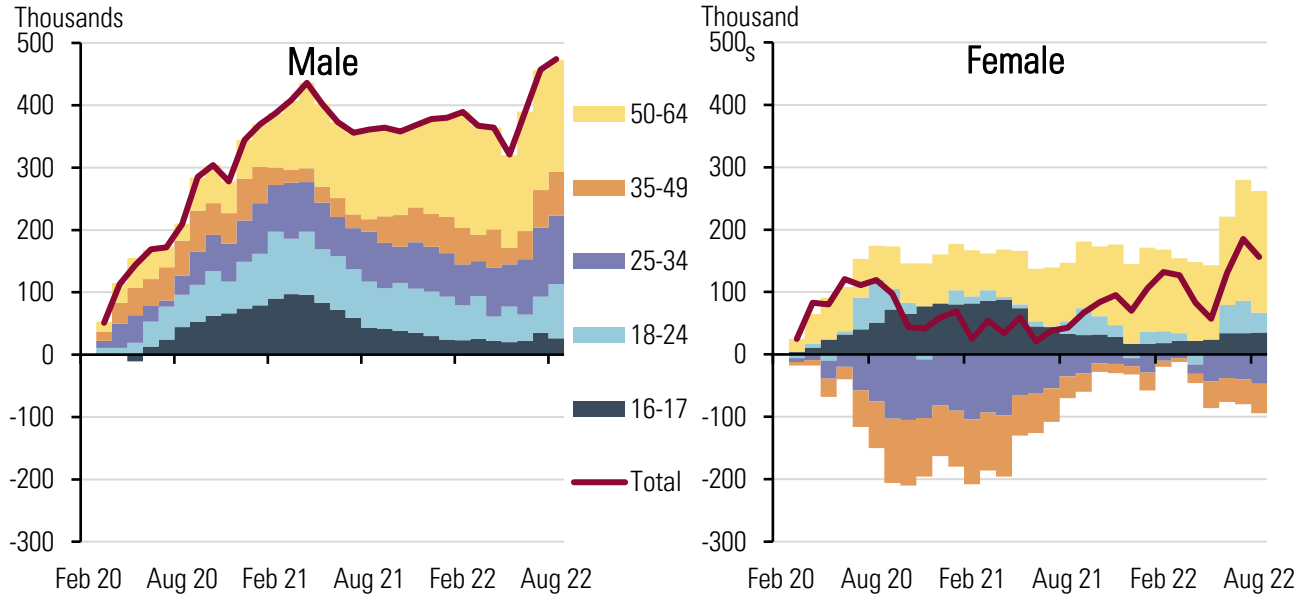
Inactivity has risen, potentially exacerbating recruitment difficulties

2.31 Inactivity levels had been falling consistently in the decade up to the pandemic – from 9.5 million in 2011 to 8.4 million in February 2020 – mainly because of increased female participation. This trend swiftly reversed with the pandemic's onset. Inactivity spiked initially as people who would normally be available and searching for work were unable to do so because of lockdowns. It continued to rise despite the economic recovery in 2021 and by August 2022 was over 600,000 higher than in February 2020 (Figure 2.1).

2.32 Rising inactivity has been the most talked about aspect of the labour market in the last year – with much of the conversation around the individuals most affected since the onset of the pandemic and the reasons behind their increasing numbers. Some stakeholders were concerned that inactivity could be reducing hiring options. For example, the BCC told us 'record job vacancies highlight the perilous hiring crunch facing businesses…With rising economic inactivity confirming that the UK workforce is shrinking, labour shortages are likely to persistently drag on UK growth by stifling firms' ability to operate at full capacity.'

2.33 Figures 2.12 and 2.13 show the change in total levels of inactivity since February 2020 by age and gender. Of the additional 629,000 inactive 16-64 year olds in August 2022, three quarters (474,000) are male and 156,000 are female. People aged 50-64 are responsible for well over half (375,000) of the total increase with the youngest aged 16-24 accounting for 180,000 of the increase.

Figure 2.12: Net change in inactivity levels since February 2020 by age and gender, UK



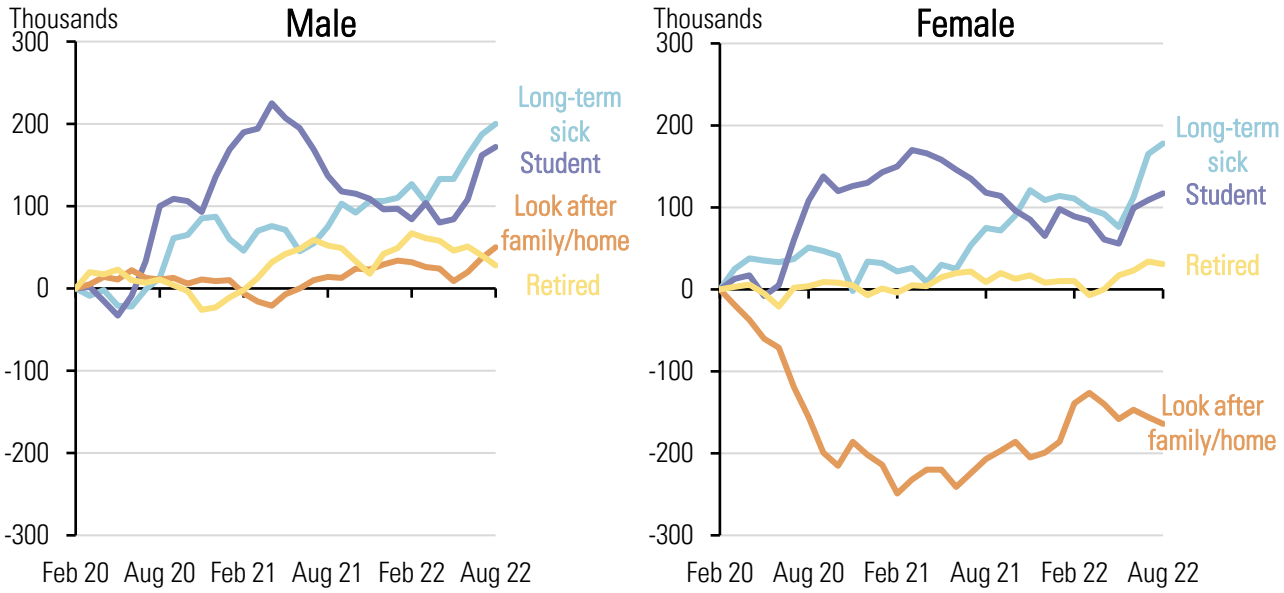
Source: LPC analysis of ONS LFS inactivity data: seasonally adjusted, UK, Feb 2020 – Aug 2022.

2.34 There are notable gender differences for 25-49 year olds, with inactivity rising by 180,000 25-49 year old men but falling by 94,000 women. Figure 2.13**Error! Reference source not found.** shows the net changes in the number of people self-reporting different reasons for their inactivity from February 2020. It shows that looking after family/home among women is the only major inactivity reason that has reduced across the period, continuing long-term downward trend. It is possible that the pandemic created conditions whereby work and caring responsibilities could be combined, resulting in a reduction in inactivity for this specific cohort.

2.35 The number of inactive students has increased by almost 300,000 over the period. This increased early in the pandemic as young people chose to remain in education and then fell as the economy re-opened and jobs became available in 2021. While there have been more recent increases in student inactivity some of that was expected due to the seasonal nature of student inactivity. We look at students in more detail when discussing the youth labour market in Chapter 5.

2.36 The group responsible for the largest component of the increase in inactivity are those considered long-term sick, accounting for 380,000 of the 630,000 increase. Inactivity for this reason has been particularly high in the last twelve months, increasing by around 230,000 to 2.49 million in August 2022.

Figure 2.13: Change in inactivity since February 2020 by reason and gender, UK



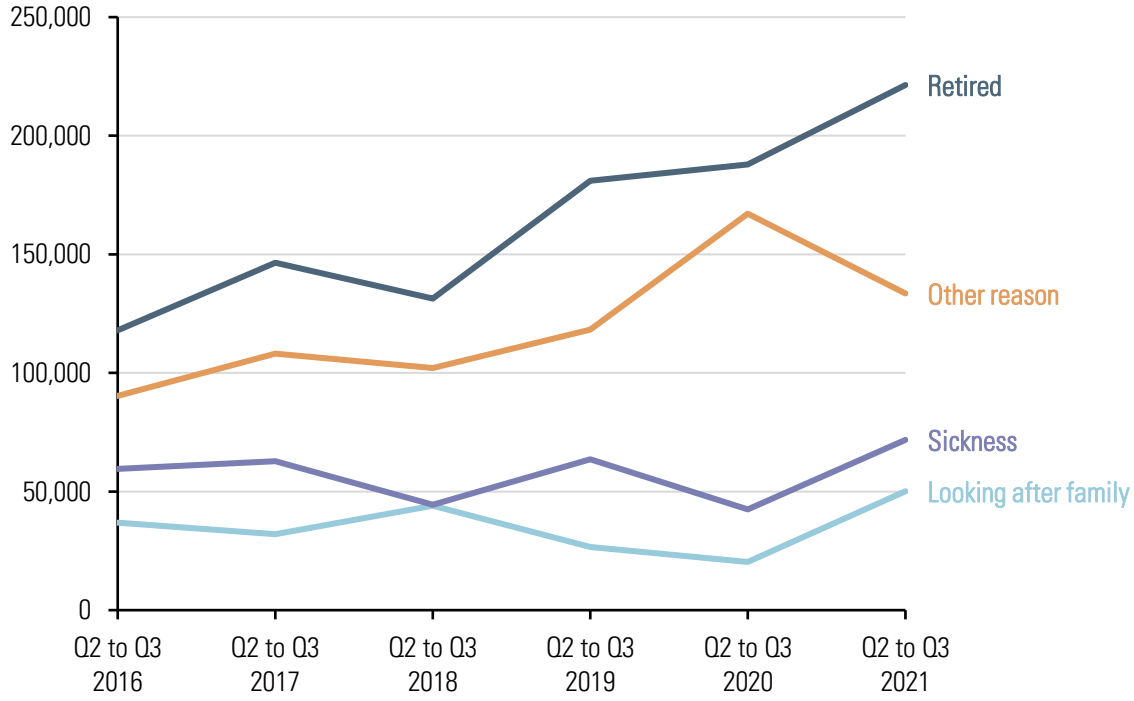
Source: LPC analysis of ONS LFS inactivity data: seasonally adjusted, UK, Feb 2020 – Aug 2022.

2.37 Research from a variety of sources using Labour Force Survey (LFS) data shows the health conditions responsible. Analysis from the Financial Times (Burn-Murdoch, 2022) highlighted how chronic pain and mental health issues were responsible for a majority of the recent increase. The analysis also pointed to an increase in the number of people suffering from multiple health conditions. While the UK was not alone internationally in seeing increasing inactivity after the initial pandemic shock, it is the only developed country where the rate of inactivity has continued to rise.

2.38 However, movements into inactivity among 50-70 year olds show that retirements are the key driver, and have risen since 2016, while – even through the pandemic – movements to inactivity because of sickness have stayed flat (Figure 2.14). Research (Carrillo-Tudela, Clymo, Communello, Visschers, and Zentler-Munro, 2022) confirms that the main cause of movements from employment into inactivity are retirements up to the second quarter of 2022. Other research, such as Boileau and Cribb (2022), showed the increase in health-related inactivity was driven by those who had not worked in five years (0.8 percentage points out of the total 1.1 percentage point increase in health-related inactivity). This suggests that health is a factor in increasing inactivity, but predominantly among people who were already inactive for other reasons. Burn-Murdoch (2022) found that retirement plays more of a role for workers aged over 50, but for younger people there have been some large relative increases in mental illness and progressive illnesses including cancer. We discuss the rise in inactivity among young people in more detail in Chapter 5.

2.39 There are also key differences in how movements to and from inactivity play out across low-paying and non-low-paying sectors, which we look at in detail in Chapter 4. In short, there was a big increase in movements from non-low-paying sectors employment into inactivity, while low-paying sectors saw little change. At first glance this suggests movements into sickness or early retirements are not the cause of issues in low-paying sectors. But at the same time, movements from inactivity into low-paying sector employment have fallen. Figure 2.11 showed that while flows from inactivity into work tracked the vacancy rate quite closely, these flows haven't responded to the post-pandemic jump in vacancies. It is possible that the worsening health of the inactive group is hindering moves from inactivity into work and therefore employers' ease of filling their vacancies.

Figure 2.14: Movements into inactivity among 50-70 year olds by reason, UK, 2016 - 2021



Source: ONS - Movements out of work for those aged over 50 years since the start of the coronavirus pandemic (March 2022).

Workers' lifestyle and career choices may affect recruitment difficulties

2.40 One further explanation for recruitment difficulties is preferences of workers themselves, many of whom have been reconsidering their employment and lifestyle choices post-pandemic. The Bank of England Agents survey (Figure 2.9) found the third most common reason employers cited they were struggling to recruit was 'employees lifestyle preferences'. We heard many examples from stakeholders capturing the difficulty in recruiting due to competition and changing preferences. One hotelier in Wales told us they had had three chefs leave to become delivery drivers:

> *'They're enjoying the life because it's nine to five, no unsocial hours, and no weekends. And they don't want to go back though they'd probably get another ten or twenty grand more, but then they're ready to sacrifice that money for the lifestyle they're having'.* (Hotelier, Wales)

2.41 Similarly, one high street retailer told us about '…the well documented impact of individuals choosing to change career through Covid and move out of retail/hospitality and into different sectors'.

2.42 This may explain why some sectors are struggling to recruit across a range of different countries, including those who have not seen changes to inactivity or access to migrant workers. The OECD (2022b) find that 'the share of firms [in the EU] reporting production constraints from labour shortages increased by 13 percentage points relative to its pre-crisis level of 20% in accommodation and food services and by 12 percentage points (relative to a pre-crisis level of 23%) in administrative and support services … In Canada, the proportion of firms expecting labour shortages in the first quarter of 2022 was 65% in the accommodation and food services vs an average of 37% across the economy.'

Tackling the causes of economic inactivity, such as ill health, is crucial for getting people into work

2.43 Another group of individuals mentioned in discussions about how to improve the current labour supply are those in receipt of benefits. In February 2022, of the 9.1 million benefit claimants of working age there were 5.3 million people in receipt of out of work benefits. Of this latter group, 1.6 million were in receipt of incapacity benefit and so unable to work due to sickness or disability. A further 3.4 million were receiving Universal Credit while the remainder were either receiving Income Support, Jobseeker's Allowance, Pension Credit or some combination of benefits.

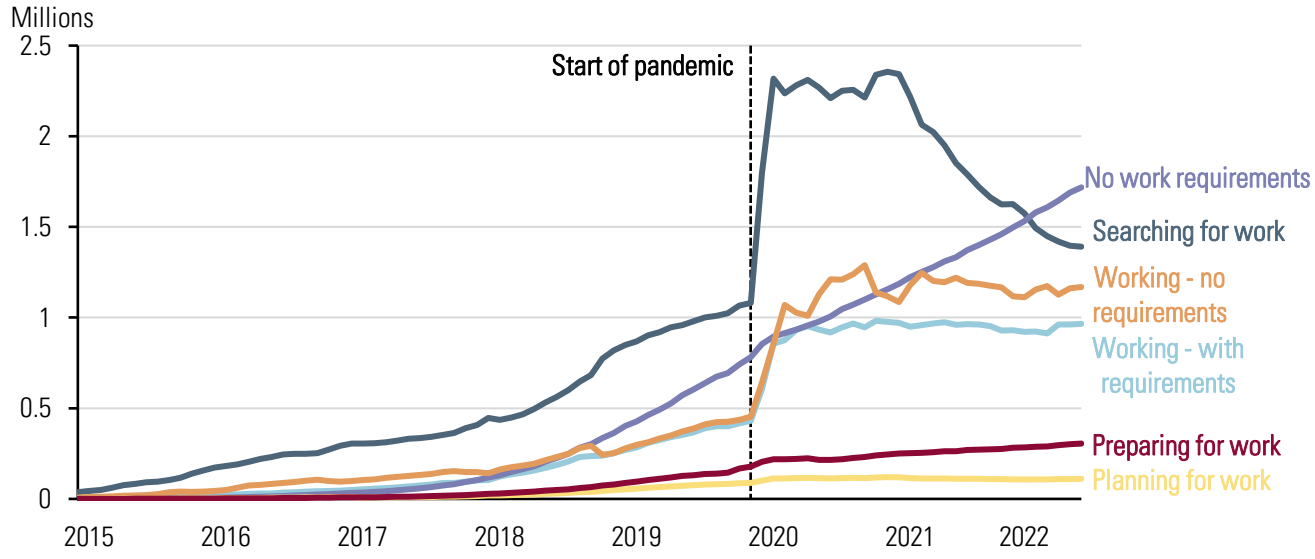
2.44 Universal Credit was introduced in 2013 to bring together a number of existing working age benefits into a single payment. As Universal Credit was rolled out individuals were moved across from existing benefits. There are still a number of individuals in receipt of these legacy benefits – the Department for Work and Pensions expects households still claiming legacy benefits to have moved across to Universal Credit by the end of 2024. In May 2022, 96 per cent of jobseekers were on Universal Credit.

2.45 Figure 2.15 examines those in receipt of Universal Credit by conditionality regime – claimants are assigned to one of six groups based on their assessed capability and circumstances. Prior to the pandemic there were just over one million in the searching for work category. This increased sharply to over 2.3 million in the first few months of the pandemic – as the Government made temporary policy and operational changes that made it easier for individuals affected to claim. Numbers began to fall steadily from April 2021, helped by record job vacancies, and had dropped to 1.4 million by August 2022.

2.46 The group facing no work requirements – who are not expected to work due to health or caring responsibilities – has continued its pre-Covid trajectory as individuals migrate from legacy benefits and are joined by new claimants. By August 2022, it had overtaken the searching for work category with 1.7 million individuals in receipt. There are over 2 million individuals in work claiming Universal Credit either with or without requirements and 430,000 preparing or planning for work.

2.47 The benefits story is linked to the inactivity story. Just as unemployment has fallen, the number of people with search requirements has fallen. A simple reading of Figure 2.15 suggests that as inactivity has risen, due to increased ill health and retirement, the number of people in receipt of benefits with no work requirements has risen, but this latter increase largely reflects the transition from legacy benefits. Nevertheless, it is likely that more ill health-related inactivity is leading to more ill health-related benefit claims, though the extent of this is difficult to measure. Tackling the causes of economic inactivity, such as ill health, is crucial for getting people into work.

Figure 2.15: Universal Credit breakdown by conditionality, GB, 2015-2022



Source: LPC analysis of DwP StatXplore data, Great Britain, May 2015 - Aug 2022.

Labour market slack is at its lowest level in 20 years

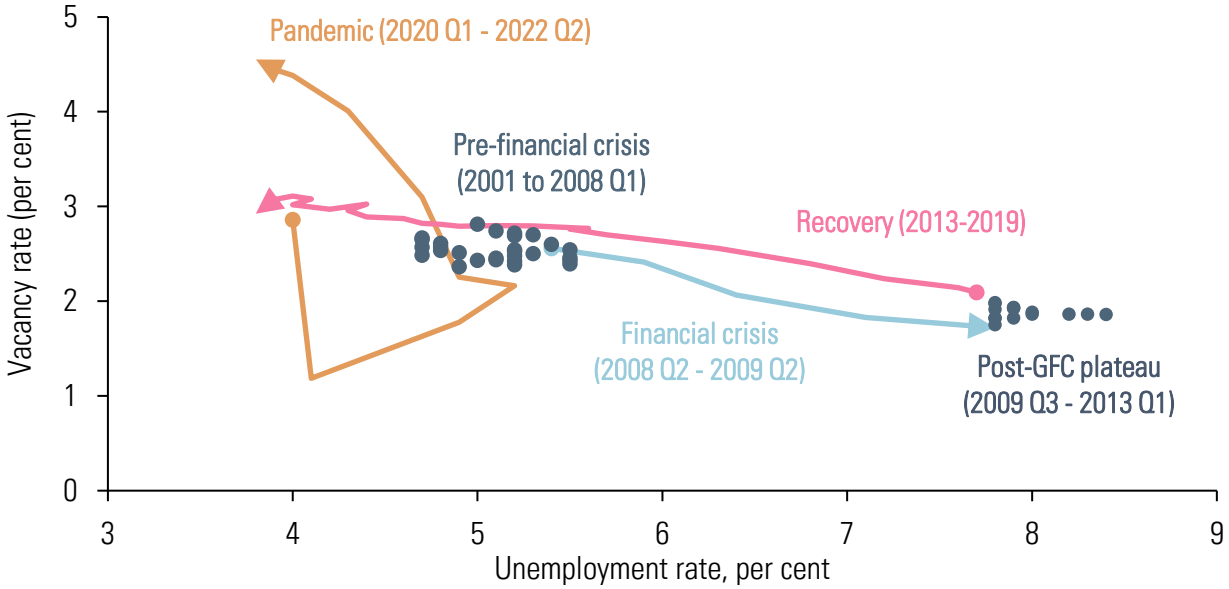
2.48 The level of unemployment had declined steadily between the financial crisis and the pandemic, almost halving from 2.7 million to around 1.4 million between late 2011 and late 2019. Unemployment increased during the pandemic but not as much as initially forecast, helped by the Coronavirus Job Retention Scheme (CJRS). After rising by around 380,000 to peak at 1.7 million in January 2021, it then fell steadily, dropping below its pre-pandemic low by spring 2022. In August 2022 there were only 1.2 million unemployed, the lowest level since 1975.Error! Reference source not found.

2.49 High demand for new workers is reflected in growing numbers of job vacancies and falling unemployment as workers take up these opportunities. The opposite is true when demand is low; job vacancies fall and unemployment rises. This relationship between job vacancies and unemployment is illustrated in the Beveridge curve shown in Figure 2.16. Each point represents a quarter between 2001 and 2022 Q2 and shows a downward sloping relationship, whereby higher job vacancies are associated with lower unemployment and vice versa. The arrows connect the points on the chart during periods

when unemployment and job vacancy numbers grew or declined. For example, the light blue line shows how during the financial crisis the number of job vacancies fell and unemployment rose, shifting to the bottom right-hand corner. The most recent point is 2022 Q2, in the top left hand corner. This point shows that vacancies have not been this high relative to unemployment at any point in the last 20 years.

2.50 However, unemployment alone has become a weaker measure of the amount of slack in the labour market. Underemployment, where workers want more hours than those available in their current job, has grown in importance as flexible working practices and the sectors that use them have grown (hospitality and leisure etc) (OECD, 2019). Some businesses have increased their use of short hour contracts in response to the NLW. For example, the BRC told us that 9 per cent of their members have done this. We discuss the effects of short-hours contracts on low-paid workers in Chapter 3 and go into more detail of how businesses adapted to a rising NLW in Chapter 4.

Figure 2.16: Beveridge Curve: vacancy and unemployment rates, UK, 2001-2022

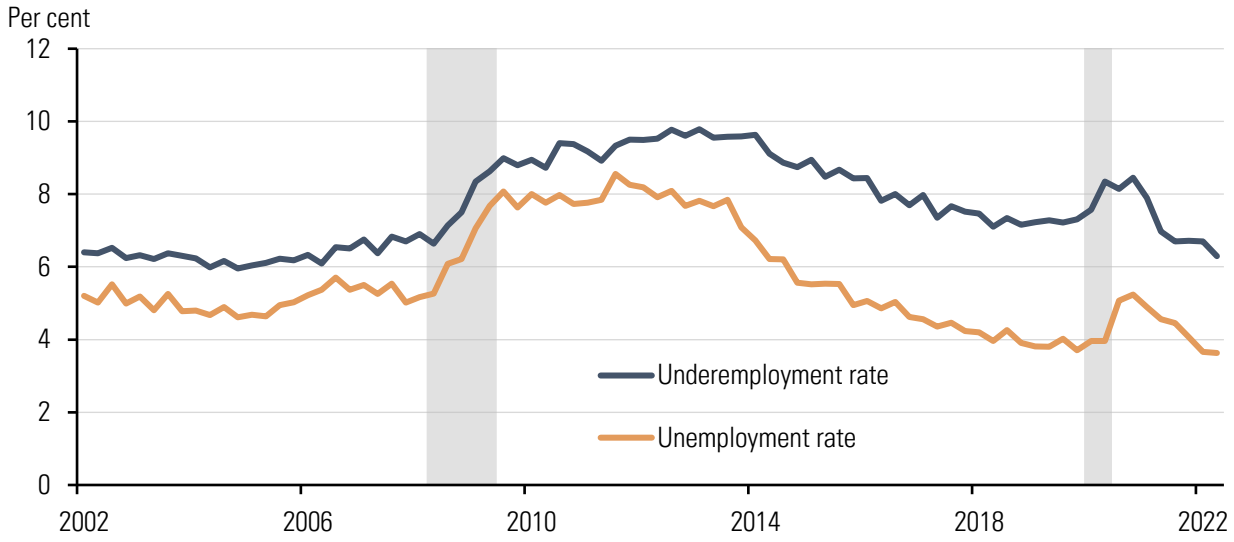


Source: LPC estimates using ONS unemployment (MGSC), vacancies (AP2Y) and 16+ employment (MGRZ) data, quarterly, seasonally adjusted, UK, Jan 2008 – Aug 2022.

2.51 In recent years the underemployment rate has tracked slightly higher than the unemployment rate (Figure 2.17). After the financial crisis, the underemployment rate fell more slowly than unemployment, meaning labour market slack was higher than the unemployment rate alone suggested.

2.52 As we entered the pandemic unemployment was already at record lows, but underemployment was still above pre-financial crisis levels. After the pandemic underemployment fell sharply (more so than unemployment) to rates last seen before the financial crisis, 15 years previously. This drop may be connected to the recruitment difficulties firms have faced during the past year – ONS data from BICS shows that one of the main responses by firms to worker shortages was to ask existing employees to work longer hours. Furthermore, structural shifts away from sectors like leisure and hospitality, where underemployment is more likely, may also be a causal factor. Nevertheless, this fall in underemployment is important for understanding wage dynamics in the UK, which we discuss next.

Figure 2.17: Underemployment and unemployment, UK, 2002-2022



Source: LPC estimates using ONS unemployment (taken from AO2) and underemployment (EMP16) data, quarterly, not seasonally adjusted, UK, 2002 Q1 – 2022 Q2.

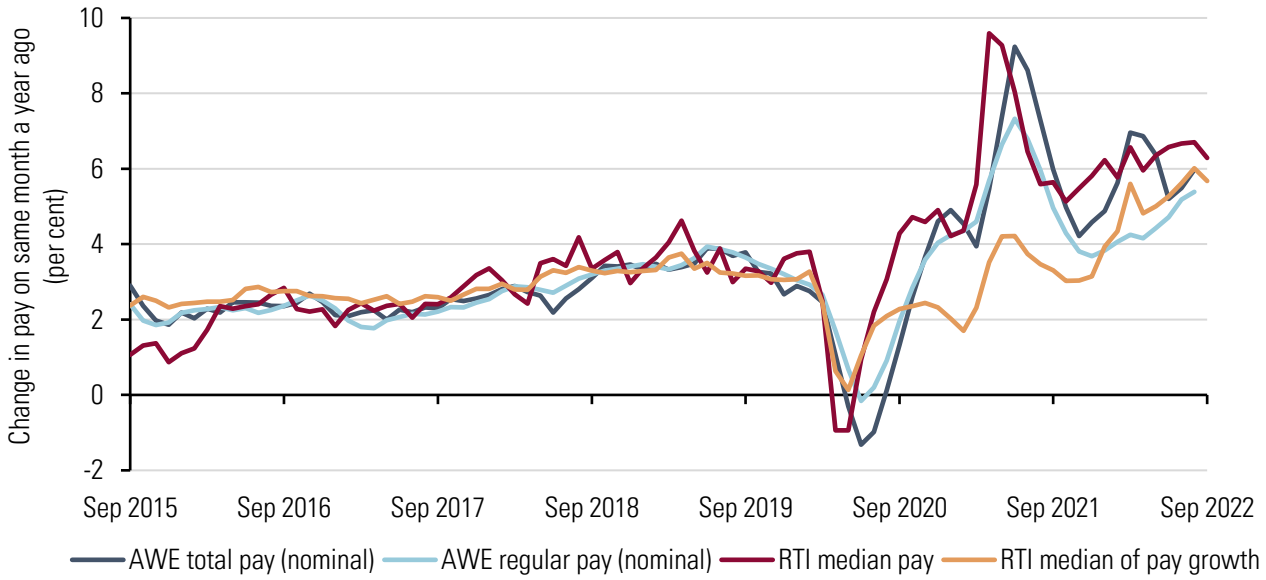
The tight labour market has driven nominal pay growth

2.53 The tight labour market, where employers with record vacancies compete for workers, has resulted in nominal wage growth increasing. Last October both the HM Treasury (2021b) panel of independent forecasts and the Bank of England (2021a) projected wage growth to slow in 2022 (along with a slow-down in price inflation) to 1.8-3.3 per cent from 2.3-5.1 per cent in 2021. That did not happen. Pay growth turned out much stronger in 2021 (at 5.9 per cent) and has also been stronger than forecast so far in 2022 (again at around 6 per cent).

2.54 Headline pay growth has been much stronger after the pandemic than it was before (Figure 2.21). Average Weekly Earnings (AWE) total pay including bonuses grew around 2-3 per cent a year between 2015 and 2018, picking up to around 3-4 per cent before the pandemic but reached 6 per cent in August 2022. Pay growth from HMRC's Real Time Information (RTI) measures showed a similar pattern.

2.55 However, there were still 1.2 million workers on furlough in September 2021, the final month of the CJRS, meaning annual pay growth will be skewed up slightly up to September 2022. This is because furloughed workers were paid up to 80 per cent of their wages so a small portion of the growth will be workers returning to their normal hours of work. Despite the caveats, nominal pay growth appears much stronger now than it was before the pandemic. The RTI median of nominal pay growth measure, which accounts for some of the skewing effects, reached 5.7 per cent in September 2022, far higher than the 3.0-3.5 per cent growth seen pre-pandemic.

Figure 2.18: Average Weekly Earnings total and regular pay growth, GB, RTI median pay growth and RTI median of pay growth, UK, 2015-2022

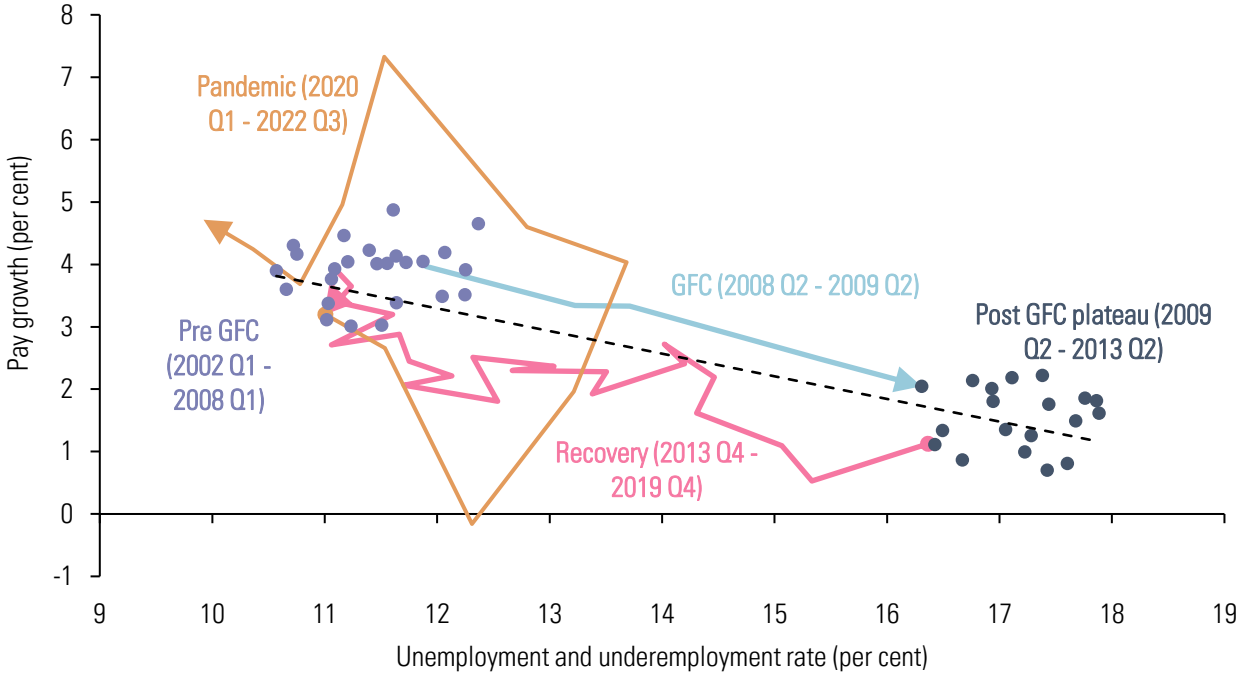


Source: LPC estimates using ONS AWE total (KAC3) and regular pay (KAI9), RTI median pay and RTI median of pay growth data, monthly, seasonally adjusted, UK, Sep 2014-Sep 2022.

2.56 Much of this growth has been driven by the tight labour market, particularly the combination of both low unemployment and falling underemployment. The influence of underemployment on wage dynamics has grown. The IMF (2022c) and Bluedorn (2022) have shown that high levels of underemployment directly reduce wage growth, even more so in countries like the UK, where unemployment is low (Bell and Blanchflower (2021) find similar results in the United States and Europe). With the growth of more flexible working practices and the sectors that use them (hospitality and leisure etc) the margin of adjustment has shifted towards hours rather than jobs (OECD, 2019). David Blanchflower notes that for unemployment to have an effect on wage bargaining, employers need to be aware of it; he argues that underemployed workers in their workplace are likely to have greater salience to employers and indicate weaker bargaining power.

2.57 Figure 2.19 combines unemployment and underemployment together as a share of economic activity as a broader measure (than unemployment alone) of slack in the labour market. In the pre-financial crisis period, pay growth was around 3-5 per cent with measured slack (unemployment and underemployment) at around 11-12 per cent. The financial crisis resulted in higher slack (around 16-18 per cent) and weaker wage growth (around 1-3 per cent). As the economy recovered and slack reduced, wage growth increased, moving the UK back towards its pre-financial crisis position (with slack around 11 per cent and wage growth around 3 per cent). The pandemic was a period of volatility with government intervention affecting both wage growth and measures of slack. Nevertheless, in the first two quarters of 2022, nominal wage growth of around 4-5 per cent is consistent with what we should expect given that levels of slack in the labour market are at their lowest in at least 20 years.

Figure 2.19: Regular pay growth and labour market slack, UK, 2002-2022



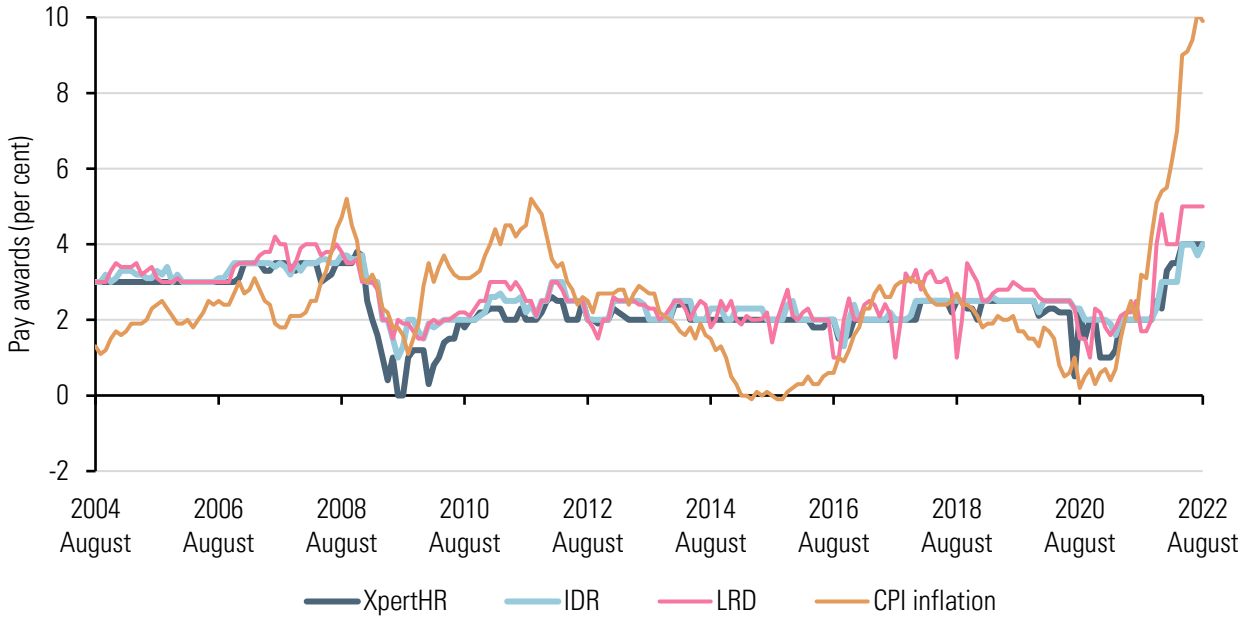
Source: LPC estimates ONS unemployment (AO2) and underemployment (EMP16) data, quarterly, not seasonally adjusted, UK and AWE regular pay growth (KAI9) data, seasonally adjusted, GB, 2002 Q1 – 2022 Q2.
Note: GFC = Great Financial Crisis.

2.58 We heard from stakeholders and pay researchers that firms adopted different pay strategies to recruit and retain staff. These included greater use of non-consolidated elements of pay – one-off bonuses, retention bonuses and starting bonuses. Others conducted more than one pay round in the year. These practices resulted in a gap between regular and total pay growth from the end of 2021, but recent data suggest this has been eroded since June 2022.

2.59 Strength in nominal pay growth is reflected in pay settlements, as shown in Figure 2.20. The median settlements from XpertHR and IDR have increased to around 4 per cent since March 2022 – up from 2-3 per cent for most of 2021. Settlements recorded by the Labour Research Department are trade union-negotiated deals and show stronger growth at around 5 per cent since May 2022 – also up from 2-3 per cent for most of 2021.

2.60 Prior to the financial crisis, the median of pay settlements had been around 3-4 per cent. After this the median settlement was around 2-3 per cent until the onset of the pandemic. There appears to be little relationship with CPI inflation throughout most of the period shown.

Figure 2.20: Pay settlements, UK, 2004-2022



Source: LPC estimates using median of pay awards in last three months from IDR, LRD and XpertHR; and CPI inflation (D7G7), monthly, seasonally adjusted, UK, Aug 2004-Aug 2022.

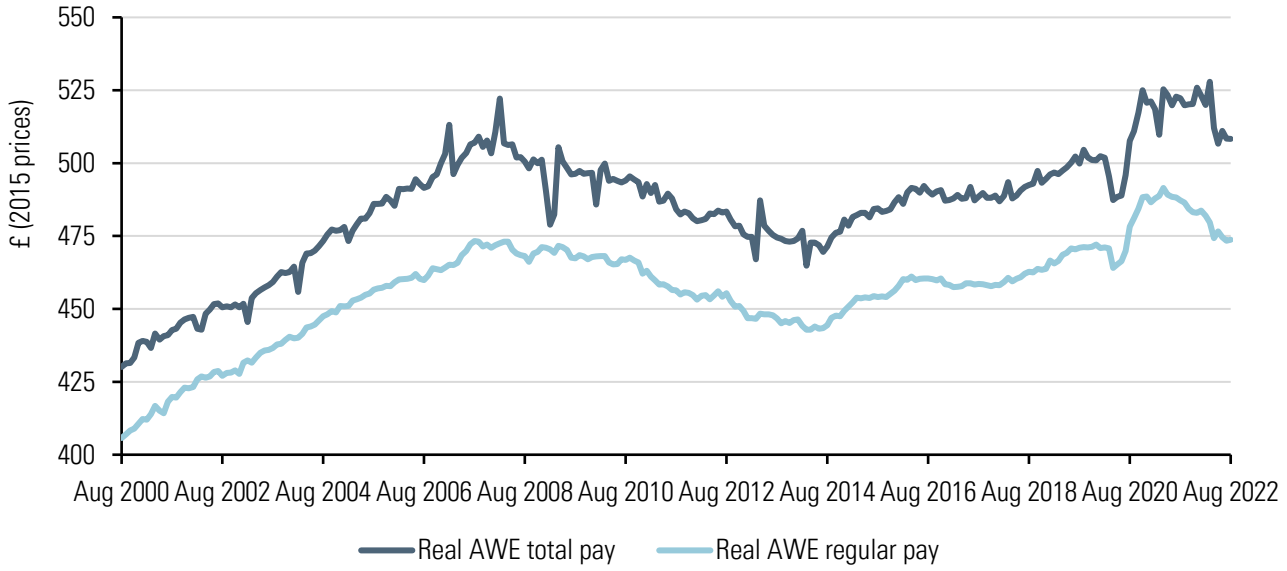
Nominal pay growth has not kept pace with prices, with real wages falling

2.61 Despite the strong growth in nominal earnings, they have not kept pace with inflation, resulting in real wage cuts. As shown in Figure 2.21, real AWE regular pay started falling in April 2021 and in August 2022 was 3.6 per cent below that level. In contrast, as nominal AWE total pay was boosted by bonuses and other supplements, real AWE total pay did not start falling until March 2022. However, by August 2022, it had fallen by 3.7 per cent – slightly more than the longer-term fall in real regular pay.

2.62 The latter, at £474 a week in August 2022, was just £1 a week or 0.3 per cent above what it was in February 2008 before the financial crisis. Taking account of bonuses, the change in real pay is even more stark. Real AWE total pay was £508 a week in August 2022 – around £14 a week or 2.6 per cent lower than in February 2008.

2.63 The combination of strong nominal wage growth and sustained falls in real wages has not been observed in the UK in recent economic history. The most similar period is the 1970s, but even then nominal wage growth kept up with inflation for the most part, with short periods of real wage falls followed by real wage growth.

Figure 2.21: Real Average Weekly Earnings total and regular pay, GB, 2006-2022



Source: LPC estimates using ONS real total pay (A3WX) and real regular pay (A2FC), monthly, seasonally adjusted, GB, Aug 2000-Aug 2022. Real pay reflects pay in 2015 prices, deflated by CPIH.

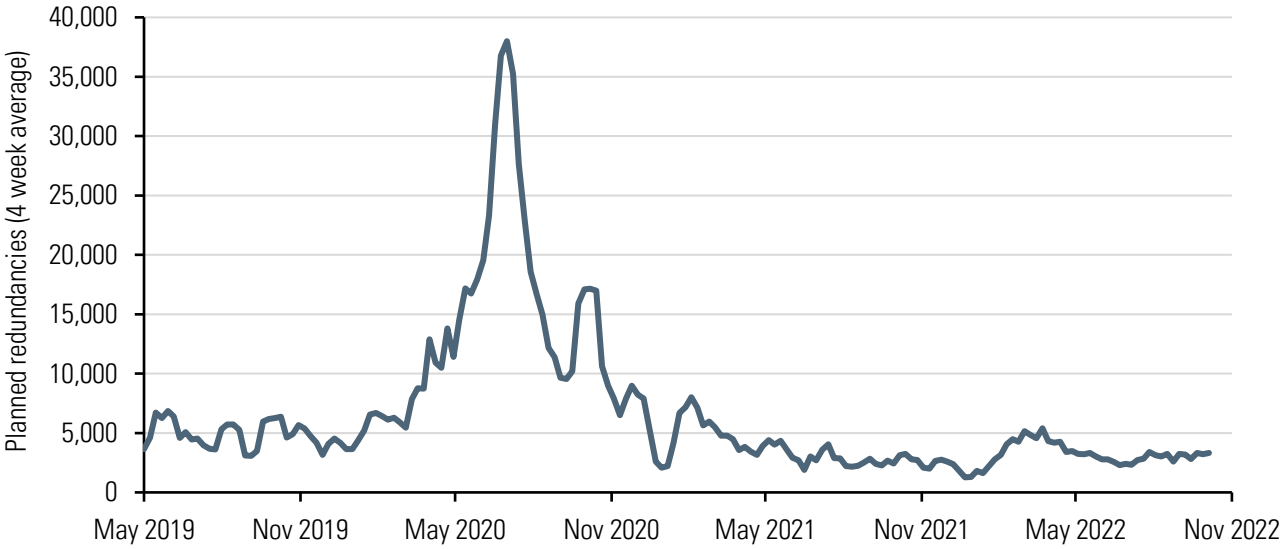
The labour market is expected to weaken, with falling vacancies accompanied by rising unemployment

2.64 A number of metrics show a recent drop in employer demand for new recruits. While levels of ONS vacancies remain historically high at 1.25 million they have passed their peak and fell by 46,000 in September, the largest three-monthly fall in two years. More timely vacancy data from both Indeed and Adzuna also show a recent dip as we saw in Figure 2.6. Likewise, KPMG and Recruitment & Employment Confederation (2022), UK Report on Jobs recorded the weakest rises in permanent and temporary placements for 19 months. They also noted that supply issues remained with individuals hesitant to apply for new roles driven by fears over the economic outlook.

2.65 To date this drop in demand has not yet resulted in a contraction in workforces through redundancies. HR1 data from the Insolvency Service contains information from firms planning on making 20 or more staff redundant. Planned redundancies in 2022 have remained very low and despite a small uptick in the most recent data levels are lower than the same week in 2021 and remain lower than planned redundancies pre-pandemic. It should be noted that redundancies tend to be a lagging indicator.

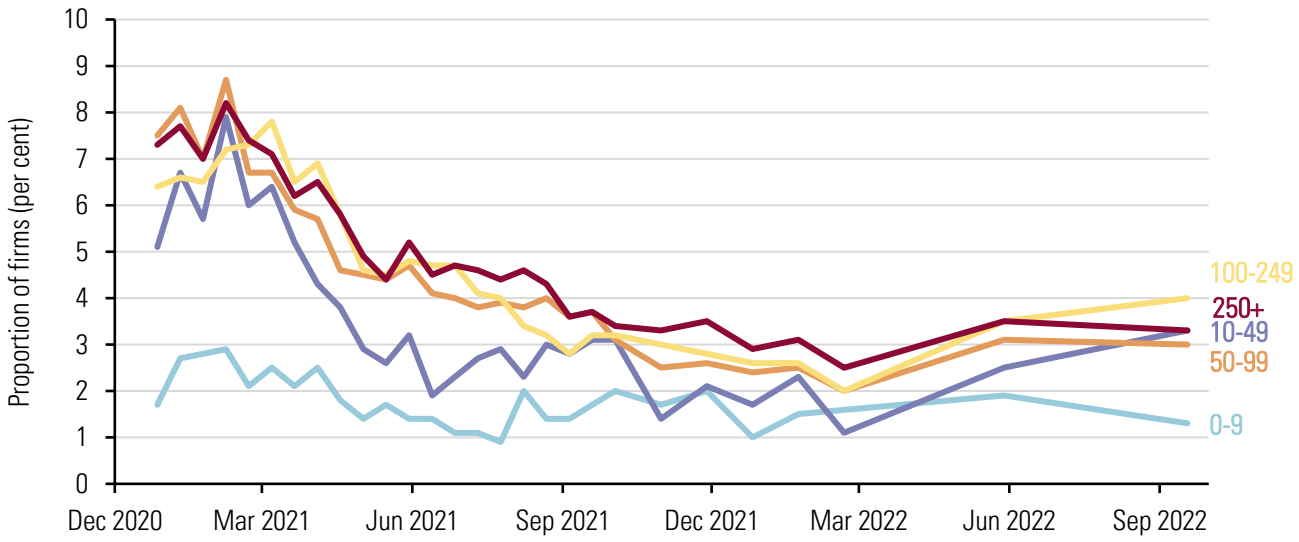
2.66 Smaller businesses do not need to go through the HR1 process, so instead we look at redundancy intentions in the ONS BICS data. Figure 2.23 shows the proportion of firms expecting to make redundancies in the next three months. It shows how across all firm sizes, with the exclusion of the smallest micro firms, there has been an increase in the last six months in the share of firms planning on making redundancies, albeit only increasing to rates similar to twelve months previous. These data combined with HR1 notification information suggest firms are currently not planning to make large redundancies.

Figure 2.22: HR1 potential redundancy notifications, UK, 2019-2022



Source: LPC estimates using ONS HR1 notifications, weekly, not seasonally adjusted, GB, Apr 2019-Oct 2022.

Figure 2.23: Share of firms forecasting redundancies in next three months by firm size, UK, 2021-2022



Source: LPC estimates using ONS BICS data, fortnightly, not seasonally adjusted, UK, Waves 20-65 (Dec 2020-Sep 2022).

Forecasters expect unemployment to rise and pay growth to slow in 2023

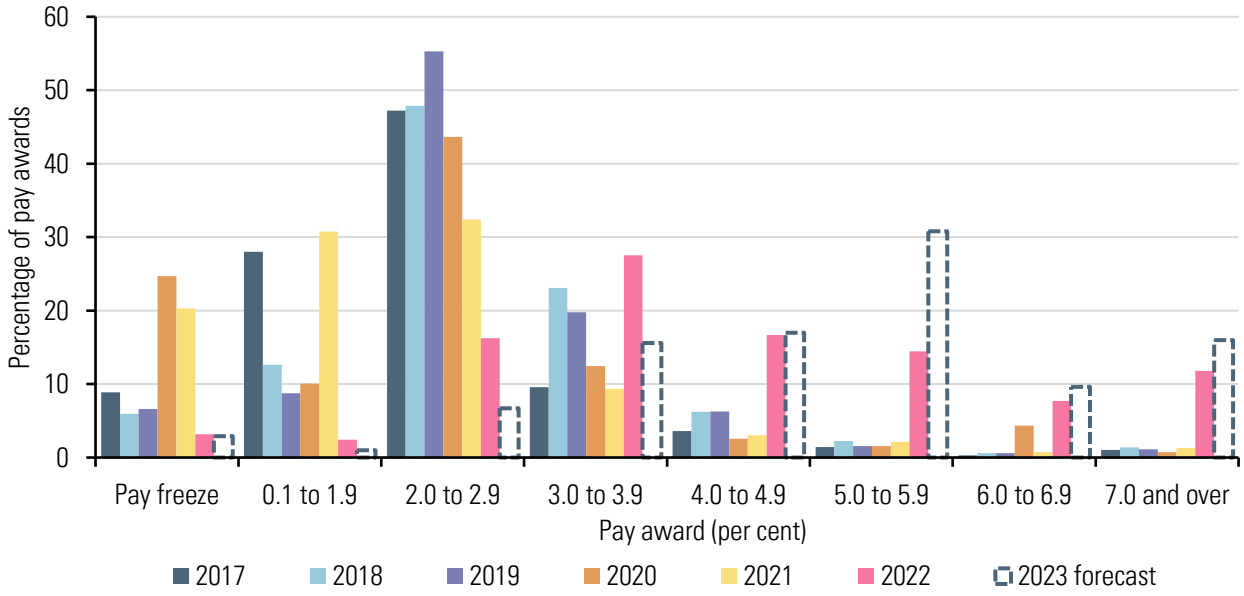
2.67 The latest forecasts reflect the weakening economy and labour market, with lower employment and slightly higher unemployment expected (Table 2.1) in 2023. In line with this, pay growth is also expected to soften in the near term. The Bank's monthly Decision Maker Panel reported that average wage growth was 6.5 per cent over the 12 months to September 2022, but was expected to slow to 5.9 per cent over the next 12 months. Similarly, the HM Treasury panel has stronger wage growth this year (5.9 per cent) slowing to 4.6 per cent in 2023.

2.68 Earnings forecasts contrast with expected pay settlements. We showed that the median of pay settlements had picked up in Figure 2.20 to around 4-5 per cent in 2022. This is likely to be sustained –

with both pay researchers and the Bank of England pointing to surveys of employers that suggest they expect pay awards to be at least as strong next year as this year. The shift in the distribution towards higher pay awards is shown in Figure 2.24.

2.69 Some of the difference between pay settlements and earnings forecasts is likely due to timing. Most pay settlements take effect between January and spring, so expectations of higher settlements in that period in 2023 likely reflect the tight labour market right now. Earnings forecasts on the other hand are for the complete calendar year, so the softening likely reflects the expected slowdown in economic growth and loosening of the labour market over that period.

Figure 2.24: Distribution of pay awards and forecasts, UK, 2017-2023



Source: LPC estimates using XpertHR data, UK, 2017-2023.

Table 2.1: Wage, employment and unemployment forecasts, 2022-2023

HM Treasury panel (October 2022) plus the Bank of England (August 2022)	Average wage growth (%)		Employment growth (%)		Unemployment rate in Q4 (%)	
	2022	2023	2022	2023	2022 Q4	2023 Q4
Median	5.9	4.6	1.0	0.2	4.1	4.4
Mean	5.8	4.5	1.0	0.2	4.0	4.3
Maximum	7.3	6.6	2.9	1.9	4.9	5.0
Minimum	4.1	2.7	-1.1	-1.5	3.4	3.2
Lower quartile	5.3	3.6	0.7	-0.3	3.8	4.0
Upper quartile	6.3	5.0	1.3	0.6	4.3	4.6
Interquartile range	1.1	1.4	0.6	0.9	0.5	0.6
Bank of England (only)	5.3	5.3	1.3	-1.5	3.7	4.7

Source: HM Treasury (2022g) panel of forecasts and the Bank of England (2022c). Average wage growth and employment growth from Table 1.E and MPC Forecasts of LFS unemployment rate in Q4 using market interest rates.

Conclusions

2.70 The labour market has recovered quickly but remains below pre-Covid employment rates, largely because of falls in self-employment. Record high vacancies, albeit past their peak, combined with employers struggling to recruit suggest the labour market is more supply-constrained than demand-constrained. While rising inactivity is likely a causal factor in recruitment issues, the international picture suggests others factors too, as labour markets have tightened in many countries but the UK's increase in inactivity is unique. Employers cite competition from other employers, changes in lifestyle and career choices among workers, and changes in access to migrant workers as the main reasons they are struggling to recruit. We also heard from low-paid workers that they viewed switching jobs to be a significant risk, which may slow down reallocation across the economy and be part of the explanation for why employers cannot recruit.

2.71 What is clear is that the labour market is very tight, with both unemployment and underemployment at their lowest levels for years. This has driven the highest nominal wage growth since before the financial crisis (5-6 per cent). And yet wage growth has not kept up with inflation. Real wages are falling sharply.

2.72 However, Chapter 1 outlined weaknesses in the macro economy, with substantial hits to real incomes and low investment likely to work through into the labour market, which tends to lag the macro economy. As the economy continues to falter and vacancies fall too, we should expect unemployment to rise. The pandemic showed that recruitment activity can fall very rapidly indeed. The majority of forecasters in the HMT panel expect unemployment to rise by the end of 2023. In line with this, wage growth is also expected to be lower in 2023 than it has been in 2022.

Chapter 3

Who are minimum wage workers

Key findings

- The number of minimum wage workers has fallen significantly for the first time in the last twenty years. Between 2019 and 2022 the total number of employee jobs covered by the minimum wage (including youth rates) fell from nearly 2.0 million to 1.6 million (or from 7.0 per cent to 5.4 per cent of employee jobs). One key driver of this is a tight labour market; firms are struggling to hire workers so are raising pay above the minimum.
- Total minimum wage coverage has fallen by 400,000 jobs since 2019. Three out of four of those jobs were previously held by women. Coverage has fallen by 25 per cent for women and only 14 per cent for men.
- Since 2019 coverage has fallen by 39 per cent in large firms and 27 per cent in medium firms but remained unchanged in small firms. Large retail firms have seen particularly fast reductions in coverage.
- Minimum wage workers are concentrated in a small number of occupations. 45 per cent of all minimum wage workers work in retail, hospitality, or cleaning. 75 per cent of all minimum wage workers work in a slightly wider group of occupations which we refer to as low-paying occupations. In these occupations, 15 per cent of jobs are minimum wage jobs, whereas in other occupations only 2 per cent of jobs are minimum wage jobs.
- The number of underpaid workers increased by 100,000 in 2022 compared with 2019. This appears to be linked to large numbers of workers still being paid the previous NLW rate. However, if we exclude these workers, underpayment as a share of coverage has still increased since 2019. We would not expect this to happen in a tight labour market that gives workers options to work elsewhere.
- Minimum wage rises have helped reduce the incidence of low hourly pay to a record low level, but have had a smaller impact on low weekly pay. Low hourly or weekly pay is defined as two thirds of the hourly or weekly median earnings. The share of employee jobs on low hourly pay has fallen dramatically from 21 per cent to 9 per cent since the NLW was introduced in 2015. However, low weekly pay has only fallen slightly in the same period. Low hours amongst workers on low weekly pay, especially women, are the reason for this.
- The effects of inflation on workers' living costs were a central theme of stakeholder evidence this year. Unions warned that pay-rises negotiated early in the year had now been eroded by the growing cost of living. Workers emphasised that the difficulty of living on low-pay has been exacerbated by insecure working arrangements, unpredictable shift patterns and fluctuating incomes. Increasing childcare costs combined with fluctuating shift patterns meant some workers faced difficult

decisions on whether to take additional hours. In rural communities we heard that limited access to increasingly expensive transport was preventing some workers accessing the wider labour market.

- We heard that as some employers struggled to recruit, in combination with or sometimes as a substitute for investment in improving productivity, employers had intensified the workload of their employees. Workers, particularly in retail and hospitality, reported routine abuse from customers which had grown during the pandemic and remained at a high level.
- Several respondents considered the effects of the minimum wage on groups with protected characteristics, noting both the importance of the NMW for these groups and its limitations. They told us women and those with protected characteristics were more likely to be on the NLW therefore the NLW acted as important tool in addressing gender and race pay inequality.

3.1 This chapter describes who minimum wage workers are and their experiences of the workplace, in three sections. First, we review the number of minimum wage workers, their characteristics and how these have changed since 2019. Second, we discuss how the rising minimum wage has dramatically reduced the number of workers on low hourly pay but has had less of an effect on the numbers on low weekly pay (defined as two-thirds of median pay). Finally, we summarise what we heard from workers in low-paid jobs themselves and those who represent them.

The changing characteristics of minimum wage workers

The number of jobs covered by the minimum wage has fallen significantly for the first time in 20 years

3.2 We define jobs as covered by the minimum wage if they are paid within 5 pence of the relevant National Minimum Wage (NMW) rate. Coverage includes jobs paid less than the minimum wage. The relevant NMW rate depends on your age and whether you are a first-year apprentice. We define coverage in terms of jobs rather than workers, as one worker could be working multiple minimum wage jobs. If a worker is self-employed they are not eligible for the NMW, so all statistics in this section relate only to employees.

3.3 Between 2019 and 2022 the total number of employee jobs covered by the minimum wage (including youth rates) fell from nearly 2.0 million to 1.6 million (or from 6.9 per cent to 5.4 per cent of employee jobs). This reduction in coverage is surprising as minimum wage rates grew faster than average earnings over this period. We look at what may have caused this fall in more detail in Chapter 4, but a likely cause is the tightness of the low-paid labour market in 2022, which we discuss in Chapters 2, 4 and 5. Firms told us they were struggling to hire workers and had to raise pay above the minimum to attract and retain workers.

3.4 The more moderate growth in minimum wages in 2021 is another potential cause of the reduced coverage. The National Living Wage (NLW, the minimum wage for those aged 23 and over) increased by only 2.2 per cent between 2020 and 2021, which may have allowed many employers to get ahead of the rate. There is more uncertainty over our estimates of coverage in 2020 and 2021 due to data issues, but our central estimates suggest that most of the reduction in coverage happened between 2020 and 2021. We discuss in more detail the changes in coverage for the NLW population in Chapter 4, and for the younger age groups in Chapter 5 and apprentices in Chapter 6.

Table 3.1: Number and percent of employee jobs covered by the minimum wage, by rate population, UK, 2019 and 2022

	2019		2022		Difference[c] (2022 - 2019)	
Minimum wage population	Covered (thousands)	Coverage rate (per cent)	Covered (thousands)	Coverage rate (per cent)	Covered (thousands)	Coverage rate (p.p)
AR	31	16.4	31	14.0	0	-2.4
16-17	36	12.3	25	7.7	-11	-4.7
18-20	116	12.0	82	9.2	-34	-2.9
21-22	98	10.9	89	10.6	-9	-0.4
23-24	57	5.2	103	9.3	46	4.1
25+	1,649	6.6	1,240	4.8	-410	-1.8
Total	1,987	7.0	1,570	5.4	-417	-1.6

Source: LPC analysis of ASHE, low-pay weights, UK, 2019-2022.
Notes:
a. AR stands for Apprentice Rate.
b. 23-24 year olds became entitled to the NLW in 2021. They are included in coverage figures for 21-24 year olds in 2019, and in coverage figures for the NLW in 2022.
c. Figures may not sum due to rounding.

The number of jobs paid below the minimum wage has increased, although this could reflect data issues

3.5 Table 3.2 compares underpayment by age in 2019 and 2022 using the Annual Survey of Hours and Earnings (ASHE). It shows that total levels of underpayment have increased by 79,000, with the increase among workers aged 21 and over. Looking at the data in more depth shows that around 150,000 individuals were being paid at the previous NLW rate of £8.91. This is substantially higher than those that were paid at the previous rate back in 2019. There may be a connection between this higher than expected number still being paid the 2021 NLW and how upratings were treated during the pandemic.

3.6 However, even if we exclude this 150,000, underpayment as a share of coverage is still higher than 2019. This is a surprise given that coverage is down in 2022 and Chapter 2 shows a tight labour market with firms struggling to recruit. We could expect there to be less scope to underpay when workers have other options in the labour market. Chapter 2 also showed how workers in low-paying occupations regard moving jobs as high risk. This has been a common occurrence in our conversations with workers for some years. We will investigate this area in more detail for our 2022 non-compliance report.

Table 3.2: Number and per cent of employee jobs paid below[a] the minimum wage, by rate population, UK, 2019 and 2022

MW Rate	2019 Underpayment			2022 Underpayment			Difference[e] (2022 - 2019)		
	Level (000s)	Per cent of coverage	Per cent of total	Level (000s)	Per cent of coverage	Per cent of total	Level (000s)	Per cent of coverage (ppts)	Per cent of total (ppts)
AR	9	29.7	4.9	10	32.4	4.5	1	2.7	-0.3
16-17	3	9.4	1.2	5	19.8	1.5	2	10.4	0.3
18-20	19	16.3	2.0	21	24.9	2.3	2	8.6	0.3
21-22[b]	20	20.9	2.3	36	40.9	4.3	16	20.0	2.0
23-24[c]	12	21.6	1.1	37	35.9	3.4	25	14.3	2.2
25+[d]	364	22.1	1.5	398	32.1	1.5	34	10.1	0.1
Total	428	21.6	1.5	507	32.3	1.7	79	10.7	0.2

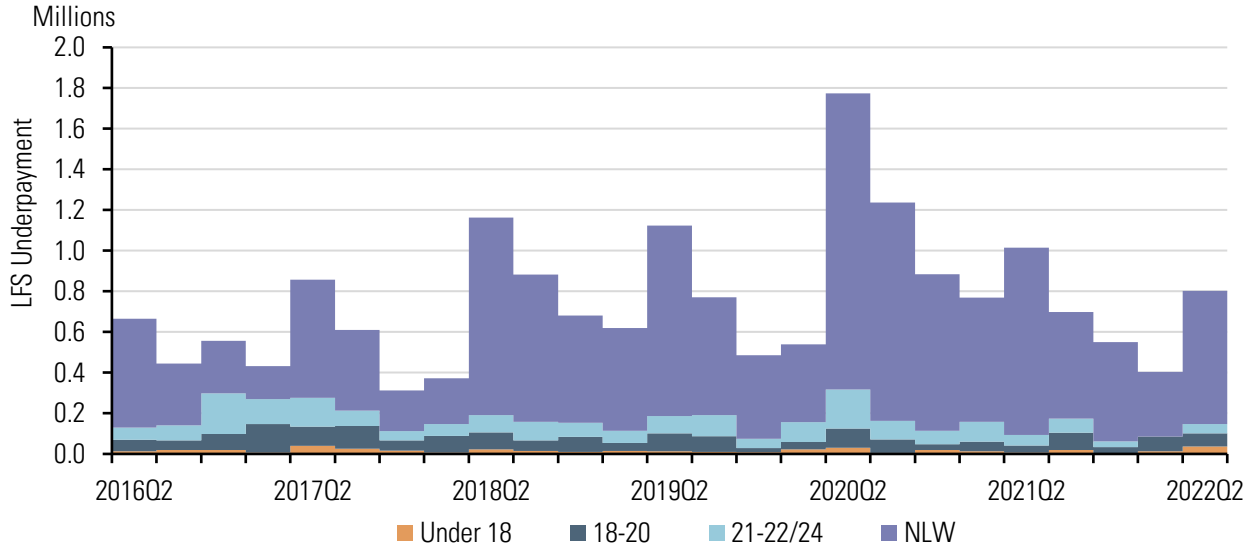
Source: LPC analysis of ASHE, low-pay weights, not chain linked, UK, 2019-2022.

a. Underpayment is measured as anyone paid below the rate for the relevant minimum wage population.
b. 21-22 became a new rate in 2021. Prior to this they were part of the 21-24 Year Old Rate.
c. 23-24 year olds became entitled to the NLW in 2021. Prior to this they were part of the 21-24 Year Old Rate.
d. Row shows figures for 25+ only. NLW was 25+ from introduction in 2016 until addition of 23-24 year olds in 2021. 2022 NLW underpayment is calculated by summing 23-24 and 25+ figures.
e. Figures may not sum due to rounding.

3.7 As well as ASHE we can look at an alternative measure of underpayment derived from the Labour Force Survey (LFS). LFS data, collected via a household survey, usually shows higher levels of both underpayment and coverage than in ASHE and is an imperfect measure of minimum wage pay. But despite its pay flaws, the LFS offers a consistent time series and the quarterly nature of the LFS enables us to identify within-year patterns and how they relate to our minimum wage upratings. Figure 3.1 illustrates the frictional nature of underpayment, which is at its highest each year at the moment of the NMW uprating in the second quarter before falling in subsequent quarters.

3.8 The pandemic made the recording of accurate pay information difficult, resulting in inflated levels of LFS underpayment. The latest information from the second quarter of 2022, however, shows total underpayment of around 750,000, a fall from not only the recorded highs of the pandemic but also the same period in 2019. The move to a round figure of £9.50 may also have made calculating pay easier for individuals and reduce estimated underpayment. Levels are similar to those back in 2017, the last time the NLW was a round number (£7.50).

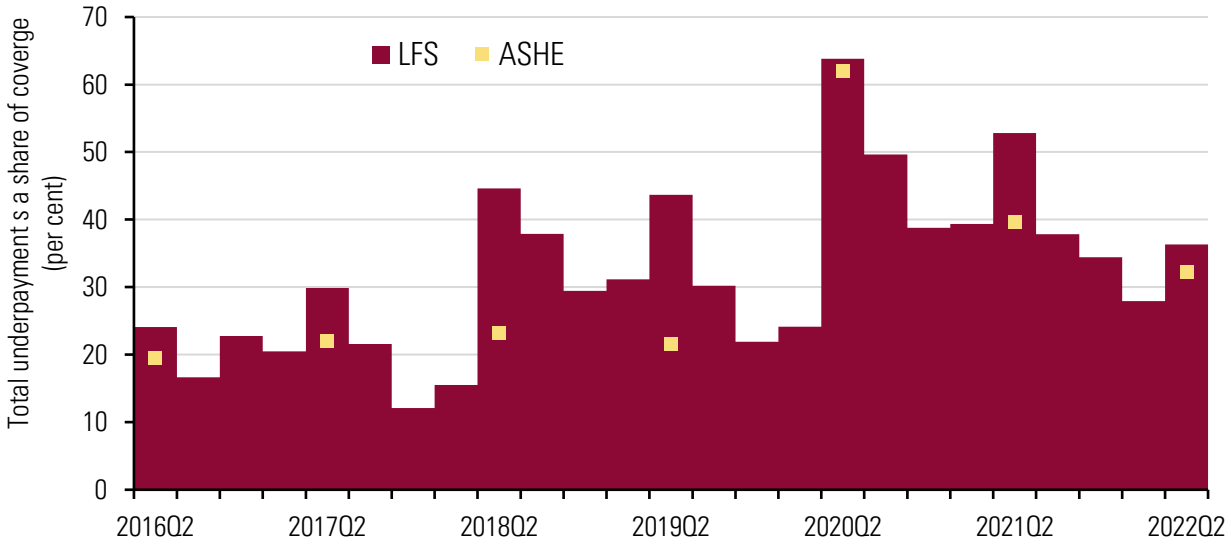
Figure 3.1: LFS underpayment totals by rate population, UK, 2016-2022



Source: LPC estimates using Labour Force Survey, income weights, quarterly, not seasonally adjusted, UK, 2016Q2 - 2022Q2.

3.9 As well as looking at levels of underpayment we can look at the share of workers underpaid relative to all those covered. Figure 3.2 compares this measure from both ASHE and LFS. Historically around one in five workers covered by an NMW rate show as underpaid in the ASHE data, while the second quarter figure using the LFS was over 40 per cent in both 2018 and 2019. As discussed, we have seen a convergence this year with LFS underpayment falling to 36 per cent while ASHE measured underpayment has increased on pre-pandemic rates to 32 per cent.

Figure 3.2: LFS and ASHE underpayment as a share of coverage, UK, 2016-2022



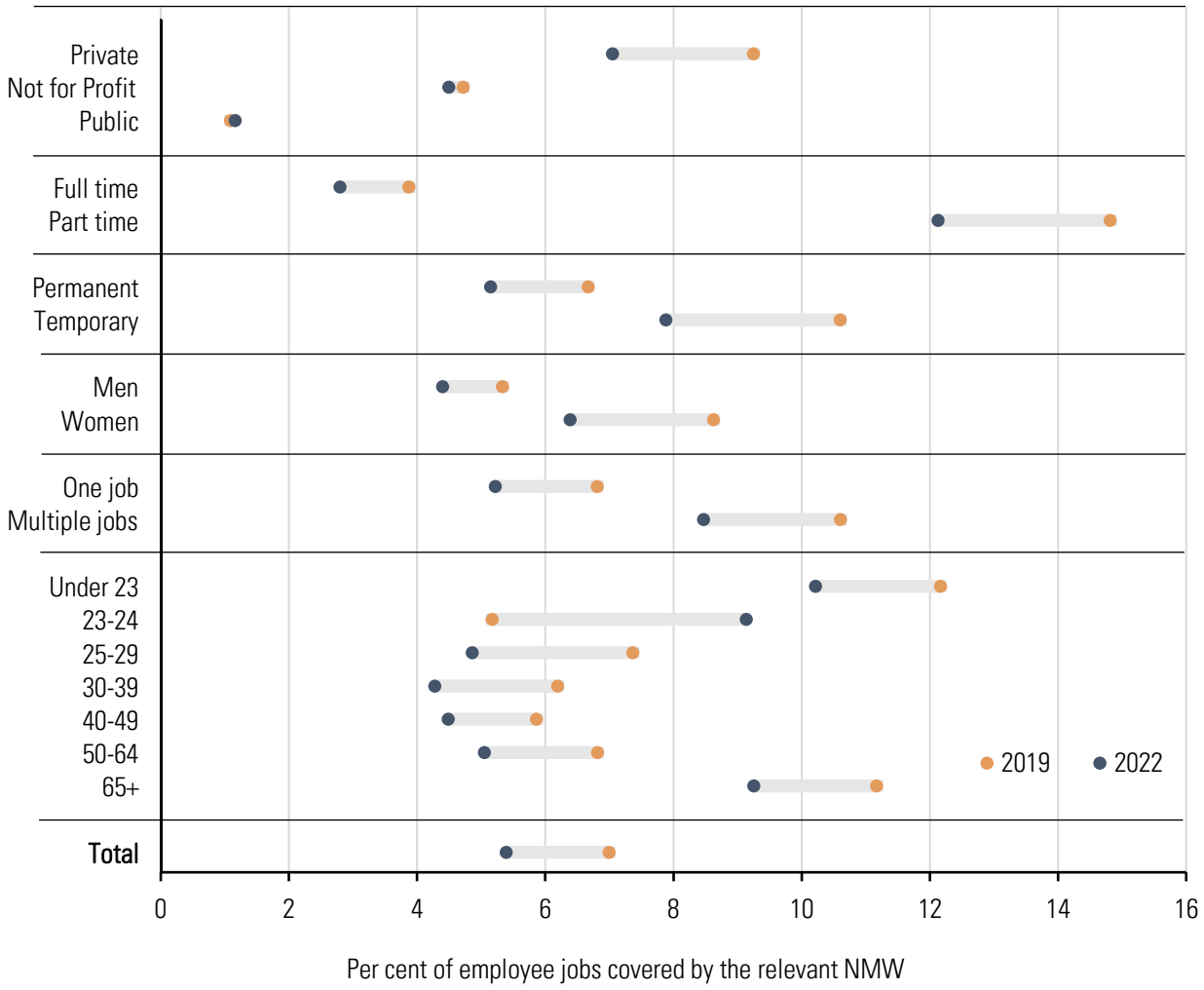
Source: LPC estimates using and LFS.
Notes:
a. ASHE, SOC2020 weights, 16+, UK, 2016-2022.
b. LFS, income weights, quarterly, not seasonally adjusted, 16+, UK, 2016Q2 - 2022Q2.

3.10 We could expect levels of underpayment to fall given the observed drop in coverage seen this year. As we see this fall in the LFS data it is fair to assume that there could be some issues around the reliability of the ASHE underpayment data. This could relate to those that are legitimately paid at the previous rate (due to the timing of the pay period) and are overinflating latest ASHE underpayment figures. We will explore this in more detail and report our findings in our 2023 Report on non-compliance.

Coverage has fallen faster amongst women, younger workers and part-time workers

3.11 Certain groups of workers are much more likely to be covered by the minimum wage. Women account for 59 per cent of all minimum wage jobs, despite making up half the workforce. Workers who are under 30 or over 65 are also much more likely to be on the minimum wage, as shown in Figure 3.1.

Figure 3.3: Per cent of employee jobs covered by the relevant NMW/NLW rate, by personal and job characteristics, UK, 2019 and 2022



Source: LPC analysis of ASHE, low-pay weights, UK, 2019-2022.

3.12 Lower coverage amongst women is the key driver for the overall reduction in coverage. Table 3.3 shows that total coverage has fallen by 400,000 jobs, of which 300,000 jobs were previously held by women. Women aged 25 to 29 saw the biggest reductions in coverage rates, from 8.5 per cent in 2019 to 6.3 per cent in 2022, while in percentage terms coverage fell most for women aged 50 to 64. While women are still more likely to work in minimum wage jobs, the gap between them and men has become smaller. The balance has shifted from a 62/38 per cent split to a 59/41 per cent split in favour of women in minimum wage jobs.

Table 3.3: Number and per cent of employee jobs covered, by age group and gender, UK, 2019 and 2022

Number of covered jobs

Age group	2019 (thousands)		2022 (thousands)		Difference (thousands)		Percent difference	
	Male	Female	Male	Female	Male	Female	Male	Female
Under 23	131	149	105	122	-26	-27	-20	-18
23-24	26	31	49	54	23	22	88	72
25-29	105	139	80	83	-25	-56	-24	-40
30-39	157	258	119	181	-38	-76	-24	-30
40-49	129	254	116	179	-13	-74	-10	-29
50-64	165	360	139	262	-26	-97	-16	-27
65+	38	46	35	45	-3	-1	-9	-2
Total	**751**	**1236**	**643**	**927**	**-108**	**-309**	**-14**	**-25**

Coverage rate

Age group	2019 (per cent)		2022 (per cent)		Difference (p.p)		Percent difference	
	Male	Female	Male	Female	Male	Female	Male	Female
Under 23	11.7	12.6	9.8	10.6	-1.9	-2.0	-16	-16
23-24	4.7	5.7	8.7	9.6	4.0	4.0	85	70
25-29	6.3	8.5	4.7	5.1	-1.6	-3.4	-26	-40
30-39	4.6	7.9	3.3	5.4	-1.3	-2.5	-28	-32
40-49	4.0	7.6	3.6	5.4	-0.5	-2.2	-12	-29
50-64	4.5	8.9	3.6	6.5	-0.9	-2.5	-20	-28
65+	9.6	12.9	7.5	11.2	-2.1	-1.7	-21	-13
Total	**5.3**	**8.6**	**4.4**	**6.4**	**-0.9**	**-2.2**	**-18**	**-26**

Source: LPC analysis of ASHE, low-pay weights, UK, 2019-2022. Does not include employee jobs with missing gender or age data.

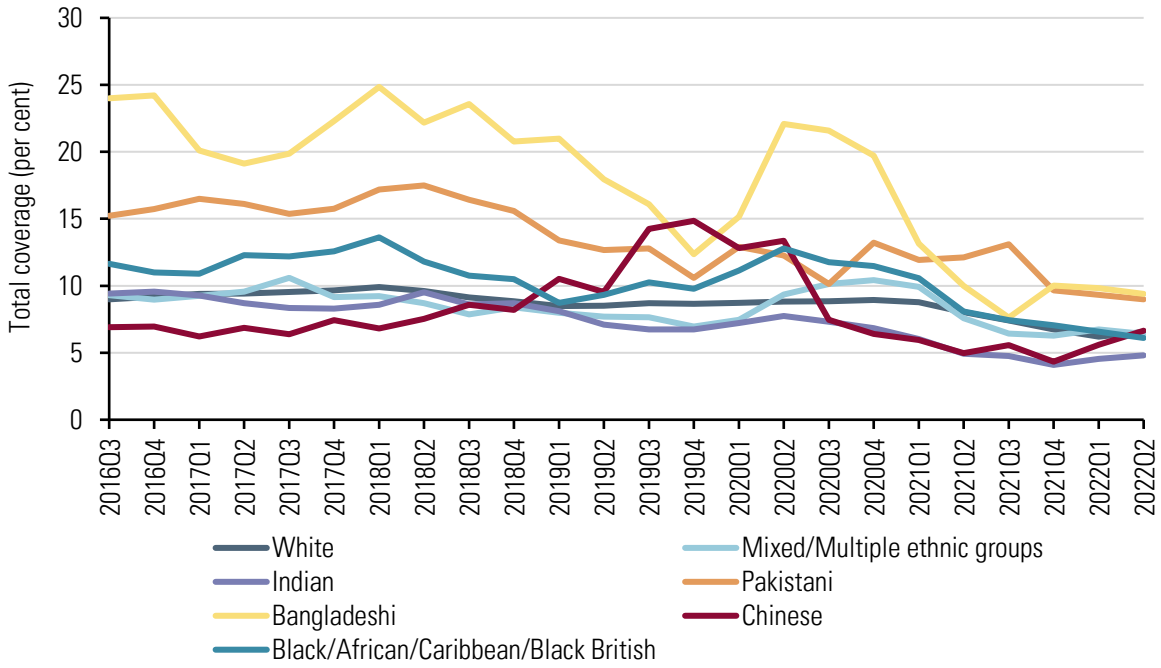
3.13 Minimum wage work is also particularly common in certain types of job. Part-time jobs are more than four times more likely to be a minimum wage job than full-time ones. Figure 3.3 shows that 12 per cent of part-time jobs are minimum wage jobs, compared with only 3 per cent of full-time jobs. Minimum wage work is also much more common in the private sector than the public sector, although a significant proportion of minimum wage workers work in childcare or social care. These sectors are publicly funded but the employers are private or third sector organisations. We discuss social care funding in more detail in chapter 7.

3.14 Our main source of pay data, ASHE, contains limited information on workers' characteristics. The LFS contains a much broader range of characteristics but its data on pay is less robust than ASHE. We estimate minimum wage coverage from the LFS by using an imputation methodology to estimate hourly pay for workers who do not have a stated hourly pay rate. This methodology tends to produce higher rates of coverage overall. Sample sizes are small for some groups of workers and so we use a rolling four quarter average to reduce variation. Despite reducing the changes in coverage that are normally observed over a minimum wage year, the methodology remains helpful in assessing relative differences both within and across characteristics and for looking at changes over time.

3.15 Some groups of workers in the past have been more likely to be paid the minimum wage. The following analysis uses LFS data to look at the impacts of recent increases to the NMW and NLW on coverage rates for these groups of workers and their comparators.

3.16 Figure 3.4 shows how minimum wage coverage for all workers has changed by ethnicity. Between 2016 and 2020, Bangladeshi workers were the most likely to be covered by the minimum wage, followed by Pakistani workers. While these ethnicities still have the highest rates of coverage these have fallen in the last couple of years and the overall variation between workers with different ethnic backgrounds has fallen.

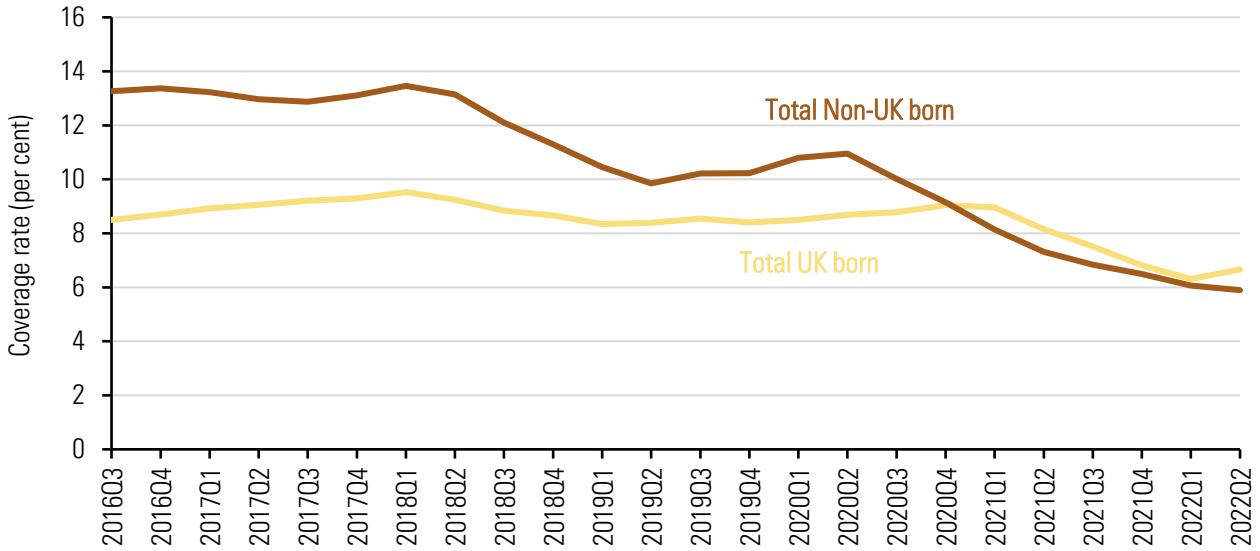
Figure 3.4: Total coverage by ethnicity, UK, 2016-2022



Source: LPC estimates using LFS microdata, imputed wage, quarterly, income weights, rolling four quarter average, not seasonally adjusted, UK, 2015 Q4-2022 Q2.

3.17 Figure 3.5 looks at how minimum wage coverage for all workers has changed by country of birth and highlights a similar pattern of falling coverage rates in recent years. Interestingly it also shows how in the last six years there has been a convergence between coverage rates for UK born and non-UK born workers, driven by much sharper falls for those born outside the UK. This partly reflects the changing composition of this group, with fewer EU migrants in low-paying occupations and greater numbers of non-EU workers in non low-paying jobs, as discussed in Chapter 2 and Chapter 4.

Figure 3.5: Total coverage by country of birth, 2016-2022, UK

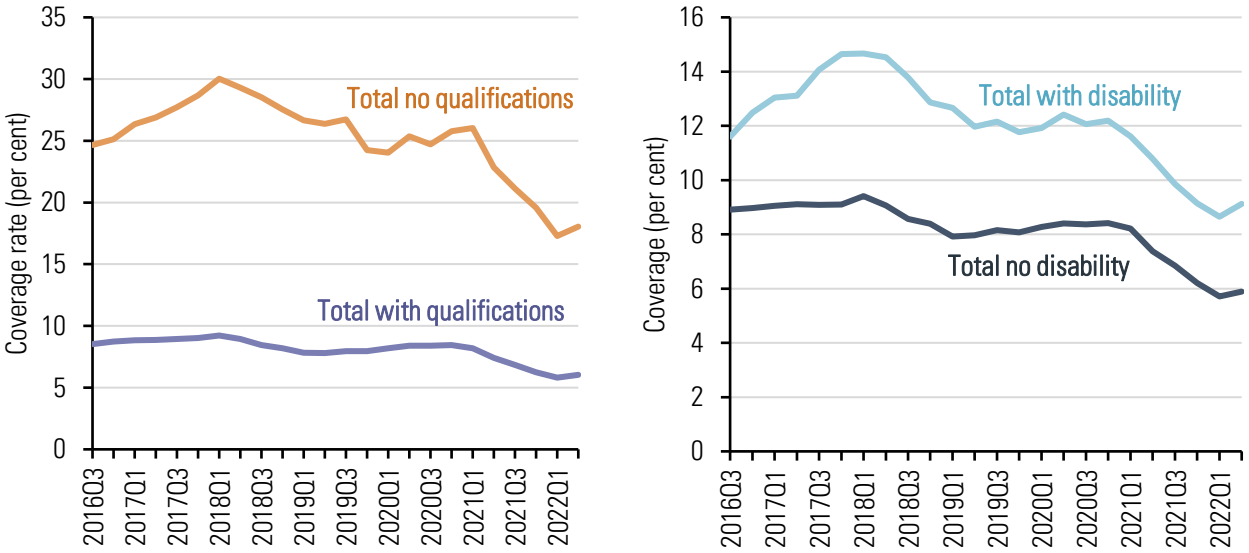


Source: LPC estimates using LFS microdata, imputed wage, quarterly, income weights, rolling four quarter average, not seasonally adjusted, UK, 2015 Q4-2022 Q2.

3.18 Prior to the pandemic around one in four workers without formal qualifications were covered by minimum wage policies. This has fallen sharply in the last two years, with coverage dropping to 18 per cent in the second quarter of 2022 as shown in Figure 3.6. While this fall is sharper than the drop for those with qualifications, the relative position is little changed; workers without qualifications are still three times more likely to be paid the minimum wage. These changes also partly reflect the changing composition away from workers without qualifications.

3.19 The picture for workers with a disability is similar. Prior to the pandemic they were around 50 per cent more likely to be covered by the minimum wage than their counterparts without a disability (12 per cent vs 8 per cent). Both groups have seen reductions in coverage rates in the intervening period but the relative difference remains.

Figure 3.6: Total coverage by qualifications and disability, UK, 2016-2022



Source: LPC estimates using LFS microdata, imputed wage, quarterly, income weights, rolling four quarter average, not seasonally adjusted, UK, 2015 Q4-2022 Q2.
Note: Disability figure uses LFS DISCURR variable. This is different to analysis in Chapter 4 which uses DISEA variable.

Most of the reduction in overall coverage is due to lower coverage in large firms and low-paying occupations

3.20 Minimum wage jobs are concentrated in a small group of occupations we define as low-paying based on the number and share of minimum wage jobs. The full list of low-paying occupations is shown in Appendix 4. 15 per cent of jobs in low-paying occupations are covered by the minimum wage, whereas the coverage rate in other occupations is only two per cent. 75 per cent of all minimum wage jobs are in low-paying occupations, as shown in Table 3.4

3.21 Table 3.4 also shows that minimum wage jobs are disproportionately likely to be in small firms. 12 per cent of jobs in small firms (fewer than 50 employees) are minimum wage jobs, whereas only 3 per cent of jobs in larger firms are. Overall, small firms provided 24 per cent of all jobs in 2022, but the majority (52 per cent) of all minimum wage jobs, up from 41 per cent in 2019.

3.22 The reduction in coverage has been greatest amongst large firms and particularly in retail. Since 2019, large supermarket chains have engaged in a high-profile competition over pay (Farrell, 2022 Morrisons, 2021). While large supermarket chains have always tended to pay slightly above the minimum wage rate competition for workers may have influenced competing firms who had previously paid the minimum wage. Large retail stores have also been competing with one another by offering more attractive contracts, including with higher guaranteed minimum hours. This appears to have been successful in terms of recruitment; one large retailer we spoke to told us they were not struggling to recruit for store roles, although turnover was higher in London where headline pay was less competitive.

Table 3.4: Number and per cent of employee jobs covered, by low-paying occupation and firm size, UK, 2019 and 2022

Number of covered jobs												
	2019 (thousands)			2022 (thousands)			Difference (thousands)			Difference (per cent)		
	Small	Med	Large	Small	Med	Large	Small	Med	Large	Small	Med	Large
Retail	111	29	206	124	27	97	12	-3	-109	10.9	-9.2	-52.8
Hospitality	183	48	104	167	26	57	-16	-22	-47	-8.8	-46.4	-45.1
Cleaning	64	48	154	61	39	112	-3	-9	-42	-4.1	-19.6	-27.2
Social care	23	27	54	15	15	22	-9	-12	-32	-37.2	-44.9	-59.3
Other low-paying	228	97	205	228	65	125	0	-32	-80	0.0	-32.7	-39.1
Non low-paying	204	57	139	222	52	116	18	-5	-23	8.9	-8.3	-16.2
Total	**813**	**306**	**863**	**816**	**223**	**530**	**3**	**-83**	**-333**	**0.4**	**-27.0**	**-38.6**
Coverage rate												
	2019 (per cent)			2022 (per cent)			Difference (p.p)			Difference (per cent)		
	Small	Med	Large	Small	Med	Large	Small	Med	Large	Small	Med	Large
Retail	38.1	20.9	12.8	35.7	19.1	6.7	-2.4	-1.9	-6.1	-6.2	-8.9	-47.9
Hospitality	40.5	25.6	14.3	35.9	17.1	10.2	-4.6	-8.5	-4.1	-11.3	-33.3	-28.5
Cleaning	36.9	25.6	14.3	33.5	17.1	10.2	-3.5	-8.5	-4.1	-9.4	-33.3	-28.5
Social care	18.9	14.9	11.1	10.4	8.7	5.3	-8.5	-6.2	-5.8	-44.8	-41.7	-52.2
Other low-paying	22.0	17.3	14.7	20.9	12.9	10.9	-1.1	-4.4	-3.7	-4.9	-25.5	-25.6
Non low-paying	4.9	1.9	1.1	4.7	1.6	0.9	-0.2	-0.3	-0.2	-4.1	-16.1	-19.2
Total	**13.1**	**7.3**	**4.8**	**11.8**	**5.1**	**3.0**	**-1.3**	**-2.2**	**-1.8**	**-9.9**	**-30.5**	**-38.0**

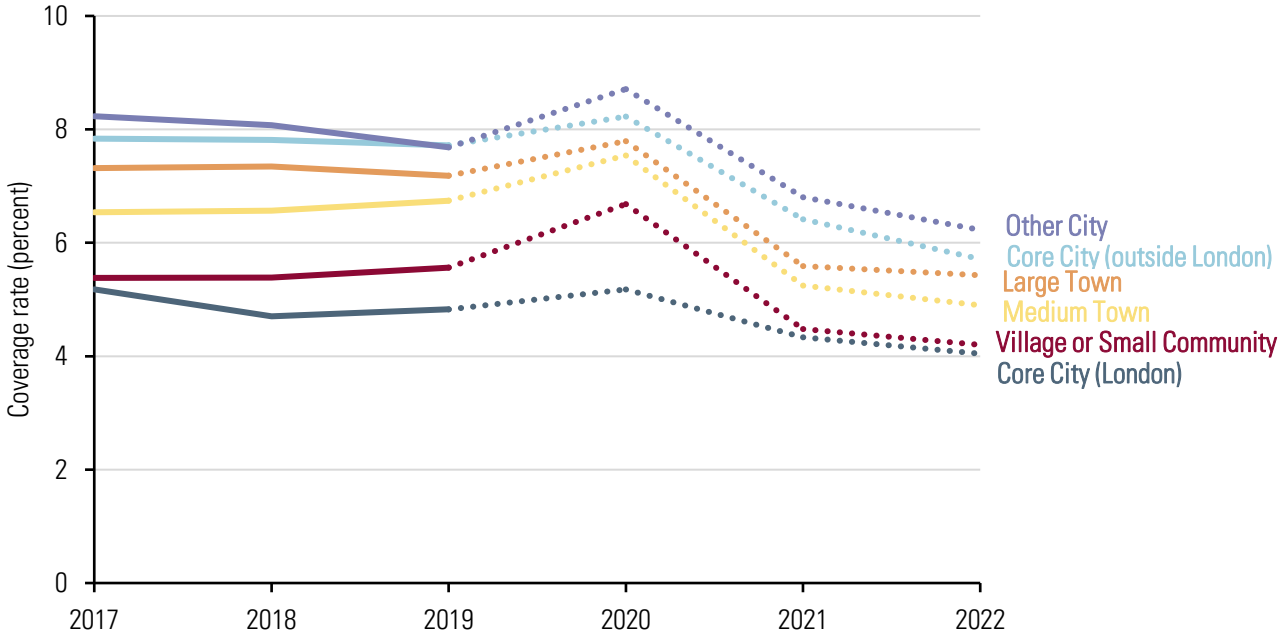
Source: LPC analysis of ASHE, low-pay weights, UK, 2019-2022. Does not include employee jobs with missing occupation or firm size data. Figures may not sum due to rounding. Small firms here refers to firms with less than 49 employees, medium firms refers to firms with 50-249 employees and large firms are firms with more than 250 employees. Pre-2020 figures are chain-linked to make them comparable with later figures.
Note: We include a breakdown for every low-paying occupation in the published tables which accompany this report.

Minimum wage workers are more likely to live in cities outside of London

3.23 In our review of the NLW we showed how the introduction of the NLW resulted in minimum wage workers being spread more evenly across the country. Despite this, coverage remains unevenly spread across the country. In this section we use the latest 2022 data from ASHE to examine how geographic coverage has changed using a range of measures.

3.24 Figure 3.7 looks at how coverage varies based on an approach that splits areas into cities, towns and villages. Prior to the pandemic coverage was lowest in London and in villages or small communities. It was highest in the two categories covering cities outside London. As we have already mentioned coverage has dropped in 2022 and we see this across all area types, although the relative positions remain unchanged.

Figure 3.7: Coverage rate, by House of Commons City-Town Classification of residence, 2017-2022



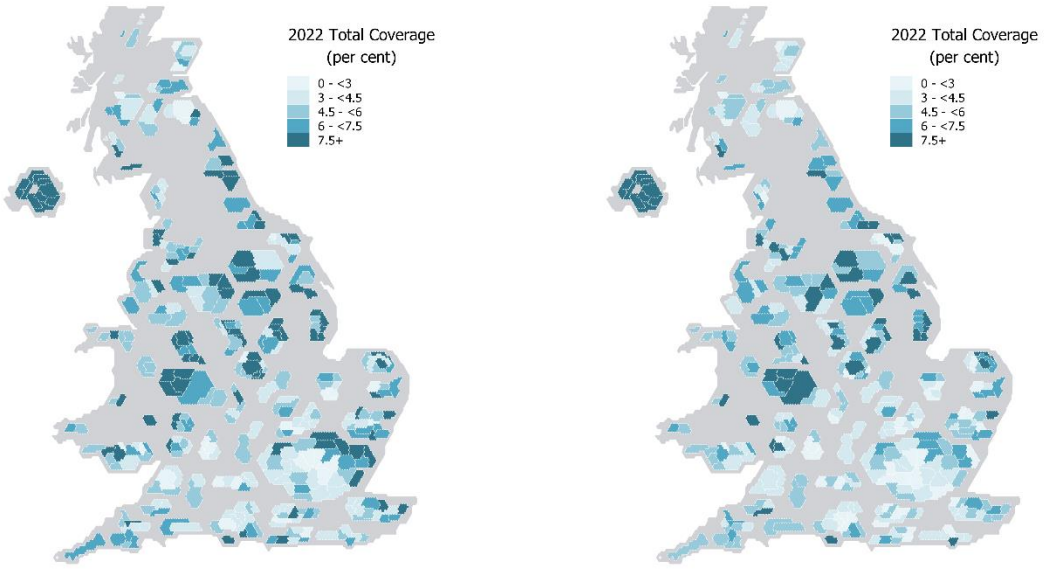
Source: LPC analysis of ASHE, low-pay weights, UK, 2017-2022. Figures before 2020 use SOC10 weights and are chain-linked so they are on consistent basis with later figures . 2020 and 2021 pay estimates use LPC central estimates (see LPC report 2021). HOC City-Town Classification used to identify area types at LSOA level.

3.25 Figure 3.8 maps the proportion of workers in April 2022 covered by the minimum wage in the local authority where they work and also where they live. The left hand cartogram (map where size of local authority is modified to reflect population) shows coverage is highest for jobs located in the North East, the West Midlands, Northern Ireland, and the East Midlands. Coverage is generally lower in Scotland, the East and the South East. London, the South West, Wales, the North West and Yorkshire and the Humber contain a mix of high and low coverage areas.

3.26 The overall picture is mostly similar if we look at coverage on a residence basis but there are differences. Firstly there are a number of coastal areas with high shares of low-paid jobs but lower coverage rates for those who live there. Similarly, most of London has lower coverage rates for workers living there relative to workers who work there. There are relatively few parts of the country with higher coverage on a residence basis than a workplace basis. These however, tend to be located in traditionally deprived areas in the North East, North West, East Midlands, East Midlands and West Midlands. Looking at both measures is important as it highlights how low-paid workers live in areas other than those with high concentrations of minimum wage jobs.

3.27 Changing rates of coverage, helped by a rising minimum wage, have resulted in a much more condensed spread of coverage across the country. Inequalities in terms of coverage rates within regions are often greater than those across areas, something we also highlighted in our review of the NLW.

Figure 3.8: Local Authority coverage on workplace [LHS] and residence basis [RHS], UK, 2022



Source: LPC estimates of ASHE, SOC20 lo- pay weights, UK, 2022.
Note: coverage data for Northern Ireland is not available by local authority and does not differ on a work or home basis.

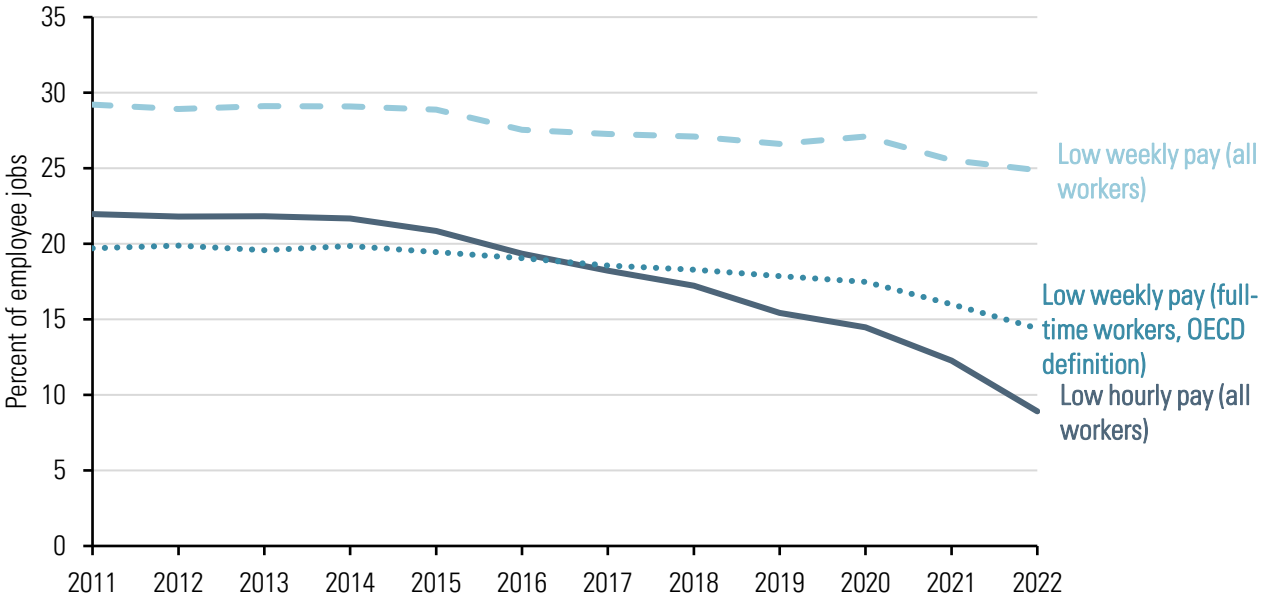
3.28 We had a number of responses to our consultation which addressed the geographical differences in pay, the cost of living and the minimum wage's impacts. The Food and Drink Federation (FDF) told us about sub-sectoral and regional variation in the number of workers in food and drink manufacturing paid the NLW: 'the average hourly wage varies across regions, with employees in the South East earning on average £14.41 per hour whilst workers in the North East earn on average £9.80 per hour.' Care England told us that while care workers are generally paid above the NMW in the UK there 'is a clear North-South divide'. The Homecare Association also supported this by reporting that commissioning rates varied across the country. The Scottish Women's Convention (SWC) told us that the cost of living tended to be a lot higher in island and rural communities, meaning wages did not go as far. In their survey one woman said: 'there is a high cost of living. I would say between 40-60 per cent higher than the mainland UK.' Poor infrastructure in island and rural communities, such as a lack of affordable transport and childcare, can limit employment opportunities and reinforce gender stereotypes.

The links between the minimum wage, low hourly pay and low weekly pay

Rising minimum wages continue to reduce the number of people on low hourly pay, but have had less impact on low weekly pay

3.29 The ONS measure the incidence of low pay as the per cent of employee jobs paid below two-thirds of median hourly or weekly earnings. This follows the OECD definition of two-thirds of median full-time earnings. Figure 3.4 shows that the incidence of hourly low pay has fallen dramatically since the NLW was introduced. The Government's target for the NLW to reach two-thirds of median hourly pay by 2024 would effectively make low hourly pay as conventionally-defined illegal for eligible workers.

Figure 3.9: Per cent of employee jobs low-paid, by hourly or weekly pay, UK, 2011-2022



Source: LPC estimates of ASHE, SOC20 low-pay weights, 2011-2022. Figures before 2020 use SOC10 weights and are chain-linked so they are on consistent basis with later figures. Both hourly pay and weekly pay measures exclude overtime. OECD definition based on workers aged 21 and over.

3.30 Table 3.5 shows the relationship between weekly and hourly pay. At the top of the distribution the relationship is strong. Over 80 per cent of workers in the top decile for hourly pay are also in the top decile for weekly pay. This is because most well-paid workers work full-time, so there is little variation in the hours worked among this cohort. At the bottom of the pay distribution this relationship breaks down. Only around a third (39 per cent) of workers in the bottom decile for hourly pay are also in the bottom decile for weekly pay. This is because hours of work vary far more at this end of the pay distribution. The UK has many part-time jobs, including those where the weekly hours are low but hourly pay is not. Medium to high hourly pay combined with low hours leads to low weekly pay in many cases. The rising minimum wage has a limited effect on these kinds of jobs. This is why low weekly pay has not fallen as quickly as low hourly pay. Similarly, minimum wage jobs are often part-time, meaning increases in minimum wages will have less effect on low pay as measured using the OECD's definition (which only considers full-time workers).

Table 3.5: Per cent of employee jobs by hourly and weekly pay decile, UK, 2022

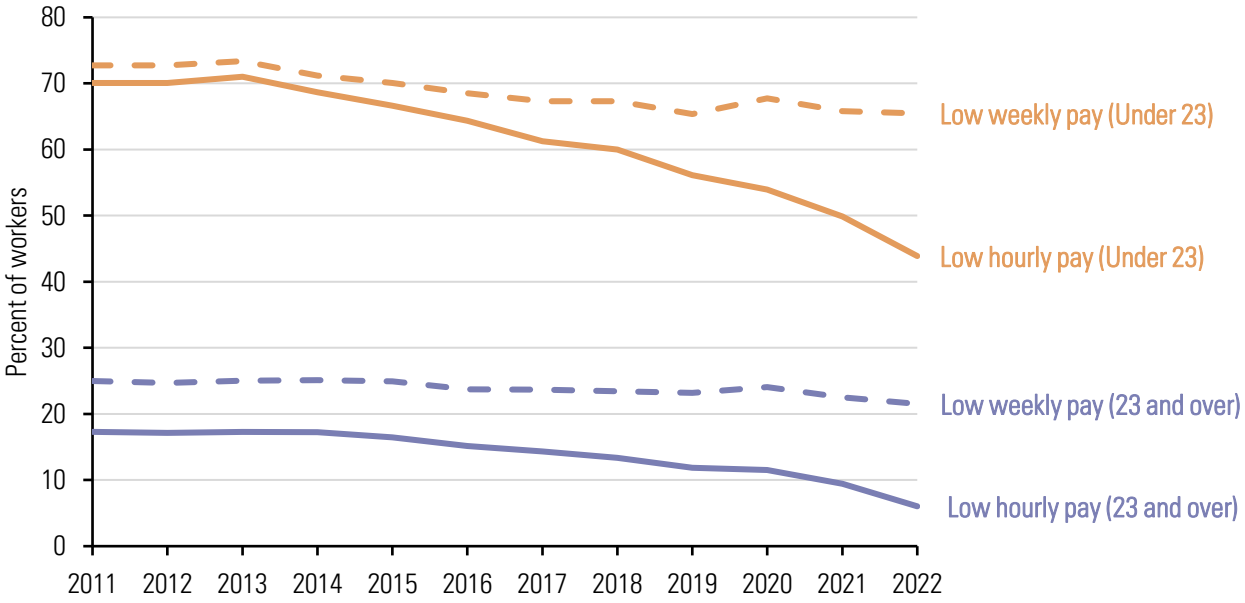
Weekly pay decile	Hourly Pay Decile 1	2	3	4	5	6	7	8	9	10
1	3.86	2.22	1.31	0.74	0.47	0.33	0.40	0.27	0.20	0.20
2	2.72	2.50	1.72	1.07	0.70	0.42	0.29	0.18	0.24	0.15
3	2.43	3.04	2.15	0.86	0.50	0.38	0.28	0.15	0.11	0.09
4	0.61	1.37	3.07	3.11	0.76	0.34	0.27	0.24	0.15	0.08
5	0.20	0.52	1.05	2.68	3.84	0.93	0.30	0.23	0.19	0.06
6	0.12	0.21	0.40	0.94	2.30	4.44	1.01	0.31	0.21	0.06
7	0.04	0.09	0.20	0.36	0.90	2.10	4.71	1.12	0.36	0.11
8	0.02	0.02	0.07	0.16	0.35	0.72	1.98	5.22	1.23	0.23
9	0.00	0.01	0.02	0.06	0.14	0.28	0.62	2.03	6.06	0.80
10	0.00	0.00	0.01	0.01	0.03	0.07	0.15	0.25	1.25	8.23

Source: LPC analysis of ASHE, SOC20 standard weights, 2022, UK. Both hourly pay and weekly pay measures exclude overtime.
Note: Figures shown are per cent of overall total (100). Each row and column decile sums to 10.

Low weekly pay remains common amongst women and workers aged under 23

3.31 Figure 3.10 shows that the rising minimum wage has reduced low pay for both workers aged over 23 (the current age threshold for the NLW) and workers under 23. Low pay is much more common for this latter group. In 2013 around 70 per cent of jobs done by workers under 23 were low paid on an hourly basis, compared with 17 per cent of jobs for older workers. However, since 2013 the incidence of low hourly pay has reduced dramatically for workers under 23. In 2022 only 43 per cent of jobs done by under 23s were low-paid. This reflects both the rising minimum wage for younger workers and the spillover effects from the NLW to younger workers (Cribb et al, 2021). We discuss the pay and employment effects of the youth minimum wage rates in more detail in Chapter 5.

Figure 3.10: Per cent of employee jobs low-paid, by age group and hourly and weekly pay, UK, 2011-2022

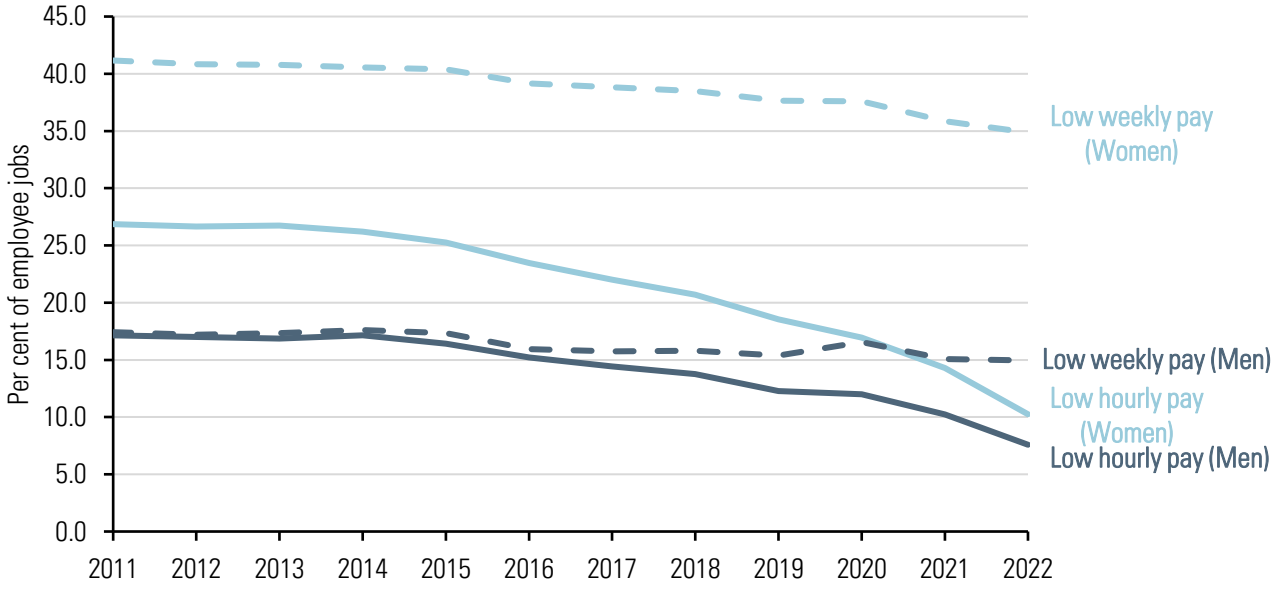


Source: LPC estimates of ASHE, 2011-2022, UK. Figures before 2020 use SOC10 weights and are chain-linked so they are on consistent basis with later figures. Both hourly pay and weekly pay measures exclude overtime. Low hourly and low weekly pay measures are defined relative to median earnings for all ages population.

3.32 The prevalence of low hourly pay has fallen fastest amongst women, but women are still much more likely to be in low weekly pay. Figure 3.11 shows that women are more likely to work in jobs with low hourly pay. However, since 2015 the rising minimum wage has reduced low hourly pay more for women than men. Low weekly pay remains common amongst women: 35 per cent of employee jobs held by women were low-paid in 2022, down from 40 per cent in 2015. This is because women are more likely to be in part-time work than men.

3.33 While many workers choose to work fewer hours, we continue to hear evidence from workers on insecure contracts who cannot regularly get as many hours as they would like. We discuss this evidence in the next section.

Figure 3.11: Per cent of employee jobs on low hourly pay, by gender and hourly and weekly pay, UK, 2011-2022



Source: LPC estimates of ASHE, 2011-2022, UK. Figures before 2020 use SOC10 weights and are chain-linked so they are on consistent basis with later figures. Both hourly pay and weekly pay measures exclude overtime. Low hourly and low weekly pay measures are defined relative to median earnings for entire population.

Experiences of minimum wage workers

Unpredictable hours and income insecurity remain an issue for some low-paid workers

3.34 As in previous years, workers and their representatives told us how the difficulty of living on low pay is exacerbated by insecure working arrangements, unpredictable shift patterns and fluctuating incomes. UNISON argued in-work poverty was increasing and firms were using exploitative contracts to circumvent higher wages. They cited Trade Union Congress' (TUC) estimates of 3.6 million workers in insecure work (including zero-hours contracts, agency, casual, seasonal and other fixed-term contracts plus self-employment). They recommended strengthening legislation to limit the use of zero-hours contracts, prevent the bogus classification of workers as 'self-employed' and to extend employment rights.

3.35 The Union of Shop, Distributive and Allied Workers (Usdaw) told us retail workers were receiving fewer hours of work following the pandemic, leading to financial insecurity. Their survey showed that 25 per cent of members would like more hours but could not get them. They told us of workers employed on short-hours contracts but consistently working overtime: 'nearly a fifth of workers surveyed reported that the amount of hours they work vary each week'. GMB Union told us that zero-hours contracts remained common in social care, citing Skills for Care data showing 42 per cent of domiciliary carers were on these contracts.

3.36 We spoke to retail workers who complained about having to change their hours, often with little notice, making it harder to manage both their work and other responsibilities such as caring. Workers also reported that short shifts of as little as three hours were common, but often not viable for those travelling into work. Retail workers' contracts did not always reflect their real working hours. In the course of our visits, we spoke to many retail workers who were reluctant to move jobs; workers who had been with the same employer for many years feared they would lose hours, income security and non-pay benefits if they moved to another company. As one worker told us: 'I don't want to leave and enter an insecure environment with worse conditions.'

'My hours change every week. My days change every week. Some days I'm starting at seven and working till six…and then you get others coming in two till ten. You just don't know whether you're coming or going.'

Poundland worker, North Wales

'if I take the risk of going for another job, in this market the jobs are like 'last one in first one out' … the fear and the anxiety that would give me'.

Retail worker, North Wales

'People are just not getting the contracts that they need…I've got people I work with that are on eight or sixteen hour contracts. They're trying to raise mortgages, they can't even get a mortgage as their contract is not regular and yet they are regularly working the same kind of hours I'm working, 35 plus hours.'

Supermarket worker North Wales

3.37 Social care workers we spoke to in Scotland told us they worked on zero-hour contracts and that although they generally worked full-time hours, it was not uncommon for shifts to be cancelled at short notice, without compensation. Workers generally had a week's notice of their shifts. When asked whether she would consider moving jobs, one worker told us 'I've tried different places and it's the same conditions everywhere'.

3.38 Hospitality workers in Wales described a culture of long hours but short notice of shifts, with some workers receiving their weekly shifts on a Sunday night and being expected to work on Monday morning. One worker's contract allowed for her to work 25 per cent 'above or below' her stated hours. She told us unpredictable scheduling made it difficult for workers to combine more than one job. A union representative noted that use of short-hours contracts (for example, six or eight hours) was commonplace in large pub chains, but that workers could nevertheless be asked to work very long weeks – 48 hour weeks were common, and he had heard of individuals working up to 60 hours. These contractual arrangements made workers insecure; the union representative shared an example of a worker who fell out with his boss and whose hours fell from 40 to six overnight as a result.

'it's such a risk if I was to move to another bar, I'm looking at that bar and wondering how do I know how they treat their staff? but I have absolutely no idea. I could go in there and it'd be worse. You're kind of trying to figure out if the situation that you're in is better, even if you're getting paid less'.

Hospitality worker

3.39 The Living Wage Foundation argued that insecure work was a major problem and a key driver of in-work poverty. 'While their hourly pay has been rising, many low-paid workers continue to struggle to cover their living costs due to insecurity of hours and other factors beyond hourly wage'. Their polling found 'that 53 per cent of shift workers receive less than a week's notice of their working hours, shifts or work schedules, while 12 per cent of shift workers receive less than 24 hours.' They recommended the adoption of 'Living Hours' standards, including advance notice of shifts and guaranteed minimum hours as a solution to this. The Low Incomes Tax Reform Group (LITRG) described the use of zero-hours contracts as a trade-off from the rising NLW, leading to 'a degradation of job security'.

2018 LPC recommendations on one sided flexibility

In 2018, in the wake of Matthew Taylor's review of modern working practices, the Government asked the LPC for advice on 'one-sided flexibility'. This term is used to refer to the set of practices requiring unreasonable requirements around workers' availability; unpredictability making it difficult for workers to manage finances; and an overarching fear of losing future work if they raised a concern or turned hours down. Evidence from workers in Leicester shows many of these features.

We recommended a package of measures intended to give workers greater protection against unfair work practices (Low Pay Commission 2018), but the Government has yet to bring forward legislation forward implementing to implement these. Our recommendations were:

A right to switch to a contract which reflects your normal hours. This is not about a worker requesting a change to the amount of work they do, but rather proper recognition of their normal hours. We believed this would help to tackle the fear of employer retaliation by providing a guarantee of the worker's normal hours.

A right to reasonable notice of work schedule – to encourage employers to provide workers with their work schedule in advance so that individuals can plan their lives.

Compensation for shift cancellation or curtailment without reasonable notice – to discourage employers from cancelling shifts at the last minute or partway through a shift.

Information to workers – the written statement of terms from employers should detail the rights we are proposing here.

Fluctuating incomes can cause problems for workers on benefits

3.40 Some respondents to our consultation focused on the relationship between the minimum wage and the benefits system. The LITRG noted that the benefits system – in particular the Universal Credit (UC) withdrawal rate – undermined the effect of NLW increases for workers: 'the interactions that exist between the minimum wage and tax and benefit systems mean the NLW does not necessarily translate into cash in the pockets of low-paid workers.' They recommended 'increasing the scope and level of the work allowances in UC for minimum wage increases'. In Chapter 10, we look at how our recommendations for the April 2023 rates will interact with the tax and benefits system and what proportion of the higher minimum wage low-paid workers will retain.

3.41 They also noted that anyone working 16 hours at the NLW loses their carer's allowance; they called for this threshold to be increased. Lastly, they called for more work to understand the interactions between UC and self-employment; the NLW is used to calculate the Minimum Income Floor used in UC

calculations for the self-employed, meaning self-employed UC recipients are effectively required to increase their earnings in line with NLW increases to remain at parity.

3.42 One union representative in Wales described the problems caused for hospitality workers by fluctuations in income which are common in the sector.

> *'There is a real disparity in the hospitality trade or any trade where there's a fluctuating wage. You still don't know what you'll be getting from week to week or month to month because of the lack of the five day week … you might suddenly have a good month in work, and then the next week it [the benefit payment] drops, but in that month you may have had a bad one [fewer hours] … back pay is a nightmare for people on low wages. Pay in September backdated to April will give you a lump sum that looks like you're on brilliant wages and your benefits get stopped.'*
>
> Union representative in Wales

3.43 Whitbread told us many workers were confused about the relationship between work and benefits. 'We receive a lot of calls into our Employee Relations team and through our Employee Assistance Provider related to this … Beneficiaries of the benefits system need clarity and tools to support them in optimising their benefits and work status to avoid penalties, confusion, and worry.'

3.44 Usdaw noted that since 2010 in-work benefits had been continuously cut, with the latest example being the withdrawal of the £20 increase to UC. 83 per cent of their members received in-work benefits and 61 per cent of those were struggling with debt. Stakeholders in Derry told us that the difficulty in qualifying for UC meant people were hesitant to take an unstable job and risk losing a stable source of income. The Londonderry Chamber of Commerce told us that it was difficult to incentivise people into the workforce. There were cultural and generational factors that exacerbated the lack of incentives to work and made local people in Derry more likely to become reliant on UC.

The rising cost of living is causing low-paid workers hardship

3.45 The effects of inflation on workers' living costs were a central theme of evidence from workers and unions. The TUC described 'a growing cost of living emergency', with low-paid workers facing higher rates of inflation as they spend proportionately more on energy. Using ONS data, their submission showed large numbers cutting back spending and turning off heating. UNISON told us high inflation 'will more than wipe out any real increase in the buying power of the UK's lowest paid workers'. UNISON members in Derry told us the rising cost of living was making everyday expenses for people in full-time work incredibly challenging, with people having to choose between food or fuel. An Usdaw survey found 69 per cent of respondents had struggled to pay gas and electric bills in the last year and almost half reported missing meals to pay everyday bills. Community told us they were 'concerned that as inflation expectations are continually surpassed, wage settlements which were, at the time of negotiation above inflation, become eroded.'

3.46 Employers, too, were conscious of the struggles faced by low-paid workers. The Confederation of British Industry (CBI) told us that 'many members have told us that they are taking all the steps they can to support their workers with the cost-of-living crisis … firms are conscious that inflation is going to hit lower-paid workers harder'.

Work continues to intensify in low-paying sectors, exacerbated by recruitment difficulties

3.47 Across several sectors we heard from workers that low-paid work was growing more intense. In combination with or sometimes as a substitution for investment in productivity, employers intensify the workload of their employees. We provide more detail of how businesses adapt to a rising living wage in Chapter 4 and their changing investment intentions in Chapter 7.

3.48 Usdaw members working in supermarkets told us that as the NLW increased so did the employer's expectation that they would assume additional responsibilities across the whole of the store. They pointed to the introduction of self-service check outs as an example of where a single person was now responsible for a large volume of customers. Usdaw also told us that greater automation in retail was causing staff stress: 'the growth of self-service tills in supermarkets has resulted in a range of issues. The most prominent of this is the expansion of retail job roles, as workers are expected to manage several tills at once, including ID checks, removing security tags and minimising thefts whilst prioritising service, alongside other duties.'

'they [employers] are expecting the people that are there to do more jobs for the same amount of money. No extra money but you take on a lot more roles, you do cleaning, you're doing all kinds of different things'

Usdaw supermarket worker

3.49 GMB told us that members working in the security sector were being given more responsibilities but remained on low rates of pay. They reported members taking on additional duties outside their job description with compensation of only around £1 an hour. Workers were routinely asked to pay for their own training and accreditation (which needs renewing every three years). One of their members had to pay £400 for various licences.

3.50 Unite told us that long hours were the norm in hospitality, and that the sector's recruitment crisis had led to excess overtime for many salaried workers. 'It is commonplace for a supervisor or junior kitchen worker to be salaried on £20k per year based on a 40 hour contract … the hours needed from these workers has grown exponentially to 60+ hours per week becoming the norm in kitchens'. We explore employer difficulties recruiting in a tight labour market and its impact on hours and underemployment further in Chapter 2.

3.51 Hospitality workers in Wales echoed these points, telling us they were routinely asked to sign waivers of their rights under the Working Time Directive. 'Because if you don't, you're not going to make enough money because the wages are low. So I just signed it because I was like, well, I don't know how else I'm gonna be able to pay my rent…you could be working six days and doing AFDs[1] and doing from ten till two and that was quite normal … you just accepted it.'

[1] AFD is an industry term referring to very long shifts that can start in the morning and carry on to late at night, therefore 'all day'.

Rising childcare costs and unpredictable shifts make planning childcare difficult

3.52 Usdaw described a crisis in childcare with overwhelming costs and limited staff availability. They noted significant variations in cost across the country: 'the price for 25 hours of nursery childcare for those aged under two is 50 per cent higher in inner London (£183.56) than in Yorkshire and Humberside (£122.17)'. Unite members during our Hastings visit told us that childcare costs were increasingly expensive and unpredictable shift patterns made planning childcare difficult. Workers faced hard choices over overtime, as additional pay barely covered the extra childcare costs incurred.

'As a mother, that's the main thing that restricts me … if I could get a nine to five job on higher pay, I could afford the childcare' [but in minimum wage work this wasn't possible]. 'My wages just about cover childcare, but only just – the cost's always going up, every half year or year. I'm waiting for some free hours, or to put my other child in to school. But then I'll have to cover half term and after-school clubs – there are always some costs involved.'

Worker in Kent

3.53 Childcare workers we spoke to in Scotland painted a picture of a rewarding but challenging job in need of more recognition and better pay. For most workers, pay rates were above the NLW, but they thought their pay had stagnated in recent years. There was a clear divide in both pay and terms and conditions between those directly employed by local authorities and those in the private sector. The latter group were paid less and had worse employment terms (for example, around sick pay and pensions). Only one of the seven workers we spoke to said they had a formal contract.

Transport limits access to wider labour markets

3.54 In many locations we visited, lack of transport was raised by workers as a factor limiting their access to wider labour markets. Travelling into work in a rural area was a key issue for the workers we spoke to. Retail workers said that travelling to shifts on public transport was very difficult especially early in the morning or late at night.

3.55 Unite's submission argued that 'the costs of travel significantly impact low-pay workers. Transport fares have increased faster than overall price inflation. Working patterns are such that precarious working does not necessarily allow for consistent and affordable use of public transport … Access to reliable and affordable transport can mean the difference between being able to work and being locked into welfare dependency.'

'we're on an island, there's no competition so they can pay what they want and just pay the minimum wage…..other sites around Birmingham and Wolverhampton pay a minimum of £12.50 an hour'.

Food production worker in North Wales

'We've had members of staff who have had to turn up sometimes an hour and a half before their shift because that's the only time … [they can make it] with buses running … they just sit upstairs and wait.'

Retail worker

'[public transport] limits greatly the kind of jobs I can take ... It keeps me in a profession I don't fancy any more. Retail jobs are the ones I can get to … It means I can't take a higher paid job in a rural area, it locks you in, it restricts where you end up living'.

Bookseller in Kent

'the transport thing … is a huge difficulty within hospitality. I have never been able to afford a car so my job is difficult because I live in Newport and the bar's in Cardiff..... Newport buses stop running at 7pm and if I've finished my shift at midnight I'll have a 45 minute walk from the station to my house. So yeah, that's difficult.'.

Worker and Unite member in North Wales

Fear of violence, abuse and harassment is common

3.56 A Unite survey found '68 per cent of respondents confirming they had either witnessed or experienced sexual harassment at work… Bus cuts and lack of transport connectivity across the UK results in many workers who work night shifts struggling to find safe transport home'. Unite found that this particularly affected young women.

3.57 Retail workers reported that it was routine for them to receive abuse. This had intensified during the pandemic but had remained more common since lockdowns ended. Workers feared for their safety – several we spoke to had experienced threats of serious violence and robberies. They told us this fear was exacerbated by the reluctance of store managers to hire security guards, apparently because of pressure on staffing budgets. We spoke to hospitality workers in similar situations: 'I regularly felt unsafe because the company wouldn't pay for security, even though it will be part of the licence'.

'I wouldn't recommend anyone coming into retail – the abuse we receive is increasing'.

Retail worker, Wolverhampton

Workers with protected characteristics are overrepresented in low-paying occupations

3.58 Several respondents considered the effects of the minimum wage on groups with protected characteristics, noting both the importance of the NMW for these groups and its limitations. The TUC stated that minimum wages were an important tool in addressing gender and race pay inequality. Community Leisure UK told us that 'The NLW has been key for groups with protected characteristics as these groups are more likely to be amongst the lowest-earning groups'. The National Hair and Beauty Federation (NHBF) thought the NLW had benefited women in the personal care sector as its workforce was predominantly female (88 per cent). Whitbread also noted that their 'most diverse populations are found in our lowest paid roles, and therefore those with protected characteristics are more likely to benefit from increases in the NLW.'

3.59 The SWC noted that women, ethnic minority workers and disabled workers were more likely to be paid the minimum wage, but that this in itself was evidence of discrimination. They told us 'there is an overrepresentation of ethnic minority groups in minimum wage jobs, even when they have the qualifications needed to get better-paid jobs. Migrant people and BME communities might find themselves always struggling to barely afford the very basics, without access to a better quality of life.'

3.60 Usdaw also noted that people with protected characteristics were disproportionately likely to be NLW workers, therefore any NLW increase would have a disproportionately positive impact on those workers. Both Usdaw and Unite called for ethnicity pay gap reporting. Unite noted that 'Black and Asian Ethnic Minority workers are also over-represented in the low-paid and under-valued occupations' and are more likely to experience in-work poverty and child poverty. The Local Government Association (LGA) told us that workers on the lower pay points of the local authority pay structure were much more likely to be women. 95 per cent of local authority workers paid under £21,000 were women. These workers would benefit more from the increases in the NLW, but could also be at greater risk of redundancy if local authorities did not have the budget to fund increases.

3.61 Usdaw noted that women were twice as likely as men to be contracted to less than sixteen hours of work a week. Women were also more likely to be primary carers 'therefore paid work is more likely to be restricted by unpaid caring commitments'. Unite argued that women workers faced systematic disadvantage: 'the benefits of having more women in employment are being outweighed by the poor quality and low pay of the jobs they largely occupy'. Women faced higher levels of insecurity at work, had greater difficulty asserting their rights and had fewer progression opportunities. In addition, 'Unite research has found a disproportionate prevalence of sexual harassment and gender-based violence experienced by women working in the hospitality sector'. Unite also called attention to the gender pensions gap: 'A higher proportion of women than men earn less than the auto-enrolment threshold of £10,000 a year — and in some schemes, there are up to three times more women under this threshold.' The Living Wage Foundation told us that overall, women were more likely to be paid below their Living Wage rate than men, although part-time male employees were most likely to be paid below the real Living Wage.

3.62 Unite told us the disabled poverty gap had been growing for 20 years. They supported TUC recommendations for mandatory disability pay gap reporting and enforcement of reasonable adjustments.

3.63 Mind told us that people with mental health problems were more likely to experience poverty, low incomes and low-pay. Adults with lower incomes reported higher levels of psychological distress, anxiety, depression and loneliness than adults with higher incomes (Office for Health Improvement & Disparities, 2021). They cited a Living Wage Foundation survey of low-paid workers which found that '63 per cent said moving onto the Living Wage would improve their mental health and 43 per cent said the pay they received negatively impacted their levels of anxiety'.

Conclusion

3.64 The number of jobs covered by the minimum wage has fallen by approximately 400,000. This is the first significant fall in twenty years. It is likely driven by a tight labour market in 2022 and a relatively low NLW increase in 2021. The reduction in coverage has been uneven. Women have seen much faster reductions in coverage than men. Large firms have reduced coverage rapidly, while small firms have maintained coverage at similar levels.

3.65 The latest data on underpayment of the minimum wage is complex. Measured underpayment has increased by around 100,000 workers since 2019, but includes a very large number (around 150,000) who appear to have been paid at last year's rate. Even if we exclude this latter group, it is clear that underpayment remains a substantial feature of the low-paid labour market, despite the tightness of

the labour market. We plan to publish a report with more detail on the underpayment of the minimum wage and non-compliance in 2023.

3.66 While the minimum wage has driven down low hourly pay, it has had a limited effect on low weekly pay. Low weekly pay depends on hours as well as hourly pay and has remained stubbornly high especially for women and younger workers. Stakeholders told us that while the NLW was an important tool for addressing gender and race pay inequality, it could not solve all problems facing low-paid workers.

3.67 We heard from workers that the rising cost of living had made it harder to get by in low-paid jobs. We heard about the difficulties of planning work and personal life while in low-paid jobs with variable hours, especially for workers with caring responsibilities. Our recommendations in response to the Government's 2018 review into one-sided flexibility would go some way to rectifying this.

Chapter 4

The National Living Wage

Key findings

- The lowest-paid workers saw faster increases in hourly pay than any other group between April 2019 and April 2022, with the National Living Wage (NLW) a key driver. Though pay growth at the bottom of the distribution was slightly higher than the NLW increase, suggesting the tight labour market also played a part.
- The number of employee jobs paid at or below the NLW fell by 19 per cent from 1.65 million in 2019 to 1.34 million in 2022. This was the first large fall in coverage in 20 years and not what we expect when the NLW is increasing rapidly. Employers told us this year they had had to raise pay above the NLW to attract workers. With abundant job vacancies, the rate at which workers progressed off the NLW into higher-paid jobs increased for the first time since 2017.
- Maintaining differentials when the NLW is rising is costly for employers, but they worry that cutting them reduces the incentive to progress into more senior roles. While employers still report pressure on differentials as one of their greatest concerns with the NLW, fewer employers report reducing differentials this year than in previous years. This may be due to the lower increase in the NLW in 2021 and other pressures driving up pay for all workers in low-paying firms.
- Between 2019 and 2022 employment rates improved for most demographic groups who are more likely to be paid the NLW, except less qualified workers. While employment rates are lower now than before the pandemic for 23-64 year olds without a higher education, this is due to a higher rate of inactivity in this population rather than a higher rate of unemployment. This suggests other factors such as ill health or early retirement are more likely to be responsible for this change than the minimum wage.
- Between 2019 and 2022 employment fell in low-paying occupations, accelerating the pre-pandemic trend, while continuing to grow in other occupations. We do not think the NLW is the main driver of this fall; high vacancies and record low underemployment in low-paying occupations suggest high demand for workers. Instead, workers are moving into other better-paid occupations instead or remaining economically inactive. Other factors such as the shift from in-store to online retail and changes in migration policy are likely also play a role.
- Employment rates in the lowest-paid areas fell furthest during the pandemic but have since recovered faster. Employment in these areas is now only 1 per cent lower than before the pandemic, a similar reduction to that seen in other, higher-paid areas.

- Overall, there is little evidence to suggest the NLW caused employment to fall between 2019 and 2022. Instead, labour supply for low-paid jobs has fallen. This is due to changes in migration policy, increased inactivity following the Covid-19 pandemic, and opportunities in better-paid occupations (such as healthcare). Together, these factors mean firms have struggled to attract workers and in response have increased pay above the minimum wage. In consequence, the number of jobs paid the NLW has fallen significantly for the first time in 20 years.

4.1 This chapter evaluates the impacts of the National Living Wage (NLW) on pay and employment between 2019 and 2022. It is difficult to isolate the effects of the NLW upratings in the last three years from the pandemic-induced recession and the tight labour market. We therefore use a range of sources to get a broad view of the impact of the NLW. This chapter includes descriptive analysis of pay and employment, insights from stakeholders and econometric analysis. We focus on the three-year period from 2019 to 2022, as the Covid-19 pandemic reduced the quality of our normal data sources in 2020 and 2021. We report single-year comparisons with 2021 where possible but focus on the overall changes over the last three years.

4.2 The chapter is structured as follows. First, we present evidence on how the NLW has changed the pay distribution over the last three years. Second, we look at how pay and employment outcomes vary for groups likely to be paid the NLW. We look at workers grouped by personal characteristics, occupation, industry, firm size and geography. Third, we summarise our econometric analysis of the pay and employment impacts of the NLW. Finally, we review the evidence we received from stakeholders on the employment impacts of the NLW. We separately discuss other impacts of the NLW (for example on prices, productivity and profits) in Chapter 7.

The National Living Wage and a tight labour market mean hourly pay rose fastest at the bottom of the distribution

4.3 Between April 2019 and April 2022, the NLW increased faster than median hourly pay and faster than inflation. This is shown in Table 4.1. This means that NLW workers saw their gross hourly pay grow at a faster rate than others. We measure median hourly pay using the Annual Survey of Hours and Earnings (ASHE), which provides a detailed picture of pay in April each year. NLW workers also saw their hourly pay grow 4.3 percentage points faster than prices for the average household (based on the Consumer Price Index). The NLW even grew faster than a specific measure of inflation for low-income households, which has been higher in the last three years as fuel and food make up a greater share of these households' consumption.

4.4 Government targets have driven the strong growth in the NLW over this period. The Government first asked us to put the NLW on a path to reach 60 per cent of median earnings in 2020. Once the NLW reached this level, the Government asked us to raise the NLW to two-thirds of median earnings by 2024, subject to economic conditions. We recommended a slower increase (2.2 per cent) for the NLW between 2020 and 2021, due to the pandemic-induced recession. We then recommended a 6.6 per cent increase in the NLW between 2021 and 2022 to put us back on track towards the 2024 target.

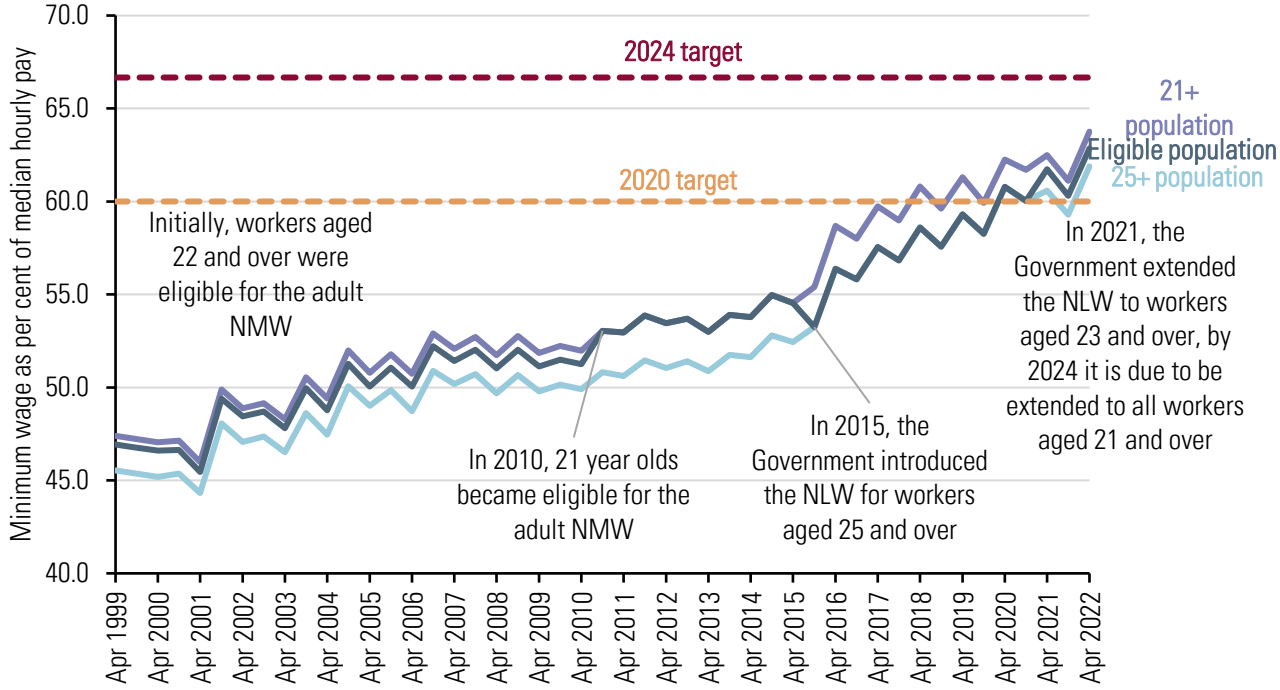
Table 4.1: Summary of key measures of hourly pay and prices, UK, 2019 and 2022

Measure	April 2019	April 2022	Change	Per cent change
Median hourly pay (23+ population	£13.63	£15.11	£1.48	10.8
National Living Wage	£8.21	£9.50	£1.29	15.8
10th percentile of hourly pay (23+ population)	£8.50	£9.98	£1.48	17.5
Consumer Price Index (CPI, April 2019=100)	100	111.5	11.5	11.5
Consumer Price Index including Housing costs (CPIH, April 2019=100)	100	110.5	10.6	10.6
CPIH-equivalent for bottom decile of households by income (April 2019=100)	100	113.5	13.6	13.6

Source: LPC analysis of ASHE, UK, 2019-2022, 23+ population, excluding first year apprentices. Pre-2020 figures are chain-linked to make figures comparable. ONS CPI Index (D7BT), ONS CPIH Index (L522) and ONS CPIH-equivalent indices (democratic weightings).

4.5 The NLW is now the highest it has ever been relative to median pay, a measure known as the bite (or the Kaitz index). This is shown in Figure 4.1. In April 2022, the NLW was 62.9 per cent of median hourly pay amongst workers aged 23 and over. In April 2019, the NLW was only 60.2 per cent of median hourly pay.

Figure 4.1: The National Minimum Wage/National Living Wage as a per cent of median hourly pay, UK, 1999-2022, adult rate



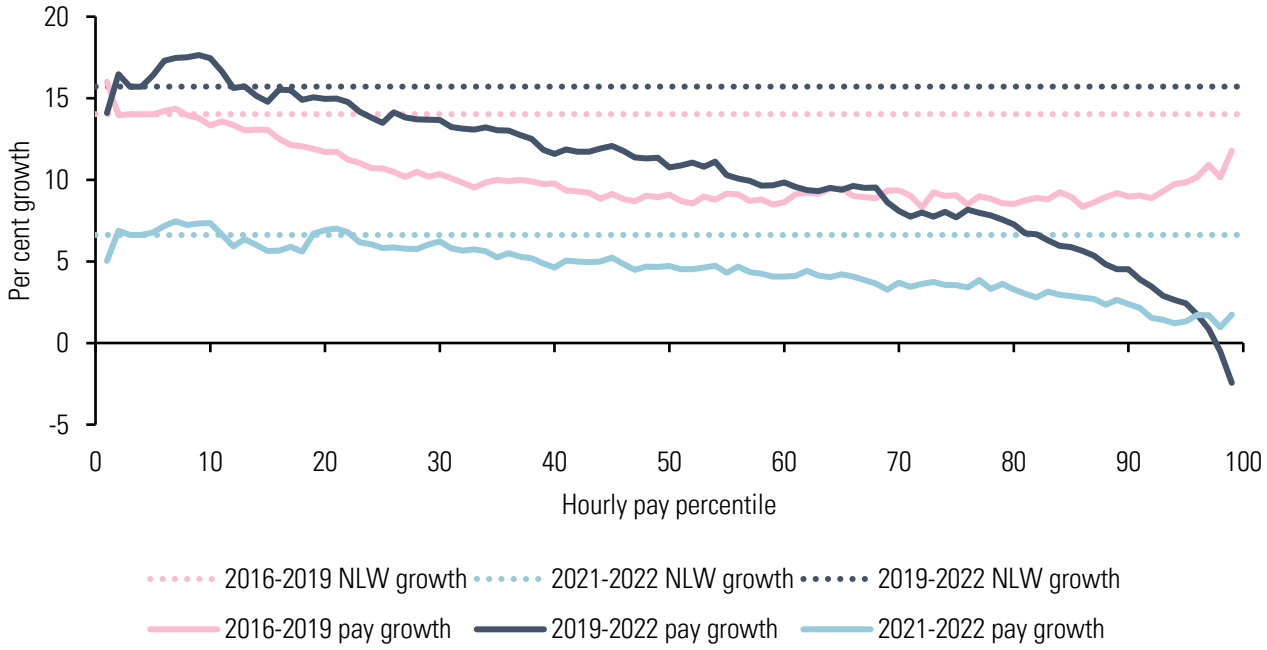
Source: LPC analysis of ASHE, SOC20 standard weights, UK, 1999-2022. Pre-2020 figures are chain linked to put them on a comparable basis with latest data. Excludes first year apprentices. Includes estimates for October and April. October pay estimates are average of previous April and upcoming April.

4.6 Hourly pay has grown at a much faster rate for low-paid workers since 2019. Pay for the tenth percentile[2] of employee jobs increased by 17.5 per cent between 2019 and 2022, whereas median pay for all employee jobs only grew 10.8 per cent over the same period. This same pattern is clear between 2021 and 2022. Pay at the tenth percentile increased by 7.4 per cent, relative to median pay growth of only 4.7 per cent. This continues a trend we have seen since the NLW was introduced in 2015. Pay has tended to grow fastest for workers at the bottom of the hourly pay distribution.

4.7 The NLW is one key driver of the strong pay growth at the bottom of the pay distribution. 6.6 per cent of eligible employee jobs (approx. 1.65 million) in 2019 were covered by the NLW (defined as paid up to 5 pence more than the rate). The rising NLW meant that pay in these jobs was legally required to increase by at least 15.8 per cent between 2019 and 2022.

[2] The 10th percentile here refers to the amount that 10 per cent of jobs are paid less than.

Figure 4.2: Growth in hourly pay by pay percentile, growth in NLW, 2016-2019, 2019-2022, and 2021-2022, UK, workers aged 23 and over



Source: LPC analysis of ASHE, standard SOC20 weights, UK, 2016-2022, 23+ population. Pre-2020 figures are chain-linked to make them comparable with later figures. Excludes first year apprentices.

4.8 Previous evidence has shown that the NLW also increases pay for workers paid slightly above the minimum wage. These are referred to as spillover effects. We previously estimated that between 2015 and 2019, the NLW directly increased pay for the bottom 7 per cent of employee jobs but had indirect effects on a further 28 per cent of employee jobs (Low Pay Commission, 2022c). Cribb, Giupponi, Joyce, Lindner, Waters, Wernham, and Xu (2021) estimated that the NLW increased pay for workers paid up to £1.50 above the NLW (approximately 20 per cent of workers).

4.9 Spillover effects occur due to firms wanting to maintain internal and external pay differentials. As the NLW increases, firms seek to maintain a gap between their lowest-paid workers and those with more seniority (for example, managers or team leaders), skills or experience. Similarly, if the NLW increases pay in the lowest-paying firms, other firms may want to increase pay to match or better the pay offer of competing firms.

4.10 Between 2019 and 2022, pay actually grew faster for those paid just above the minimum wage. Hourly pay at the sixth to eleventh percentiles grew faster than the NLW. This is a different pattern of pay growth than we saw between 2016 and 2019, when pay growth was fastest for minimum wage workers. This suggests the NLW is not the only factor driving strong pay growth at the bottom of the distribution; other factors such as the tight labour market is also playing a part.

4.11 In the last year, many stakeholders in low-paying sectors told us they struggled to hire workers and have had to increase pay faster than the NLW to attract them. For instance, UKHospitality (UKH) told us: 'The workforce supply crisis has led to substantial increases in basic rates of pay with intense competition between firms…We are seeing many firms having joining/starter rates of pay well above the statutory minimum'. The Association of Convenience Stores (ACS) also reported that 'Convenience

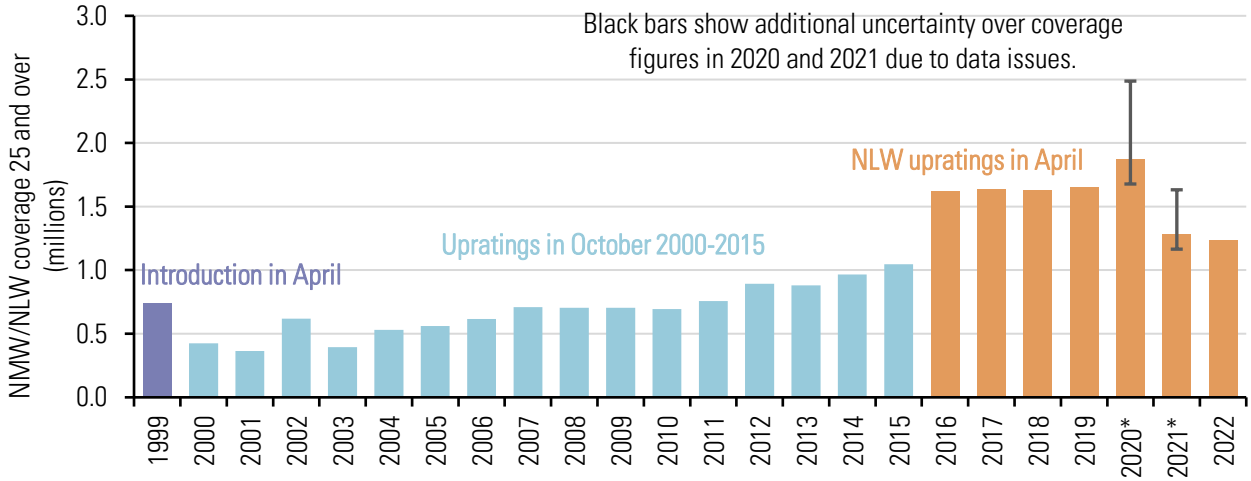
retailers tend to employ stores colleagues at or just above NLW, but it has proved increasingly difficult to recruit staff at this level as the tightening labour market increases wage rates'.

4.12 The NLW still has spillover effects in a tight labour market but they manifest differently. Previously, spillovers have presented as strongest pay growth for minimum wage workers which then tails off until approximately the 35th percentile. However, in the context of a tight labour market the NLW sets the minimum pay increase and firms compete to go above it, hence we have seen more firms this year moving above the NLW. When there is a shortage of available workers for jobs, firms compete with each other on pay and conditions. This competition is relative; a given firm wants to pay more than their competitors so they can attract the available workers. In this scenario, the NLW sets the baseline pay level. Firms then compete to add premiums above it to attract workers. So, while firms are increasingly raising pay above the NLW, increases in the NLW are still driving their pay awards up. NLW spillovers help explain why pay growth is stronger amongst low-paying jobs, despite similarly high vacancy rates in better-paying sectors such as IT and finance. We discuss the difficulties in estimating the size of spillover effects this year in paragraph 4.53.

The number of jobs covered by the National Living Wage has fallen

4.13 NLW coverage fell by 19 per cent between April 2019 and April 2022, from 1.65 million to 1.34 million. We define NLW coverage as the number of jobs done by workers eligible for the NLW paid within 5p of the NLW. The fall in coverage over the last three years bucks a long-term trend of coverage gradually increasing since 2003. Moreover, during this period 23-24 year olds became eligible for the rate, which we expect to increase the number of covered workers. Accordingly, the share of eligible jobs covered has fallen by 24 per cent from 6.6 per cent to 5.0 per cent. Coverage is another key measure of how binding the minimum wage is. In previous years, as the minimum wage grew faster than the median, bite and coverage increased together. This latest three-year period has seen the two measures decouple for the first time.

Figure 4.3: Number of employee jobs covered by the National Minimum Wage/National Living Wage, 1997-2022, workers aged 25 and over

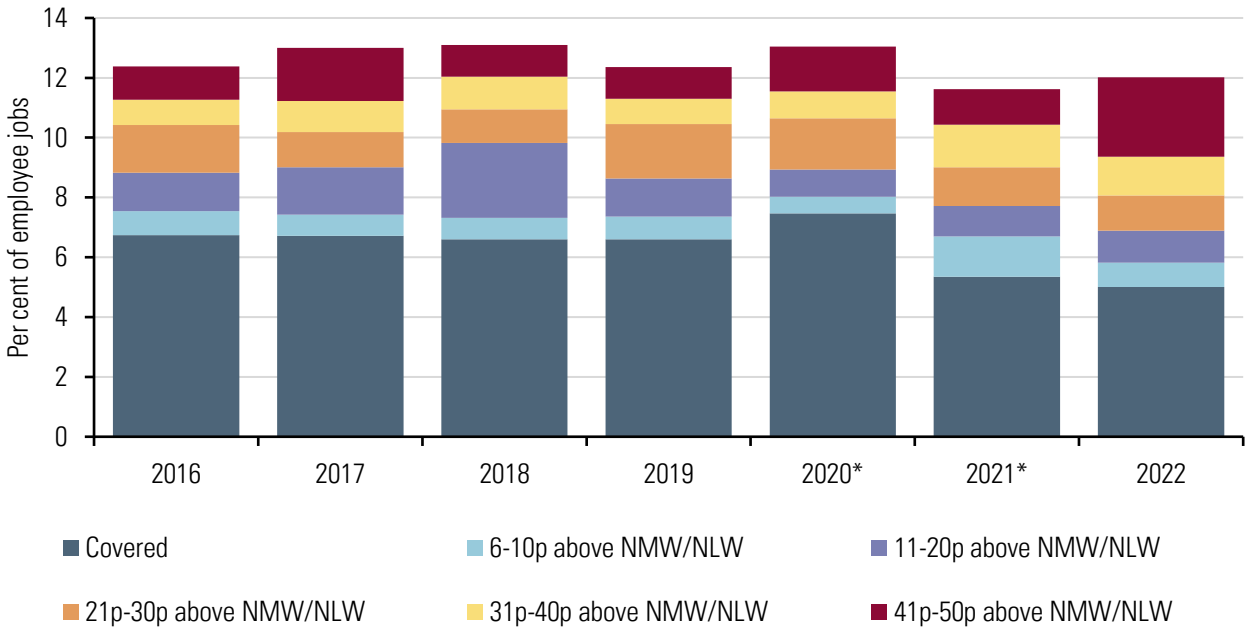


Source: LPC analysis using ASHE, SOC2020 low-pay weights,UK,1999-2022. Estimates from 1999 to 2020 are chain-linked and so will differ from previously published figures. Data from 1999-2010 include apprentices and use data reweighted based on 2011 census.
Note: There is increased uncertainty around the 2020 and 2021 estimates due to the effects of furlough on hourly pay data. For more detail see LPC report 2021. Coverage estimates are as of April that year and are rounded to nearest thousand.

4.14 There are two drivers of this fall in coverage. First, firms have increased pay faster than the NLW for some jobs. As discussed in paragraph 4.11, many firms in low-paying sectors have faced a shortage of available workers and increased pay to attract and retain workers. In addition, the NLW increased by only 2.2 per cent between 2020 and 2021, and firms may have been able to get ahead of the NLW in that year. Although there is more uncertainty over coverage estimates in 2020 and 2021, our central estimates suggest that coverage fell most in 2021, which coincided with a slower increase in the NLW.

4.15 The result of this stronger pay growth is that there are now more workers paid just above the NLW. Figure 4.4 shows that while coverage has fallen since 2019, the share of employee jobs paid within 50 pence of the NLW has remained at approximately 12 per cent. In 2022, there were more jobs paid between 6 and 50 pence above the NLW. There was a particular upsurge in jobs paid £10 an hour, which doubled from 190,000 to 420,000 employee jobs between 2019 and 2022. This reflects a tendency amongst employers to set pay at round numbers (Fry and Ritchie, 2012).

Figure 4.4: Per cent of employee jobs by hourly pay bands, UK, 2016-2022, workers eligible for the NLW



Source: LPC analysis of ASHE, SOC20 low-pay weights, NLW eligible population (25+ before 2021 and 23+ from 2021), UK, 2016-2022. Pre-2020 figures are chain-linked so they are comparable with later figures. Excludes first year apprentices.

4.16 The second potential driver of the fall in coverage is reduced employment. If minimum wage workers leave employment more so than other workers, then the number (and share) of workers covered will fall. There are some signs that employment has fallen in groups exposed to the minimum wage. Since before the pandemic (2019 Q2) employment has fallen by 10 per cent in low-paying occupations, whereas it has increased slightly in other occupations. We define low-paying occupations as the occupations where minimum wage workers are most likely to work; we provide a full definition in Appendix 4. Employment rates for workers without a higher education have fallen by 2 percentage points, whereas better qualified workers have seen a slight increase in employment rates. Based on the available evidence we do not think the increase in the NLW caused these falls in employment.

4.17 We judge that better pay is the main driver of the fall in coverage and lower employment is a secondary driver. Vacancies are at record highs (especially in some low-paying industries such as hospitality and social care) and the number of jobs paid up to 50p above the NLW has remained broadly steady since 2019. We discuss the employment impacts of the NLW in more detail later in this chapter.

The NLW continues to put pressure on pay differentials within firms, but firms report reducing differentials less recently than in previous years

4.18 The NLW continues to alter pay structures within low-paying firms and industries. The most common concern we hear from employers is that the minimum wage reduces pay differentials between the lowest-paid workers in their organisations and slightly better-paid workers. Employers and unions worry that these changes reduce incentives to progress in terms of skill, seniority or responsibility.

Stakeholder evidence on differentials

4.19 While stakeholders continued to tell us that narrowing differentials was a common response to the rising NLW, there was some suggestion this was less prevalent than in previous years. For example, the British Retail Consortium's (BRC) survey of employers found that 27 per cent had reduced differentials and 32 per cent had reduced layers of management. This represented a decrease from last year, when 57 per cent reported reduced differentials, although the share reporting reducing layers of management was unchanged.

4.20 Community Leisure UK also told us that differentials were being squeezed. Some members observed that pay was only increasing for those on the National Minimum Wage (NMW) while other roles had seen little or no pay increases due to a tight budget. As one member wrote, the 'NMW impacted on four of our pay grades so to ensure a differential between each grade we had to increase all four'.

4.21 Survey results from the Chartered Institute of Personnel and Development (CIPD) showed a similar share of businesses responding to the increase in the NLW by reducing pay differentials as previous years. This year 18 per cent of respondents cited this compared to 17 per cent last year and 20 per cent in 2019. In contrast, the CIPD found that more hospitality businesses were maintaining differentials, with the proportion reducing them falling from 30 per cent in 2021 to 15 per cent in 2022 and those maintaining them jumping from 22 per cent in 2021 to 37 per cent in 2022. Respondents in construction (10 per cent) were most likely to say their firms had increased differentials.

4.22 The Federation of Small Businesses (FSB) told us that most small employers reported maintaining or increasing pay differentials while only 10 per cent reported decreases (down from 17 per cent last year and 15 per cent in 2019). This year a significant minority (20 per cent) reported that where differentials had shrunk this had created dissatisfaction among non-NLW staff. For example, one member reported 'that skilled builders also demand more pay because of an increase in the NLW paid to labourers'.

4.23 The Recruitment & Employment Confederation (REC) told us that that lower differentials brought a risk 'that it will reduce the incentive for an individual to take on a job with added responsibilities and demands'. Whitbread told us that rising wages 'will put pressures on our plans to invest in skills development and pay progression for our employees.' The Food and Drink Federation

(FDF) told us that while larger businesses could afford to maintain differentials as the NLW increased, this was not the case in smaller businesses who could not increase the wages of higher-paid staff due to pressures elsewhere, resulting in differentials almost disappearing.

4.24 Some worker representatives were concerned by narrowing differentials. In Wolverhampton we heard that that many supermarket workers were leaving supervisory roles due to the level of work causing stress and the minor increase in pay was not worth the added levels of responsibility and stress. One supermarket worker complained that a team leader was only paid 20 pence an hour more. We heard similar stories from workers in different sectors in Derry where a coffee shop worker was paid £9.70 an hour for a supervisory role, 20 pence more than other staff. Community told us that despite trying to preserve differentials when negotiating pay deals, they heard from members when the NMW and the NLW increases other pay grades do not.

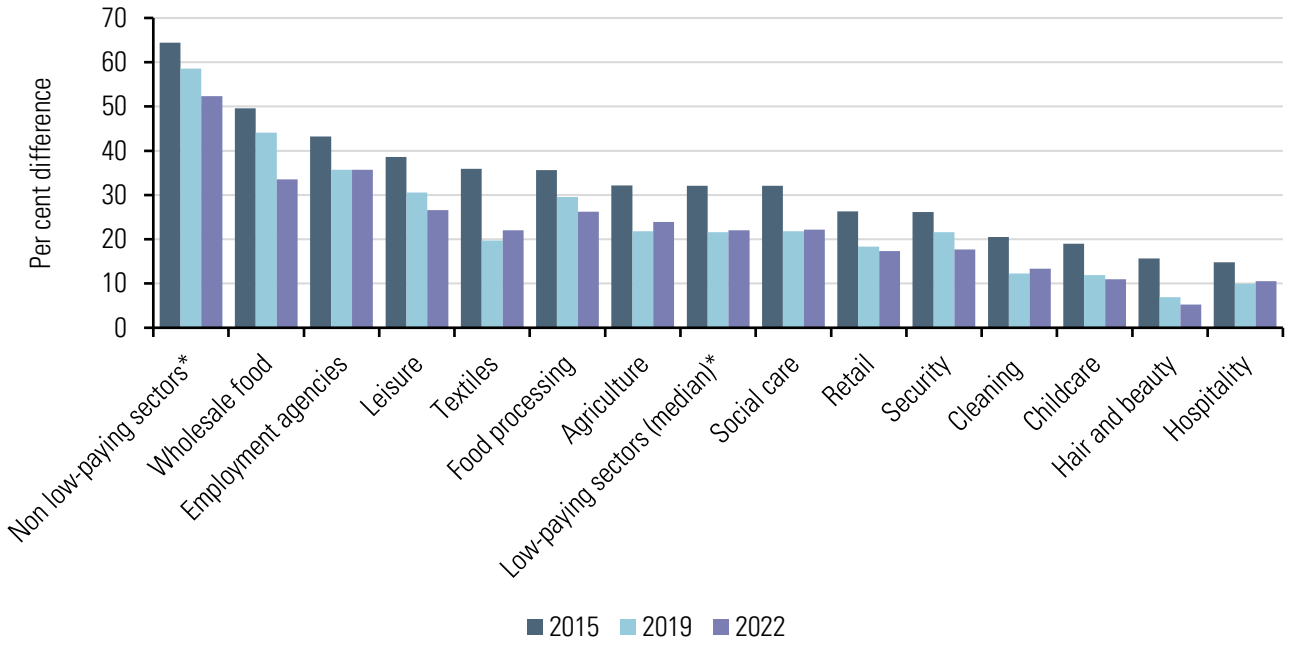
'[The business that employs me has] expanded and it's incredibly well performing and our sales are higher than they were pre-Covid … [however] you're starting at £9.50 and the highest you can aspire to at management level is worth £22-23,000 at this point in time which is much below the average wage in Northern Ireland'.

Coffee shop worker in Derry

Industry-level measures of differentials have stabilised since 2019

4.25 Industry-level differentials in low-paying industries have stabilised since 2019. This contrasts with what happened between 2015 and 2019, when industry-level differentials fell significantly, as shown in Figure 4.5. We measure industry-level differentials using the difference in pay between the median and 10th percentile within an industry. We report these differences as percentages of median pay within an industry. We group the industries where workers are most likely to be paid the minimum wage into low-paying industries (full definition in Appendix 4.) We use an industry-level measure of differentials as we do not have detailed enough data to estimate firm-level differentials. Our measure is not perfect; it captures differences in pay between firms (in the same industry) as well as within firms. Nevertheless, it suggests that differentials fell more in low-paying sectors than in other industries between 2015 and 2019. By 2019 in the median low-paying industry, the median worker was only paid 22 per cent more than the worker on the 10th percentile. In 2022, the median worker in a low-paying industry still earned on average 22 per cent more than the worker on the 10th percentile. In some industries, such as leisure or wholesale food, differentials did continue to fall. While this is not a perfect measure of differentials, it supports stakeholder evidence suggesting employers have not reduced differentials as much in recent years as in previous years.

Figure 4.5: Per cent difference between median and 10th percentile, by low-paying industries, UK, 2015-2022



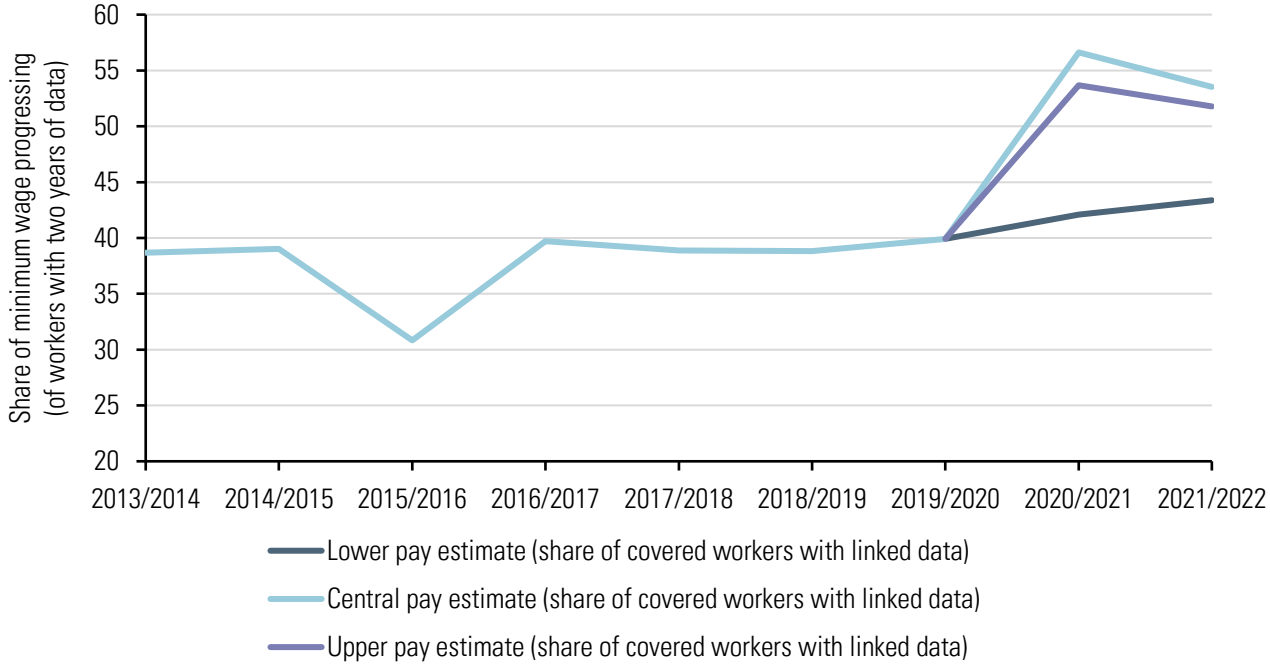
Source: LPC analysis using ASHE, SOC20 standard weights UK, 2015-2022. 2015 and 2019 figures are chain-linked so they are on a consistent basis to 2022 figures.
Note: The low-paying sectors (median) figure reflects the median of the 50th to 10th percentile differentials within each low-pay industry. The non low-paying sectors figure reflects the median of the 50th to 10th percentile differentials within one digit sic groupings (excluding any job included within the LPC definition of low-paying industries.) Definition of low-paying industries is in Appendix 4.

Progression from the National Living Wage onto higher pay has become more common since the pandemic began

4.26 We also continue to find little evidence that increases in the NLW have reduced the chance that workers progress off the minimum wage onto higher pay. Figure 4.6 shows the shares of minimum wage workers with two years' linked data who progress off the minimum wage into better paying work each year. Since the NLW was introduced in 2016, around 40 per cent of workers have done so each year. To deal with uncertain pay data in 2020 and 2021 we estimate several measures based on different pay scenarios in these years (see Low Pay Commission, 2020b and Low Pay Commission, 2021). Across each of these scenarios, we find that the share of minimum wage workers progressing off the minimum wage increased from 39 per cent in 2018/19 to 43-54 per cent in 2021/2022.[3] Low-paid workers are becoming less reliant on the minimum wage.

[3] Our headline measure of progression excludes workers who we do not have data for in the second year. We do not have follow up data for approximately half of minimum wage workers. When including these workers a lower share of workers progress off the minimum wage into better paid work each year (on average 22 per cent each year between 2016 and 2019). Using this measure, our central estimate still suggests that the progression rate increased between 2018/19 and 2021/22.

Figure 4.6: Per cent of workers progressing off the NMW/NLW, UK, 2013/14-2021/22



Source: LPC analysis of ASHE, SOC20 standard weights of initial year, UK, 2013-2022. NLW eligible population. Only includes main jobs. 2020 and 2021 pay estimates use LPC central estimates (see Low Pay Commission 2021). Results may be affected by attrition bias in ASHE, see (Phan, Stokes, Forth, Bryson, Singleton, Ritchie and Whittard, 2022). Pre-2020 figures are chain-linked to make them comparable with later figures.

Pay growth has been mixed for demographic groups likely to be paid the National Living Wage

4.27 We track employment and pay outcomes across different demographic groups to assess the pay and employment impacts of the NLW. Certain groups of workers are more likely to be paid the NLW. Chapter 3 explains how coverage varies across different worker and job characteristics. In this section, we compare pay and employment outcomes for groups of workers more likely to be paid the NLW, to those of other groups of workers. If pay grows faster for workers more likely to be paid the NLW, this is evidence of an NLW pay effect. Similarly, if employment grows more slowly for groups more likely to be paid the NLW, this indicates a negative employment effect. This is only indicative analysis as other factors could be driving in pay and employment between these demographic groups. The NLW could also have different effects across different groups.

4.28 There is a mixed picture on pay effects when looking across groups of workers. Pay grew faster for women than men between 2019 and 2022. Pay also grew faster for workers aged 23 to 24 relative to older workers, and workers without a higher education relative to better qualified workers. This is shown in Table 4.2. The NLW is one driver of stronger pay growth for these groups. Pay tends to be lower for those groups and coverage higher (as shown in Chapter 3). This means that these groups are more likely to be directly affected by the NLW as well as by spillover effects.

4.29 However, there is a more nuanced picture when we consider pay growth by ethnicity. Some ethnic minority groups who tend to have higher coverage saw faster pay growth than white workers. But other groups such as Bangladeshi/Pakistani or Black workers saw slower pay growth. This is surprising, as we would expect the NLW to drive up pay for these groups, and it likely reflects changes

in the composition of these groups. It could also reflect sampling variability or measurement issues. Our best source of pay data, ASHE, does not include data on ethnicity or a range of other personal characteristics so we have to use the Labour Force Survey (LFS). We discuss issues relating to measuring pay in the LFS in Appendix 3.

Table 4.2: Median pay and the bite of the NLW, for different demographic groups, population aged 23 and over, UK, 2019 Q2 – 2022 Q2

Group of workers	2019 Q2	2020 Q2	2021 Q2	2022 Q2	Difference in median pay 2019 Q2 – 2022 Q2	Percent difference from 2019 Q2 to 2022 Q2, p.p.
Men[a]	£14.97	£15.35	£15.66	£16.35	£1.38	9.2
Women[a]	£12.35	£12.94	£13.29	£13.92	£1.57	12.7
23-24[a]	£8.23	£8.63	£9.24	£9.74	£1.52	18.4
25-29[a]	£11.93	£12.37	£12.54	£13.21	£1.28	10.7
30-64[a]	£13.27	£13.87	£14.43	£15.25	£1.97	14.8
No disability[b]	£12.47	£12.98	£13.66	£14.42	£1.95	15.6
Disability[b]	£10.89	£10.61	£11.54	£12.22	£1.33	12.2
White[b]	£12.12	£12.70	£13.30	£13.94	£1.82	15.0
Ethnic Minority[b], Of which:	£12.34	£12.02	£12.82	£14.07	£1.72	13.9
Indian[b]	£14.66	£15.66	£15.38	£17.13	£2.47	16.8
Bangladeshi/Pakistani[b]	£12.23	£10.33	£11.55	£11.55	-£0.68	-5.6
Black[b]	£12.06	£10.76	£11.96	£12.94	£0.89	7.3
Other or Mixed Ethnic group[b]	£11.55	£11.84	£13.60	£13.84	£2.29	19.8
UK-born[b]	£12.17	£12.50	£13.23	£13.99	£1.83	15.0
Non-UK born[b]	£11.94	£13.61	£13.32	£13.94	£2.00	16.8
Higher education[b]	£16.17	£16.22	£16.97	£18.01	£1.84	11.4
No higher education[b]	£9.99	£10.18	£10.86	£11.52	£1.54	15.4

Source: LPC analysis of LFS and ASHE, income weights in LFS, standard SOC20 weights in ASHE, UK, 2019-2022. 23-64 population. Estimates marked with (a) use ASHE data, which is chain linked to make figures comparable. Estimates marked with (b) use LFS data. LFS pay data relies on a smaller sample than ASHE data and is self-reported so is less reliable and tends to be an underestimate of pay. Note: ONS changed the qualification variables in 2022Q1, this may affect results although similar trends are visible before the structural break. Figures for individual categories also affected by changes in composition of category.

Employment rates have remained high for most groups of workers likely to be paid the minimum wage

4.30 Table 4.3 shows how employment rates have changed for different subgroups of the population between 2019 and 2022. If the NLW was reducing employment, we might expect to see worse employment performance for workers more likely to be paid the NLW. However, in most cases we see the opposite, stronger employment growth for more exposed workers. For instance, employment rates for people with a disability increased by 1.0 percentage points, whereas employment rates for workers without a disability increased by only 0.4 percentage points. Similarly, employment rates increased by 3.1 percentage points for people with an ethnic minority background, whereas they fell by 1.0

percentage point for white workers. While other factors could be driving these changes, they do not present any evidence of a negative employment effect. Previous research in both UK and US has also found that higher minimum wages tend to raise pay for disadvantaged groups, without harming their employment prospects (Derenoncourt and Montialoux, 2020, and Datta, Machin, and McKnight, 2021)

4.31 However, less qualified workers have seen a reduction in employment since 2019. Employment rates have fallen by 2.0 percentage points for workers without a higher education, while increasing by 0.4 percentage points for other workers. At first this appears to be a sign of negative employment effects, as less qualified workers are more likely to be paid the NLW. Other evidence, though, suggests the NLW is unlikely to be the cause.

Table 4.3: Employment rates for different demographic groups, population aged 23-64, UK, 2019 Q2 – 2022 Q2

Group of workers	2019 Q2	2020 Q2	2021 Q2	2022 Q2	Difference from 2019 Q2 to 2022 Q2, p.p.
Men	85.0	84.5	83.5	83.8	-1.2
Women	75.4	75.4	75.5	75.5	0.1
23-24	75.9	76.2	77.3	78.2	2.3
25-29	83.8	84.1	83.7	83.7	-0.1
30-64	79.8	79.5	79.0	79.1	-0.7
No disability	86.5	86.4	86.4	86.9	0.4
Disability	54.2	54.5	54.8	55.2	1.0
White	81.4	80.7	80.3	80.4	-1.0
Ethnic Minority	72.5	75.8	75.0	75.6	3.1
Of which:					
Indian	79.8	83.0	84.0	81.3	1.5
Bangladeshi/Pakistani	64.6	65.7	67.2	68.6	4.0
Black	75.7	77.7	74.7	75.4	-0.3
Other or Mixed Ethnic Group	70.3	75.0	73.7	75.7	5.4
UK-born	80.6	80.2	79.7	79.7	-0.8
Non-UK born	78.5	79.2	78.9	79.3	0.8
Higher education	86.2	86.0	86.1	86.6	0.4
No higher education	75.2	74.6	73.4	73.2	-2.0
Total	80.1	79.9	79.5	79.6	-0.5

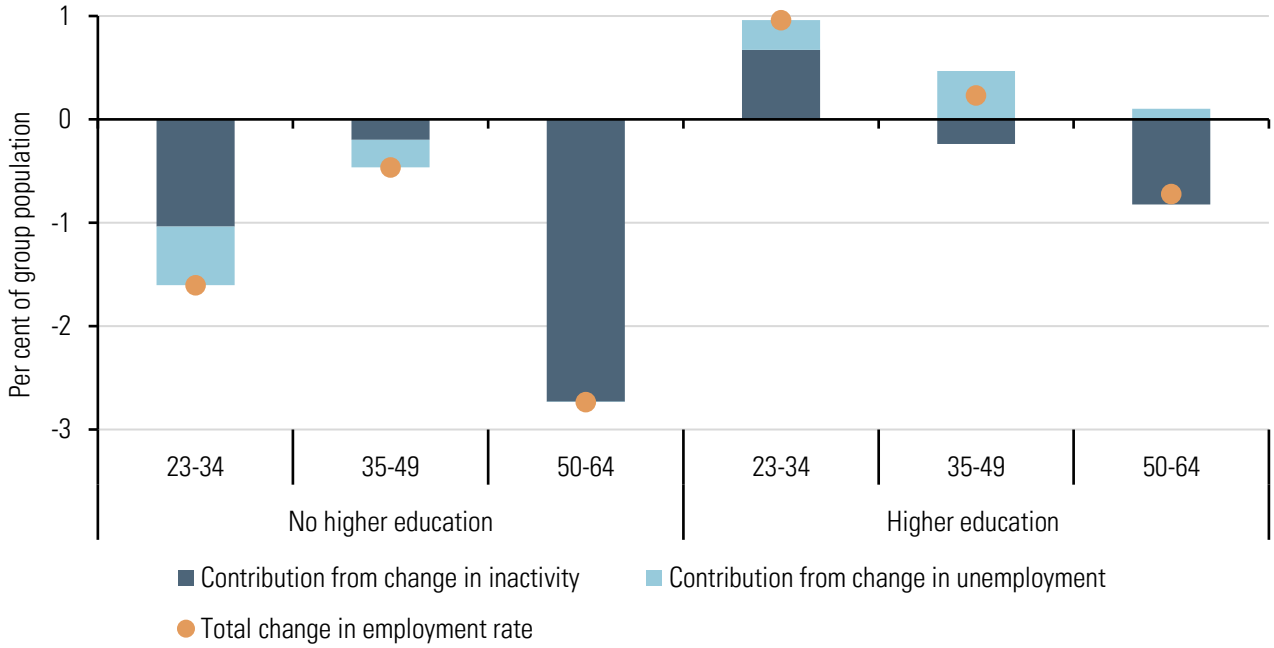
Source: LPC analysis of LFS, standard weights, UK, 2019-2022, 23-64 population, not seasonally adjusted. Figures for individual categories also affected by changes in composition of category. Employment rates refer to employment as a percentage of total group population.
Note: ONS changed the qualification variables in 2022Q1. This may affect results although similar trends are visible before the structural break.

Employment falls for low qualified workers likely reflect pandemic effects rather than minimum wage effects

4.32 Figure 4.7 shows two key points. First, the fall in employment rates is largest for older, less qualified workers. The fall in employment rates is also worse for lower qualified men (3.0 percentage

points) than for lower qualified women (1.0 percentage point). However, low-paid workers tend to be younger and female so we would expect the minimum wage to affect these workers (within the less qualified group) more. Second, most of the reduction in employment rate is due to increased inactivity rather than unemployment. While this does not rule out a minimum wage effect, we might expect a minimum wage effect, which reduced the demand for labour, to have a bigger effect on unemployment than inactivity. Instead, it appears the share of older, less qualified workers who are seeking work has fallen. This is consistent with the high levels of vacancies and employers' struggles to fill them discussed in Chapter 2. While we cannot rule out a minimum wage effect, it is likely that other factors (such as the pandemic-induced recession) are the main causes of the fall in employment for less-qualified workers rather than the increase in the NLW.

Figure 4.7: Change in employment rates, by age and qualification level, UK, 2019 Q2-2022 Q2

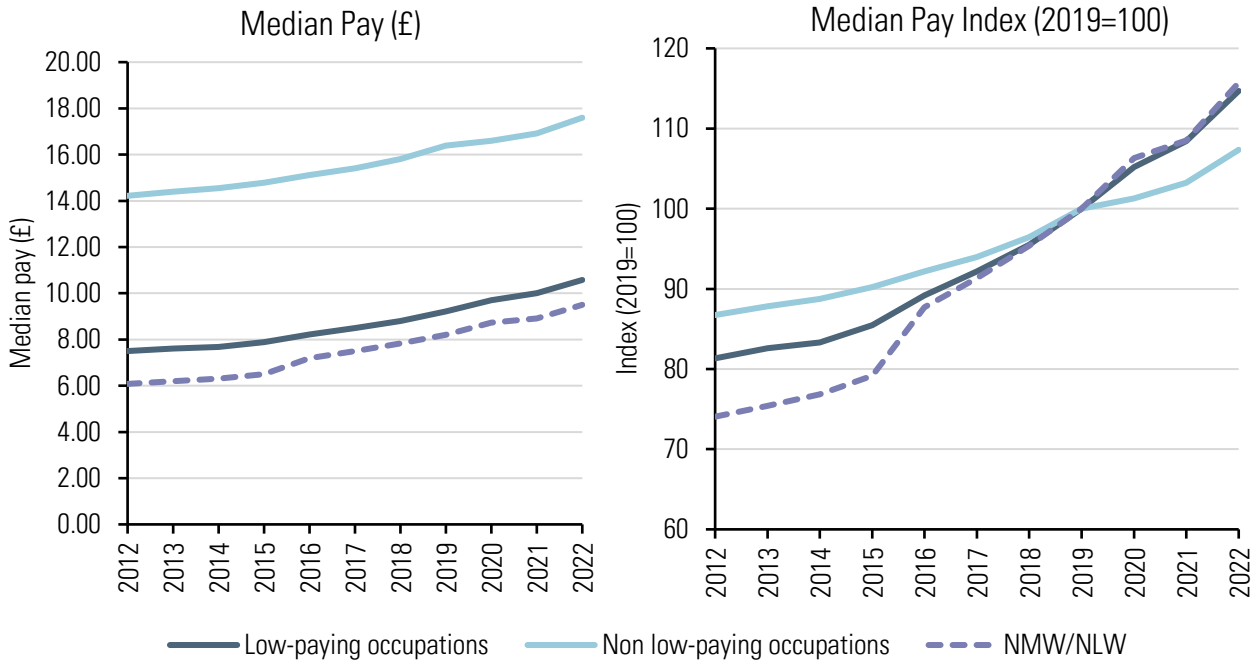


Source: LPC analysis of LFS, standard weights, 23-64 population, 2019 Q2-2022 Q2, not seasonally adjusted. Figures for individual categories also affected by changes in composition of category.
Note: There was a change to LFS education variable in 2022 Q1, similar results hold if make comparisons using 2021 Q4 data.

In low-paying occupations pay has grown rapidly, but employment continues to decline

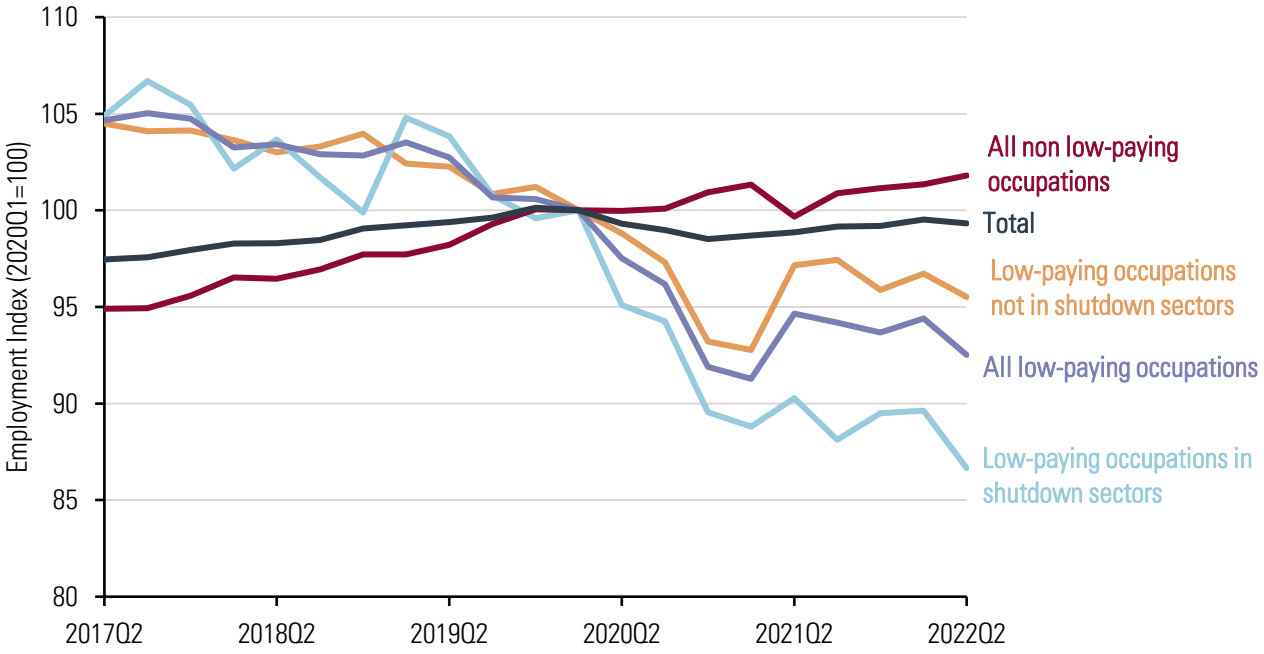
4.33 Between 2019 and 2022, pay grew twice as fast in low-paying occupations as in other occupations (14.7 per cent compared to 7.3 per cent). This is shown on the right-hand side of the Figure 4.8, but the left hand side shows that pay levels remain much lower in low-paying occupations despite the faster growth. In 2022, 15.6 per cent of eligible jobs in low-paying occupations were paid at or below the NLW, compared to 1.6 per cent of other occupations. 76 per cent of all NLW jobs were in low-paying occupations. Accordingly, the NLW was a key driver for the stronger pay growth in low-paying occupations during this period.

Figure 4.8: Median pay by low-paying occupation and NMW/NLW, UK, 2012-2022



Source: LPC analysis of ASHE, standard SOC20 weights, UK, 2012-2022, workers aged 23 and over. 2022 figures use SOC20 codes mapped to SOC10 codes, Pre-2020 figures use chain-linking to make them comparable with later figures. For full definitions of low-paying occupations see Appendix 4.

Figure 4.9: Employment index (2020Q1=100), by low-paying occupations and shutdown sector, UK, 2017-2022



Source: LPC analysis of LFS, standard weights, UK, 2017-2022, workers aged 23 and over, not seasonally adjusted. Definition of shutdown sectors is from Joyce and Xu (2020) and is described in Appendix 4.

4.34 Between the second quarter of 2019 Q2 and the second quarter of 2022, employment in low-paying occupations for workers aged 23 and over fell by 10 per cent but grew by 1.8 per cent in other occupations. Because low-paying occupations tend to require interpersonal interactions (for example

waiting on tables in a restaurant) they were worse hit than other occupations during the pandemic. Figure 4.9 shows that, within low-paying occupations, jobs in industries which were shut down during the pandemic fell most in 2020 and have not recovered since. In many cases, employers are trying to hire more workers but are struggling. Vacancies remain at a high level in low-paying industries such as hospitality and social care. This suggests that part of the reason for the fall in employment in low-paying occupations is the residual effects of the pandemic.

4.35 Table 4.4 shows how the flows in and out of low-paying occupations has changed in the last three years relative to the previous three years. Low-paying occupations have struggled to hire workers over this period. While flows in from unemployment increased by 102,000, flows in from other occupations and inactivity fell by 140,000 and 240,000 respectively. At the same time, flows out of low-paying occupations into unemployment (mostly at the beginning of the pandemic) rose by 141,000, but moves to inactivity barely changed and moves into non low-paying occupations fell. So overall, employment shrunk in low-paying occupations predominantly due to reduced hiring, and, to a lesser extent, due to increased flows out into unemployment.

Table 4.4: Change in total labour market flows, by occupation, UK, 2019-2022 relative to 2016-2019

Flow direction	Flow	Change (thousands)		Change as a percent of previous employment (per cent)	
		Low-paying occupations	Non low-paying occupations	Low-paying occupations	Non low-paying occupations
In	From other occupations	-140	-66	-1.8	-0.5
	From inactivity	-240	37	-3.1	-0.4
	From unemployment	102	396	1.2	1.4
	Total flows in	**-277**	**367**	**-3.7**	**0.5**
Out	To other occupations	-66	-140	-0.9	-0.8
	To inactivity	11	551	0.1	1.8
	To unemployment	141	249	1.8	0.8
	Total flows out	**86**	**660**	**0.9**	**1.8**
Net	From other occupations	-73	73	-0.9	0.3
	From inactivity	-251	-513	-3.2	-2.2
	From unemployment	-39	147	-0.5	0.6
	Total net flows	**-363**	**-293**	**-4.6**	**-1.2**

Source: LPC analysis of two quarter longitudinal LFS, longitudinal weights, population aged 23-64,UK, 2016 Q2/Q3-2022 Q1/Q2. Figures show difference between total flows in 2016 Q2/Q3-2019 Q1/Q2 and 2019 Q2/Q3 and 2022 Q1/Q2. Net flows reflects flows in minus flows out. In 2021 Q1 SOC2010 data was not available for occupations, so we use SOC2020 data mapped to SOC2010 occupations as discussed in Appendix 4. For right hand columns we normalise the total flows number in each period with the total employment in those occupations in quarter before the period (2016 Q1 and 2019 Q1). Employment by occupation estimates based on LFS, population weights, population aged 23-64, UK.

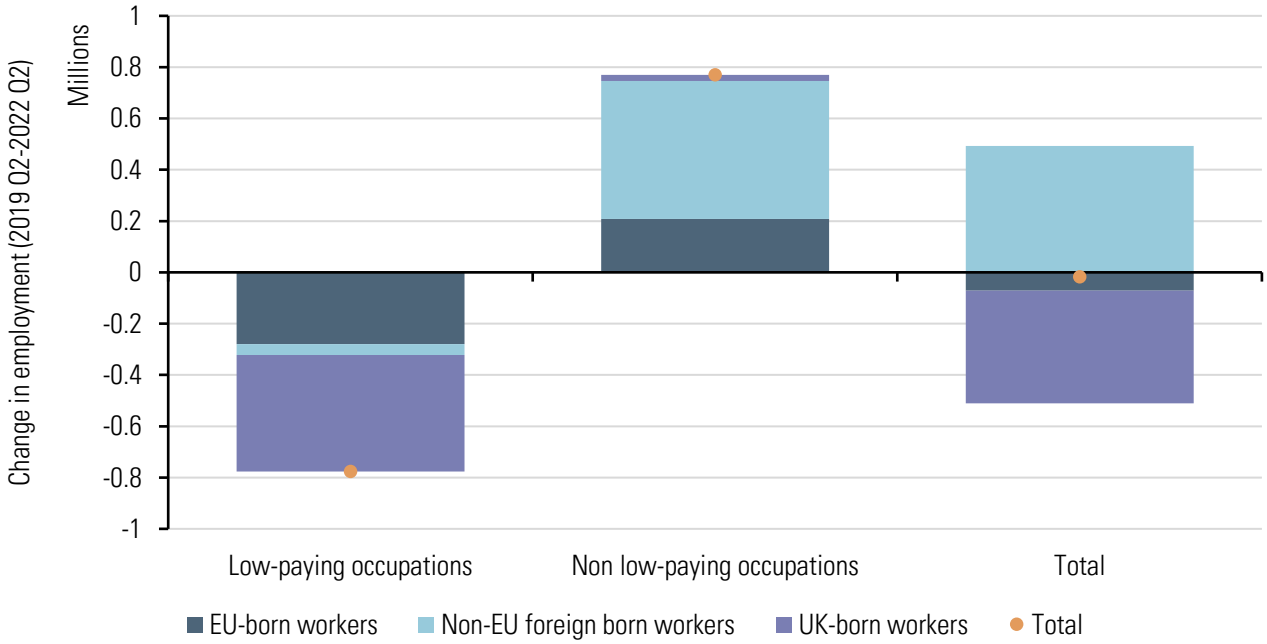
4.36 In comparison, non low-paying occupations have seen a much greater rise in flows out into inactivity (551,000 additional flows out in the last three years). Most of this loss has been made up by hiring 396,000 more workers from unemployment than in the previous three years. This helps explain why employment has performed better in non low-paying occupations over the last three years. While

the number of workers leaving these occupations has increased, part of this has been made up for with new workers joining.[4]

4.37 In Chapter 2 we discussed a large increase in inactivity. This analysis shows that the increased moves from employment into inactivity are overwhelmingly from non-low paying occupations. However, low-paying occupations have also been affected by 240,000 fewer people flowing in from inactivity. Reduced flows into low-paying occupations from inactivity could be due to the health problems we discussed in Chapter 2. They could also be due to more jobs being available in better-paid occupations, which have increased hiring.

4.38 Overall, these effects lead to a larger percentage reduction in employment in low-paying occupations than in other occupations (as shown in the second two columns of table 4.4). This supports evidence we heard from employers in low-paying occupations who told us they have struggled to attract workers and so have raised pay (see paragraph 4.11).

Figure 4.10: Change in employment by low-paying occupations and country of birth, 23-64 population, UK, 2019 Q2 – 2022 Q2



Source: LPC analysis of LFS, standard weights, UK, 2019-2022, 23-64 population, not seasonally adjusted.

4.39 Migration policy is likely also driving some of the recent reduction in employment in low-paying occupations. While total migration has increased since 2016, the new points-based system makes it difficult to hire from abroad into low-paying occupations because of the pay and skill thresholds (unless they are on the shortage occupation list). Figure 4.10 shows that between 2019 Q2 and 2022 Q2, the

[4] These flows figure only include people who the ONS contact in two consecutive quarters. It is therefore unlikely to capture the effects of migration, which is another factor boosting employment in non low-paying occupations. There are also likely to be differences from this analysis based on the longitudinal LFS analysis and other analysis such as Figure 4.10 based on the quarterly LFS, which are likely due to sampling error.

number of EU-born workers in low-paying occupations fell by 280,000 (31 per cent). This accounts for 36 per cent of the total fall in employment in low-paying occupations. At the same time the number of non-EU migrant workers has increased, but these workers are concentrated in better-paying occupations where it is easier to get a visa. Certain occupations are particularly vulnerable to outflows of migrant labour. Employment fell by 11.7 per cent in hospitality between 2019 to 2022 Q2. The fall in EU workers in hospitality was equal to 57 percent (7.3 percentage points) of the total reduction.[5] UKH told us that 'cutting off immigration for occupations in Levels 1 and 2 has had a disproportionate effect on our sector. Whereas about a third of jobs in the UK are in Levels 1 and 2, the figure for our sector is 85 per cent.'

4.40 Employment in low-paying occupations has been falling since 2017, so the pandemic is not the only factor explaining reduced employment. However, there are also other factors which could be driving this trend. For instance, 35 per cent of the fall in employment in low-paying occupations since 2016 Q2 has been due to reduced employment in retail. This is likely driven by the trend towards online retail and away from high street retail. In April 2016, online retail made up 13.5 per cent of all retail sales (excluding automotive fuel), but by April 2019 this had grown to 18.4 per cent. It then spiked during the pandemic and in April 2022 made up 26.6 per cent of all sales (ONS, 2022c). The transition from the high street to online has changed the composition of the retail workforce and reduced the number of staff needed in shops.

4.41 Overall, the evidence suggests that a number of factors are driving the continued fall in employment in low-paying occupations. Since 2017, employment in low-paying occupations has been falling relative to other occupations. It is possible some of this has been driven by the increases to the NLW. However, there are also a range of other factors which could also be causing it, such as migration policy and the pandemic. One sign which suggests that the recent fall in employment is driven by the pandemic rather than the NLW is high vacancy levels in most low-paying sectors. These vacancies suggest that part of the fall in employment is a temporary decline due to the pandemic and employers in low-paying sectors are trying to hire again to return to pre-pandemic levels of employment.

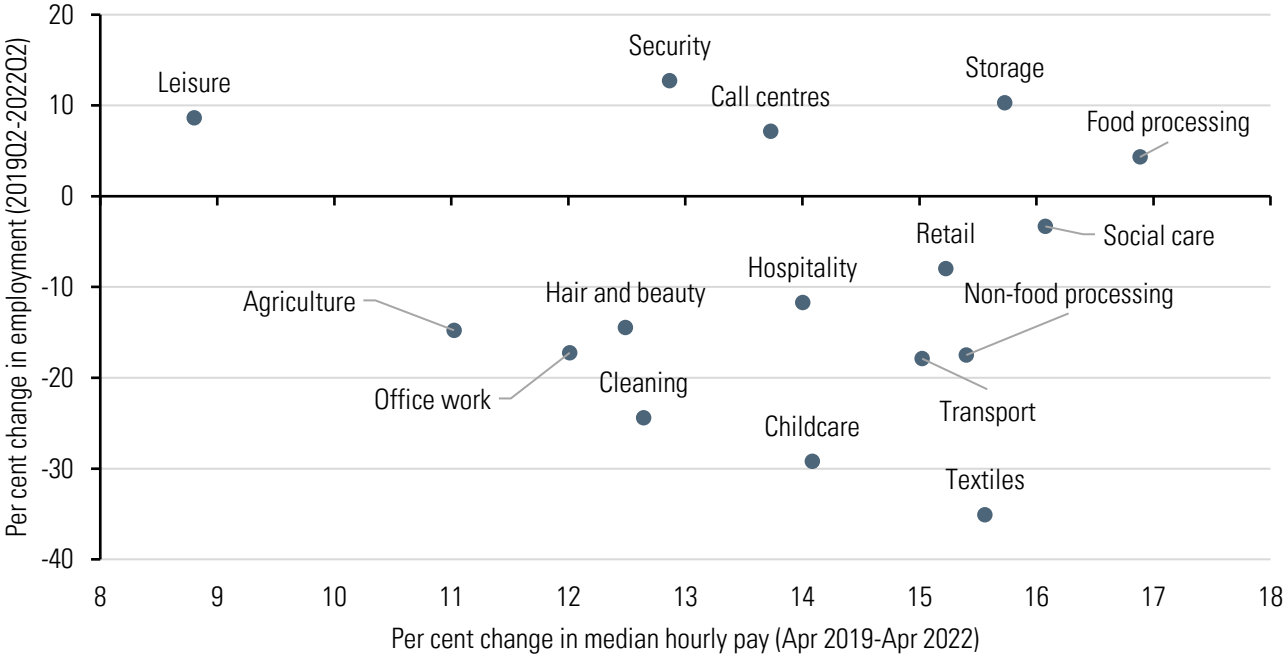
There is no clear relationship between changes in employment and pay across different low-paying occupations

4.42 Pay is growing at a similar rate across most low-paying occupations, while employment growth varies much more across occupations. Strong pay growth in social care may reflect the shortage of workers in those occupations. While employment has only fallen by three per cent in social care, less than the average for low-paying occupations, vacancy rates are particularly high in the sector. Skills for Care reported that in August 2022 there were eleven vacancies per filled job in adult social care in England (Skills for Care, 2022). This reflects an increased demand for adult social care in recent years due to an aging population and increased staffing requirements due to increased staff absences. We explore the recruitment and retention challenges in social care in more detail in Chapter 7. In contrast, Blanden, Crawford, Drayton, Farquharson, Jarvie, and Paull (2020), and Coleman, Shorto, and D. Ben-

[5] These figures rely on the LFS, which has previously had problems accurately capturing migrant population (ONS, 2021a). Sumption, Forde, Alberti and Walsh (2022) have similar findings using administrative data.

Galim (2022) document lower demand for childcare, which alongside other factors may have slowed pay growth in the sector. The minimum wage sets a lower bound on how fast pay can grow, even in sectors such as childcare facing reduced demand.

Figure 4.11: Per cent change in employment and median pay, by low-paying occupations, UK, 2019-2022



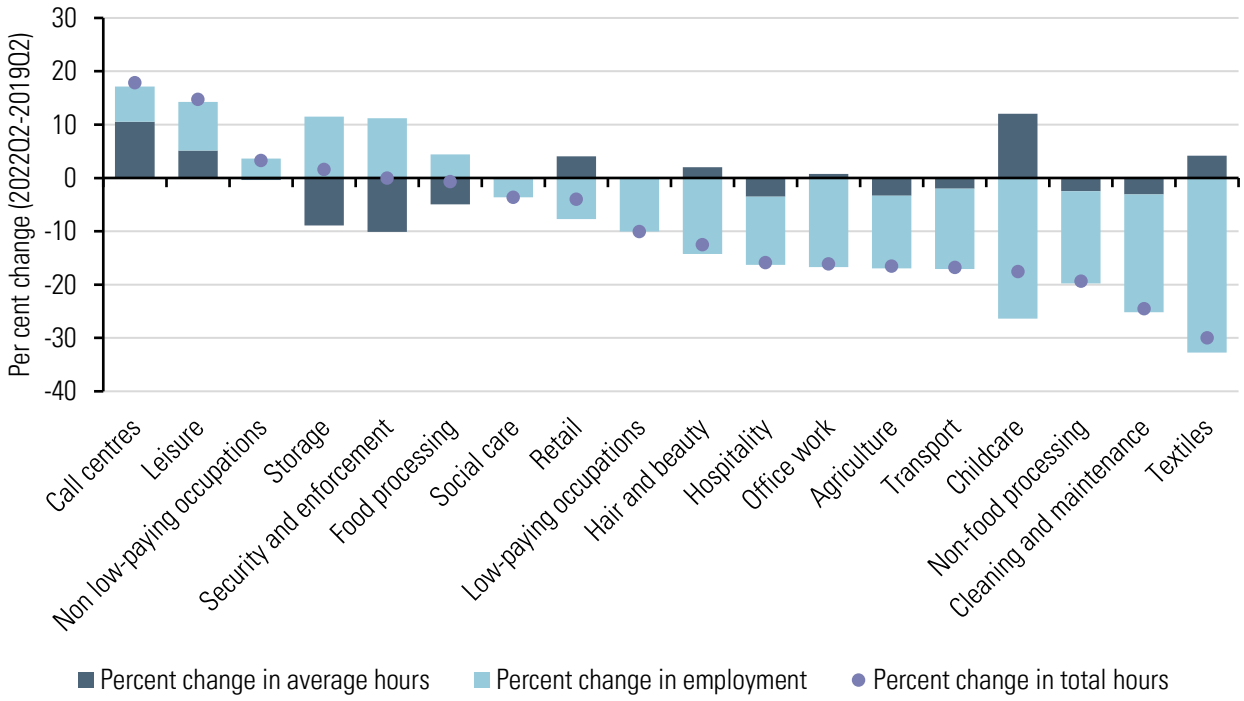
Source: LPC analysis of ASHE, standard weights, 2019-2022, UK, workers aged 23 and over excluding first year apprentices. LPC analysis of LFS, population weights, 2019-2022, UK, 23-64 population, not seasonally adjusted.

There is no evidence that the NLW is associated with firms reducing hours for low-paid workers, but zero-hours contracts are on the rise

4.43 As well as employment, we track average hours and the prevalence of insecure work within low-paying occupations. There is some evidence that the initial introduction of the NMW had a small negative effect on average hours (Stewart and Swaffield, 2006 and 2008). It is possible that the rising NLW could push employers to reduce or offer less security over workers' hours. However, we find no evidence that the NLW caused firms to reduce hours for low-paid workers. We also find underemployment is at a record low in low-paying occupations, related to the shortage of available workers. While zero-hours contracts have become more prevalent in low-paying occupations, this is likely to be driven by factors other than the NLW.

4.44 Average hours remained stable for low-paid occupations between 2019 and 2022. Across all low-paying occupations, average hours did not change between the second quarter of 2019 and the second quarter of 2022. Total hours fell by 10 per cent and this was completely driven by the reduction in employment. There was variation between low-paying occupations; average hours increased most in childcare and fell most in security and enforcement. Overall, we find no evidence to suggest that firms in low-paying occupations reduced hours after NLW rises between 2019 and 2022.

Figure 4.12: Per cent change in employment, average hours and total hours, by low-paying occupations, UK, 2014-2022

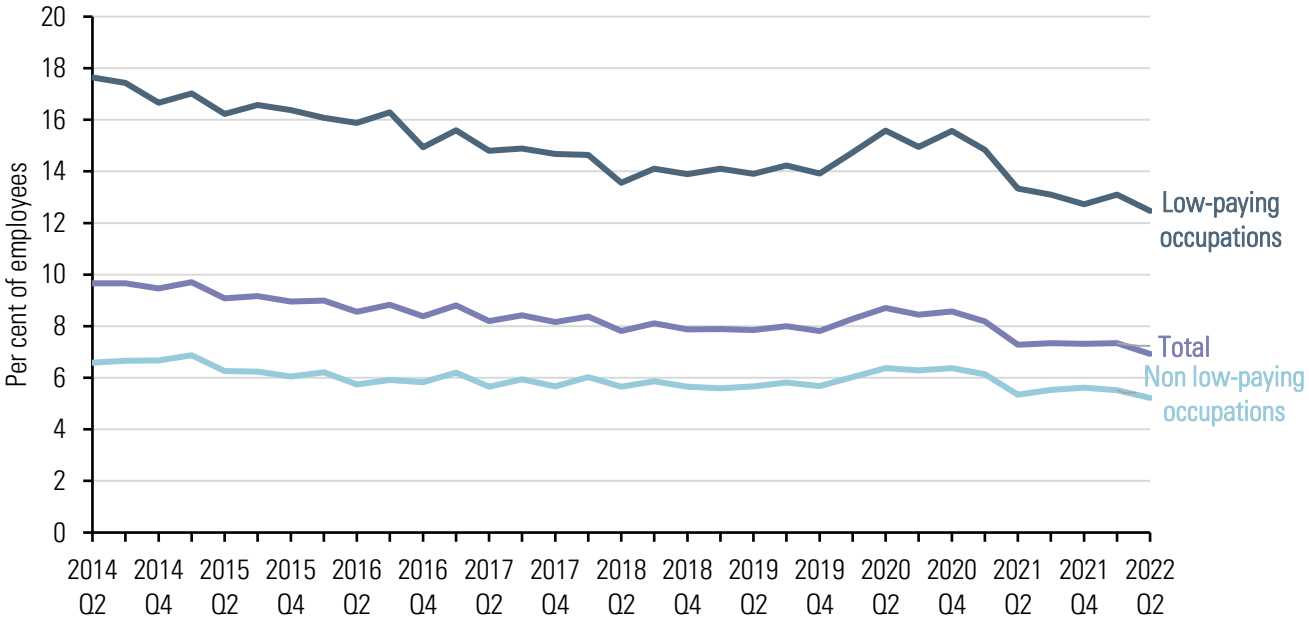


Source: LPC analysis of LFS, standard weights, UK, 2019-2022, workers aged 23 and over, not seasonally adjusted.

4.45 The share of employees in low-paying occupations who would like to work more hours is at a record low. This matches the aggregate picture discussed in Chapter 2. High levels of vacancies, as firms struggle to find people to hire, mean it is easier for workers who want additional work to find it. Underemployment tends to be much higher in low-paying occupations, as shown in Figure 4.13, because part-time work and irregular hours are more common in these occupations. However, underemployment has fallen fastest for low-paying occupations since the economy reopened in 2021 and is now at its lowest level since 2014. This provides further evidence that increases in the NLW are not associated with reduced hours of work.

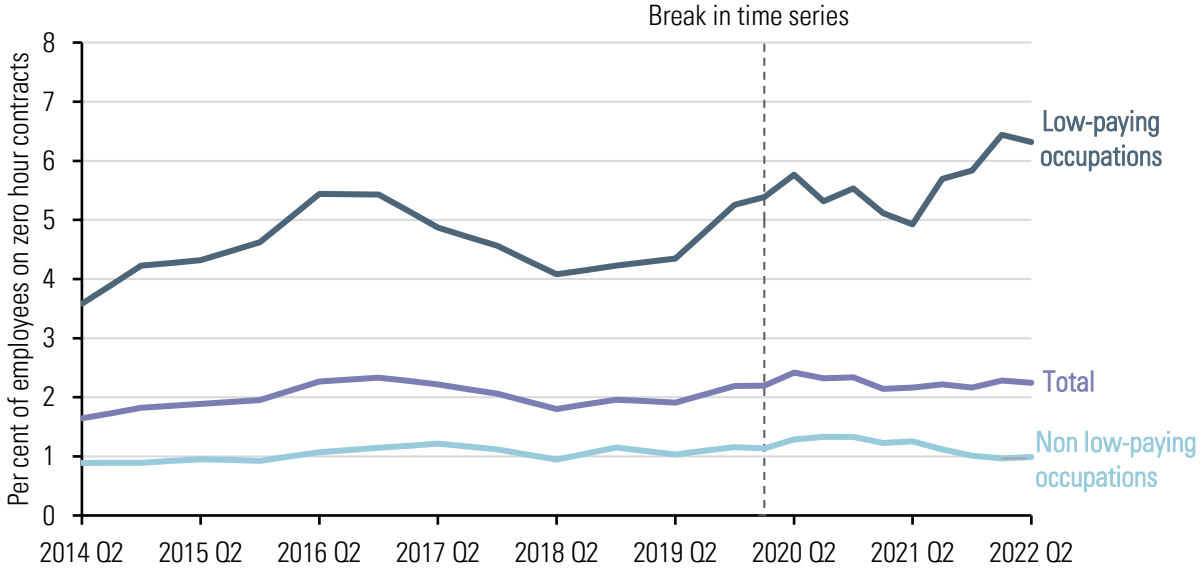
4.46 Zero-hours contracts have become more common in low-paying occupations in the last year. Figure 4.14 shows that in the 2022 Q2 6.3 per cent of employees in low-paying occupations worked on zero-hours contracts compared with 4.9 per cent a year earlier. In this period, zero-hours contracts in other occupations remained stable at a low level. The use of such contracts increased most in hospitality. In 2021 Q2, 8 per cent of hospitality employees were on zero-hours contracts, compared with 15 per cent in 2022 Q2. This increase could have been caused by the NLW; Giupponi and Machin (2018) have previously found that the NLW's introduction increased use of zero-hours contracts in social care. Alternatively, the uncertain recovery from the pandemic-induced recession may have caused firms to look for more flexibility. Insecure and temporary work typically rises following a recession.

Figure 4.13: Per cent of employees who would like to work more hours, by low-paying occupations, UK, 2014-2022



Source: LPC analysis of LFS, standard weights, UK, 2014-2022, workers aged 23 and over, not seasonally adjusted. Underemployment defined in line with ONS (EMP16) table.

Figure 4.14: Per cent of employees on zero-hours contracts, UK, 2014-2022



Source: LPC analysis of LFS, standard weights, UK, 2014-2022, workers aged 23 and over, not seasonally adjusted. Data is only available every other quarter between 2014 and 2019.

4.47 Another form of insecure work is temporary jobs, which have increased in low-paying occupations in the last year, from 4.0 per cent of jobs in 2019 Q2 to 4.8 per cent by 2021 Q2 and 5.4 per cent by 2022 Q2. The main driver of this, however, has been people who voluntarily choose to work temporary jobs. The share of employees in low-paying occupations voluntarily working temporary jobs has increased from 2.3 per cent in 2019 Q2 to 3.2 per cent in 2022 Q2. There has been a much smaller

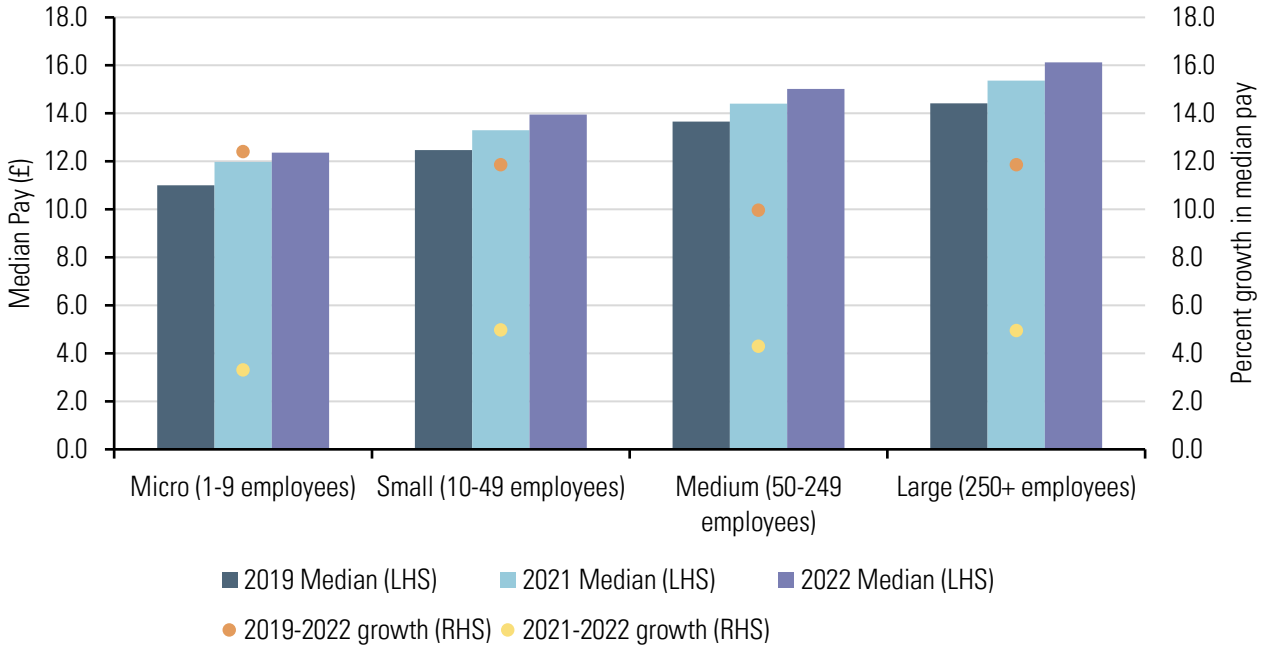
increase in people working in involuntary temporary jobs. This suggests that much of the increase in temporary jobs reflects changing worker preferences rather than the impact of the minimum wage.

Pay has grown at a similar rate for different sized firms, while employment has grown fastest in the smallest firms

4.48 Firm size is another key lens for monitoring the impacts of the minimum wage. Smaller firms tend to pay less and are more likely to employ someone on the NLW. If the NLW reduced employment, we might expect to see worse employment outcomes for smaller firms, controlling for other factors. Piek and Van Fintel (2019) find negative employment effects in small firms but not large firms in response to sectoral minimum wages in South Africa. Harastoszi and Lindner (2019) actually find larger negative employment effects in bigger firms following a minimum wage hike in Hungary, likely due to these firms being more likely to work in tradable sectors.

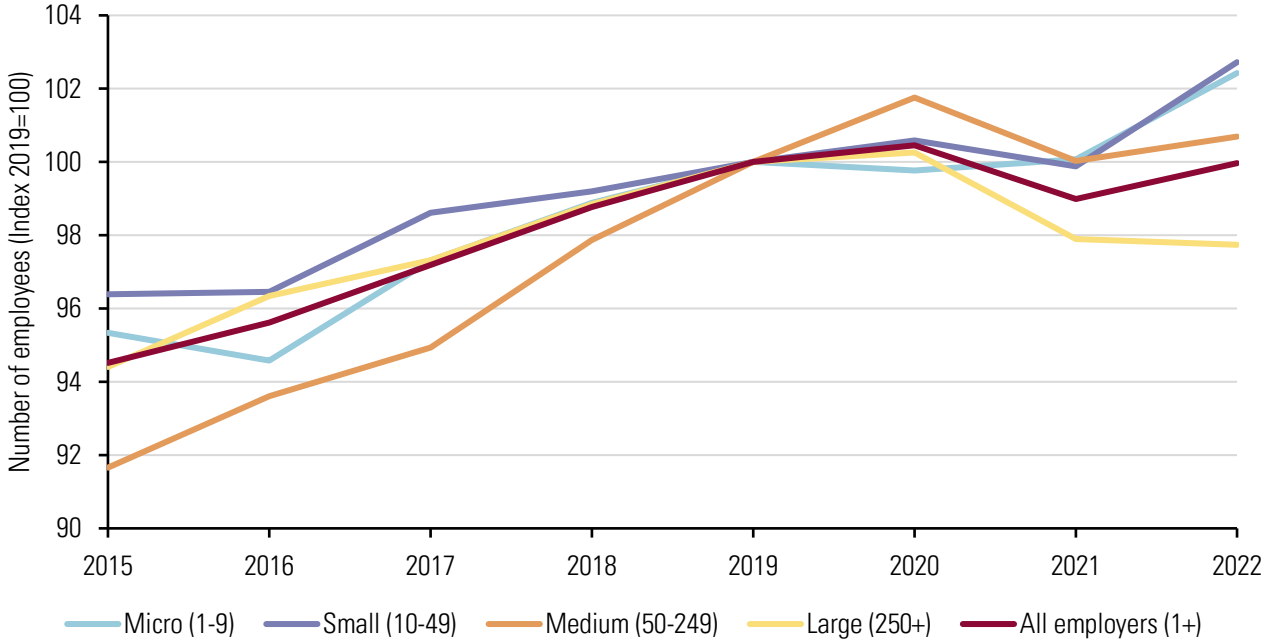
4.49 Our analysis of pay and employment by firm size does not show a clear NLW effect. Between 2019 and 2022 pay grew at a similar rate across different firm sizes, with the weakest pay growth for medium-sized firms (see Figure 4.15). Figure 4.16 shows that amongst firms with employees, employment has performed worse for larger firms since 2019, despite them on average paying better. Other factors unrelated to the NLW are likely driving this. These two figures provide no evidence that the NLW has had different effects on small businesses relative to larger businesses since 2019.

Figure 4.15: Median pay by firm size, UK, 2019-2022



Source: LPC analysis of ASHE, SOC20 standard weights, 2019-2022, UK, workers aged 23 and over. 2019 figures use chain-linking to make them comparable with later figures. Excludes first year apprentices.

Figure 4.16: Private sector employment index (2019=100), by firm size, UK, 2015-2022



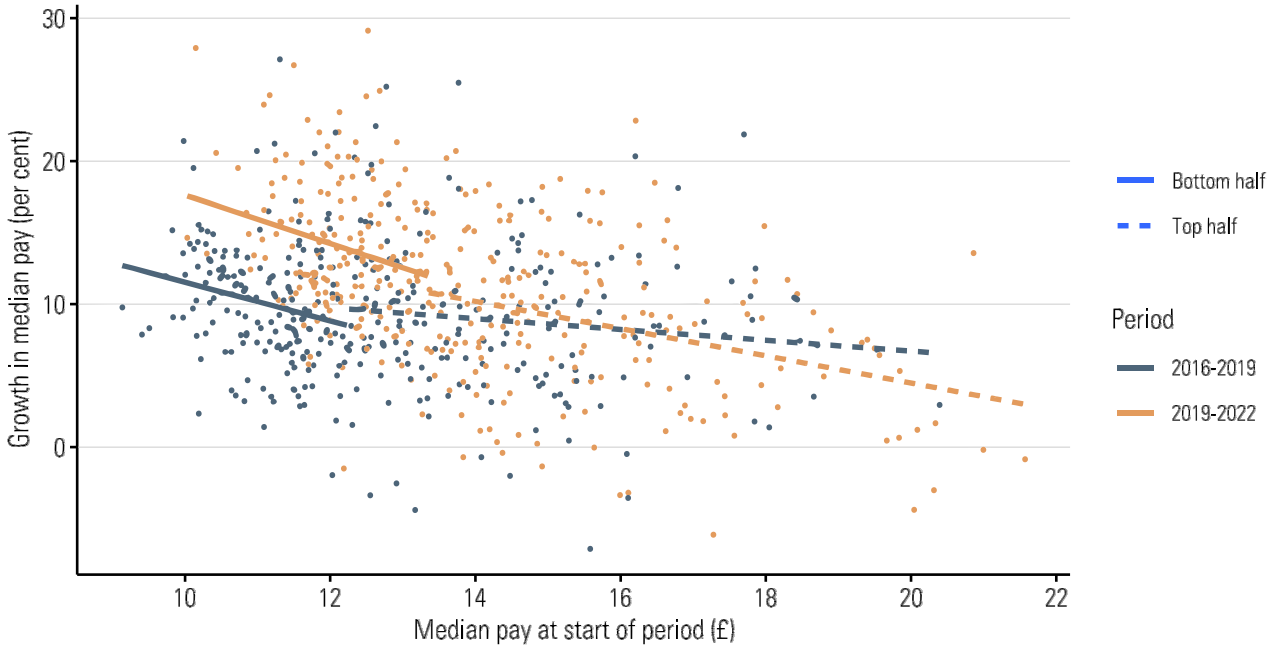
Source: LPC analysis of BEIS business population estimates, Table 28a, excludes solo-self employed, 2015-2022, UK.

Pay has grown fastest in low-paying areas

4.50 Pay varies across the country; the NLW affects different areas differently and we expect to see stronger pay and employment effects in areas where pay is lower. Figure 4.17 shows that the local authorities with lower pay levels in 2019 saw faster pay growth between 2019 and 2022. The NLW is one driver of this. In 2019, local authority median pay varied between £10.03 and £21.56. We estimate that spillover effects reach up to £2 above the NLW, so the increase in the NLW from £8.21 in 2019 to £9.50 in 2022 is likely to have driven pay up amongst the lower-paying authorities, but had little effect on median pay in the best paying authorities. To show this, we split local authorities into the better-paying half and the lower-paying half of authorities. Within the lower-paying half, we see strongest pay growth for the lowest-paying authorities, who are most exposed to the NLW. This follows a similar pattern to 2016-2019, when the NLW also rose strongly and drove up median pay for the lowest-paying authorities.[6]

[6] In the top half of local authorities, the pattern of pay growth changed between 2016-2019 and 2019-2022. In the former period, pay growth was similar between authorities with pay just above the median and authorities with the highest pay, but in the latter period areas with the highest pay saw the weakest growth. These are places where median pay was more than £5 above the NLW, so we would not expect to see minimum wage effects. This suggests there are other factors driving down growth further up the distribution.

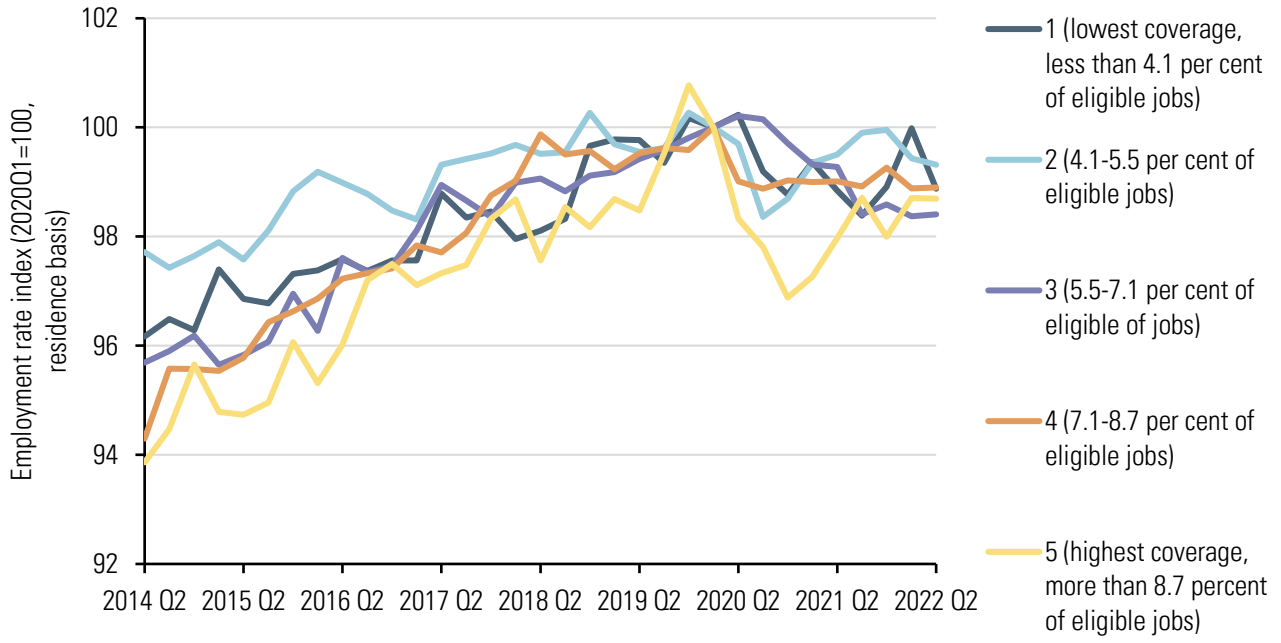
Figure 4.17: Median pay and growth in median pay, by resident local authority, UK, 2016-2019 and 2019-2022



Source: LPC analysis of ASHE, SOC20 standard weights, UK, 2016-2022, 23+ population, 2016-2020 figures are chain-linked to make them comparable with later figures, 23+ population. Excludes City of London and Isles of Scilly. Local authority level data is not available in Northern Ireland, so that is treated as a single observation. Fitted lines are based on linear regressions, split by period and whether median pay is above or below the median local authority.

4.51 The NLW seems to be driving up pay in the lowest-paying areas and there is little evidence to suggest it is reducing employment in those areas. Figure 4.18 shows employment rates for five different groups of local authorities, grouped by their share of minimum wage workers in 2019. During the pandemic, employment fell more in areas with the highest coverage, but since then it has recovered fastest in those areas. The temporary nature of this shock suggests that it reflects a pandemic effect rather than a minimum wage one. The pandemic hit the lowest-paying areas worst, partly due to the composition of industries in those areas.

Figure 4.18: Employment rate index (2020 Q1=100), by resident local authority coverage quintile, GB, 2014 Q2-2022 Q2



Source: LPC analysis of ASHE, low-pay weights, GB, 2019. Authorities are grouped based on 2019 coverage rate. LPC analysis of LFS, population weights, 23-64 population, not seasonally adjusted. Excludes Northern Ireland and Isles of Scilly.

Econometric evidence confirms that any recent job loss is more likely down to the pandemic than the NLW

4.52 We commission and carry out econometric analysis to estimate how the NLW has altered pay and employment. Econometric evidence is an important tool. It can help us produce more precise estimates of the pay and employment impacts and it can isolate the causal effects of the NLW from other factors. However, it relies on assumptions. In the last few years Covid has made it more difficult to isolate the causal impact of the NLW from other factors. We have carried out two pieces of internal research on the pay and employment impacts of the NLW; both are affected by Covid.

4.53 First, we produced estimates of the pay and employment impacts of the NLW from 2019 to 2022 using a bunching approach. This approach was pioneered by Cengiz, Dube, Lindner, and Zipperer (2019) and Cribb, Giupponi, Joyce, Lindner, Waters, Wernham, and Xu (2021) first applied it in the UK. For an explanation of this approach, see Cribb, Giupponi, Joyce, Lindner, Waters, Wernham, and Xu (2021) or further detail in Appendix 2.

4.54 We find large pay effects from the NLW increases in the 2019 to 2022 period using the bunching analysis. We find statistically significant increases in the number of workers in pay bands as much as £3.50 above the rate (equivalent to 38th percentile of wage distribution), which suggests large spillover effects. However, given the potential confounding effect of Covid and other factors discussed above, we cannot be certain these effects reflect genuine minimum wage effects.

4.55 We also find that employment fell more in lower-paying jobs in low-paying areas than in lower-paying jobs in better-paying areas between 2019 and 2022. If all the assumptions of the method held,

then this would mean that the NLW had reduced employment. The NLW affects low-paid jobs in low-paying areas more than relatively low-paid jobs in better-paying areas. However, we found evidence to suggest that the key assumption of the method does not hold over the Covid period. While we cannot rule out the minimum wage causing the reduction in employment, our current judgement is that these findings are mainly driven by the Covid pandemic. We discuss this research in more detail in Appendix 2.

4.56 We also carried out econometric analysis, which used geographic, age and gender variation in wages to assess the impact of the NLW on pay and employment outcomes. This analysis updates that conducted by Manning (2016 and 2021), Dube (2019), Dickens and Lind (2018) and Butcher and Dickens (2022). The method compares outcomes across age-gender-region cells of the UK labour market that are more and less affected by changes in minimum wages.

4.57 We found significant effects of the introduction and subsequent increases of the NLW on pay at the median (using both bite and coverage measures). They found no significant negative impacts on employment or hours across the whole period, but they did find a significant negative impact in 2020. Although that may have been a minimum wage effect, it is difficult to disentangle the impact of the NLW from that of Covid (see Appendix 2).

4.58 We also found that the NLW may have boosted participation between 2015 and 2019 as inactivity has significantly reduced for groups more exposed to the minimum wage relative to other groups of workers, but this had not led to an increase in unemployment. However, this effect is no longer significant during the pandemic. These results are consistent with previous analysis that suggested that there was no clear evidence of significant adverse employment effects of the NLW. However, there is more uncertainty over the employment effects in the last three years, as it is difficult to separate minimum wage effects from the impacts of the pandemic-induced recession.

Stakeholder evidence supports the NLW having minimal effects on jobs and hours

4.59 Employer representatives' surveys this year tended to find fewer employers reporting employment effects as a result of the NLW increase. Where we heard from employers that the NLW may affect employment it was more likely to affect the numbers of hours worked rather than hiring behaviour. Overall, it was more common for employers to report they could not hire enough staff than that they were seeking to reduce their workforce.

4.60 Employer organisations did not tell us that the latest NLW rise had significantly affected employment. UKH told us that 'the 2022 increase in the NLW has not had a detrimental effect on employment levels and hours worked across the hospitality sector. However, were revenues to fall sharply, many businesses would be left with a cost base which could be overwhelming'. REC's survey found a low prevalence of employment impacts: 7.5 per cent of respondents reported reducing hours, 5.3 per cent reported a hiring freeze and 2.8 per cent reported redundancies (all down on the previous year). Almost 36.8 per cent of respondents were unaffected. Make UK told us in the manufacturing sector that the NLW had no significant impacts on employment or hours. The BRC's survey showed a large decrease in businesses who had responded to the rising NLW by reducing shop floor staff, from 54 per cent in 2021 to 23 per cent in 2022. There was a similarly large decrease in the share of businesses responding by decreasing hours worked, from 50 per cent in 2021 to 18 per cent in 2022.

4.61 However, some bodies, particularly those which represent small businesses, suggested the latest rises had some impact on employment. The Chartered Institute of Payroll Professionals (CIPP) told us that 'some businesses have been reducing hours and staffing levels in response to increased NMW rates, as well as in response to coronavirus, which has caused many businesses to assess the staffing levels needed.' The FSB told us that a greater proportion of small businesses were adapting to the rising NLW by hiring fewer workers. 19 per cent of members compared to 14 per cent last year reported hiring fewer workers while a slightly higher proportion reported reducing hours (22 per cent compared to 19 per cent last year). However, this marks a return to the pre-pandemic trend for FSB members as 21 per cent reported lower recruitment as a result of the NLW in 2019.

4.62 The Confederation of British Industry (CBI) told us that some businesses were cutting hours to preserve headcount, in the face of faltering demand. 'A member in the logistics sector told us that they have reduced the number of shifts – from three to two – and as a result people are working fewer hours. This member has traded 20 per cent less than in 2021, and prices have increased by 20 per cent. Reducing the number of shifts by cutting hours was the only option left to preserve jobs.'

Conclusion

4.63 The NLW combined with a tight labour market to boost pay for low-paid workers between 2019 and 2022. The lowest-paid decile of workers saw faster increases in hourly pay than any other group between April 2019 and April 2022. The NLW grew faster than average pay and prices in this period, helping to drive up pay for low-paid workers. Despite the strong growth in the NLW, the number of employee jobs paid at or below the NLW fell by 19 per cent from 1.65 million in 2019 to 1.34 million in 2022. This suggests the tight labour market (high vacancies and low unemployment) was also a key driver of pay growth. Employers told us this year they had had to raise pay above the NLW to attract workers. With abundant job vacancies, the rate at which workers progressed off the NLW into higher-paid jobs increased for the first time since 2017.

4.64 Overall, there is little evidence to suggest the NLW caused employment to fall between 2019 and 2022. Instead, labour supply for low-paid jobs has fallen. This is due to changes in migration policy and increased inactivity following the Covid-19 pandemic and opportunities in better-paid occupations (such as healthcare). Together, these factors meant firms have struggled to attract workers and in response have increased pay above the minimum wage. In consequence, the number of jobs paid the NLW has fallen significantly for the first time in 20 years.

Chapter 5

Youth rates

Key findings

- Young people have come out of the pandemic in a strong position. The tight labour market has seen demand for workers outstrip supply. This has led to substantial increases in median hourly pay as employers compete to attract young workers, often offering well above the youth rates of the minimum wage. For 16-20 year olds, median pay has increased much faster than minimum wages and while the real value of their minimum wage rates has declined in the face of high inflation, their real median wages have risen.
- However, young men's employment has not recovered as quickly as young women's and, over the longer term, the share of 18-24 year-old men who are not in education, training or employment (NEET) has remained stubbornly high. As with older age groups, this is associated with an increase in inactivity due to poor health, particularly poor mental health. There are also signs that the fall in the proportion of young women who are NEET may have stalled during the pandemic.
- Meanwhile, many young workers re-entered the labour force on zero-hours or temporary contracts following the pandemic. Younger workers can value the flexibility offered by these contracts, but they further increase the vulnerability of their employment in a downturn. Nevertheless, the fact that youth unemployment and underemployment remain at historic lows, while enrolment in education remains higher than before the pandemic, suggest that the overall picture for young people is positive.
- 23 and 24 year olds have continued to do well since becoming entitled to the National Living Wage (NLW) in April 2021. Research we commissioned did not find negative effects on their employment, although it did find evidence of a reduction in hours worked by 23-24 year olds in low-paid occupations relative to 26 year olds. This result may be a consequence of the change in entitlement to the minimum wage, but there may also be other factors at work. Underemployment – workers wanting more hours – was lower following the change than it had been before the pandemic. Employers were also reporting acute labour shortages at this time, particularly in hospitality. These both make a demand-led fall in hours more surprising. Instead, the results could be capturing changes in the choices made by 23 and 24 year olds, rather than – or as well as – the choices of employers.
- 21 and 22 year olds are due to become entitled to the NLW in 2024, and the majority of our stakeholders continue to support this move. Although the NLW remains high relative to median pay for this age group, the majority are already paid at or above the NLW.

5.1 As well as the National Living Wage (NLW), we advise the Government on the level of the three youth rates of the National Minimum Wage (NMW). Our remit for these rates is to raise pay as high as

possible without damaging the employment prospects of young adults. In 2019, we reviewed the structure of the youth rates and recommended that workers become entitled to the NLW at age 21 instead of age 25, starting with a move to age 23 in 2021 (Low Pay Commission, 2019a). 21-22 year olds are due to become entitled to the NLW in 2024.

5.2 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 potentially 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 (De Fraja, Lemos and Rockey, 2021, 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). The risk that high minimum wages could disincentivise enrolment in education has also been used as an argument for lower youth rates, although evidence on this is mixed (Maré and Hyslop, 2021).

5.3 Despite facing greater falls in employment and a greater likelihood of being furloughed during the pandemic, young people have experienced a strong recovery. The tight labour market has increasingly led employers to rely on young workers and offer higher pay to attract them. The youngest groups of workers, particularly those aged 16 and 17, have seen the strongest growth in employment, pay and hours worked. However, some groups have not recovered as fully as others following the pandemic and young people remain vulnerable were worsening economic conditions to drive down demand for labour.

5.4 This chapter considers the current state of the youth labour market and the impact of recent changes in minimum wage rates. First, we outline how young people's employment, hours worked and enrolment in education has changed overall in recent years. Second, we look at changes in young people's pay since 2019 and the relationship between actual pay and the minimum wage rates. We also discuss trends in employment and pay in hospitality and retail, two important sectors for young workers. Third, we focus in on groups of young people who are not in employment or are in less secure employment. We consider the share of young people not in education, employment or training (NEET), and look at zero-hour and non-permanent contracts. Finally, we summarise new research on the labour market outcomes of 23-24 year olds since they became entitled to the NLW in April 2021. We consider evidence we have received from stakeholders about the youth labour market and young people's pay throughout this chapter. Chapter 9 presents further evidence from stakeholders on future youth minimum wage rates.

Youth employment has recovered quickly from the pandemic

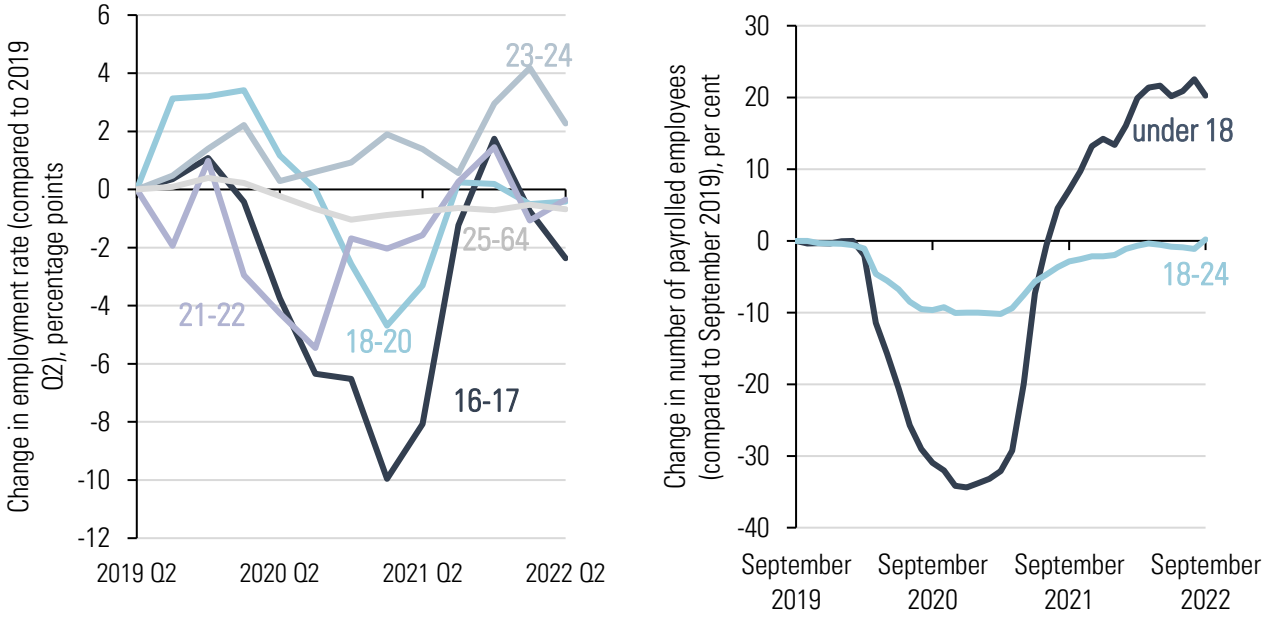
5.5 The overall picture for young workers is one of rapid recovery from the pandemic. Employers have increasingly looked to young workers to fill gaps in the workforce as they struggled to recruit older workers. Several stakeholders commented on the state of the labour market and the increased opportunities for young people to enter the workplace. The British Beer and Pub Association (BBPA) told us this was 'not because they can be paid at a lower rate, rather that currently this element of the

workforce is proving easier to attract and recruit'. The Trades Union Congress (TUC) also told us that the tight labour market was seeing more young people enter employment.

5.6 The recovery has been particularly marked for the youngest workers. According to HMRC's Real-Time Information (RTI) data, there were 88,000 more payrolled employees aged under 18 in September 2022 than in September 2019, an increase of 20 per cent. Data from the UK Labour Force Survey (LFS) for 16-17 year olds shows a less dramatic increase, but still has employment peaking above pre-pandemic levels by the end of 2021, with 24,000 more workers than in the same quarter of 2019.

5.7 Figure 5.1 shows the trajectory of young people's employment rates as measured by the LFS and the number of young payrolled employees recorded in the RTI data since 2019. The differences between these two data sources are discussed in Appendix 3, but it should be noted that changes in RTI data are not adjusted for the overall size of the age group – so changes in population can also affect these numbers. The RTI data may also include some employees aged under 16 and is seasonally adjusted, while the LFS data shown in Figure 5.1 is not. The latest LFS data shows employment falling below 2019 levels, but this is largely explained by increased enrolment in education compared to 2019 (Figure 5.4) and stakeholders have not reported a drop in demand for young workers.

Figure 5.1: Change in employment rate (LHS) and change in number of payrolled employees (RHS), by age, UK, 2019-2022

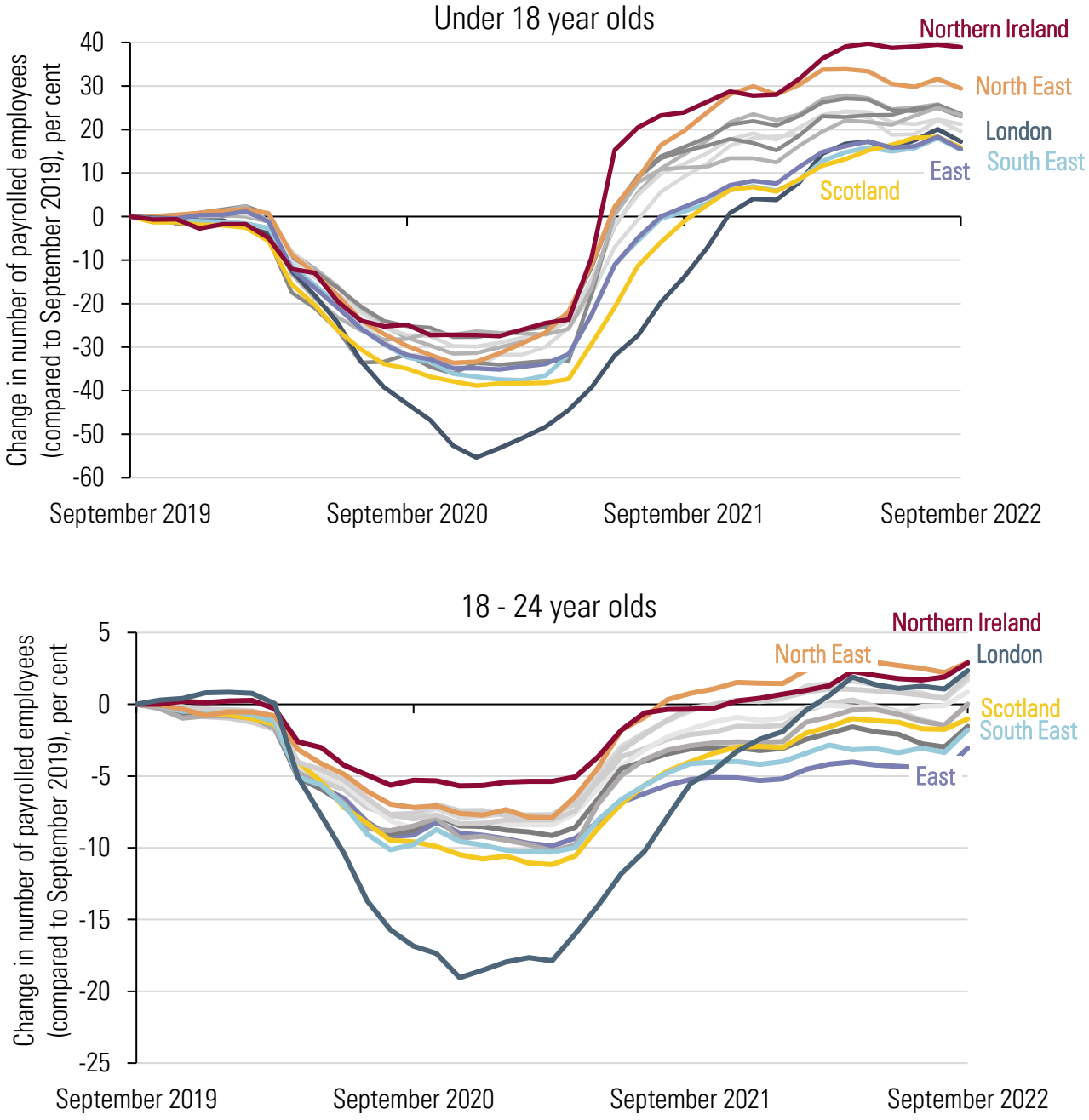


Source: LHS: LPC estimates using LFS microdata, quarterly, not seasonally adjusted, 2019 Q2 – 2022 Q2. RHS: LPC estimates using ONS data: RTI payrolled employees, monthly, seasonally adjusted, September 2019 – September 2022.
Note: Payrolled employee numbers are not adjusted for the size of the total population. LFS figures suggest that the UK population of 16-17 year olds grew by around 5 per cent between 2019 Q2 and 2022 Q2, while the population of 18-24 year olds fell by around 3 per cent over the same period.

5.8 Within the UK, Northern Ireland saw the largest percentage increase in the number of young employees (Figure 5.2), with high demand also reflected in high pay increases in the region (Figure 5.8 below). This continues a trend of growing youth employment in Northern Ireland over the last decade. For those aged under 18, regions and nations where employment was hit hardest by the pandemic, such as London and Scotland, remain at the lower end of the pack, but have still seen the number of

payrolled employees rise more than 15 per cent above pre-pandemic levels. For 18-24 year olds, the difference between regions is less marked: Northern Ireland and the North East continue to do well, while the number of employees in the East of England remains around 3 per cent below pre-pandemic levels.

Figure 5.2: Change in the number of payrolled employees aged under 18 and 18-24, by region, UK, 2019-2022

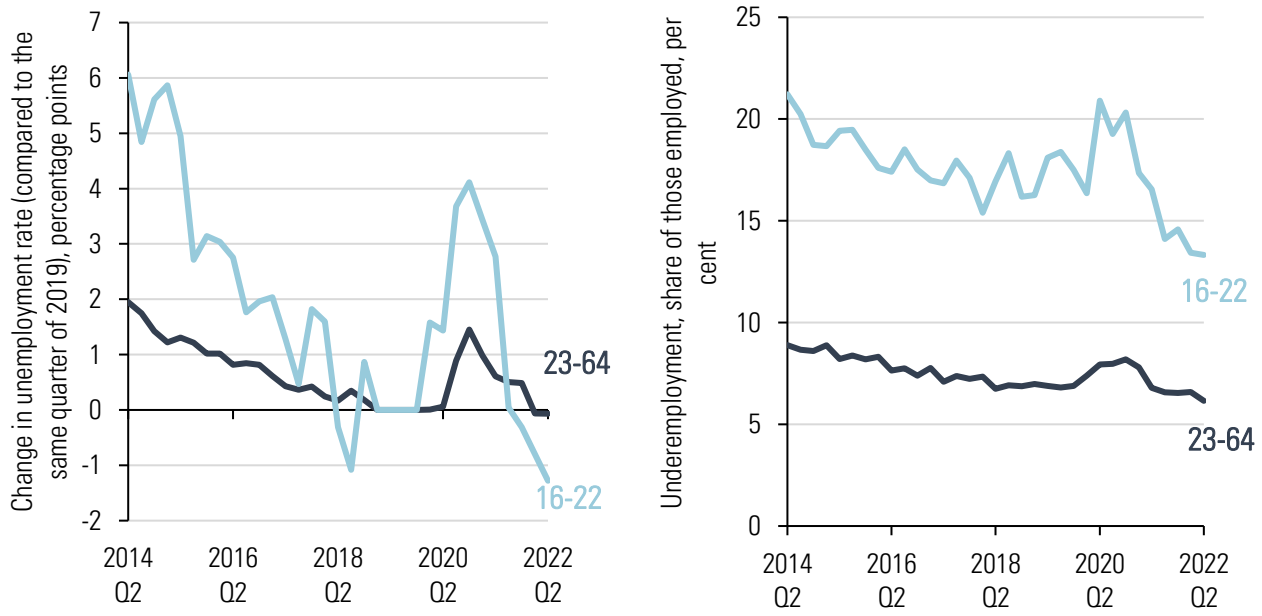


Source: LPC estimates using ONS data: RTI payrolled employees, monthly, seasonally adjusted, UK (NUTS1 region of employer), September 2019-September 2022.

5.9 At the same time, youth unemployment has fallen to historic lows. Unemployment is typically higher for young people and, following the financial crisis of 2008, youth unemployment – particularly for

men – remained elevated for a number of years. However, since 2014, there has been a persistent fall in unemployment for those aged under 23. The pandemic did cause a spike in unemployment, but this was short lived and young people quickly returned to a pattern of decreasing unemployment (Figure 5.3). Underemployment, which can be a sign of disguised unemployment, has also fallen considerably since the pandemic.

Figure 5.3: Change in unemployment rate compared to the same quarter of 2019 (LHS) and underemployment rate (RHS), by age, UK, 2014 - 2022



Source: LPC estimates using LFS microdata, quarterly, not seasonally adjusted, UK, 2014 Q2 – 2022 Q2.

5.10 While the employment rate looks at the share of the whole population that is in work, the unemployment rate is measured as the share only of those who are in the labour market – that is, who are employed or looking for a job. It does not take into account those who are not in the labour market (inactive). Because a large (and changing) share of the youth population is in full-time education, and so more likely to be inactive, this standard measure of unemployment can fluctuate more for young people than for older populations. We therefore consider two associated measures in this chapter: unemployment as a share of the total youth population (Table 5.2), which has also decreased between 2019 and 2022, and the share of the youth population that is not in employment, education or training (NEET), who face particular risks to their future career prospects. As discussed in paragraphs 5.36 onwards, the share of young people who are NEET has also been falling overall, but this positive picture is tempered by less promising longer-term trends for young men.

5.11 The changes in youth employment precipitated by the pandemic and the ensuing tight labour market have been accompanied by changes in participation in education for young people. Enrolment in education has been increasing for some time, but the pandemic saw a step-change as young people sheltered from the limited opportunities in the labour market by remaining in or returning to education. As of June 2022, enrolment in full-time education remained above pre-pandemic levels for under 23 year olds (Table 5.1). This increase in enrolment has been most pronounced for 18-20 and 21-22 year olds, with both groups seeing a 3.1 percentage point shift into enrolment in full-time education.

5.12 The change in enrolment in education also explains some of the drop-off in employment rates since the beginning of 2022. Young people in education are less likely to participate in the labour market than young people not in full-time education. Increases in employment at the end of 2021 were driven largely by increased labour force participation amongst young people in education. Since then, labour market participation of this group has fallen back to 2019 levels and with a greater share of young people in education, this brings overall participation rates down (Table 5.2).

Table 5.1: Share of total population aged 16-22 enrolled in full-time education, 2019 – 2022

	In full-time education				Not in full-time education			
	Employed	Inactive	Unemployed	Total	Employed	Inactive	Unemployed	Total
2019 Q2	15.4	37.0	2.5	54.9	32.3	8.2	4.7	45.1
2022 Q2	16.0	39.2	3.0	58.3	30.2	8.4	3.1	41.7
Change (ppt)	0.6	2.2	0.6	3.4	-2.1	0.2	-1.5	-3.4

Source: LPC estimates using LFS microdata, quarterly, not seasonally adjusted, UK, 2019 Q2-2022 Q2. Figures may not sum due to rounding.

Table 5.2: Labour force participation rate, employment and unemployment, by enrolment in full-time education, 16-22 year olds, UK, 2019-2022

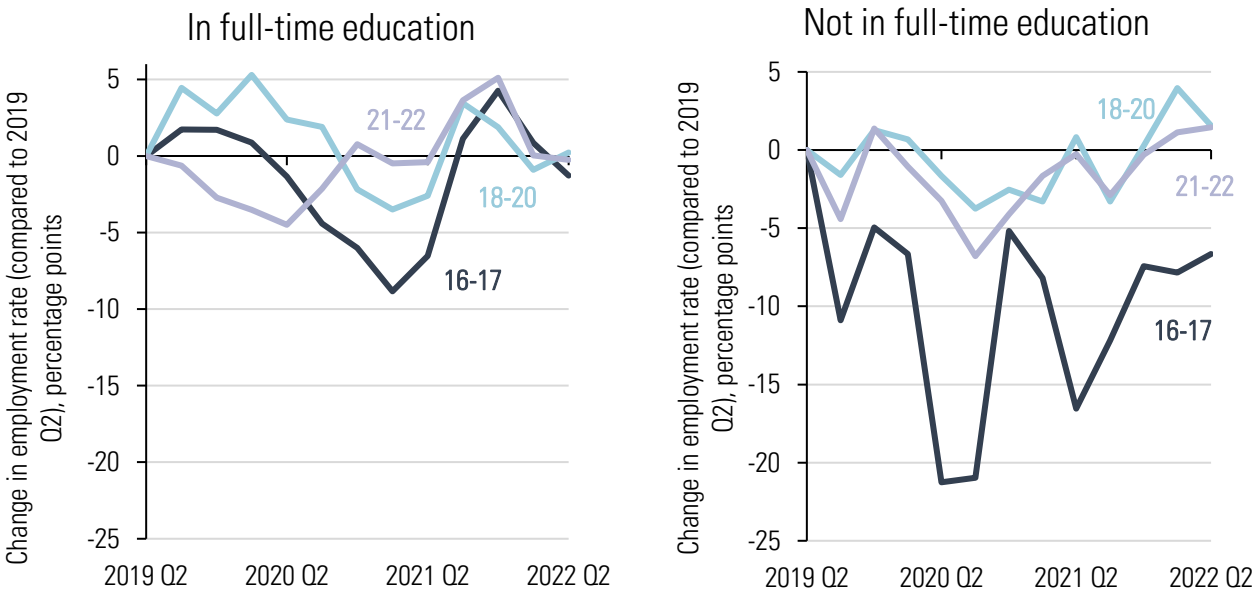
	Participation rate	Employment rate	Unemployment (see note)
In full-time education			
2019 Q2 (per cent)	32.5	28.0	4.5
2022 Q2 (per cent)	32.7	27.5	5.2
Change (ppt)	0.1	-0.5	0.7
Not in full-time education			
2019 Q2 (per cent)	81.8	71.4	10.4
2022 Q2 (per cent)	79.8	72.3	7.5
Change (ppt)	-2.0	0.9	-2.8
Total			
2019 Q2 (per cent)	54.8	47.6	7.1
2022 Q2 (per cent)	52.4	46.2	6.2
Change (ppt)	-2.4	-1.5	-1.0

Source: LPC estimates using LFS microdata, quarterly, not seasonally adjusted, UK, 2019 Q2-2022 Q2. Figures may not sum due to rounding.
Note: Unemployment is shown as a share of the relevant population (the 'u-pop rate'). This is different to the unemployment rate, which is calculated as a share of those participating in the labour market only. The participation rate is equal to the sum of the employment rate and the u-pop rate.

5.13 Table 5.2 and Figure 5.4 show that when we break down the age groups by whether they are enrolled in full-time education, employment rates for almost all groups are now very close to where they were before the pandemic. The exception to this is the group of 16-17 year olds not in full-time education, where reductions in employment are driven primarily by increases in inactivity. This is a very small group and as such estimates using the LFS are somewhat volatile. Many of those in this group are also enrolled in other types of (non-full-time) education and there has not been a corresponding increase

in the share of NEET 16-17 year olds, which remains lower than 2019. However, we are aware of the risk of some young people falling behind or remaining disengaged with both education and the labour market following school shutdowns during the pandemic. We discuss trends in inactivity further in paragraph 5.38 onwards.

Figure 5.4: Change in employment rate, by enrolment in full-time education and age, UK, 2019-2022



Source: LPC estimates using LFS microdata, quarterly, not seasonally adjusted, UK, 2019 Q2 – 2022 Q2.

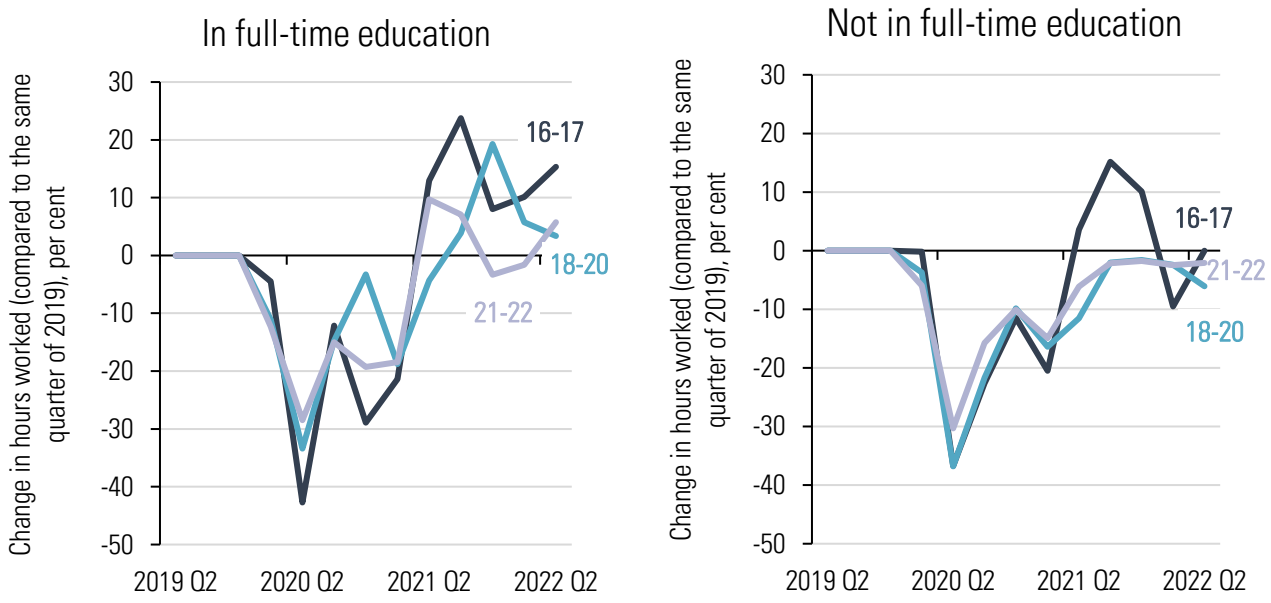
5.14 Changes in education enrolment also affect the hours that young people work. On average, young people are working fewer hours than before the pandemic. This is mainly a compositional effect due to more young people being in full-time education (Table 5.3). However, in Figure 5.5, we see that those in education are now working more hours than before the pandemic, while those not in education are working slightly fewer hours. For 16-17 year olds, both groups saw a peak in hours worked towards the end of 2021, in the lead-up to the peak in their employment rate. This again indicates the increased demand for their labour over that period as employers faced a reduced supply of older workers in low-paying sectors. We look at this further by sector in Figure 5.16 below.

Table 5.3: Mean hours worked per week, by age and enrolment in education, 16-22 year olds, UK, 2019-2022

	In full-time education			Not in full-time education		
	16-17	18-20	21-22	16-17	18-20	21-22
2019 Q2 (hours)	9.1	13.6	17.2	24.8	31.3	32.6
2022 Q2 (hours)	10.5	14.1	18.2	24.8	29.4	31.9
Change (hours)	1.4	0.5	1.0	0.0	-1.9	-0.6

Source: LPC estimates using LFS microdata, quarterly, not seasonally adjusted, 16-22 population, 2019 Q2-2022 Q2. Hours worked in main job.

Figure 5.5: Change in average hours worked, by age and enrolment in full-time education, UK, 2019-2022



Source: LPC estimates using LFS microdata, quarterly, not seasonally adjusted, UK, 2019 Q2 – 2022 Q2. Hours worked in main job.

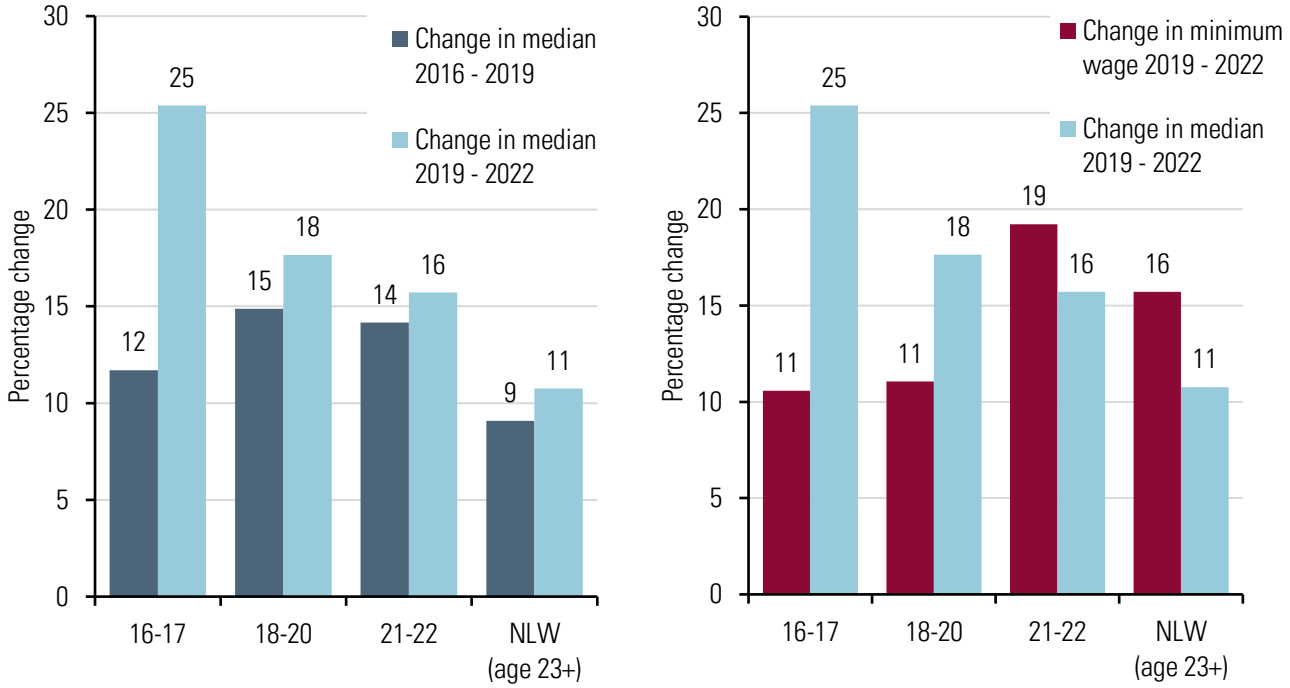
The tight labour market has pushed young people's pay up faster than adults' and the youth minimum wage rates

5.15 Hourly pay for young people grew sharply between April 2019 and April 2022. For 16-20 year olds, median hourly pay grew much faster than their minimum wage rates. This points to the importance of the tight labour market and intense competition for workers in pushing up pay for young people, rather than pay increases being driven by the minimum wage.

5.16 It remains common – although not universal – for employers to tell us they do not use the youth rates; increasingly, we have heard that the difficulty of recruiting staff in a tight labour market is a factor in this. Unite told us that, as a result of the recruitment crisis, 'hospitality employers are now struggling to fill labour gaps and have begun paying between £12 to £14 to more experienced workers to recruit and retain staff. This is removing age differentials in pay because experience and age have bottomed out.'

5.17 As with employment increases, 16-17 year olds stand out. They saw their median hourly pay increase by 25 per cent between 2019 and 2022 – more than double the minimum wage increase of 11 per cent over the same period. This growth was also more than double the 12 per cent growth seen in the previous three years (2016 – 2019) and equated to the highest cash increase in median hourly pay for any group, at £2.53.

Figure 5.6: Change in median hourly pay, 2016-2022 (LHS) and change in median pay compared with change in minimum wage rates (RHS), by age, UK, 2019-2022

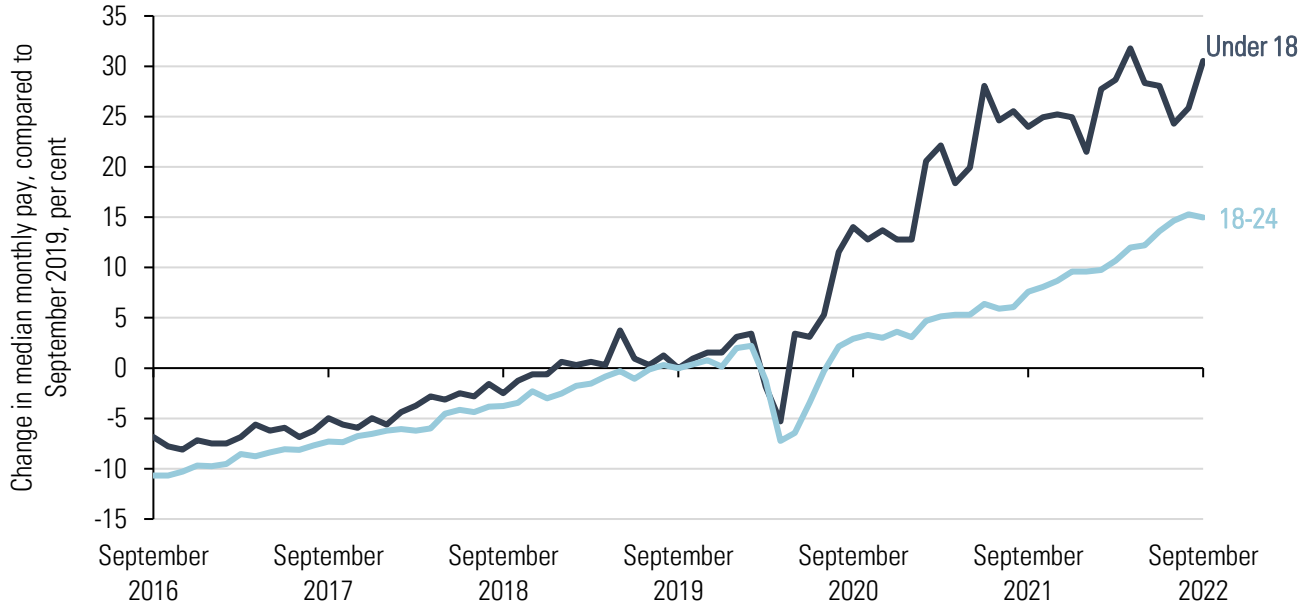


Source: LPC analysis of ASHE, standard SOC 2020 weights, 16 + population, UK, 2016-2019 and LPC data on minimum wage rates, 2019-2022. Pre-2020 figures are chain linked so they are comparable with later figures. Excludes workers eligible for the Apprentice Rate.

5.18 21-22 year olds also experienced stronger pay growth between 2019 and 2022 than they had over the previous three years, although growth was slightly lower than for other groups of young people. Growth in 21-22 year olds' median wages did not keep up with growth in their minimum wage rate, but this is because we have recommended large increases in the minimum wage for 21-22 year olds to prepare for their entitlement to the NLW in 2024.

5.19 Median monthly pay, as measured in the administrative RTI data, has outpaced growth in hourly pay – as measured by ASHE – for those aged under 18, growing by 32 per cent between April 2019 and April 2022. For 18-24 year olds, growth in monthly pay lagged behind growth in hourly pay, with monthly pay growth broadly remaining on the trajectory it was on in the years prior to the pandemic (Figure 5.7). Some of the pay growth in 2020 and 2021 was due to compositional effects, as employment in lower-paid jobs fell more during the pandemic, however as employment is now close to pre-pandemic levels, these compositional effects will be less apparent. Instead, recent patterns of growth reflect both rising hourly pay and the changing trends in hours worked (Figure 5.5). Those aged under 18 were working increased hours towards the end of 2021 and the first half of 2022, while 18-24 year olds have been working fewer hours on average than before the pandemic. This is partly because of increased enrolment in education. In paragraphs 5.45-5.49, we also discuss research that found reduced hours for 23-24 year olds over this period.

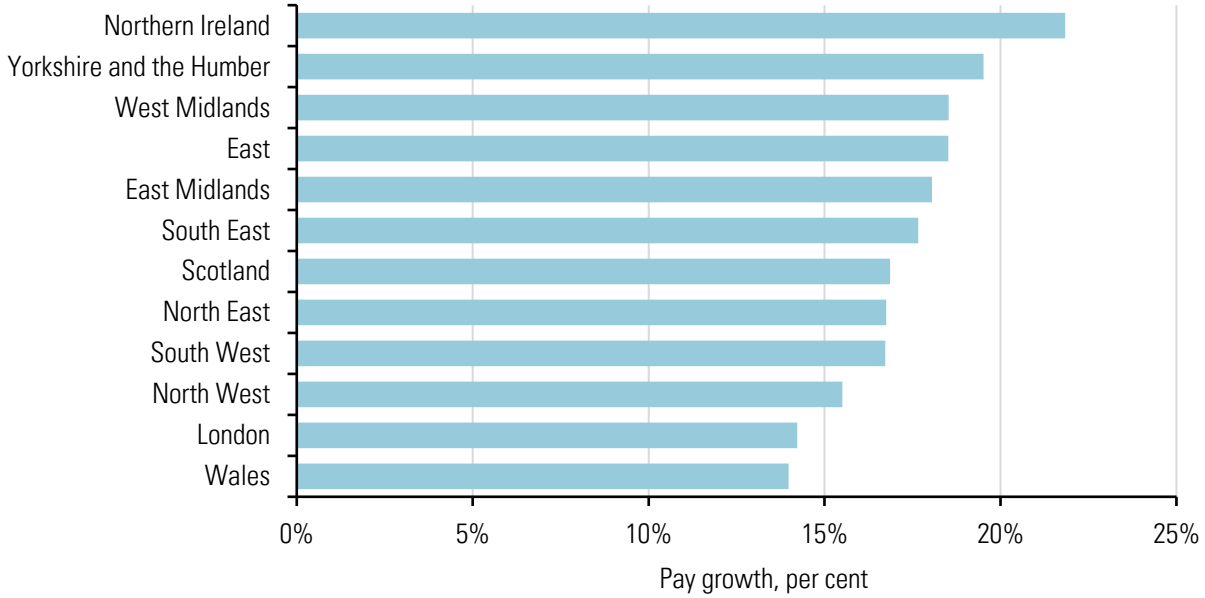
Figure 5.7 : Change in median monthly pay, under 25 year olds, UK, 2016-2022



Source: LPC estimates using ONS data: RTI payrolled employees, monthly, seasonally adjusted, September 2016-September 2022.

5.20 When looking at differences in pay growth between regions and nations of the UK, strong employment growth in Northern Ireland has also translated into high pay growth: workers under 23 in Northern Ireland saw median pay grow by more than 20 per cent between 2019 and 2022, going some way to closing the gap between the lowest and highest-paying regions. At the other end of the scale, London and Wales have seen relatively low pay growth over the last three years (below 15 per cent).

Figure 5.8: Change in median hourly pay, employees aged 16-22, by regions and countries of the UK, 2019-2022



Source: LPC analysis of ASHE, standard SOC 2020 weights, 16-22 population, UK (NUTS1 region of employer), 2019-2022. Pre-2020 figures are chain linked so they are comparable with later figures. Excludes workers eligible for the Apprentice Rate.

Young people's pay has grown in real terms since 2019, but their minimum wage rates have not

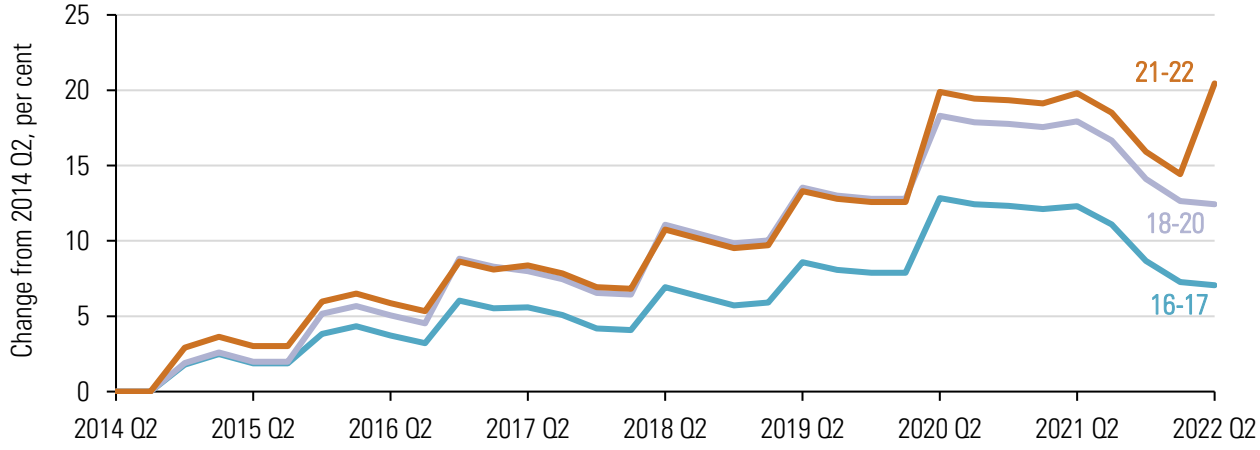
5.21 Younger workers also stand out from workers aged 23-64 as having experienced real growth in their median pay (i.e. growth after adjusting for inflation) between April 2019 and April 2022. As shown in Table 5.4, growth in median hourly wages for those under 23 outpaced growth in the Consumer Price Index (CPI), as well as growth in inflation adjusted to reflect the expenditure patterns of low income households (CPIH-equivalent for bottom decile of households by income). While median wages for young people were keeping up with inflation, the same was not true of minimum wages. Following the unexpectedly high inflation in 2022, all groups except 21-22 year olds saw a fall in the real value of the minimum wage.

Table 5.4: Summary of key measures of hourly pay and prices, youth rate populations, 2019-2022

Measure	April 2019	April 2022	Change	Percentage change
Median hourly pay: 16-17 year olds	£6.14	£7.70	£1.56	25.4
Median hourly pay: 18-20 year olds	£8.27	£9.73	£1.46	17.6
Median hourly pay: 21-22 year olds	£9.20	£10.65	£1.45	15.7
Minimum wage: 16-17 year olds	£4.35	£4.81	£0.46	10.6
Minimum wage: 18-20 year olds	£6.15	£6.83	£0.68	11.1
Minimum wage: 21-22 year olds	£7.70	£9.18	£1.48	19.2
Consumer Price Index (CPI, April 2019=100)	100	111.5	11.5	11.5
Consumer Price Index including Housing costs (CPIH, April 2019=100)	100	110.5	10.6	10.6
CPIH-equivalent for bottom decile of households by income (April 2019=100)	100	113.5	13.6	13.6

Source: LPC analysis of ASHE, 16-22 year old population, UK, 2019-2022. Pre-2020 figures are chain linked so they are comparable with later figures. Excludes workers eligible for the Apprentice Rate. ONS CPI Index (D7BT), ONS CPIH Index (L522) and ONS CPIH-equivalent indices (democratic weightings).

Figure 5.9: Change in the real value of NMW youth rates, by rate, UK, 2014-2022

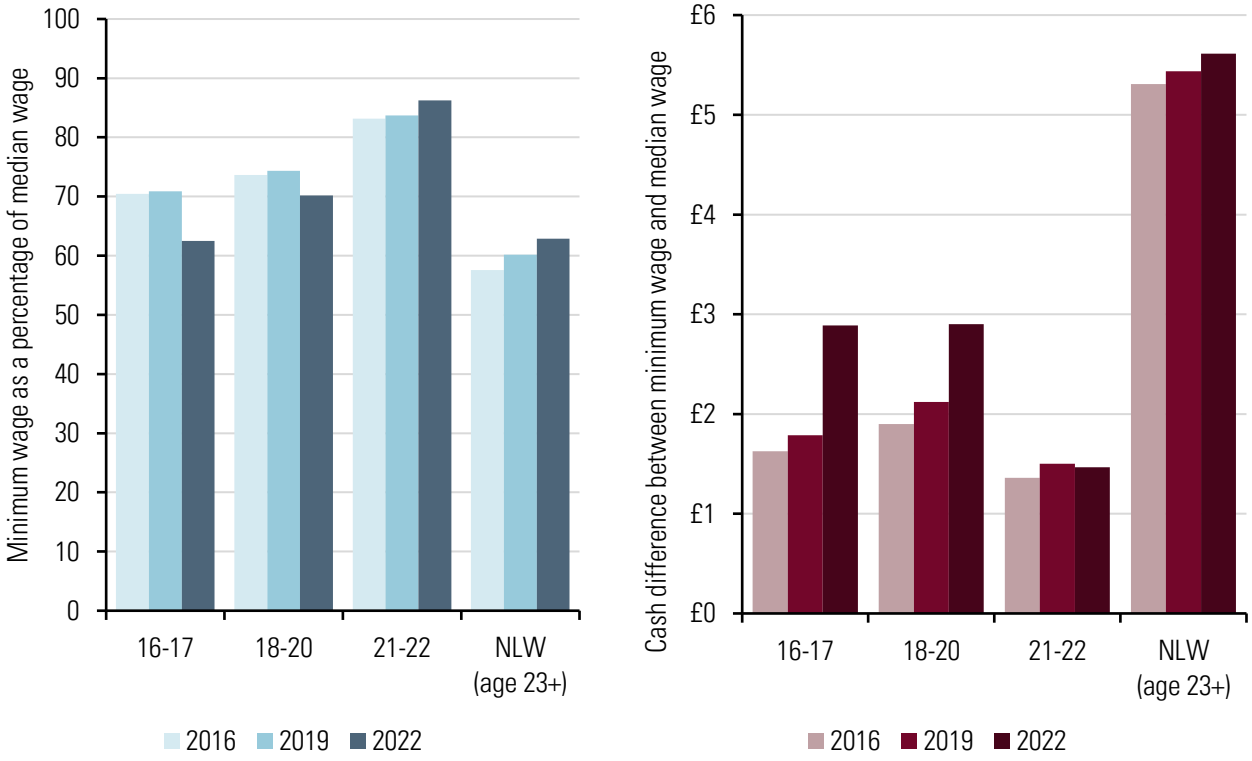


Source: LPC estimates using ONS CPI inflation data (D7BT), quarterly, and LPC data on minimum wage rates.
Note: Age-related rates of the minimum wage; the minimum wage for apprentices in their first year and for apprentices aged 18 and under differs from the age-related minimum wage rate.

Hourly wages rising faster than the minimum wage for 16-20 year olds means the bite of the minimum wage has fallen for these workers

5.22 With median hourly wages rising faster than the minimum wage for 16-20 year olds, the bite of the minimum wage – the minimum wage as a percentage of the median wage – has fallen for these workers. The minimum wage is now just above 60 per cent of the median for 16-17 year olds and 70 per cent of the median for 18-20 year olds, down from 71 and 74 per cent respectively in 2019.

Figure 5.10: Bite of the minimum wage (LHS) and cash difference between minimum wage and median wage (RHS), by age, UK, 2016-2022

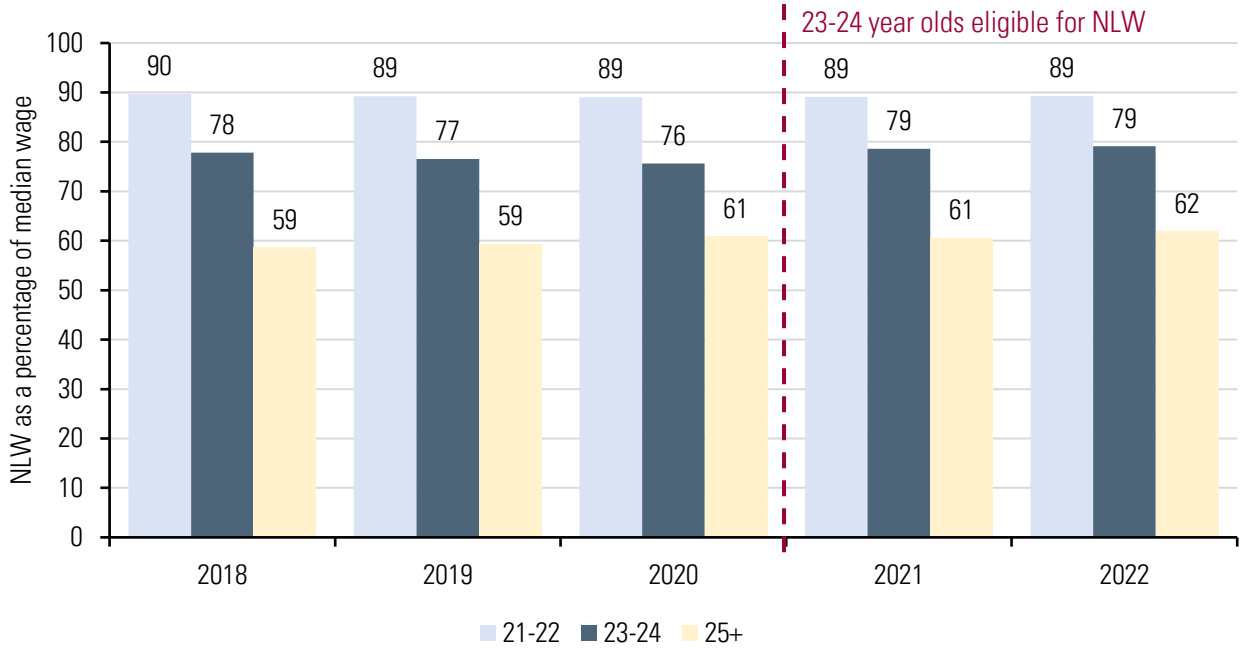


Source: LPC analysis of ASHE, standard SOC 2020 weights, 16+ population, 2016-2022. Pre-2020 figures are chain linked so they are comparable with later figures. Excludes workers eligible for the Apprentice Rate.
Note: Bites are measured at April. They will change throughout the year due to growth in median pay.

5.23 For 21-22 year olds, the bite of the minimum wage has increased over the same period, from 84 to 86 per cent of the median. This is due to much higher rises in the minimum wage rate for this age group as we continue to move them closer to the NLW and we expect the bite to continue to increase.

5.24 The current NLW is around 89 per cent of the median hourly wage for 21-22 year olds. As shown in Figure 5.11, this is higher than the bite of the NLW for 23-24 year olds when they became entitled to it in April 2021, although only 3 percentage points above the bite of the current minimum wage for the 21-22 age group. The bite of the NLW for 21-22 year olds has also remained remarkably consistent over time. This may reflect the large share of 21-22 year olds that are already paid at or close to the NLW rate (see Figure 5.12).

Figure 5.11: Bite of the NLW, by age group, UK, 2018-2022



Source: LPC analysis of ASHE, standard SOC 2020 weights, 21+ population, 2018-2022. Pre-2020 figures are chain linked so they are comparable with later figures. Excludes workers eligible for the Apprentice Rate.
Notes:

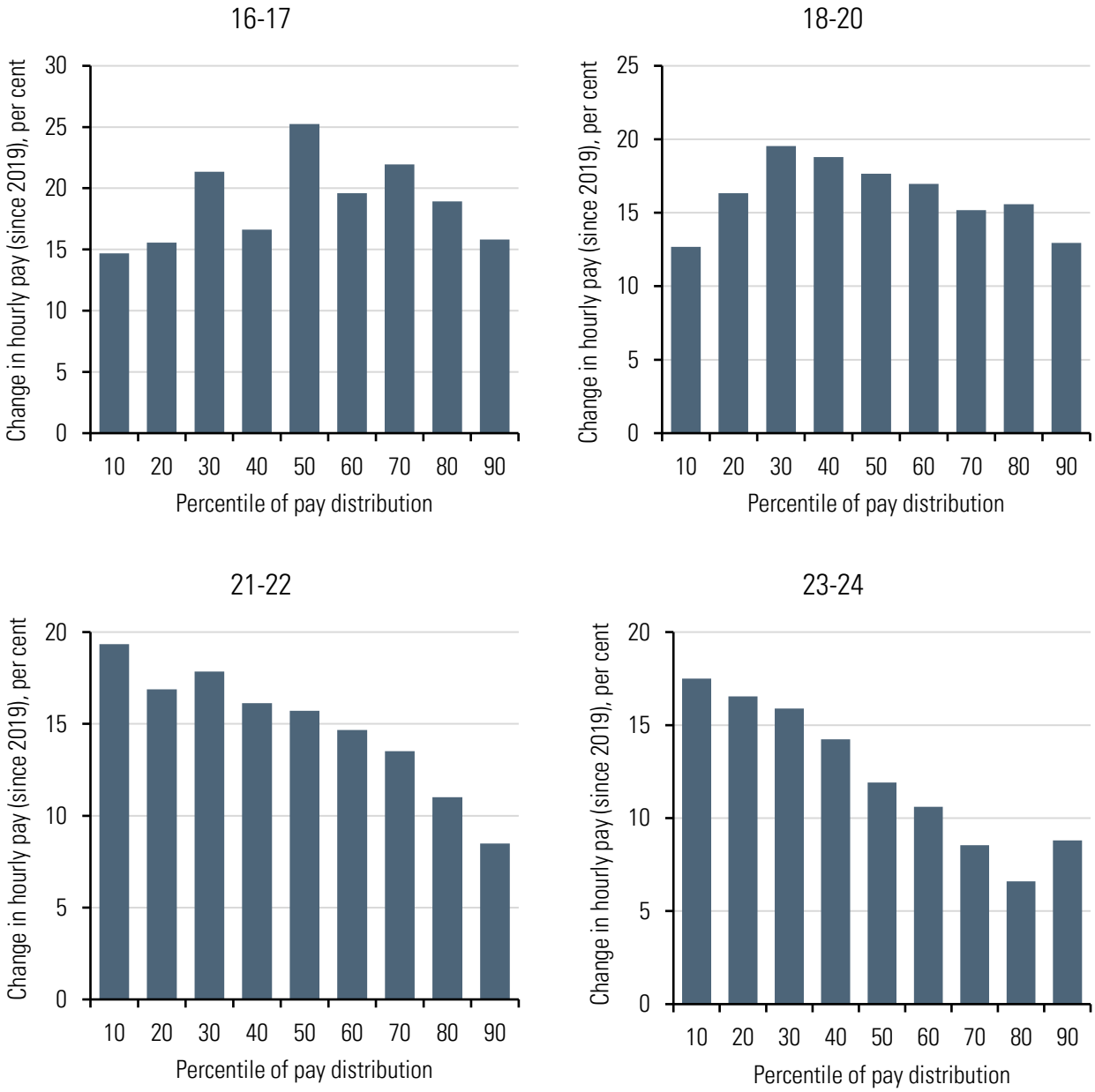
a. Bites are measured at April. They will change throughout the year due to growth in median pay
b. Central pay estimates are used for 2020 and 2021; pay data for these years is more uncertain due to the impact of the pandemic.

Pay rises for young people mean fewer are covered by their minimum wage rate

5.25 In the latest earnings data, we have seen pay growth across the whole distribution of young people's pay, with young workers being increasingly paid at rates above their own age rate. Figure 5.12 shows that for 16-20 year olds, growth between 2019 and 2022 has been strongest around the middle of the distribution, where wages were already above the minimum wage in 2019. Meanwhile, 21-22 year olds show a pattern more typical of wage changes led by the minimum wage, and similar to 23-24 year olds, with the highest growth at the bottom of the distribution. This demonstrates the importance of the tight labour market in pushing up wages for 18-20 year olds and the diminishing importance of their minimum wage rates. Of course, the distribution of wages for young people remains much narrower overall than that for older workers, with wages at the 90th percentile typically being less than twice those at the 10th percentile.

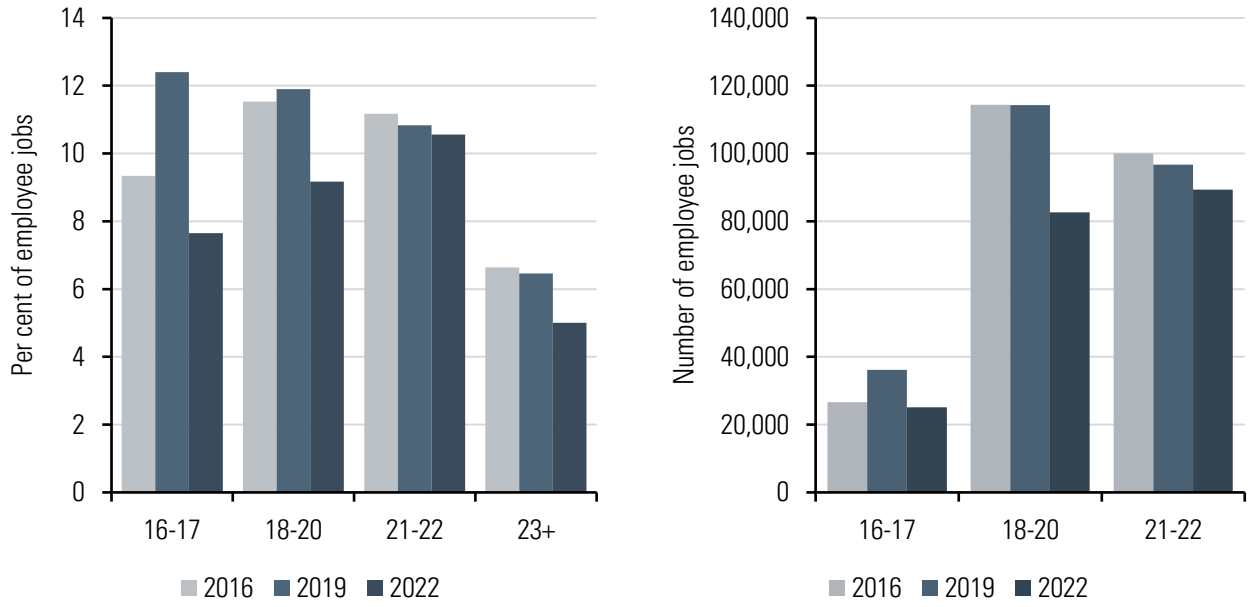
5.26 This means that coverage of minimum wages – the number of people paid within five pence of the rates or below – has decreased, while the share of young people paid at rates at or above their own (including at or above the NLW) has increased. This is also the case for 21-22 year olds, despite the bite of the minimum wage having increased, although decreases in coverage for this group have been small compared with those for younger workers (Figure 5.13).

Figure 5.12: Change in hourly pay across the pay distribution, 16-24 year olds, by age, UK, 2019-2022



Source: LPC analysis of ASHE, standard SOC 2010 and SOC 2020 weights, 16-24 population, 2019-2022. 2019 and 2022 figures are not chain linked and growth at the median may differ slightly from that quoted elsewhere in this report (see Appendix 3 for a discussion of chain linking). Excludes workers eligible for the Apprentice Rate.

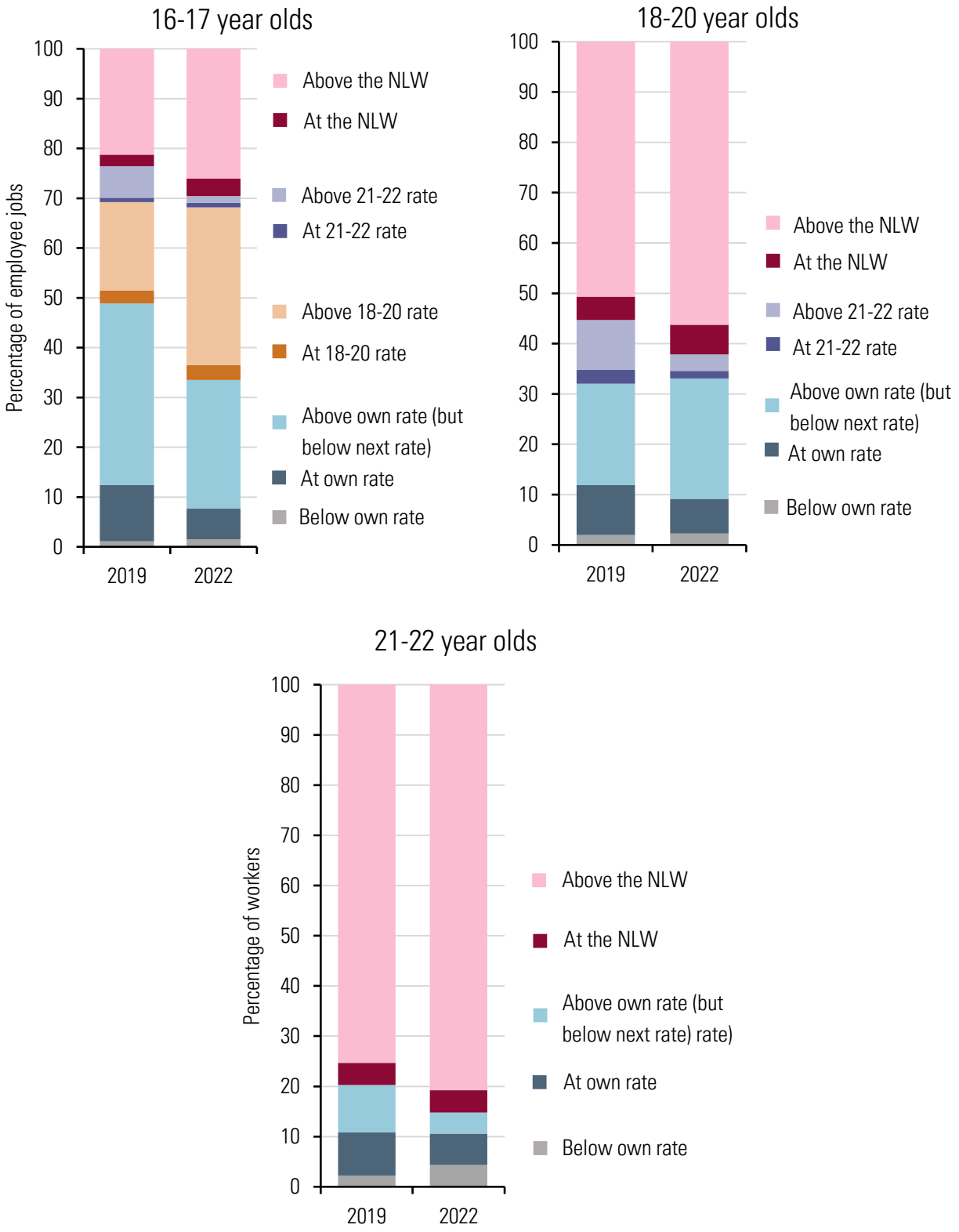
Figure 5.13: Coverage of the minimum wage: share of employee jobs (LHS) and number of employee jobs (RHS), by age, UK, 2016-2022



Source: LPC analysis of ASHE, low pay SOC 2010 and SOC 2020 weights, 16+ population, 2016-2022. Figures before 2021 are not chain linked (see Appendix 3 for a discussion of chain linking). Excludes workers eligible for the Apprentice Rate.
Note: A job is defined as covered by the minimum wage if it is paid less than 5 pence above the rate. This includes those paid below the minimum wage. Coverage is measured at April of each year, immediately after the change in minimum wage rates. It typically decreases over the year as wages increase.

5.27 Figure 5.14 demonstrates the growing share of young workers who are paid at or above the NLW, as well as at minimum wage rates above their own. For 16-17 year olds, effective coverage (i.e. the share paid less than the next minimum wage rate) is now around a third of workers, down from nearly half in 2019. For 18-20 year olds, effective coverage remains similar to 2019, but the share paid at or above the NLW has increased to 62 per cent (from 56 per cent in 2019). It has also become increasingly common for 21-22 year olds to be paid the NLW or above, with the share now reaching 85 per cent (up from 79 per cent in 2019). Despite the overall picture of rising wages and shrinking coverage, the amount of underpayment recorded in ASHE has increased this year. This is most striking for 21-22 year olds, where underpayment has nearly doubled compared with 2019.

Figure 5.14: Coverage of different minimum wage rates, 16-22 year olds, UK, 2019-2022



Source: LPC analysis of ASHE, low pay SOC 2010 and SOC 2020 weights, 16-22 population, 2016-2022. Figures before 2021 are not chain linked and so coverage figures may differ slightly from those in Chapter 10 (see Appendix 3 for a discussion of chain linking). Excludes workers eligible for the Apprentice Rate.
Note: A job is defined as 'at' a minimum wage if it is paid between the rate and 5 pence above the rate.

5.28 The high share of young workers paid above their own minimum wage rates in Figure 5.14 aligns with what we have heard from stakeholders. For example, Make UK told us that pay in manufacturing was determined by role rather than age. 'There is low awareness among employers in the sector of the youth rates as the higher-level NMW or NLW rates are usually regarded as the base rate for all workers'. The Food and Drink Federation (FDF) also told us that, as in previous years, they do not use the youth rates and pay is determined by skill not age. Community Leisure UK told us that most of its members pay all staff the NLW regardless of age because of the tight labour market. However, as members seek to have a small, productive workforce, younger workers with less experience may lose out on these positions.

5.29 The Federation of Small Businesses (FSB) told us that most small businesses reported paying the NLW to all workers aged 21 or over, although they noted that some sectors, such as retail, do use the 21-22 Year Old Rate. UKHospitality (UKH) also told us that a 'good proportion of UKHospitality companies have always paid the NLW from the age of 21 believing 'the dual rate' to be harmful to employee morale and engagement as well as being an unnecessary administrative burden.'

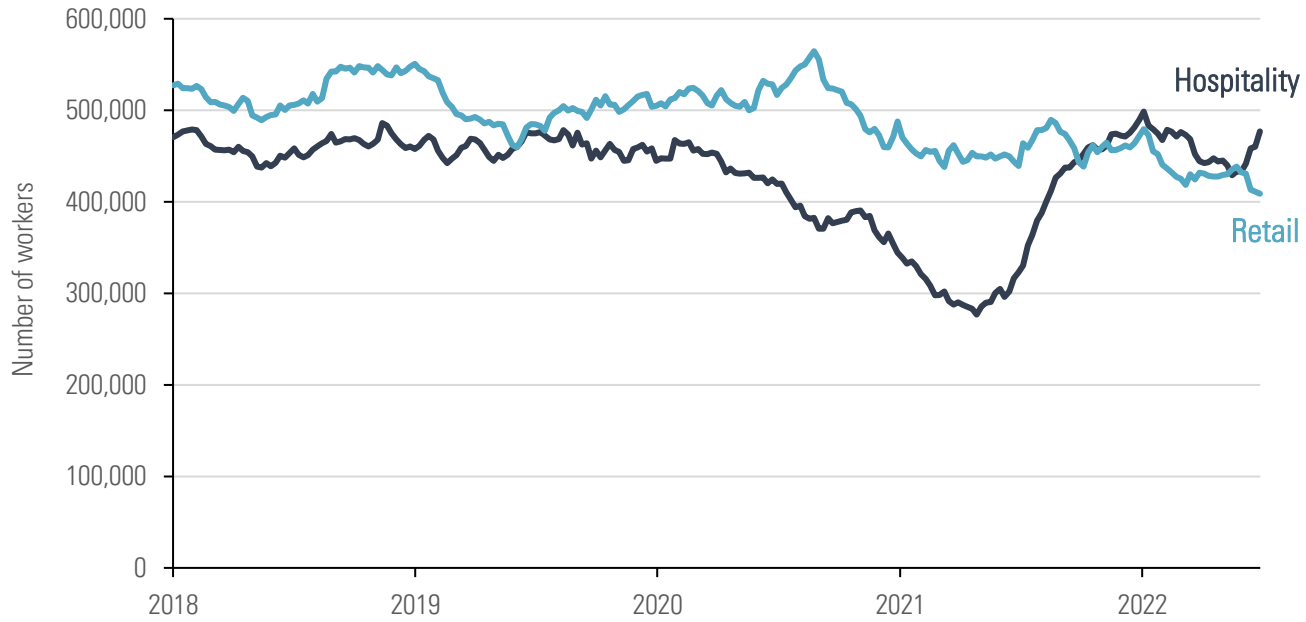
5.30 On the other hand, some sectors, such as convenience stores and hair salons, continue to use youth rates. The Association of Convenience Stores (ACS) told us that youth rates are more commonly used for those aged under 18 as they cannot do the same job as older workers (for example, they cannot serve alcohol or lottery tickets). Youth rates are less commonly used for workers aged 18-20 and even less commonly used for workers over 21 in convenience retail. The National Hair and Beauty Federation (NHBF) told us that all youth rates are used by employers but less frequently than the NLW. Around 7 per cent of its surveyed members use the 18–20 Year Old Rate while only 0.5 per cent use the 16-17 Year Old Rate. The Equestrian Employers' Association (EEA) told us that just under two-thirds of its members reported using youth rates. Young workers in Wales also told us that their recent jobs used the youth rates.

5.31 Unite told us that the youth rates are used in hospitality, including in some cases for staff with managerial responsibility. Unite reported cases where '19 year old bar managers [are] being paid almost £3 per hour less than the junior colleagues they manage despite the fact that are usually (by necessity of their role) more skilled and experienced.' But overall, they thought use of youth rates was becoming less prevalent.

Hospitality and retail remain key sectors for young workers

5.32 Hospitality has been a particularly important sector for the recovery in young people's employment. Hospitality and retail are the biggest employers of young people, employing around 38 per cent of those aged under 23 (close to 900,000 workers) and around 60 per cent of 16-17 year olds. Employers reported acute shortages in hospitality and linked this to increasing reliance on, and competition for, young workers. We also heard reports of shortages in smaller retail businesses, even from those paying above the minimum youth rates. Larger retailers, who tend to pay well above the youth minimums to young workers, were less affected. Some employers told us that one driver for wage increases were more older workers leaving the workforce. They also cautioned that if demand decreased younger workers could be the first age group to feel the consequences.

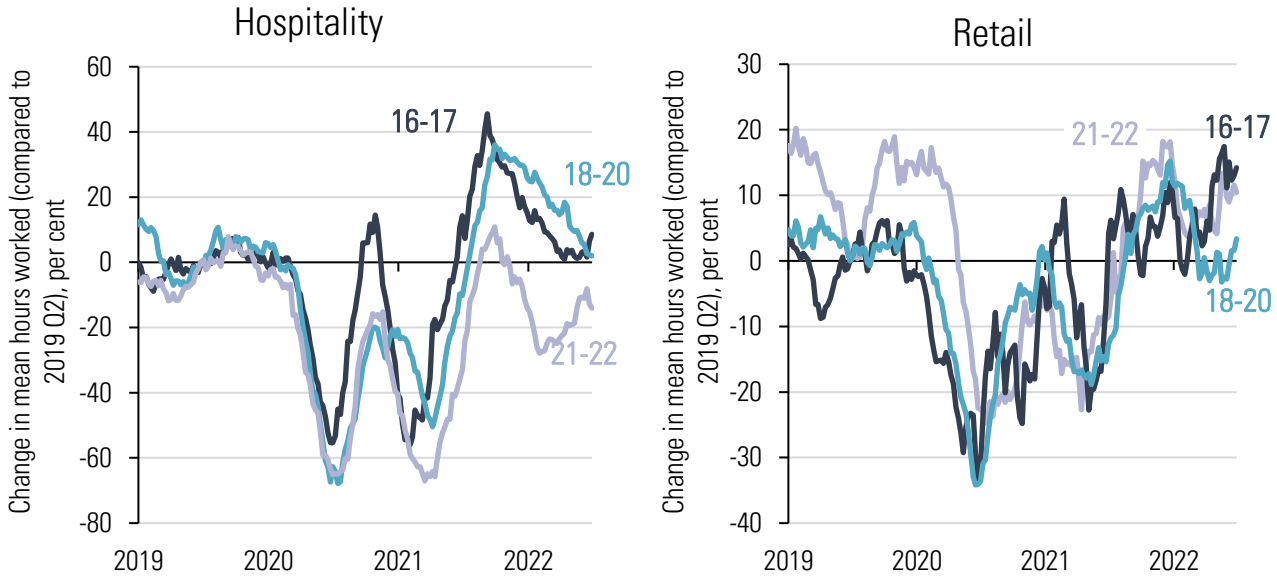
Figure 5.15: Number of workers aged under 23 in hospitality and retail occupations, UK, 2018-2022



Source: LPC estimates using LFS microdata, weekly (13-week rolling average), not seasonally adjusted, 16-22 population, UK, January 2018 – June 2022. See Appendix 4 for a full list of SOC codes included in retail and hospitality occupations.

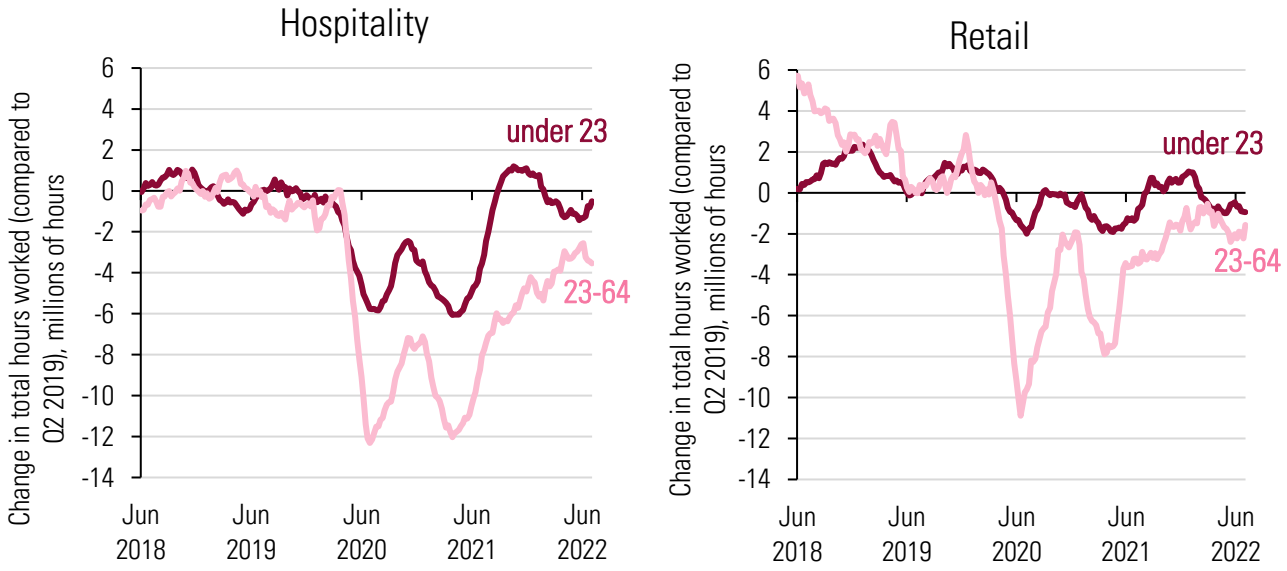
5.33 Following the lifting of lockdown restrictions, employment in hospitality rapidly increased and had surpassed pre-pandemic levels for young people by the end of 2021, partly as employers tried to make up for the lack of available workers aged 23 and over (Figure 5.15). At the same time, the average number of hours worked by young people in hospitality occupations increased steeply, reaching around 140 per cent of pre-pandemic average hours for 16-20 year olds at its peak over the summer of 2021 (Figure 5.16). Over the 13-week period to mid-September 2021, we estimate that 16-17 year olds in hospitality occupations were working 14.6 hours per week on average, compared to 10.6 in the comparable period in 2019, but with the start of the academic year this decreased. Over the same period, 18-20 year olds were working an average of 22.6 hours compared to 18.6 in 2019. We do not yet have data covering the full summer period of 2022 to see if this trend will recur. One hospitality employer we spoke to told us that the youngest workers had been working more hours than usual because of shortages.

Figure 5.16: Change in average hours worked in retail and hospitality, 16-22 year olds, by age, UK, 2019 – 2022



Source: LPC estimates using LFS microdata, weekly (13-week rolling average), not seasonally adjusted, 16-22 population, UK, January 2019 – June 2022. See Appendix 4 for a full list of SOC codes included in retail and hospitality occupations.

Figure 5.17: Change in total hours worked in hospitality and retail occupations, by age, UK, 2018-2022



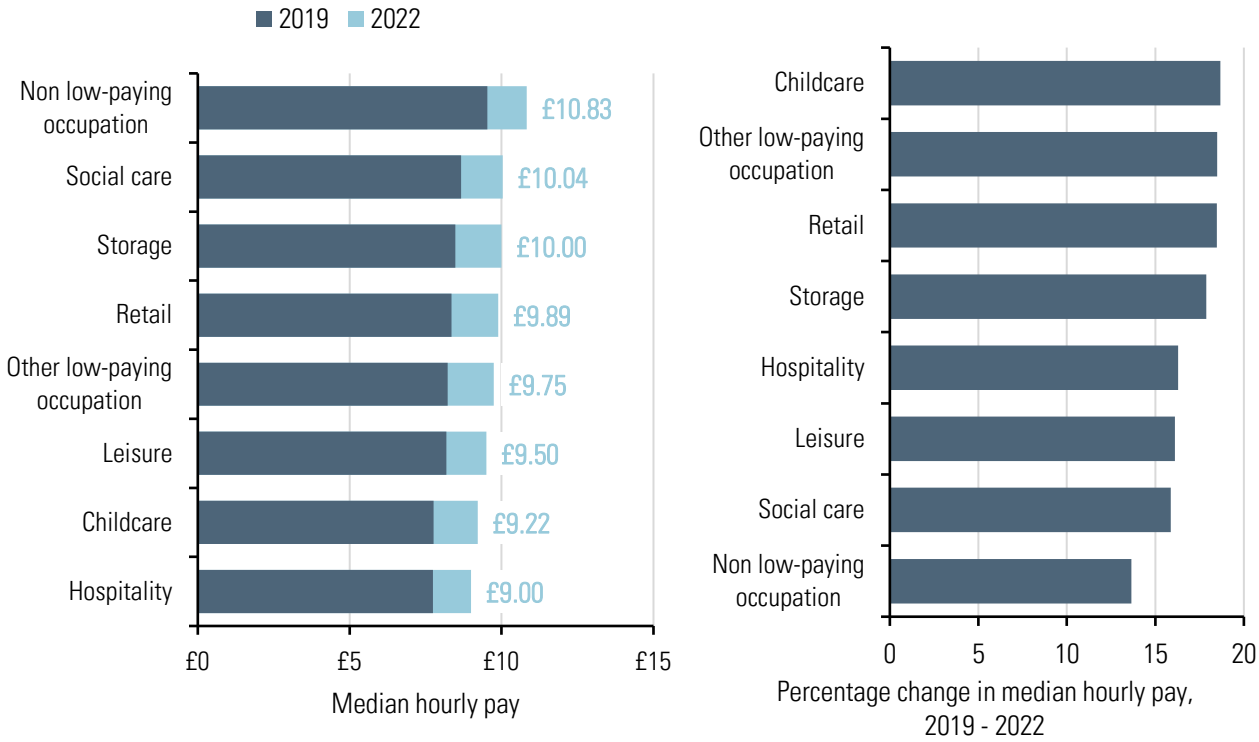
Source: LPC estimates using LFS microdata, weekly (13-week rolling average), not seasonally adjusted, 16-64 population, UK, June 2018 – June 2022. See Appendix 4 for a full list of SOC codes included in retail and hospitality occupations.
Note: Missing hours data are imputed as group mean.

5.34 As discussed in Chapter 2, employment in retail has been declining over recent years, across all age groups, although the decline has been somewhat faster for older workers. This decline has continued coming out of the pandemic. While Figure 5.16 suggests it might be partly offset by an increase in average hours worked by those in retail occupations, Figure 5.17 shows that even with increased average hours for young people, the total hours worked by those aged under 23 was not

enough to offset the lower hours worked by those aged 23 to 64. This was also the case in hospitality: even over the summer of 2021, when young people were working up to 40 per cent more hours than usual, the additional 1 million hours they supplied did not offset the 4 to 5 million fewer hours worked by 23 to 64 year olds. Since the start of the 2021-22 academic year, the total hours worked by 16 to 22 year olds have also fallen back below pre-pandemic levels. This aligns with what we heard from hospitality employers, many of whom reported having to limit their opening hours due to staff shortages.

5.35 Despite reports of particularly acute shortages in the hospitality sector, pay for young people working in hospitality occupations has seen some of the slowest growth amongst low-paying occupations and it remains one of the lowest-paid sectors. While this is partly due to an increasing share of workers aged under 18 in hospitality, which brings down the overall median, it is also due to these youngest workers seeing lower hourly pay growth than they have in other sectors, including retail. This may be because there are more limits on the tasks that can be performed by those aged under 18 in hospitality compared to other occupations. In low-paying occupations overall, the gap between 16-17 year olds and older groups of workers remains large: the difference between their median hourly pay and that of 18-20 year olds in low-paying occupations is around £2, compared with a difference of only around 50 pence between 18-20 year olds and 21-22 year olds.

Figure 5.18: Median hourly pay (LHS) and change in median hourly pay (RHS), 16-22 year olds, by occupation, UK, 2019-2022

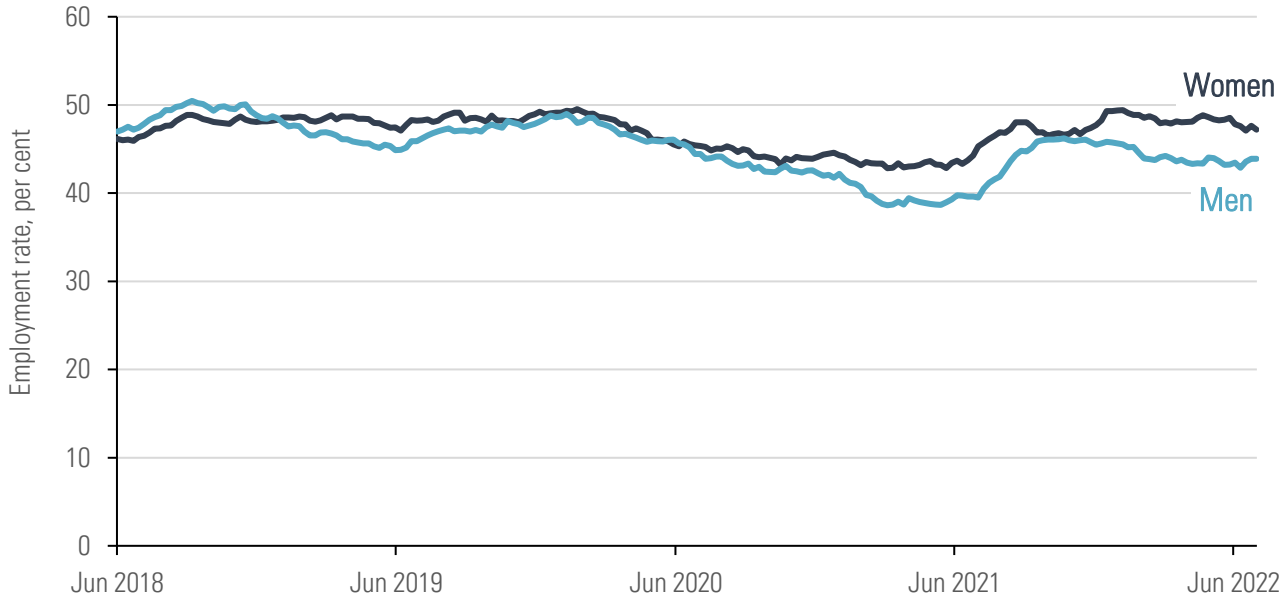


Source: LPC analysis of ASHE, standard SOC 2020 weights, 16-22 population, UK, 2019-2022. Pre-2020 figures are chain linked so they are comparable with later figures. Excludes workers eligible for the apprentice rate. See Appendix 4 for the definition of low-paying occupations.

Labour market outcomes for young men are recovering more slowly than for young women

5.36 Although the overall picture for young people is positive, not all groups have recovered so well from the pandemic. In particular, outcomes for young men lag behind those of young women. This is not purely a pandemic phenomenon: young men's employment was slower to recover following the financial crisis, and there has been a trend of increasing inactivity for young men not in full-time education. But the dip in employment experienced during the pandemic was deeper for young men and appears to have persisted (Figure 5.19).

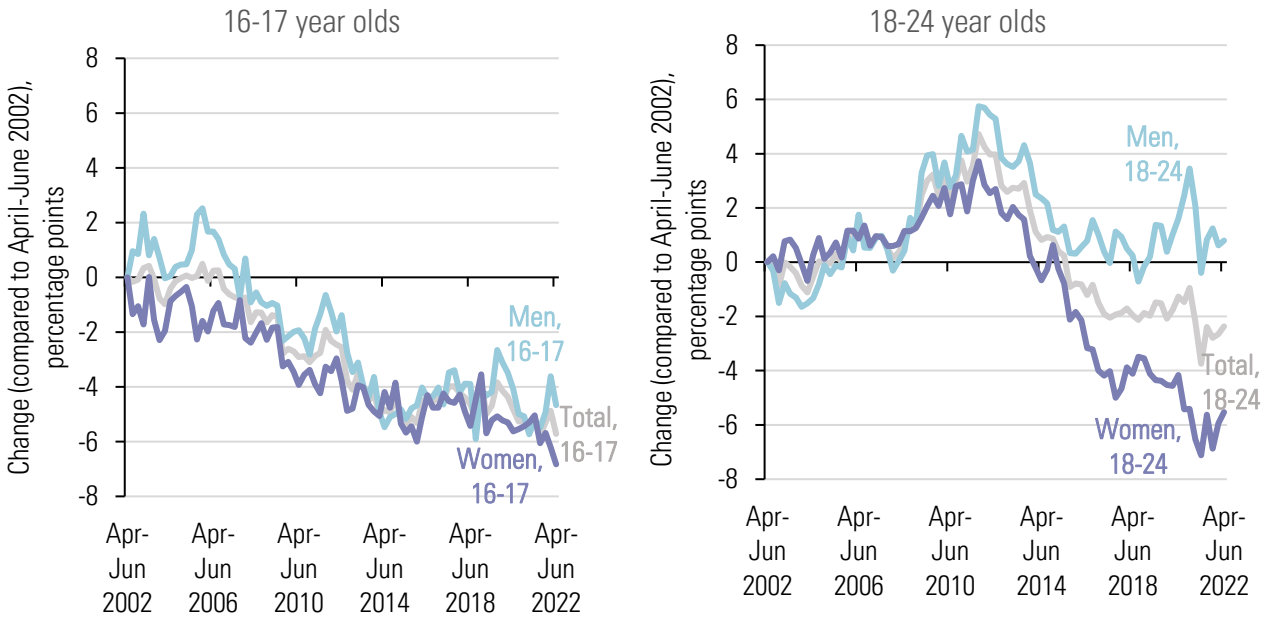
Figure 5.19: Employment rate, 16-22 year olds, by gender, UK, 2015 - 2022



Source: LPC estimates using LFS microdata, weekly (13-week rolling average), not seasonally adjusted, 16-22 population, UK, June 2018 – June 2022.

5.37 This trend is largely explained by more young men choosing to enrol in full-time education. Their enrolment rates were typically below those of young women prior to the pandemic but have now caught up. However, young men are less likely to be employed while in education than young women and those not in education have become slightly more likely to be inactive than prior to the pandemic (as have women, although to a lesser extent). This movement in inactivity reflects longer term trends and may not be specific to the pandemic: the share of young men not in education, employment or training (NEET) has remained stubbornly constant since around 2015, while falling rapidly for young women. While both young men and women aged 16-17 have seen ongoing falls in their NEET rates, for young men aged 18-24, NEET rates remain where they were 20 years ago.

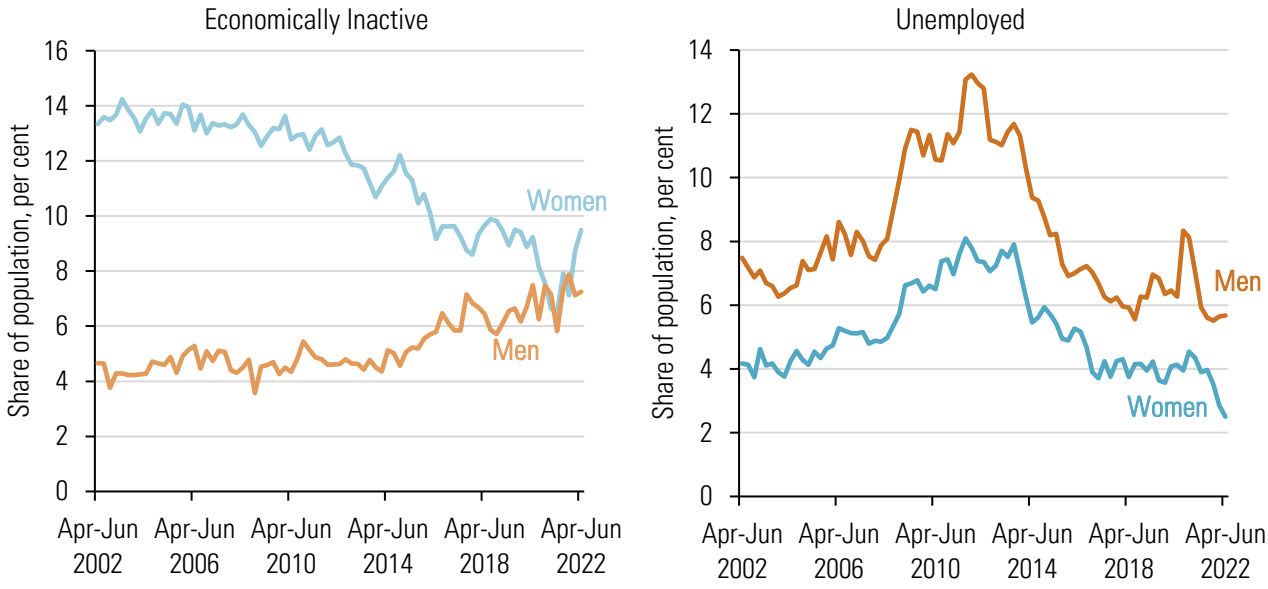
Figure 5.20: Change in the share of young people who are not in education, employment or training (NEET), by age and gender, UK, 2002-2022



Source: LPC estimates using ONS data: Not in Education, Employment or Training 'NEET'), quarterly, seasonally adjusted, 16-24 population, UK, 2002 Q2-2022 Q2.

5.38 Among NEET youth, unemployment – those who are looking for a job and are available to start but have not yet found one – has been generally falling since 2012, but this has been countered by an increasing share of young men who are NEET and inactive – that is they are not in education or employment and they are also not looking for work. Young women have historically had higher levels of inactivity; however, in 2020, the share of inactive 18-24 year old men not in education overtook the share of inactive 18-24 year old women not in education for the first time, although that has since reversed.

Figure 5.21: Young people aged 18-24 and not in education, employment or training (NEET), by gender and labour market status, UK, 2002-2022



Source: LPC estimates using ONS data: Not in Education, Employment or Training 'NEET'), quarterly, seasonally adjusted, 18-24 population, UK, 2002 Q2-2022 Q2.

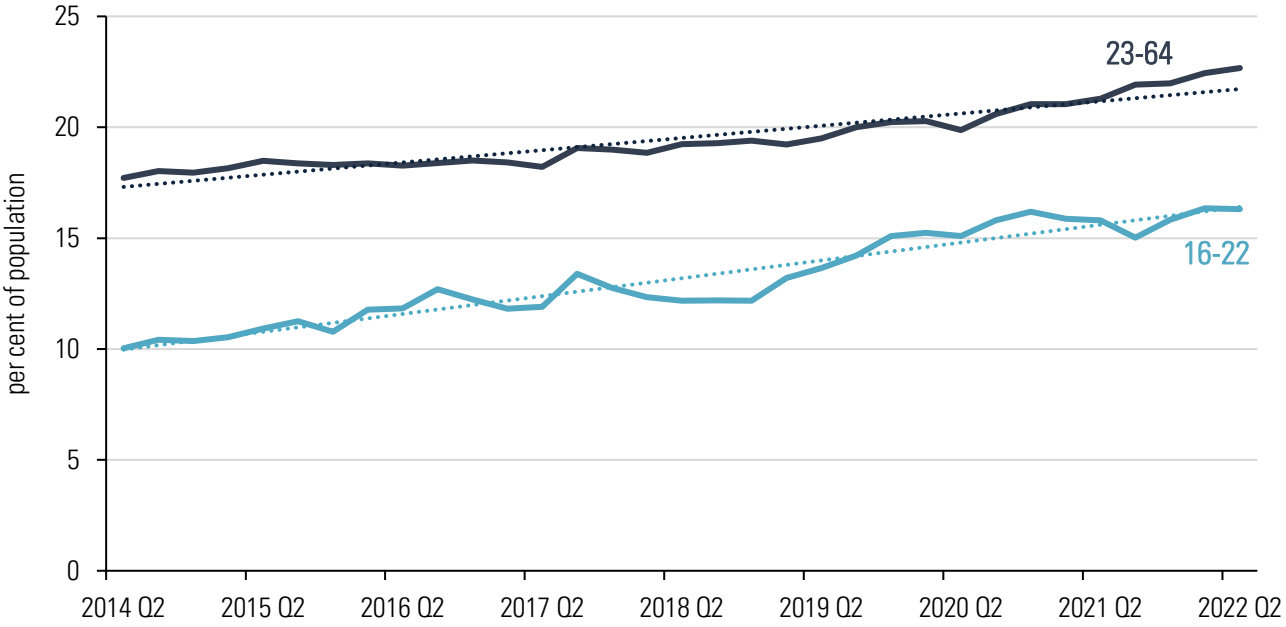
Ill health is rising among young people

5.39 Recent research by the Resolution Foundation (Murphy, 2022) highlighted the increase in health conditions – and particularly mental health conditions – among young men as a key factor in inactivity. Department for Education analysis of the Annual Population Survey (DfE, 2022a) indicated that NEET young people are much more likely to have a mental health condition than their peers: one in five NEET 16-24 year olds had a mental health condition in 2021, compared with fewer than one in ten of all 16-24 year olds. (Although the share has been growing for all young people, regardless of NEET status). Between 2014 and 2019, the incidence of non-mental health conditions remained stable, but rose during 2020 and 2021, particularly among NEET young people, where one in four reported a non-mental health condition in 2021 compared with an average of one in five between 2014 and 2019. Even for those young people who are in education, sickness-related absence rates and persistent absence have remained higher than pre-pandemic (DfE, 2022b). Disengagement from both education and the labour market during lockdowns may have lasting effects for some young people, whether they are currently in the minimum wage rate populations or will be entering them in the coming years.

5.40 Although there are more NEET young men than young women, there have also been rises in ill health for young women (DfE, 2022a). Data from June 2022 suggests that the fall in the share of NEET young women may be beginning to stall, driven by an uptick in inactivity. As discussed in Chapter 2, rising health problems are also related to increasing inactivity amongst older workers. The Prince's Trust told us that the risk of mass youth unemployment arising from the pandemic had been avoided and youth unemployment was now low. However, they noted this low unemployment may be 'masking … a shrinking labour market', with ill-health and the disability employment gap both potential factors.'

5.41 Looking at the LFS, we see an increased share of the young population recorded as having a disability. While employment rates among young people with disabilities have increased over time (possibly due to changing composition of disability type), their inactivity rate remains above that for young people without a disability, and so movement between the groups would be expected to result in a lower employment rate/higher inactivity rate overall.

Figure 5.22: Share of the population reporting a disability, by age, UK, 2014-2022



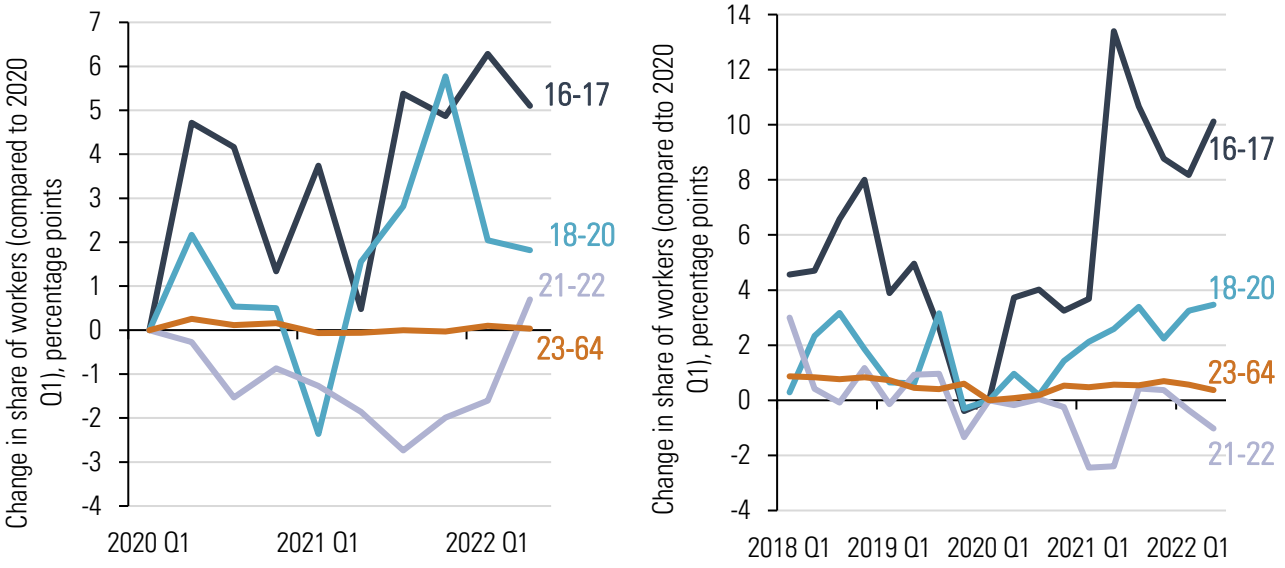
Source: LPC estimates using LFS microdata, quarterly, not seasonally adjusted, 16-64 population, UK, 2014 Q2-2022 Q2. Equality Act 2010 definition of disability. Dotted lines show trend over the period.

5.42 We have also seen an increase in the share of young people in temporary jobs or on zero-hours contracts following the pandemic. This issue has been raised by stakeholders: Youth Employment UK raised concerns about the 'increase in precarious work, such as those on zero hour contracts, which young people are more likely to be on than other age groups'. The way the Labour Force Survey collects data on zero-hours contracts changed in 2020, which limits comparisons prior to the pandemic, however even since the first quarter of 2020 there has been significant growth in the share of 16-20 year olds workers reported as on zero hours contracts.

5.43 Parallel growth in the share of workers on non-permanent contracts (Figure 5.23) helps to confirm a trend of a rising share of insecure contracts for 16 and 17 year olds in particular. As noted in Chapter 3, this age group is very likely to be working part-time, and with working alongside full-time education returning to pre-pandemic levels, some young people may benefit from the flexibility offered by zero-hours contracts or have chosen to take on seasonal or temporary work. A shift to less secure contracts as firms navigated an uncertain exit from the pandemic could also have contributed to increased reliance on young workers, who may have been more willing to accept these terms, or trade them off against higher pay, than older workers. The Union of Shop, Distributive and Allied Workers (Usdaw) told us that 'In some retailers, we continue to see staff routinely employed on short hours contracts, commonly with as few as six hours per week, only to regularly work a substantial amount of overtime each week.' From Usdaw members working in supermarkets in and around

Wolverhampton – including young workers – we heard that these arrangements encouraged them to consider moving to a different employer. However with economic conditions set to worsen, these young workers are more vulnerable to losing their jobs or being offered fewer hours.

Figure 5.23: Change in the share of workers on zero hours contracts (LHS) and on non-permanent contracts (RHS), by age, UK, 2020-2022 and 2018-2022



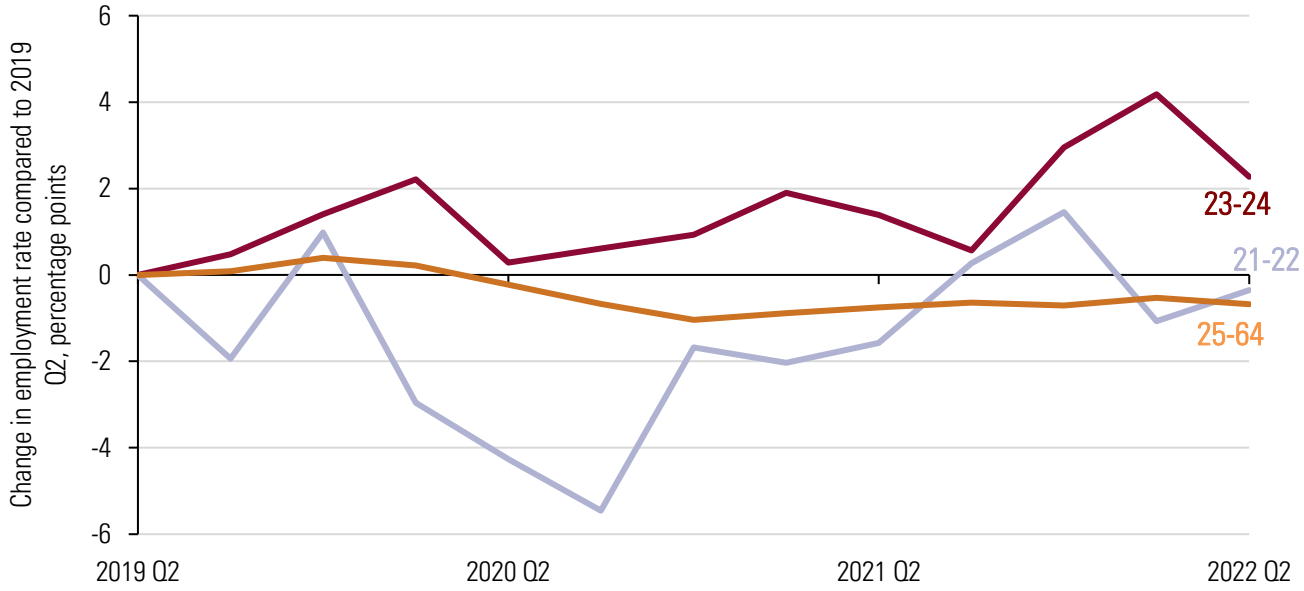
Source: LPC estimates using LFS microdata, quarterly, not seasonally adjusted, 16-64 population, UK, 2018 Q1 – 2022 Q2.

5.44 While the longer-term rise in inactivity and the more recent rise in insecure contracts are important indicators for the youth labour market, there is no evidence that they are connected to changes in the minimum wage, and overall the picture for young workers remains positive.

Moving 23 and 24 year olds onto the NLW has been a success

5.45 23-24 year olds have continued to do well in the labour market a year on from becoming entitled to the NLW in April 2021. Their employment was less affected by the pandemic than that of those aged under 23, perhaps because 23 and 24 year olds are less likely to be on insecure contracts and more likely to be working in occupations where they were able to work from home, although their employment also fared better than older workers.

Figure 5.24: Change in employment rate, 23-64 year olds, UK, 2019-2022



Source: LPC estimates using LFS microdata, quarterly, not seasonally adjusted, 23-64 population, UK 2019 Q2 – 2022 Q2.

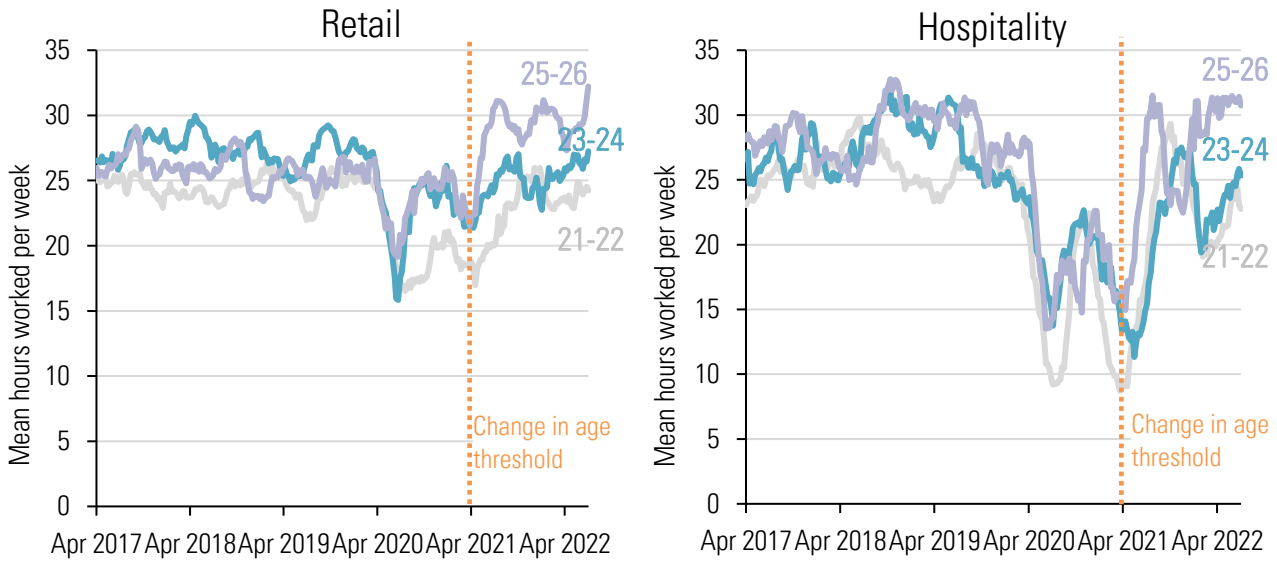
5.46 This year, we commissioned London Economics to investigate the impact of the change in the age threshold of the NLW in April 2021 (London Economics, 2022). To do this, they compared the outcomes of 23 and 24 year olds before and after April 2021 with the outcomes of 26 year olds over the same period. More details about their research methodology can be found in Appendix 2. They did not find any impact on aggregate employment, or on employment in low-paying sectors. For 23-24 year olds as a whole, they did not find any effect on average or usual hours worked.

5.47 When limiting their sample to only 23-24 year olds in low-paying sectors and occupations, the researchers found that although there was no change in employment, 23 and 24 year olds worked fewer hours relative to 26 year olds following the change in the age threshold. This was driven by 23-24 year olds becoming less likely to work full time relative to 26 year olds. The effect was largest for women in low-paying occupations, although the research did not find a statistically significant positive effect on earnings for this group, while for men in low-paying occupations they found a significant increase in earnings, but not a significant reduction in hours. This makes it difficult to attribute causality entirely to the wage changes.

5.48 In descriptive analysis of the LFS, we see both an increase in hours worked by 26 year olds, particularly in retail, and a slower post-pandemic recovery in hours worked for 23-24 year olds. To demonstrate these changes, Figure 5.25 shows hours worked in retail and hospitality by 23-24 and 25-26 year olds. We have grouped 25-26 year olds together due to small sample sizes, although trends differ slightly between the two ages. Low-paying work for 23-26 year olds is dominated by retail occupations. Between April 2021 and March 2022, 28 per cent of 23-24 year olds and 20 per cent of 25-26 year olds working in low-paying occupations were employed in retail, while a further 15 per cent (of both groups) were employed in hospitality. We can see that average hours worked by 23-24 year olds in both retail and hospitality occupations remained below their pre-pandemic levels for longer than they did for 25-26 year olds. At the same time, 25-26 year olds employed in retail occupations began to work many more hours than they had prior to the pandemic.

5.49 These changes could reflect employers preferring to give hours to more experienced, older workers once 23-24 year olds lost the advantage of a lower minimum wage rate. However, despite the fall in their average hours, 23-24 year olds were not reporting that they wanted to work more hours: the share of workers reporting any kind of underemployment was lower following the change than it had been before the pandemic. We also know that employers were reporting acute labour shortages at this time, particularly in hospitality, which makes a demand-led fall in hours more surprising. This suggests that the results could be capturing changes in the choices made by 23 and 24 year olds, rather than – or as well as – the choices of employers. We will continue to follow changes in hours worked for this age group as more data becomes available.

Figure 5.25: Average hours worked in retail and hospitality, 21-26 year olds, UK, 2017-2022



Source: LPC estimates using LFS microdata, weekly (13-week rolling average), not seasonally adjusted, 21-26 year old population, UK, April 2017 – June 2022. See Appendix 4 for a full list of SOC codes included in retail and hospitality occupations.

5.50 The same research found some significant effects – both positive and negative – for other groups. When separating the effects on white ethnic groups and other ethnic groups, they found evidence of a reduction in hours worked and weak evidence of a reduction in employment for other ethnic groups. The effects appear to be stronger and much larger than the effect on earnings, which was insignificant although positive. Again, this makes it difficult to attribute causality to changes in the minimum wage. As noted by the researchers, this group captures a range of individual ethnic groups which have very different trends in labour market outcomes and so estimates could be affected by differences in the ethnic composition of the age groups. Due to small sample sizes in the LFS, it was not possible for the researchers to study the effects using more disaggregated ethnicity data, but we will continue to monitor outcomes for different ethnic groups as we move further out from the pandemic and sufficient data becomes available. Positive effects were found for hours worked by those with dependent children and on workers in the most deprived areas, however these effects were only weakly significant.

Conclusion

5.51 Over the past year, young people's wages and employment have been buoyed by the tight labour market. At the median, their wages have kept up with steep increases in the cost of living. Their employment rates have recovered well from the pandemic, with employer and worker representatives reporting high demand for young workers.

5.52 In the case of 16-20 year olds, median wages have risen well beyond the minimum wage, which has declined in real terms. As a result, the gap between minimum and median wages has grown, while the number of workers paid at the minimum wage rates has fallen considerably. For 21-22 year olds, we have previously recommended larger increases in the minimum wage to smooth their transition to the NLW in 2024. This has meant that their minimum wage increased faster than median hourly pay. Nevertheless, an increasing number of 21-22 year olds are now paid at or above the NLW. In addition to a strong labour market for 16-22 year olds, 23-24 year olds have done well since becoming entitled to the NLW in April 2021, with their employment increasing following the change.

5.53 While the current picture for young people's employment is positive, we are aware that young people occupy a vulnerable place in the labour market and are likely to be hit harder by an economic downturn. Recent increases in zero-hours and non-permanent contracts add to this vulnerability. There are also some young people who have not benefitted from the recent tight labour market: rates of 18-24 year old men not in education, employment or training (NEET) are still above where they were in the early 2000s, with an increasing share of this group outside of the labour market and not looking for work. The latest data also shows an uptick in inactivity for NEET young women. These trends are not the result of a lack of jobs, or associated with changes to the minimum wage, but it is important that employment opportunities continue to be available to enable as many young people as possible to gain work experience at this pivotal point in their careers.

Chapter 6

Apprentices

Key findings

In April 2022 the Apprentice Rate was raised into alignment with the 16-17 Year Old Rate, a change which we recommended following a detailed review of the rate concluded in 2020.

Pay growth has been strong for apprentices – but less so than other parts of the youth labour market. Coverage is very low and continues to fall among apprentices aged 19 and over but has increased among younger apprentices following the large uprating to bring them into alignment with 16-17 year olds. This latter change is in strong contrast to the NMW youth rate populations, where coverage fell across the board over the same period.

Starts have recovered without reaching pre-pandemic levels. There is no sign of the long-term compositional changes in England, towards higher-level apprenticeships and away from younger apprentices, softening or reversing, although the picture varies in other nations.

We have not heard adverse reactions to this year's large uprating. Most stakeholder sentiment is bullish about the rate, albeit less optimistic about the outlook for apprenticeships more generally. We will consider the long-term case for an Apprentice Rate next year when we expect to have a more focused data source on apprentice pay.

6.1 This chapter looks at apprentices. The Apprentice Rate applies to 16-18 year old apprentices in any year of their courses; and to apprentices aged 19 and over in the first year of their course only. In the early years of the National Minimum Wage (NMW) these groups were exempted from the NMW; the creation of a specific Apprentice Rate, set lower than other NMW rates, took place in 2010. The distinct treatment of apprentices from other workers is intended to reflect the investment employers are required to make in their training.

6.2 We concluded a review of the Apprentice Rate in our 2020 Report. We stated then our intention to align the Apprentice Rate with the 16-17 Year Old Rate over a period of two years. Our decision responded to longstanding arguments from workers and employers. Firstly, both employer and worker stakeholders argued that the rate was simply too low and that this affected perceptions of apprenticeships and the pool of candidates likely to apply for them. Secondly, stakeholders told us that pay rates were not a leading factor in employers' decisions about apprentices, and this meant there was room to significantly increase the rate. In April 2022, the rate increased by 11.9 per cent, from £4.30 to £4.81, aligning with the 16-17 Year Old Rate.

6.3 The context for last year's recommendations was an apprentice labour market which continued to be subdued following the pandemic. This was particularly the case among the groups more likely to be affected by Apprentice Rate; under-19s and those studying on level 2 courses. Against this,

vacancies for apprenticeships were high, raising expectations of recovery over the autumn. The Government had introduced financial incentives during the pandemic to encourage employers to recruit apprentices; these remained in place but were scheduled to be withdrawn in spring 2022. The available pay data suggested that median pay for apprentices was rising but that this was driven in part by a fall in the number of apprentices doing lower-level apprenticeships. The Apprentice Rate continued to be used predominantly for apprentices under the age of 19; and underpayment remained a widespread problem for apprentices of all ages[7].

Apprentice pay has grown more slowly than the Apprentice Rate and 16-17 year olds' pay

6.4 This year we do not have access to an apprentice-specific source for pay data. The ASHE data is free of the distortions caused by furlough for the first time since 2019, however we know that this dataset does not provide a representative picture of the apprentice population as a whole (because it underestimates the number of apprentices in the workforce). Nevertheless, we can use it to examine pay trends for apprentices in different age groups. As in other chapters, to avoid distortions caused by the pandemic we look at growth over three years, from 2019 to 2022. This allows us to verify our conclusions in last year's report that apprentice pay has risen significantly in recent years, although it remains more muted than for other groups of young workers and does not outstrip growth over the previous three-year period.

6.5 Even for individual age cohorts, the growth rate is likely to be affected by changes in the composition of the apprentice population; as we shall go on to see, an increasing proportion of apprentices are older workers on higher-level courses. The move to more higher-level apprenticeships is particularly likely to affect apprentices in the 19-24 age group and may explain why their pay growth has been so much higher than other groups.

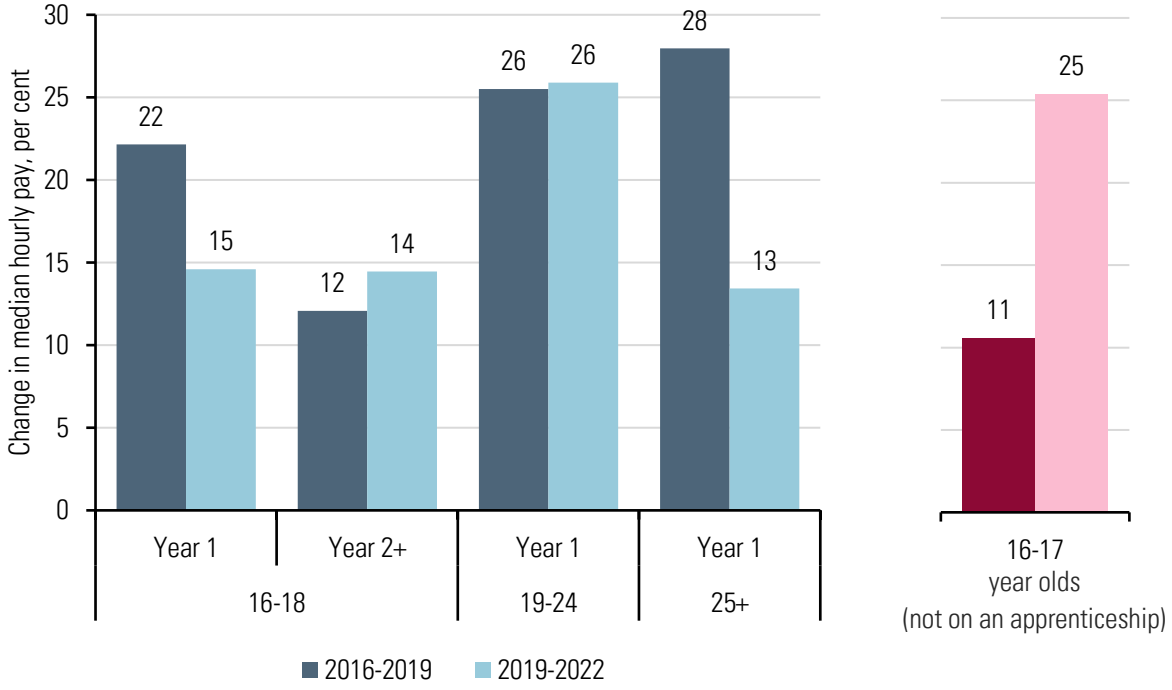
6.6 Figure 6.1 shows apprentice pay growth by age and year of apprenticeship. As a comparator, the chart also presents pay growth for 16-17 year olds not on an apprenticeship. Now that the Apprentice Rate is aligned with the 16-17 Year Old Rate, this group is an important point of comparison – particularly when we are looking at apprentices of a similar age. For apprentices under 19, pay growth of 14 to 15 per cent (depending on year of course) is markedly lower than the 25 per cent increase in the median pay of 16-17 year olds not on an apprenticeship. It is also lower than the 23 per cent rise in the Apprentice Rate over the same period.

6.7 It has long been the case that pay is lowest for the youngest apprentices. The 2022 ASHE data conform to this trend. Median hourly pay for a 16-18 year old apprentice in the first year of their course is £5.43; for the same age group in their second year, the median is £6.86. Median pay increases with

[7] Our view is that much underpayment of the Apprentice Rate has to do with employers failing to pay apprentices for their training hours. Previous reports have set out a full analysis of this – see our 2019 Report (Low Pay Commission, 2019c) and our 2020 report on non-compliance and enforcement of the minimum wage (Low Pay Commission, 2020a).

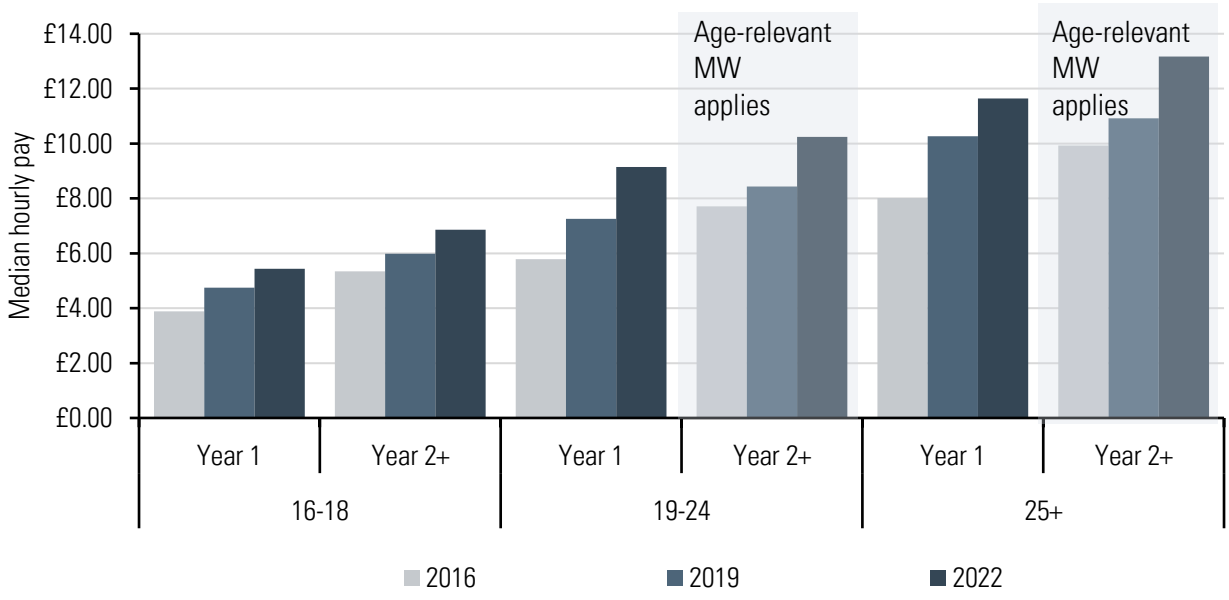
the age and year of apprenticeship; for apprentices aged 25 and over in their first year, the median of £11.64 is well above the National Living Wage (NLW).

Figure 6.1: Change in median hourly pay, workers eligible for the apprentice rate, by age and year of apprenticeship, UK, 2016-2022



Source: LPC analysis of ASHE, standard SOC 2020 weights, 16+ population (apprentices in the first year of their apprenticeship or aged 16-18) and 16-17 year old population, 2016-2022. Pre-2020 figures are chain linked so they are comparable with later figures (see Appendix 3 for a discussion of chain linking).

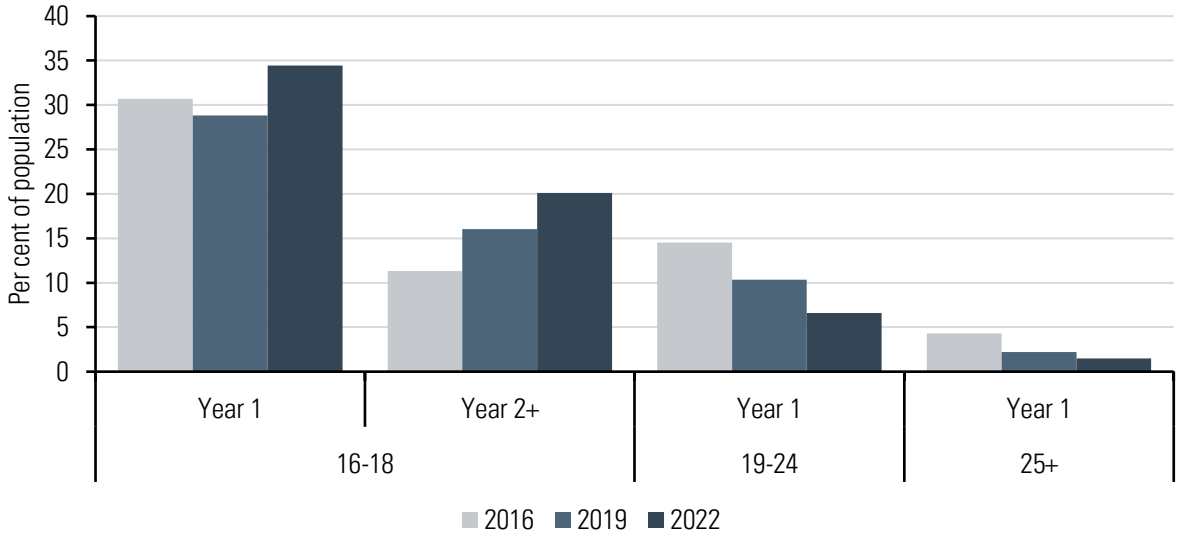
Figure 6.2: Median hourly pay, apprentices, by age and year of apprenticeship, UK, 2016-2022



Source: LPC analysis of ASHE, standard SOC 2020 weights, 16+ population (apprentices), 2016-2022. Pre-2020 figures are chain linked so they are comparable with later figures (see Appendix 3 for a discussion of chain linking).

6.8 This means the coverage of the Apprentice Rate is highest for the 16-18 age group; nearly 35 per cent among first-year and 20 per cent among second-year apprentices. These figures are substantially higher than those for older age groups; and are higher than those previously recorded in ASHE. Coverage of the rate for the youngest apprentices has increased in 2022, in contrast to other groups of young people, where coverage has fallen. For older apprentices, coverage has fallen, likely due in part to the continued move towards more higher-level apprenticeships. Overall, ASHE data suggests that coverage of the apprentice rate has fallen from 16.1 per cent in 2019 to 14 per cent in 2022, although this figure should be treated with caution as it will also capture changes in the ASHE sample of apprentices that may not reflect the underlying population.

Figure 6.3: Coverage of the apprentice minimum wage, by age and year of apprenticeship, UK, 2016-2022

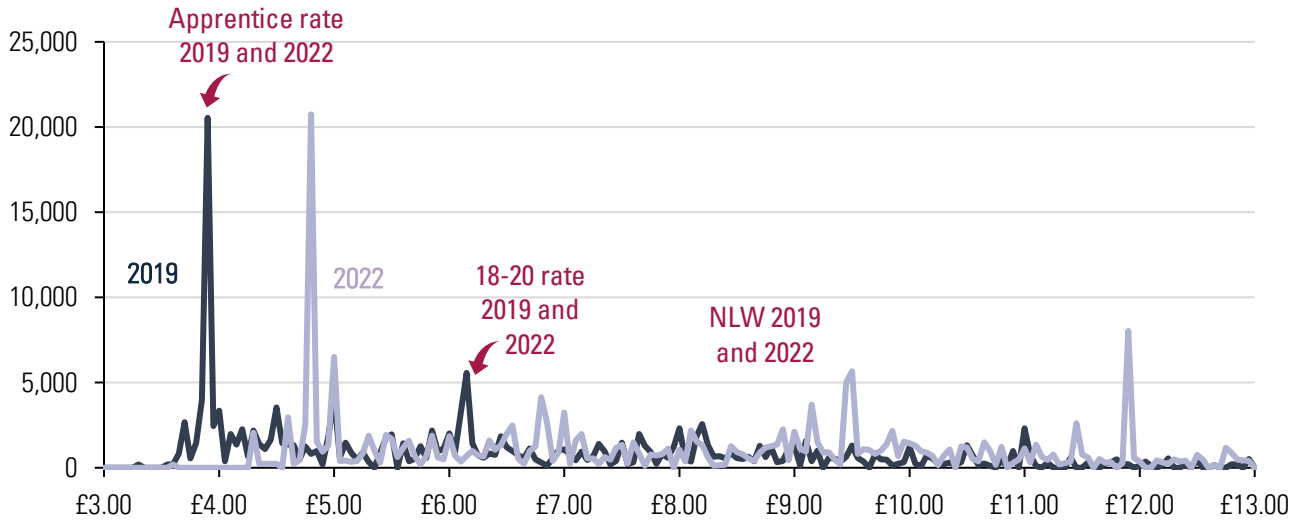


Source: LPC analysis of ASHE, standard SOC 201 and SOC 2020 weights, 16+ population (apprentices in the first year of their apprenticeship or aged 16-18), 2016-2022. Figures before 2021 are not chain linked (see Appendix 3 for a discussion of chain linking).

6.9 As Figure 6.4 shows, in 2019 and 2022 the number of apprentices paid at the Apprentice Rate was roughly equal at just over 20,000 – although in 2019 there were more apprentices paid just on either side of the rate. Elsewhere in the distribution, we see a larger spike in the number of apprentices paid the NLW in 2022 compared with 2019. We also see a spike for those paid around £11.90 per hour, which is equivalent to an annual salary between £22,000 and £25,000 and is likely driven by a small number of large employers, rather than representing a market-wide trend.

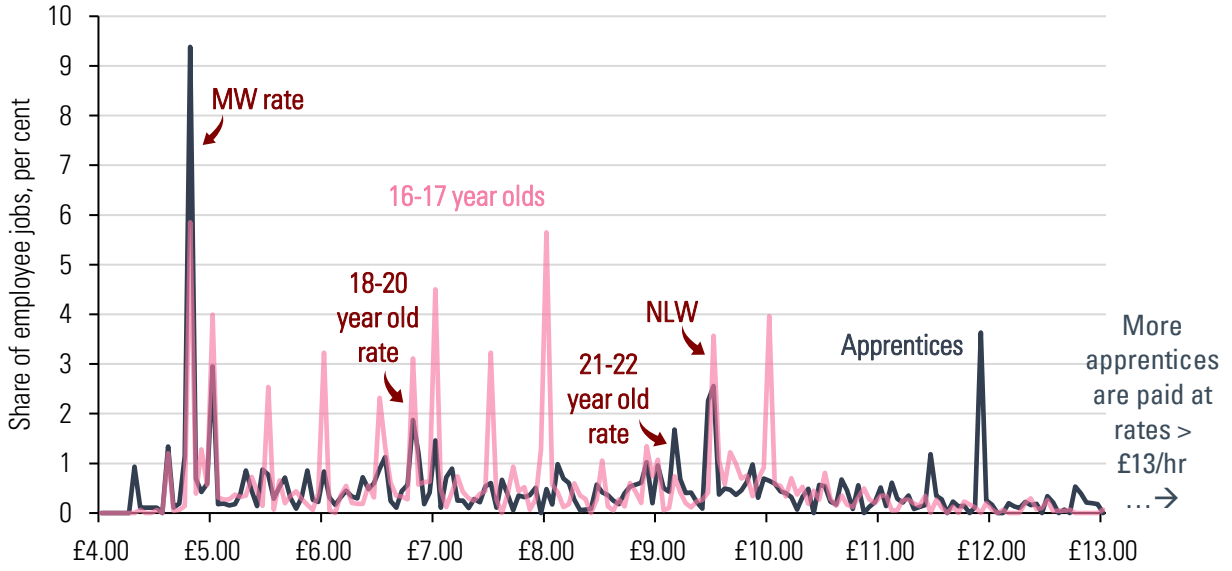
6.10 Figure 6.5 compares the distribution of the Apprentice Rate population with that of non-apprentice 16-17 year olds, with whom apprentices' minimum wage is now aligned. The notable differences in the distributions are the greater coverage of the Apprentice Rate; and the comparatively flat distribution above the Apprentice Rate. A smaller share of apprentices are paid at the round numbers between the Apprentice Rate and the NLW. Although not shown in this chart, a greater share of apprentices are paid at hourly rates of over £13.

Figure 6.4: Distribution of hourly pay, workers eligible for the Apprentice Rate, UK, 2019 and 2022



Source: LPC analysis of ASHE, standard SOC 2010 and SOC 2020 weights, 16+ population (apprentices in the first year of their apprenticeship or aged 16-18), 2019-2022. Figures before 2021 are not chain linked (see Appendix 3 for a discussion of chain linking). 5-pence pay bands. Those earning below £3 or above £13 are excluded.

Figure 6.5: Distribution of hourly pay, workers eligible for the Apprentice Rate and 16-17 year olds not on an apprenticeship, UK, 2022



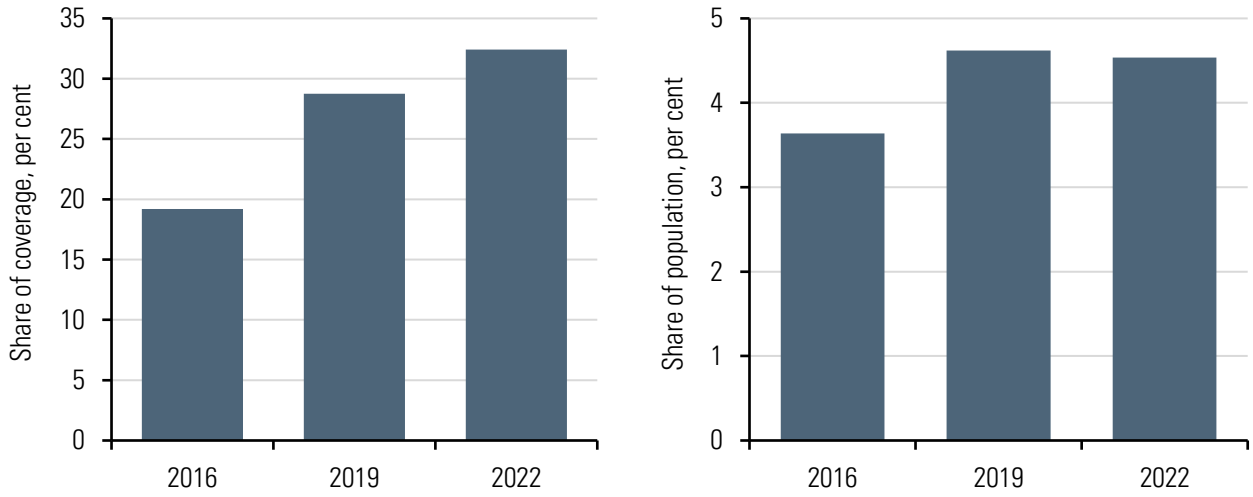
Source: LPC analysis of ASHE, standard SOC 2020 weights, 16+ population (apprentices in the first year of their apprenticeship or aged 16-18) and 16-17 year old population, 2022. 5-pence pay bands. Those earning below £4 or above £13 are excluded.

6.11 As set out in Chapter 3 (see Table 3.3), ASHE data showed that underpayment of apprentices increased both in absolute terms and as a share of coverage. As a share of the overall population, the underpayment rate stayed relatively flat, although it increased as a share of those covered by the rate (Figure 6.6). Apprentices remain the group most likely to be underpaid. Of the 4.5 per cent of apprentices paid below the rate in 2022, around one in five were paid at the 2021 Apprentice Rate,

suggesting that employers have been slow to implement the latest uprating. Around a quarter were paid just below – within 5 pence of – the minimum wage rate.

6.12 However, it is likely that ASHE does not fully capture underpayment, particularly where employers do not report training time as hours worked. Previous data from the Apprenticeship Evaluation Survey (AEvS) has indicated much higher levels of underpayment. We expect to have new AEvS data for 2023, which will provide a fuller picture of pay and underpayment.

Figure 6.6: Underpayment of the Apprentice Rate, as a share of coverage (LHS) and as a share of total population (RHS), UK, 2016-2022



Source: LPC analysis of ASHE, standard SOC 2010 and SOC 2020 weights, 16+ population (apprentices in the first year of their apprenticeship or aged 16-18), 2016-2022. Figures before 2021 are not chain linked (see Appendix 3 for a discussion of chain linking).

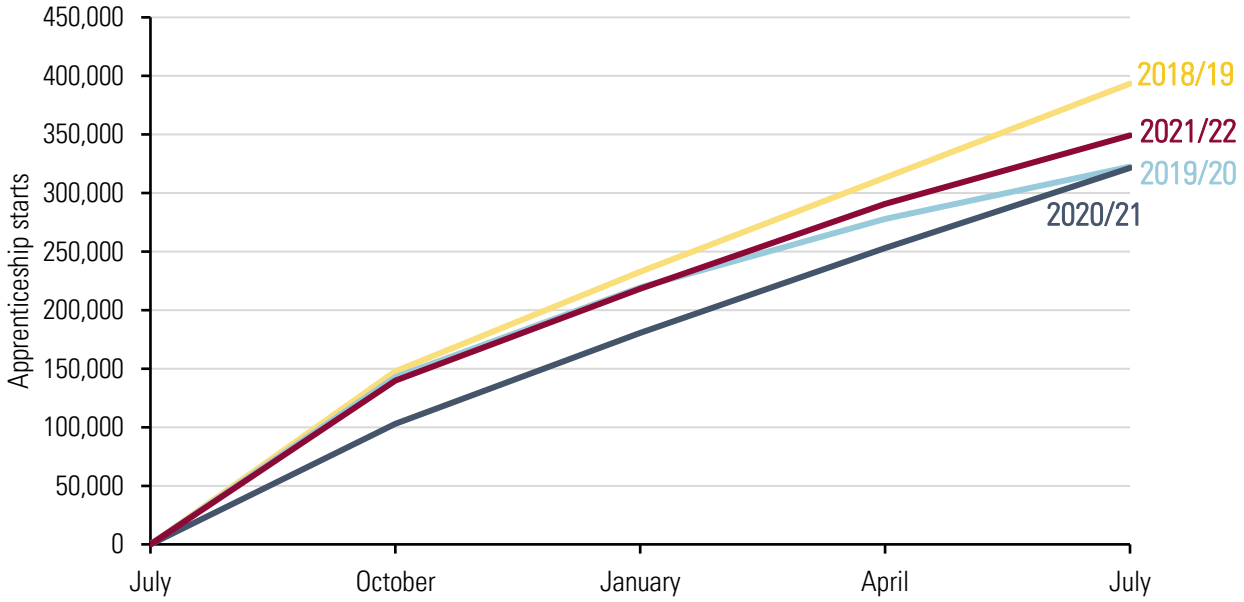
Apprentice starts are yet to fully recover

6.13 The pandemic saw a sharp fall in apprenticeship starts across the UK. Lockdowns and social distancing complicated training arrangements; businesses slowed recruitment in the face of economic uncertainty. In both the 2019/20 and 2020/21 academic years, starts in England were just over 320,000, compared with over 390,000 in 2018/19. The signs a year ago, however, pointed to a resurgence; apprenticeship vacancy levels were high ahead of the autumn period when the majority of apprenticeships begin.

6.14 Figures for the 2021/22 academic year show that starts in England had returned to around 88 per cent of their 2018/19 levels, the last full academic year before the Covid-19 pandemic. This left a total deficit of over 40,000 starts. Higher level starts actually increased by around 30,000 over the period, so the deficit is around 52,000 for starts at level 2 and over 23,000 for starts at level 3. Among under-19 year olds, there were around 20,000 fewer starts over the year.

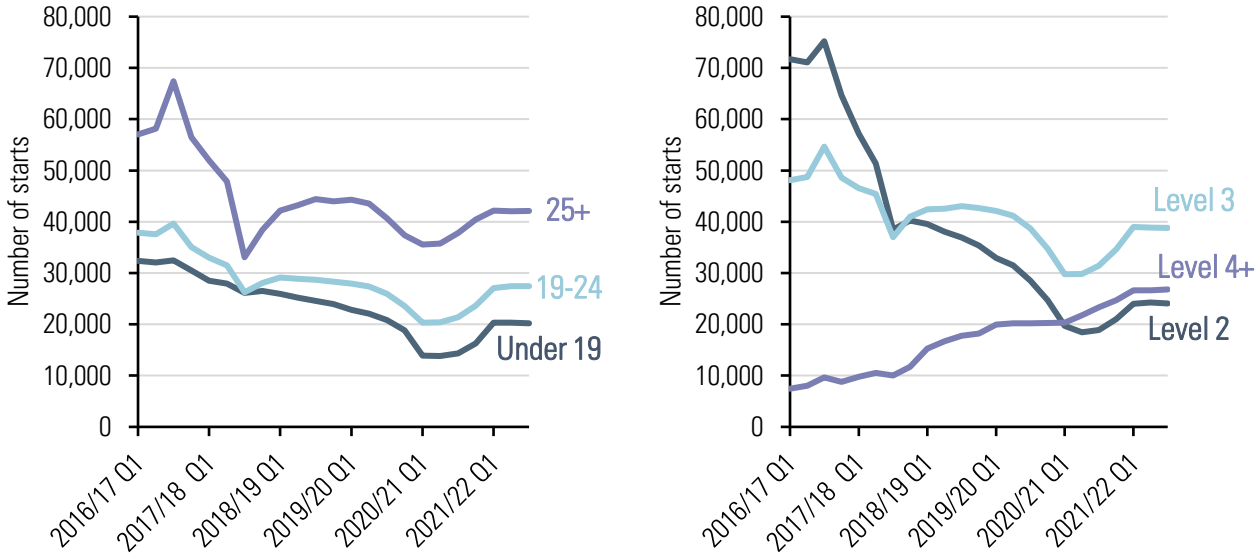
6.15 In England, the period following the introduction of the Apprenticeship Levy in 2017 saw major upheaval in the composition of apprenticeships, with a sharp drop in courses at level 2 (equivalent to GCSE) and a steady rise in higher level courses. The composition of apprentices by age did not change as markedly, but the years since 2016 have seen a steady decline in younger workers starting apprenticeships while starts in the older cohort stayed relatively stable.

Figure 6.7: Apprenticeship starts to Q3, England, 2018/19 - 2021/22



Source: LPC estimates using Department for Education Apprenticeships and traineeships statistics (September 2022), quarterly, England, 2018/19-2021/22.
Note: Data are organised by academic year (August to July).

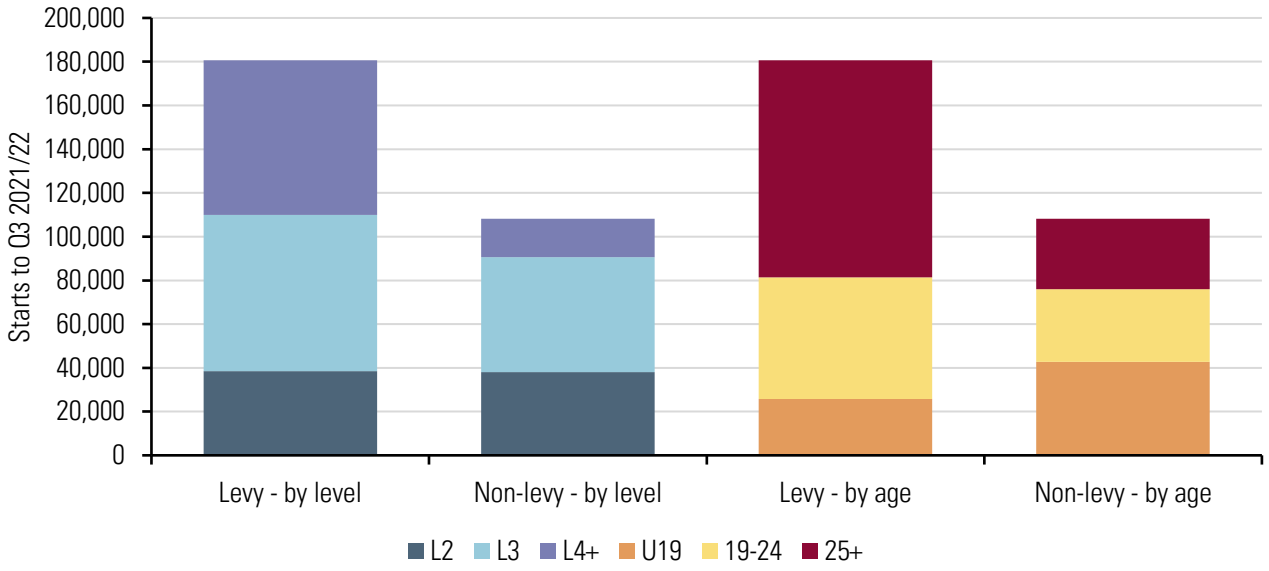
Figure 6.8: Apprenticeship starts, by age and level, England, 2016/17 – 2021/22



Source: LPC estimates using Department for Education Apprenticeships and traineeships statistics (September 2022), quarterly, England, 2016/7 Q1-2021/22 Q3.
Note: Data are organised by academic year (August to July).

6.16 Among other effects, the levy effectively divided the employer base in England into two: larger employers who pay the levy and can put those funds towards apprenticeships; and smaller ones, exempt from the levy but required to make a small contribution to the cost of a course. The latter are more likely to fund younger apprentices and lower-level courses, but only represent around a third of starts overall. The former are much more likely to spend their levy account on degree-level courses for older learners, many of whom will be existing employees rather than new entrants.

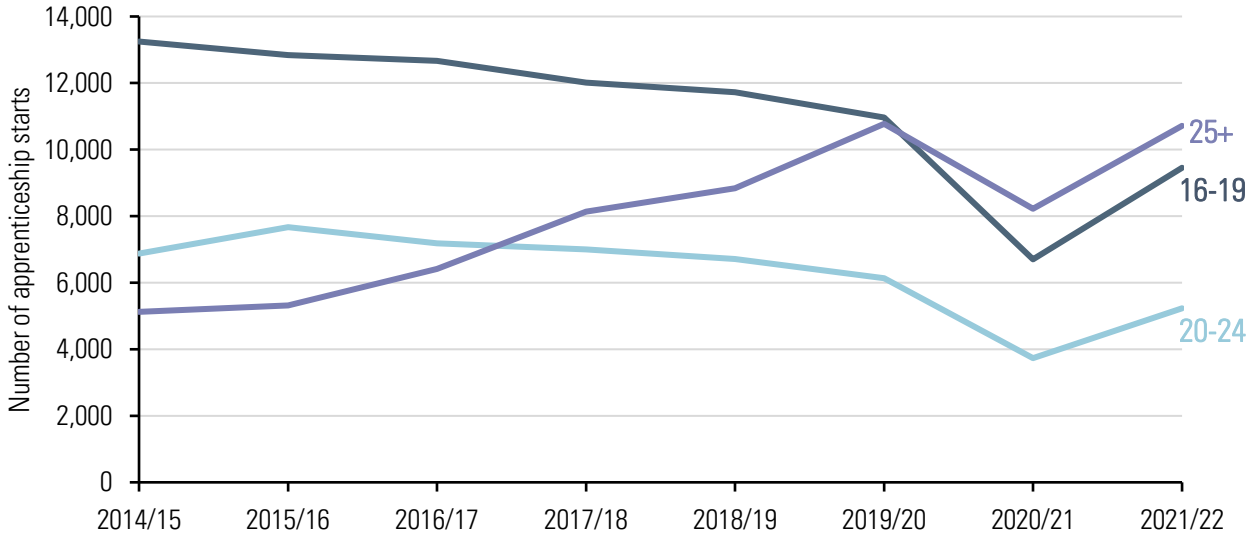
Figure 6.9: Apprenticeship starts to Q3, by levy-paying status, level and age, England, 2021/22



Source: LPC estimates using Department for Education Apprenticeships and traineeships statistics (September 2022), quarterly, England, 2021/22.
Note: Data are organised by academic year (August to July).

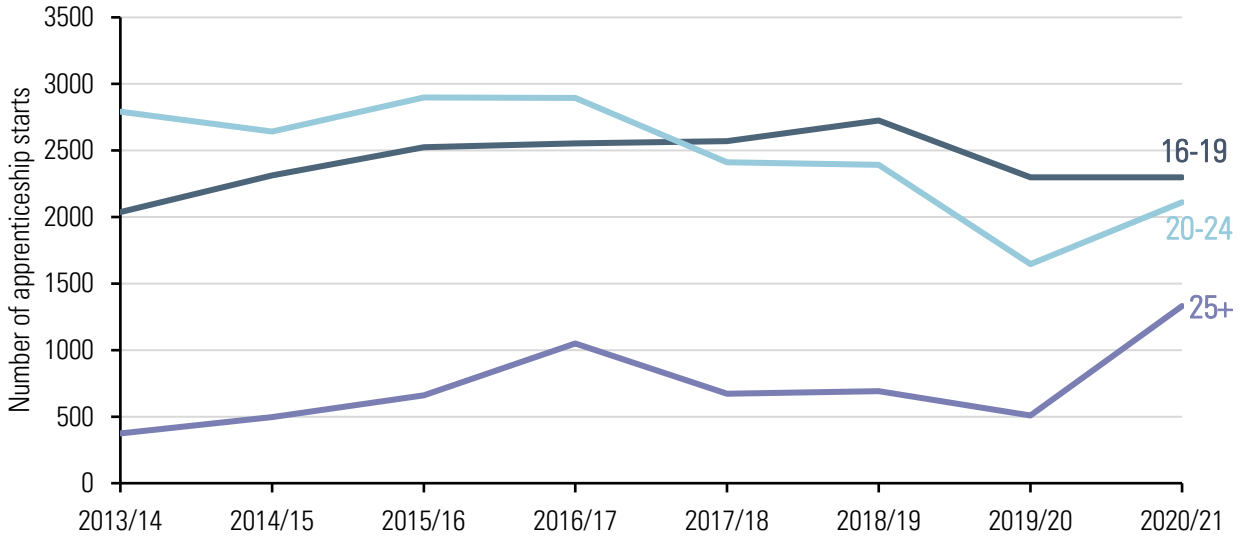
6.17 Across the UK, the picture varies both in trends and composition. The latest data from both Scotland and Northern Ireland show a marked uplift in starts, although without a return to pre-pandemic levels. The trend is flatter in Wales, where composition by age is most similar to England. Starts among the 16-19 group are the leading category in Northern Ireland and in Scotland narrowly trail the 25 and overs.

Figure 6.10: Apprenticeship starts, by age, Scotland, 2014/15 – 2021/22



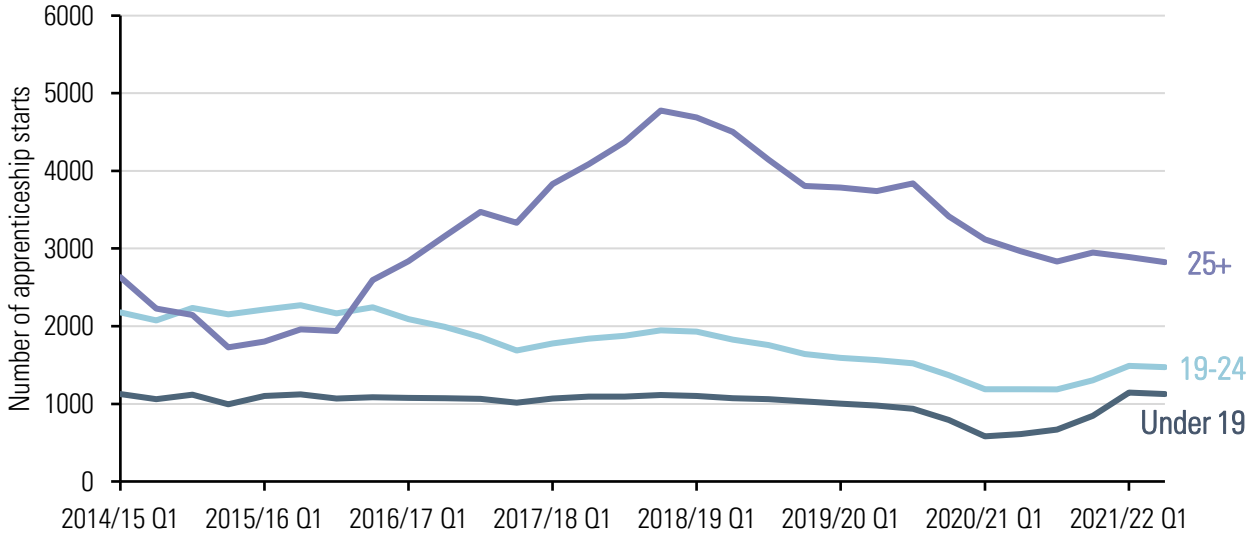
Source: LPC estimates using Skills Development Scotland Modern Apprenticeships statistics, annual, Scotland, 2014/15-2021/22.
Note: Data are organised by financial year (April to March).

Figure 6.11: Apprenticeship starts, by age, Northern Ireland, 2013/14-2020/21



Source: LPC estimates using Apprenticeships NI statistics, annual, Northern Ireland, 2013/14-2020/21.
Note: Data are organised by academic year (August to July).

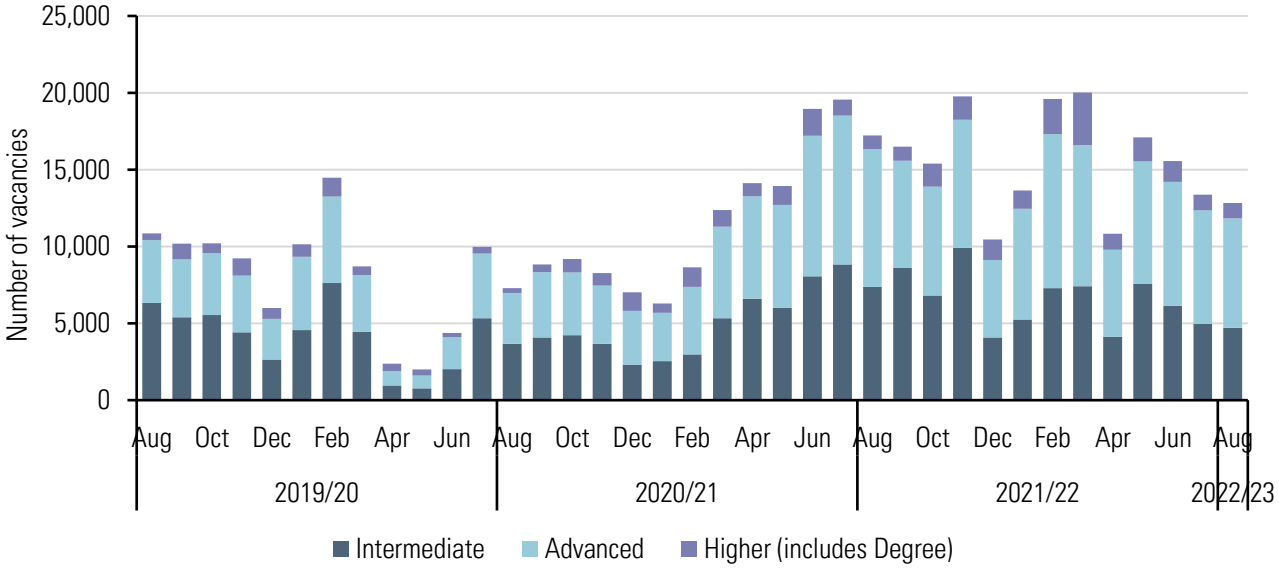
Figure 6.12: Apprenticeship starts, by age, Wales, 2014/15 – 2021/22



Source: LPC estimates using statistics from the Welsh Government (StatsWales), quarterly (four-quarter moving averages), Wales, 2015 Q1-2022 Q2.
Note: Data are organised by academic year (August to July).

6.18 Vacancies on the DfE's Find an Apprenticeship service have fallen since March, and over the summer were notably fewer than 12 months earlier. This follows a similar pattern to overall vacancies, although the change has been less dramatic and fallen off more quickly. In August 2022, vacancies on the Find an Apprenticeship website were 18 per cent above August 2019 levels, while overall vacancies measured by the ONS were 55 per cent higher. The site does not represent a complete picture of the market and tends to be skewed towards lower-paying roles, but a high proportion of roles advertised there use the Apprentice Rate.

Figure 6.13: Vacancies advertised on Find an Apprenticeship service, England, 2019 – 2022



Source: LPC estimates using Department for Education Apprenticeships and traineeships statistics (September 2022), monthly, England, Aug 2019 – Aug 2022.

Most stakeholders continue to push for increases in the Apprentice Rate

Views on the rate are bullish

6.19 The majority of stakeholders we spoke to this year continued to agree that the Apprentice Rate was set too low. We received few strong responses to the large increase in April 2022, and worker representatives continued to call for a major increase to the rate.

6.20 UNISON welcomed alignment with the 16–17 Year Old Rate but said the level of the Apprentice Rate remained grossly inadequate. They warned that the lower wage rates may influence employer behaviour and encourage them to employ apprentices; however, in so doing they may substitute older for younger works and not pay training hours properly. The Trades Union Congress (TUC) emphasised their support for alignment, but stressed that 'Ultimately, this rate should be abolished and merged into the main rate'. said that the Apprentice Rate was too low and recommended that it should grow in step with the NLW. Unite told us that £4.81 was still too low: 'while a step in the right direction … Considering the very low rate of pay, Unite doubts the increase of 50 pence per hour has had any significant impact, particularly under the current economic conditions'. The Union of Shop, Distributive and Allied Workers (Usdaw) called for a minimum rate of £12 an hour irrespective of age or apprenticeship status. 'Even with the equalisation of the Apprentice Rate and the 16-17 Year Old Rate, a rate of £4.81 is simply unacceptable'.

6.21 The Prince's Trust recommended the rate should be set at 80 per cent of the NLW. This would acknowledge time that apprentices spend on off-the-job training, while still fairly recognising their contribution. This would help to ensure that these opportunities are fairly paid across all sectors and regions, and they remain accessible to individuals from all backgrounds'. They argued that the low

Apprentice Rate limited access to apprenticeships: 'Low pay rates for apprentices – and often just the perception of low pay – can act as a barrier for those from disadvantaged backgrounds who cannot rely on family support, closing off this route for this group'. Instead it pushed young people to take jobs with less development potential but higher wages in the short term. Youth Employment UK told us that three-quarters of young people thought the Apprentice Rate was still too low despite recent increases.

6.22 The Federation of Small Businesses (FSB) told us most of their members would support an increase in the rate with many of them already paying well above the minimum requirement. Within the tight labour market, they found apprentices harder to recruit and retain than in previous years as some applicants considered other higher-paying options more attractive. The FSB also noted that currently for a young person living at home whose family is on Universal Credit taking an apprenticeship on the Apprentice Rate might would risk negatively impacting their household income. This is because once a young person starts an apprenticeship, they are no longer considered to be in full-time education and so their families lose entitlement to child benefits.

6.23 The British Chambers of Commerce (BCC) recommended 'that steps are taken to avoid widening the gap between the NLW and NMW rates by increasing youth and apprentice rates by the same percentage as the NLW'. They added that small firms advertising at the apprentice rate have not been very successful in attracting applicants. This was at least in part due to the headline apprenticeship rate being low enough to deter potential applicants from even searching for apprenticeships many of which offered higher than minimum pay.

6.24 Coventry and Warwickshire Chamber of Commerce told us many employers were paying above the Apprentice Rate to attract applicants in a tight labour market but also because of a wish to pay a fair wage. They told us they felt employers would be able to cope with a large increase in the Apprentice Rate.

6.25 Travis Perkins plc told us that the level of the current rate meant apprenticeships were perceived by many potential applicants as a low-paying career path. The Travis Perkins Group pay apprentices above the minimum rate but nevertheless feel that the current level of the statutory threshold for apprentice pay negatively impacts the number of applicants they and other businesses receive. They therefore called for an increase in the minimum pay rate, to help attract, motivate, grow and retain a diverse range of talents.

However some employers highlighted the training investment required

6.26 The National Farmers' Union (NFU) told us the rate should be set at a level where employers are encouraged to invest in training: 'Encouraging employers to invest in the training of employees of any age by offering an apprenticeship needs to be encouraged'.

6.27 The National Hair & Beauty Federation (NHBF) reported that fewer of their members were employing apprentices due to the apprentice rate being too high. This was not solely linked to recent increases in the rate: 'Feedback from the industry is that businesses are increasingly unable to afford apprentices and the cost increase in the second year … This is simply unaffordable for many salons when the student is unable to generate any income to the salon or barbershop'.

Most stakeholders tell us they do not use the Apprentice Rate

6.28 A number of employer groups told us that use of the Apprentice Rate in their sectors was rare. UKHospitality (UKH) told us that the tight labour market meant 'there will be substantial pressure on wage rates and we do not expect apprentices in their first year to be paid below the NMW/NLW rate'. Make UK told us that manufacturers do not use the Apprentice Rate: 'firms seek to set competitive wages for apprentices which are comparable to permanent staff and improve the retention rate'. A survey by the Federation of Wholesale Distributors (FWD) found 86 per cent of members believe the Apprentice Rate was too low and did not use it; the same proportion said the rate should rise from April 2023. The Chartered Institute of Payroll Professionals (CIPP) told us that employers' decisions on apprentices were driven by qualifications rather than pay: 'The large increase to apprenticeship minimum wage rates has had little effect on the market.' Their survey, however, indicated one-third of employers were paying apprentices at least the NMW for their age band from year one, with the remaining proportion either using the Apprentice Rate or paying between the rate and the age-appropriate NMW rate.

6.29 The British Beer & Pub Association (BBPA) told us the rate was generally not used by their members, who paid apprentices at the age-related NMW or above: 'members have highlighted that it would put them at a competitive disadvantage offering the Apprentice Rate, particularly as competing organisations often pay much higher. We believe that the Apprentice Rate does not reflect the true contribution which apprentices make'.

6.30 UNISON told us that the rate typically was not used for those aged over 25 years' old. Unite shared details of apprentice pay in negotiated pay agreements; some of these rates were below NMW youth rates, but were based on progression rather than age. They gave examples of an apprentice plumber and an apprentice electrician. The former 'gets £6.75 per hour rising to up to £10.76 (or £13.50) with a Level 3 diploma'. The latter 'starts at £5.59 rising to £12.15 at the final stage in addition to benefits and allowances'.

6.31 GMB Union told us that underpayment of the Apprentice Rate continued to be a problem. They restated their call for more action from the Government to better enforce employer compliance, including the reinstatement of the Apprenticeship Pay Survey to better track pay levels.

6.32 The British Retail Consortium (BRC) told us that no employers in their survey reported using the Apprentice Rate. Most retailers reported that apprentices received a similar wage rate to other employees, with a few reporting significantly higher apprentice wages, suggesting use of higher-level apprenticeships. Median apprentice pay in the survey was £9.68 per hour, ranging between £6.40 and £12.30.

6.33 A survey by the FSB found that around two in five small business employers paid their apprentices below the 18-20 Year Old Rate. They told us that small businesses often chose to pay above the rate to attract good candidates and make opportunities accessible. They restated their arguments that 'a higher Apprentice Rate will help to boost the attractiveness of apprenticeships as a career option among young people and their parents.'

6.34 Community Leisure UK told us that nearly 75 per cent of their members offered apprenticeships: 'Some members pay the Apprentice Rate, though many note that it is not an attractive rate for young

people'. The Local Government Association (LGA) told us while there were varying practices amongst councils, the Apprentice Rate was more commonly used by community and voluntary controlled schools.

Many stakeholders are frustrated with the apprenticeship system

6.35 A lot of the evidence we heard on apprenticeships focused on declining supply of apprentices; declining demand for apprenticeships in some areas; and shortcomings in the policy framework. The Recruitment & Employment Confederation (REC) told us that apprenticeship levels continued to be low: 'there has been a marked fall in the number of apprenticeships commencing each year. Just before the pandemic, there were indications of reversal of this trend, but the impact of the pandemic has impacted apprenticeship recruitment significantly.' They argued for 'a broader apprenticeship and learning levy that boosts development opportunities for all workers' as 'one way of facilitating in-work progression for entry-level skilled workers'.

6.36 The FSB argued that the Government should extend incentives for hiring apprentices introduced during the pandemic; small businesses were most likely to hire younger apprentices at lower levels, which are the areas where participation has fallen most. The Association of Convenience Stores (ACS) told us that demand for apprenticeships is low. A survey of convenience store colleagues found that 6 per cent were apprentices. As most individuals in the sector worked part-time, it could take a long time to complete an apprenticeship. Community Leisure UK also told us that apprenticeships were proving challenging in the leisure sector, with difficulty recruiting and retaining apprentices.

6.37 UKH told us their sector was 'planning to increase substantially the number of apprentices over the coming years. Apprenticeship programmes were severely affected by Covid and their re-establishment is an important part of our plans in positioning the sector as a progressive and responsible career choice.' Hospitality employers in Scotland told us there was currently no viable talent pool for apprenticeships, with businesses willing to pay above the NMW but struggling to attract applicants. A training provider operating principally in hospitality echoed this, telling us of growing demand for apprenticeships driving wage increases.

6.38 The Food and Drink Federation (FDF) told us recruitment of apprentices was a significant problem in all sectors. They put this down to off-the-job training requirements, maths and English requirements and a lack of high-quality training provision: 'Many food and drink manufacturers have to pay for additional travel and accommodation costs to ensure their apprentices have access to high-quality training providers'.

6.39 The TUC argued there was too much low-quality training: 'It is vital that measures are taken to ensure apprentices have access to meaningful training, especially as new apprenticeships pick up following disruption last year'. Unite told us there was a need for more high-quality skilled apprenticeships and outlined their lobbying work to increase skilled apprenticeships in various sectors.

6.40 The Prince's Trust told us that higher apprentice pay would support levelling-up aims and facilitate greater access to apprenticeships which are 'an under-utilised tool' in skills development. In Wales we heard from young people that apprenticeships needed promoting, as while they could be a route to a high-paying job many peers where unaware of the different options available to them.

6.41 The BRC told us that the vast majority of their members are subject to the Apprenticeship Levy, and just over half (55%) of respondents employ apprentices. Many report 'that they encounter significant challenges in spending significant parts of their levy due to the associated requirements'. Make UK wanted more flexibility to use levy funds for wage costs: 'greater support for employers to cover wages … would help to ameliorate the current decline in apprenticeship achievements.' The FDF called for a 'review of the apprenticeship levy system with a targeted approach to allow more flexible spending on shorter, modular training and to support pre-employment training programmes.' The FSB, on the other hand, told us it was important to maintain the levy, which should not be broadened into a 'training levy'. SMEs needed this funding to train apprentices as demand picked up coming out of the pandemic.

Conclusions

6.42 The evidence we have seen this year supports our previous recommendation to align the Apprentice Rate with the 16-17 Year Old Rate. This entailed a large increase in apprentice pay and so the increase in coverage we see among apprentices aged under-19 is not surprising and we have not seen evidence of negative effects on starts or an increase in underpayment following on from alignment. Although the overall picture on apprenticeships is challenging, a large majority of stakeholders continue to tell us that the Apprentice Rate is not an important driver of their decision-making when it comes to apprenticeships.

6.43 We will continue to evaluate the effects of our recommendations over the coming year. Next year we expect to have a new Apprenticeship Evaluation Survey, which will again provide a more detailed breakdown of apprentice pay and coverage, including by the level of their course. As the sector absorbs these upratings and the evidence base continues to develop, we will keep the Apprentice Rate under close review, and continue to assess whether a separate rate for apprentices is still justified.

Chapter 7

Other impacts of the National Living Wage

Key findings

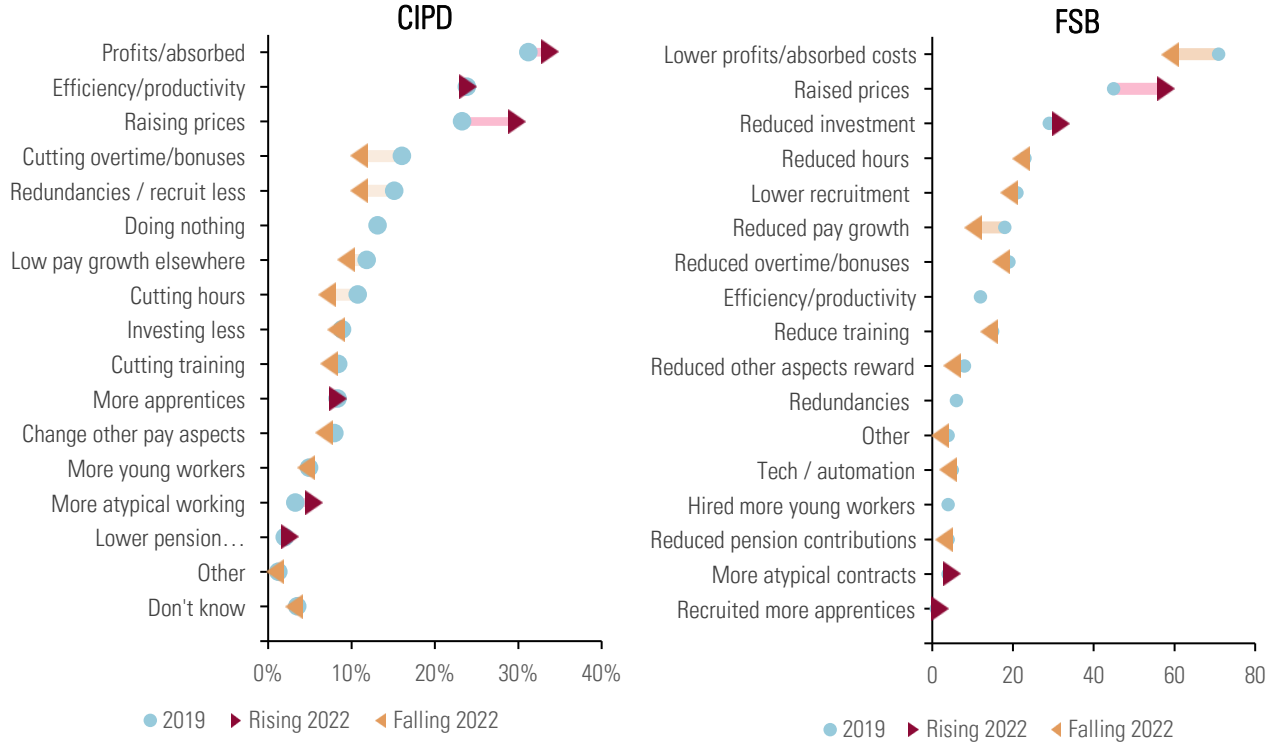
- Previous chapters have discussed the impacts of rate changes on employment and pay, finding little evidence of negative impacts on jobs or hours. This raises the question as to how employers respond to increases in the rates. This chapter draws on stakeholder and other evidence to answer this question.
- The tight labour market and recruitment struggles are likely affecting employers' options in responding to the NLW. Comparing response this year to those before the pandemic in 2019 we find fewer employers said they were reducing overtime or bonuses; reducing headcount through redundancies or reduced recruitment; reducing pay growth for the wider workforce or cutting hours in response to the NLW.
- The main response remains to absorb the cost and therefore accept lower profits. While smaller employers are more likely to do this than larger employers, fewer are doing so in 2022 than 2019. This may reflect the limited sustainability of ongoing reductions in profits.
- This year saw a marked increase in the share of businesses reporting price increases in response to the NLW. However, the NLW was not the most important driver of price increases. For most stakeholders, energy prices and labour supply were much higher in their list of concerns than the minimum wage. Employers' responses to the NLW may suggest it's currently easier to pass on increased wage costs through higher prices than reduce them through improved productivity.
- When we compare recent price changes in goods and services most exposed to the minimum wage to other goods and services, we find that other input prices – particularly energy and food – appear to be more of a driver than minimum wages. Where firms do pass on minimum wage costs to consumers, this has a negligible impact on overall inflation, as minimum wage workers make up a very small share of the UK's total wage bill.
- Some employers, particularly smaller employers have cut or scaled back investment in response to the NLW. While larger employers ones, were intending / planning to maintain or to increase their investment, but there were concerns about skills shortages holding this back. The skill sets needed to design and implement new technology or equipment were hard to come by in the tight labour market.
- The challenges faced by the adult social care were once more a central theme in evidence we received. The tight labour market made recruitment and retention more difficult than ever. Low-paid workers remaining in the sector faced increasing stress and, with rising fuel costs, greater hardship.

The rising minimum wage was one factor in a general funding crisis. The effects of incoming reforms on these difficulties remain uncertain

Employer responses to the National Living Wage reflect the tight labour market

7.1 Figure 7.1 shows the trend of employer responses to the National Living Wage (NLW) uprating and how they changed between 2019 and 2022, using surveys conducted by the Chartered Institute of Personnel and Development (CIPD) and the Federation of Small Businesses (FSB). The broad pattern remains similar to previous years but recruitment and retention difficulties faced by many employers appear to have changed their responses. Compared with 2019, fewer said they were reducing overtime or bonuses; reducing headcount through redundancies or reduced recruitment; reducing pay growth for the wider workforce or cutting hours in response to the NLW. However more said they were raising prices and lowering profits.

Figure 7.1: Employer responses to the NLW upratings, 2019-2022



Source: LPC analysis of survey data from CIPD and FSB, annual, UK, 2019-2022.

Accepting lower profits and raising prices remain the most common response to the NLW/NMW

7.2 The leading responses from employers to the rising minimum wage, year upon year, have been to absorb the cost increases through reduced profits; or to pass increases onto customers via price rises. This year saw a marked upturn in the share of businesses reporting price increases. While large shares of businesses still reported taking reduced profits, surveys by employer groups suggested that a growing proportion of their members were planning to or had already raised prices as part of their response to the rising NLW.

7.3 The NLW, of course, is not the sole or most important driver of price increases; 2022 saw sharply rising input costs across almost all sectors, resulting in part from Russia's invasion of Ukraine and the disruption in supply chains. For most stakeholders, energy prices and labour supply were much higher in their hierarchy of concerns than the minimum wage.

7.4 The Confederation of British Industry (CBI) told us that fewer companies were able to simply absorb NLW costs. 48 per cent of CBI members said they were passing on increased costs via prices, a large increase from 2019 when 33 per cent of respondents reported this. The CBI described the 2022 uprating as 'quite significant', particularly for businesses affected by renewed Covid restrictions at the start of the year. Now businesses had 'no choice but passing extra costs on prices … Those firms able to pass the extra cost on prices are expecting further increases in the next six months'.

7.5 The FSB found that the most common response among their members remained lower profits or absorbing the cost, but it had fallen since 2019 (59 per cent compared to 71 per cent in 2019); however, a similar share now reported raising their prices (58 per cent compared to 45 per cent in 2019). We heard from some SMEs that it was becoming more difficult to absorb the NWL cost and accept lower profits because of their restricted cash constraints. The British Chambers of Commerce (BCC) also found that prices and profits were the leading responses to the rising NLW. 48 per cent of members surveyed said they would raise prices (a big increase over previous years, last year the figure was 33 per cent), and one in five said they would take lower profit margins.

7.6 A survey by the CIPD found that 39 per cent of employers in wholesale and retail reported raising prices, compared with 19 per cent in 2021 and 23 per cent in 2019. In hospitality the share was 53 per cent compared with 38 per cent in 2021 and 44 per cent in 2019. The findings suggested 'that in these sectors, it's easier currently to pass on increased wage costs through higher prices than reduce them through improved productivity.' Price increases were the leading anticipated response to future increases in NLW rates. 20 per cent of businesses who expected to be affected by the projected 2024 increase said they would increase prices. Among employers in retail and wholesale, 31 per cent expected to raise prices; among hospitality and leisure employers, the figure was 40 per cent.

7.7 Retail competition, especially in the grocery sector, has historically constrained price rises. However, the British Retail Consortium (BRC) argued retailers could only absorb so much of the rising input costs and reduce their profit margins until 'inevitably … some inflation [was] passed on to the consumer'. The Association of Convenience Stores (ACS) found that half of their members reported raising their prices due to the combined impact of increased operating costs and NLW increases, a similar share to 2019. 42 per cent of Federation of Wholesale Distributors (FWD) members said they

would increase their prices to deal with the increased NMW. Jempson's, a family-owned retail business based in East Sussex, told us the frequency of price reviews from their suppliers had increased, leading to input prices rising with little notice. While they and many other stores were reluctant to pass on these costs to customers, in some instances they had little choice but to increase prices. Source BMX, a company based in Hastings, told us their input costs had increased 30 per cent since the pandemic, which along with supply chain disruptions and the rising cost of energy created a more challenging environment to operate in. They nevertheless felt they had little scope to raise prices because of the anticipated customer reaction.

7.8 Community Leisure UK told us that the past year had seen customer numbers falling, 'with many members making zero profit or even operating at a loss'. Most members had increased their prices in the face of rising costs, with increases varying from 4 to 10 per cent, depending on cost pressures, market demand and support from local authority partners. In hairdressing, a sector where companies have historically told us they are very reluctant to increase prices, the National Hair & Beauty Federation (NHBF) data showed a steady rise in businesses expressing the intention to put up prices over the next three months, with 41% saying they would do so in September 2021, 58% in September 2022 and 64% in April 2022. The Food and Drink Federation (FDF) told us that prices were rising quickly, placing many businesses in tough retail negotiations: 'some of those cost increases could be passed on to consumers, but the persistent, sheer size of cost increases seen across the board (most of which are well into double digits) are far from being recouped by manufacturers'.

7.9 A survey by the British Beer & Pub Association (BBPA) found that the 'vacancy rate for hospitality is 8 per cent'. In this context, as many pubs attempted to recruit new staff to stay open, a higher NLW was less concerning than 'rapidly rising energy costs [which] will wipe out [businesses'] entire net earnings for the year'. The BBPA were sceptical these increases could be passed onto customers in their entirety. Amongst their members there was 'a sense that prices charged to customers will not allow for any further increases … particularly if service levels are affected by staffing limitations'.

7.10 Worker representatives took a different view of employer profitability. The trade union Community pointed to some employers emerging from the pandemic with record profits: 'A proportion of our employers have had bumper years, having emerged from the pandemic, and made record profits.' UNISON submitted a report on profitability in the facilities management sector, finding that profitability had been maintained despite cost increases; investment levels were rising; and the sector had a resilient and growing SME sector. Unite also argued there were no negative impacts on businesses as the NMW rose and shared the conclusions of a report looking at 'price gouging': 'in the past six months company profits are responsible for almost 60 per cent of inflation rise … the cost of living crisis is to a great extent a profiteering crisis'.

Changes in the minimum wage have a limited effect on overall inflation

7.11 Minimum wage workers make up a very small share of the total wage bill for the UK. Using data from ASHE, we estimate that this was around 2 per cent in April 2022, less than half their share of employment (5.4 per cent). If we extend this to include those earning up to £1.50 above the NLW and whose wages might rise as a result of spillover effects, this still makes up only around 10 per cent of

the total wage bill. Wages themselves are only one of a number of costs that firms face, while many of the goods that we consume are produced abroad and so their prices are not directly affected by changes in the UK minimum wage. This means that even when some firms pass through increases in the NLW to prices, this makes up a very small share of costs in the economy overall and so has a minimal impact on total inflation.

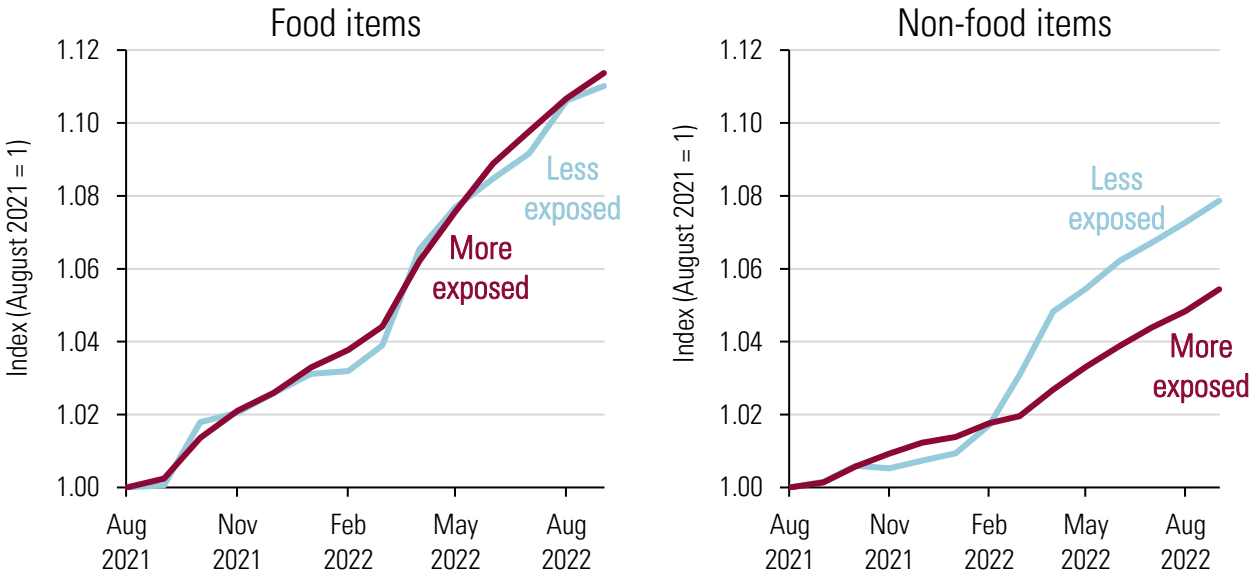
7.12 While stakeholder evidence shows that raising prices is a fairly common response to NMW/NLW rises, research indicates that in practice, firms only pass on a small proportion of NLW costs (Wilson, 2020), making the impact even smaller. This research identifies products most exposed to the minimum wage (i.e. those where minimum wage workers' wages make up the largest share of total costs). It finds that a 10 per cent increase in the minimum wage led to between a 0.2 and 1.1 per cent increase in these product's prices on average. This is significantly below the 2 to 4 per cent increase in the price of these products that should have occurred if firms had passed through the full cost. Wilson's study covered a period when inflation was relatively low, and so – as reported by stakeholders – pass-through of costs into prices is likely to be higher in the current high-inflation environment. Although, as shown in Figure 7.1, price changes are reported as one of a number of mitigations, and many firms do not currently pass NLW-related cost increases on to consumers.

7.13 Studies in other countries have found higher rates of pass-through following very large changes in the minimum wage. Allegretto and Reich (2018) found that restaurants in San Jose, California passed on nearly all of the costs of a 25 per cent increase in the minimum wage, while Harasztosi and Lindner (2019) found that after the minimum wage was nearly doubled over a period of two years in Hungary, firms passed on around 75 per cent of costs to consumers. However, while such levels of pass-through could contribute to price increases for individual items or services, the small wage share of minimum wage workers in the economy as a whole continues to keep the overall impact on inflation very small.

7.14 Using Wilson's (2020) data on the most exposed sectors and regions, we have compared inflation in products and services more and less exposed to changes in the minimum wage (based on estimates of minimum wage workers' salaries as a share of total costs by sector and region). We generally find that price changes have been similar between those items that are more and less exposed. Where inflation has been high in minimum wage sectors, this has primarily been in those sectors that are also highly exposed to food-price inflation, such as the takeaway sector.

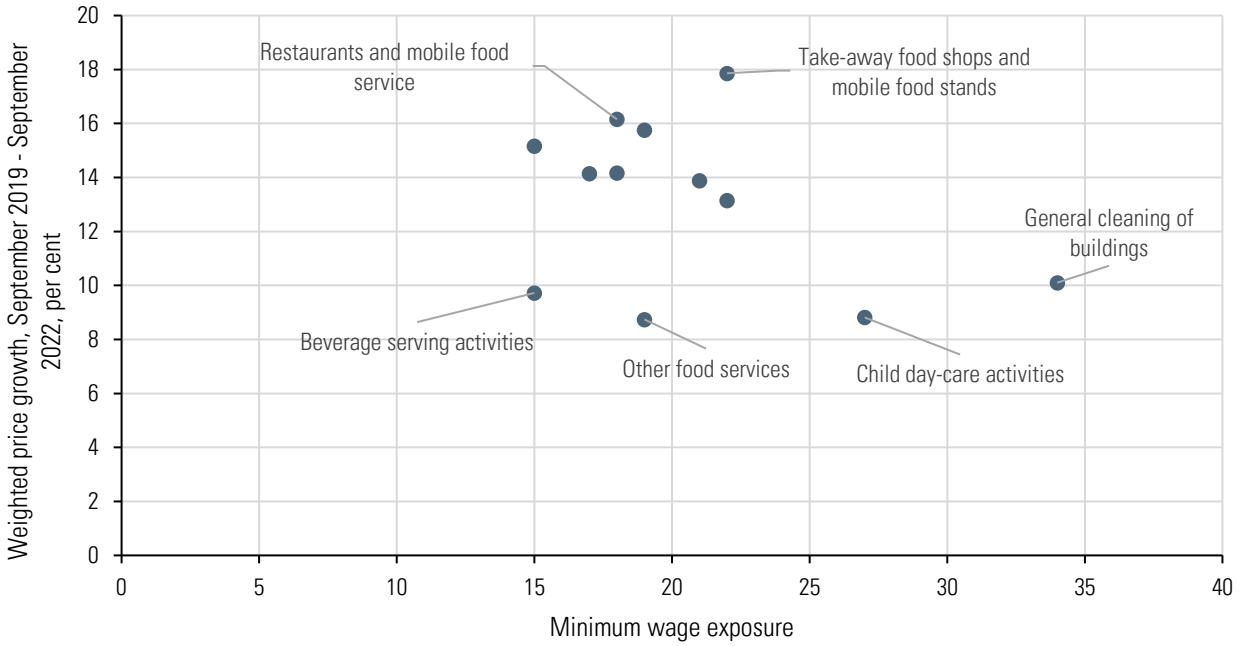
7.15 Figure 7.2 compares food and non-food items. We find no evidence that prices increase faster for goods and services more exposed to the minimum wage in for either food items or non-food items. The chart shows the change in prices since August 2021 (the first month when data were available that were largely unaffected by the pandemic and associated shutdowns). We include only products that cannot be traded internationally in order to limit the impact of global prices. This means that, for example, the cost of energy is not included (although it will be an input to many of the products and services included). While we have split out food products to control for the particularly high inflation in food inputs, a fuller analysis could control for the balance of energy and other inputs between sectors. Looking at the variation in exposure between those sectors most exposed to changes in the NLW at a national level (Figure 7.3), we do not see a relationship between the degree of exposure to NLW increases and the rate of price growth over the past three years.

Figure 7.2: Weighted index of prices for goods that are most exposed to the minimum wage compared to other goods, 2021-2022



Source: LPC estimates using ONS consumer price inflation price quote data, monthly, UK, August 2021-September 2022, and estimates of item/region-level minimum wage exposure from Wilson (2020). Non-tradable items only.

Figure 7.3: Price growth in sectors most exposed to the minimum wage, by exposure, 2019-2022



Source: LPC estimates based on ONS consumer price inflation item indices, monthly, UK, September 2019-September 2022, and estimates of sector-level exposure to the minimum wage from Frontier (2020).

Productivity and investment

7.16 As labour becomes more expensive and, in a tight labour market, harder to resource, the incentives increase to invest in productivity-enhancing technology, including automation. As profits were squeezed, however, we heard this was not always possible, especially for smaller businesses who remained far more likely to reduce investment in response to the NLW. Conversely, we heard from several larger firms who were looking at ways to improve productivity.

Some employers have reduced investment in response to the NLW

7.17 Some employer representatives told us that investment intentions were falling as business uncertainty regarding the economy and future input costs affected confidence. We heard from the CBI that uncertainty about demand continued to be the foremost factor weighing on investment, with businesses not believing they could absorb costs via improved productivity. Members reported that 'investing in automation is practically impossible due to the cost it represents in the current economic context'. 22 per cent of CBI survey respondents this year were looking to improve productivity through greater investment in automation, a reduction compared with 34 per cent in 2019.

7.18 The FSB found more businesses cutting investment. One in three members (32 per cent) reported cancelling or scaling down plans to invest in or expand their business, up from one in five in 2021 and 29 per cent in 2019. In comparison, only 12 per cent reported improving productivity or efficiency. Make UK told us that employers in manufacturing were spending their capital on 'business continuity spend'. They argued the super deduction (enabling companies to cut their tax bill by up to 25p for every £1 they invest) had failed to create an investment boom: 'investment planning cycles are far longer in length than the proposed scheme eligibility windows'.

7.19 The ACS reported that just under half of multiple retailers surveyed were investing in automation. The Scottish Grocers' Federation (SGF) told us that 'rising staff costs also negatively impact of the ability of retailers to invest in their businesses and to keep them viable, profitable enterprises. As the NLW has increased we have seen a steady decline of investment in stores.' The NHBF's survey found 46 per cent of firms would reduce investment in response to a rising NLW. The Recruitment & Employment Confederation (REC) found that less than a fifth of survey respondents reported the NLW increase would lead them to boost productivity or increase automation. In 2020, these figures were 25 and 20 per cent respectively. The Equestrian Employers Association (EEA) told us that 60 per cent of members said they could not afford to invest in their business; most members reported productivity staying the same or decreasing. Community Leisure UK told us that after two years of limited maintenance during the pandemic, investment had focused on business critical areas such as necessary replacements for equipment or essential building maintenance.

Other firms have raised investment in response to the NLW

7.20 Higher investment intentions were more common among larger employers. In food and drink manufacturing the FDF told us that larger companies were investing in research whereas small producers making up the bulk of the industry had lower cash reserves: 'The sector reflects the UK productivity puzzle: a smaller number of productive firms, followed by a long tail of less productive businesses.' During the LPC visit to Derry we heard from Manufacturing NI that the acute shortage of

labour was driving businesses to look more into robotics and automation to improve productivity. This was supported by local businesses at the Londonderry Chamber of Commerce, who wanted to invest in automation to become less dependent on workers who were increasingly difficult to recruit.

7.21 In agriculture, a labour provider told us that automation and improved productivity through robotics was possible in packing but the technology did not exist for picking, which remained dependent on labour. We spoke to one tomato farmer who after working two years with a robotics company to develop a picking robot had abandoned the project for lack of progress.

7.22 The BRC's member survey found that 50 per cent of retailers had invested in technology to increase automation. 74 per cent said they would do this in response to further cost pressures, down from 100 per cent in 2021 and 83 per cent in 2019. One large retailer told us that historically they had adapted to increases in the NLW by investing in automation to reduce staff numbers, and as the NLW increased would continue to look at a lower employment model. The Trades Union Congress (TUC) recommended unions and employers work together to unlock Britain's productivity potential, 'to think about how you raise wages, improve productivity, give people the skills they need, not just for the jobs that we've got now, but as jobs evolve over time'.

7.23 We recently carried out a study of the impact of the NLW on productivity, which found no evidence that the NLW increased productivity between 2015 and 2019 (Latimer 2022). We compared growth in productivity across different industry-region cells. If the NLW had increased productivity, we would expect productivity growth to increase in industry-region cells with a higher share of minimum wage workers. We found no evidence of this, although there is considerable uncertainty around our estimates. This evidence is consistent with the stakeholder evidence discussed above. While some, typically larger, firms say they have responded to the NLW by increasing investment, others say the opposite. Overall, we have found no evidence that the NLW has had a significant positive or negative effect on productivity to date.

Evidence from the care sector

7.24 This year, as in previous years, we received a large quantity of evidence from the care sector. Social care is largely reliant on public funding. Over the years, this funding has generally failed to match the pace of the rising minimum wage, contributing to difficulties across the sector. We heard about the continuing funding difficulties faced by the sector, as well as the potential effects of the reforms announced in September 2021 (Department of Health and Social Care 2021).

Social care reforms

In September 2021 the Government announced a package of social care reforms, including among other things a cap on the cost of care to individuals and a 'fair cost of care' policy. Both of these have an impact on the funding and commissioning of care by local authorities.

The 'fair cost of care' policy is intended to address the 'cross-subsidy' which occurs currently. Care recipients who fund their own care pay a higher price than do local authorities purchasing care for those unable to self-fund. Care providers rely on charging this higher rate because the rates offered by local authorities are not enough to cover all their costs. Under this policy, the Government will provide funding (around £1.36bn from 2022 to 2025) to support local authorities as they move towards paying

care providers a rate which adequately covers costs. The intention over time is to end cross-subsidy and allow self-funders to access care at the same rate that councils pay.

The Government also announced a cap on the amount anyone in England will need to spend on their personal care over their lifetime. Subject to eligibility and means-testing, the cap will mean that local authorities are expected to find the care of individuals who have reached the cap.

The combined effects of the reforms – and their eventual implications for low-paid workers in the care sector – are complex. They make extra funding available to local authorities, but also expand their responsibility for commissioning care. As we heard from commissioning directors this year, preparing for and implementing the reforms is resource intensive. The County Councils Network has called for the cap to be delayed from 2023 until 2024 and in the Chancellor's Autumn Statement this reform was delayed until 2025. Local government and providers continue to express doubts over whether the proposed funding settlement will be adequate. In addition, the difficulty of agreeing a fair cost of care, which is sustainable for local markets and offers 'a reasonable profit', is likely to mean continued complexity and geographical variation across the country.

Funding for the care sector remains tight

7.25 Funding remained a key theme. Respondents argued that government funding to local authorities needed to be increased to mitigate the ongoing recruitment and retention crisis. Care England told us the low fees paid by local authorities limited the pay increases that providers could afford. This was supported by the Homecare Association who told us that policies being implemented without matched funding contributed towards a destabilised sector, leaving providers unable to fulfil regulatory commitments. KeyRing, a social care employer, told us that while they had signed up to the Living Wage, the problem was securing funding from the local authorities.

7.26 Care England told us that for care providers, areas with the highest proportion of local authority-funded residents were the worst affected. While some providers could make up shortfalls in income by charging a premium to self-funded residents, they told us this would no longer be possible under incoming reforms. They estimated that plans to increase fees through the Fair Cost of Care were not backed by sufficient funds, with a calculated £854m shortfall (Buisson March 2022). In the Black Country, the Association of Directors of Adult Social Services (ADASS) told us that the proposed social care cap on personal contributions would also place added financial, workforce and technical pressures on local authorities. The Royal Mencap Society also told us that local authorities were 'insufficiently funded to meet demand let alone increase the amount they pay providers for their services.' They added that different local authority contractual arrangements for social care led to differing pay, confusion, and inequality: 'Every local authority required us to pay different amounts in different ways leading to significant additional administration'.

7.27 The Local Government Association (LGA) told us that central Government had provided a three-year financial settlement for local government in 2021; they judged at the time that this funding package would meet funding needs in 2022-23 but would leave a gap of £1bn in 2024-25. Rising energy and labour costs meant without additional funding the sector would struggle.

There is a recruitment and retention crisis…

7.28 The tight labour market meant this year we heard of businesses across the economy struggling to recruit staff. This was especially true in the care sector where increasingly stressful roles were becoming harder to fill as competing pay from the NHS and other sectors proved more attractive to many workers. Skills for Care estimated average vacancy rates at 10.3 per cent in April 2022 (up from 6.1 per cent the previous year), while a Care England survey suggested that 22 per cent of their members faced vacancy rates above 20 per cent.

7.29 Care England thought staff turnover of 28.5 per cent was driven by low pay and disparity with terms and conditions in other parts of the economy, especially the NHS. 'Care workers in the independent sector earn on average around £3,500 less than similar roles in the NHS'. They told us the staffing crisis was increasing use of agency staff and, ultimately, affecting services: 'we're seeing some really big reductions in capacity … care providers have started to say, well, I can't deliver services to everybody so I'm going to reduce the number of people I support'. They argued the care workforce needed to grow by half a million by 2035 to keep pace with demand. The LGA echoed the point that disparities with the NHS were a problem. They noted that recruitment into specialist occupations in social care was particularly difficult, for example health visitors where similar NHS jobs exist.

7.30 Scottish Care told us that the perception of social care as a profession where you cannot develop a career was exacerbating recruitment and retention challenges. The Living Wage Foundation also told us low wages were exacerbating recruitment gaps. The Scottish Women's Convention (SWC) told us women in caring roles were having their goodwill exploited and that low pay was forcing some to leave the sector. A survey of GMB members working in care found that 70 per cent were not earning enough to live on, relying on family, overdrafts, or credit cards to survive.

…which is leading to worker burnout

7.31 Both employers and workers described a social care workforce on the brink of burnout. Care England told us the pandemic saw considerable and continuing pressure on care home workers: 'people are taking a step back, and they're starting to realise what they've been through … And there aren't the mechanisms to support people that there are in other sectors like the NHS, for example'.

7.32 We heard from UNISON members in Wolverhampton that the cost of living crisis was becoming so acute that it was common for workers to opt out of the working time directive in order to receive as many hours as possible to meet the challenges of rising prices. Care England also told us that adult social care workers have been hit by cost increases. The cost of travel for home care workers, 'who travel an estimated 4 million miles per day,' added to this. The Royal Mencap Society told us that they were 'struggling to retain colleagues who are still experiencing burn out and fatigue due to the additional workload and stress as a direct result of the pandemic.'

7.33 The rising cost of fuel was a common concern, particularly for homecare workers expected to travel between engagements. The Homecare Association told us that workers were significantly affected by rising fuel prices not reflected in their fuel cost allowance, with 61% of providers were paying their staff 30p per mile or less. They estimated an extra £75 million would be required to compensate workers. These cost increases had made home care less attractive and caused some workers to move to jobs in care homes. UNISON during our visit to Wolverhampton confirmed that

despite the rising cost of fuel prices, social care workers dependent on cars were not seeing any increases in fuel allowances. The Royal Mencap society raised this as an issue which HMRC needs to address. UNISON members feared that low mileage rates were resulting in workers receiving less than the NMW.

7.34 We continued to hear representations regarding the treatment of sleep-in shifts, following last year's Supreme Court judgment that workers on such shifts are not entitled to the NMW while asleep. The LGA told us that 'The Supreme Court ruling in the case of Royal Mencap Society v Tomlinson-Blake has resulted in greater clarity and the guidance has reflected that. This is helpful and presents a stronger foundation for enforcement activity'. Worker representatives pressed for changes to the rules. UNISON demand reform on sleep-ins and the classification of overnight shifts as working time. They stated that usual practice was to pay £25-45 a night. UNISON members in NI told us that workers on sleep ins should be entitled to the NMW since they are at work and could be expected to perform duties at any moment. A submission by Professor Deirdre McCann argued for legislative reform to ensure that all time at work is fully waged and that this becomes an integral element of social care's funding settlement. She advised that we recommend that the minimum wage should extend across the full expanse of sleep-in shifts.' The TUC told us we should update our position on sleep-ins. 'The TUC supports UNISON and Mencap in their joint position that all time on sleep-in shifts must be considered working time for the purposes of the minimum wage.'

What next?

7.35 Respondents agreed that in part the issues of recruitment and retention in the care sector could be alleviated by increased pay for workers. Many of these workers who were having to perform multiple tasks and responsibilities for a wage that often compared less favourably than working in a similar role in the NHS. However, from all respondents it was noted that in order to increase pay, funding to local authorities had to be significantly increased otherwise workers may find their work intensified, further contributing to people leaving the sector. From workers themselves we heard that the rising cost of fuel, time spent travelling to appointments and feeling undervalued when performing sleep-ins shifts were all serious cause for concern.

7.36 In April the Migration Advisory Committee (MAC) reviewed adult social care and the impact ending freedom of movement had on the sector. Among their recommendations they call for the Department of Health and Social Care (DHSC) and the Devolved Administrations to work towards a joined-up approach. Currently the minimum wage for a social care worker in Scotland is £10.50 per hour and £9.90 in Wales. There is no sector specific minimum wage for social care in England therefore the NMW and NLW apply as the minimum. The MAC have recommended the Government to implement a £10.50 minimum wage in social care immediately, and for public funding to be increased to enable these pay increases.

7.37 To address recruitment and retention issues Care England called for 'the creation of a better, long-term career pathway and increased, accessible progression opportunities for social care, which will help the sector to be seen as more of a permanent, long-lasting career as opposed to a place to go for temporary work.' They have also called on the Government to 'review the pay and terms and conditions, among other things, of the adult social care workforce in order to reduce the high turnover'. Care England would also support the Migration Advisory Committee's recommendations 'of a fully-funded minimum rate of pay for care workers in England that is above the NLW.'

7.38 In order to prevent workers leaving the sector to join the NHS, the Homecare Association has recommended 'pay rates should be on a par with equivalent roles in the NHS, such as a Band 3 Health Care Assistant at £11.14 per hour.' In recognition of the need for providers to fully reimburse care workers for their work, the Homecare Association has called on 'the Government to make urgent, temporary, grant funding available as a fuel allowance to cover the costs of delivering homecare … The Department of Health and Social Care has, however, deflected responsibility for covering fuel cost increases to local authorities, who claim to have insufficient funds to assist.'

7.39 Regarding funding UNISON told us we should call on the Government to ensure additional financial provision is made to fund the projected increase in the NLW for those working in the public services. Additionally, UNISON called for more stringent compliance and enforcement of the minimum wage in social care. We discuss this further in Chapter 8.

Conclusion

7.40 Employers have responded to the rate increases in a similar way as before the pandemic, with a few key differences. The tight labour market means fewer are reducing pay for the rest of the workforce or other aspects of pay like overtime and bonuses. But more tell us they are putting prices up. However, the most recent evidence tells us that this price pass through is small and there is little difference in prices increases between goods exposed to the NMW/NLW and those that are not.

7.41 The care sector continues to face substantial challenges. The tight labour market made recruitment and retention more difficult than ever. Low-paid workers remaining in the sector faced increasing stress, and with rising fuel costs, greater hardship. The rising minimum wage was one factor in a general funding crisis, and the effects of planned reforms on these difficulties remain uncertain.

Chapter 8

Workings of the National Minimum Wage

Key findings

We have reviewed the Accommodation Offset, following extensive consultation with workers, employers, charities and research groups. Our review focuses primarily on the agriculture and hospitality sectors, as they make the greatest use of the offset.

Employers have strong incentives to invest in good-quality accommodation, especially in a tight labour market. Employers provide accommodation to low-paid workers because of the lack of local labour and housing markets. The need to attract and retain a workforce makes decent accommodation an important part of many employers' recruitment offer.

Despite this, workers we spoke to were unimpressed by their accommodation, especially where conditions were cramped and they were located away from essential utilities. Workers were reluctant to speak out about problems with accommodation or working conditions.

A key finding was that accommodation charges risked pushing some workers into situations of low or no pay if their working hours fell. Some employers we spoke to were aware of this risk and had safeguards in place, reducing or removing accommodation charges for workers on low weekly hours – but this was not universal.

In most cases, the amount employers deduct for accommodation does not meet their cost of provision. Employers thought the offset should be higher; some thought they should be permitted to deduct an uncapped market rate; others advocated more modest increases towards the value of the NLW.

Our recommendations focus on the need for a better set of quality standards and enforcement regime as a precondition for significant increases in the offset. We recommend the introduction of protections for workers on low hours. We also recommend an exemption from the offset for seafarers, who we consider to represent a special case. Lastly, we ask the Government to better align immigration and labour market policy; the offset creates a loophole when it comes to the pay rates mandated by the Seasonal Worker visa regime.

The evidence we have heard on compliance this year reflects familiar concerns from employers and workers around the operation and resourcing of the enforcement regime. We will return to this matter in a standalone report next year.

Events this year have drawn fresh attention to the pay and conditions of seafarers. The NMW has been extended to new groups of seafarers in recent years, and the Government is bringing forward measures

to extend pay protections to a wider proportion of the sector's workforce. Effective enforcement of these measures is key and will be an area we observe closely in the future.

8.1 This chapter brings together a number of items related not to the level of the National Living Wage (NLW) and National Minimum Wage (NMW) rates, but to the operation of the NMW framework. The most substantial of these is our review of the Accommodation Offset. We then go on to collect the evidence we heard this year on compliance and enforcement of the NMW; and lastly consider the position of seafarers relative to the NMW.

Review of the Accommodation Offset

Introduction and background

8.2 We have undertaken a review this year of the Accommodation Offset. We had committed to review this rate for two reasons. Firstly, since 2013 the offset had been on a path to align with the adult rate of the National Minimum Wage (NMW), subsequently the 21-22 Year Old Rate. This goal was achieved with the uprating to £8.36 in April 2021. Now is an appropriate point to think again about the offset's functioning and long-term path. Secondly, the evidence base we rely on in recommending the offset is consistently weaker than for other rates. We wished to carry out a detailed review to better understand use of the offset and the impact of our recommendations.

8.3 The most recent review of the offset was in 2013. Commissioners at the time committed to recommend staged increases in the offset towards the value of the adult rate of the NMW, as long as economic circumstances meant the real value of the NMW was rising. We noted at the time that 'we believe a higher offset would help to encourage mutually beneficial provision of accommodation. On the other hand we do not favour reducing the take-home pay of the lowest earners at a time when, like other workers, they are experiencing erosion in the real value of their wages.'

8.4 The Accommodation Offset has been a feature of the NMW framework since the minimum wage was first enacted. Nevertheless, certain aspects of its design have always been contested. Our 2013 Report, building on previous reviews in 1999 and 2006, found general support for the offset and reaffirmed several important points. These included that the offset should remain the only permitted benefit-in-kind that can count towards payment of the NMW; there should be only one rate; and it should apply irrespective of whether the worker has a choice over taking the accommodation. We noted: 'There remains a strong rationale for an Accommodation Offset – a measure that protects minimum wage workers against an excessive reduction in their income, while also recognising that there are benefits to both employers and workers. Defining that benefit (for both workers and employers), and therefore what the level of an offset should be is in significant part a matter of judgement, particularly as a single rate for the UK must cover very different local employment and housing markets.'

8.5 In this review, we sought to gather evidence on the circumstances of employers using the offset and of low-paid workers in employer-provided accommodation. Our recommendations affect the balance of benefits between employer and worker in these situations, and we have looked for views on whether the current balance is the right one. We have heard evidence on the adequacy of the offset's rules, and considered alternatives to the current model. Our review has a substantial focus on

agriculture, and the evidence we have heard overlaps with a wider set of considerations on that sector, particularly the Seasonal Worker visa scheme.

How the Accommodation Offset works

The offset dictates the maximum daily amount an employer can charge a minimum wage worker for accommodation they provide. In effect, it creates a wage floor for workers in employer-provided accommodation, distinct from that of workers not in accommodation. The Accommodation Offset is intended to be inclusive of essential utilities – employers may not charge workers extra for these. In practice, as we shall see, this is a point of contention for many employers.

Example A:

- Ivan works 35 hours a week on a farm and is paid the NLW of £9.50 per hour. He lives in a caravan provided by the farmer and is charged the offset rate of £8.70 per day.
- Ivan's basic weekly pay is £332.50 (35*9.50). From this, an accommodation charge of £60.90 (7*8.70) is deducted. Ivan receives £271.60. His pay is compliant with NMW rules.

If a worker is paid above the minimum wage, an employer is permitted to make a greater charge for accommodation, as long as it does not reduce pay below the floor set by the offset. This leads to some complexity of calculation.

Example B (non-compliant):

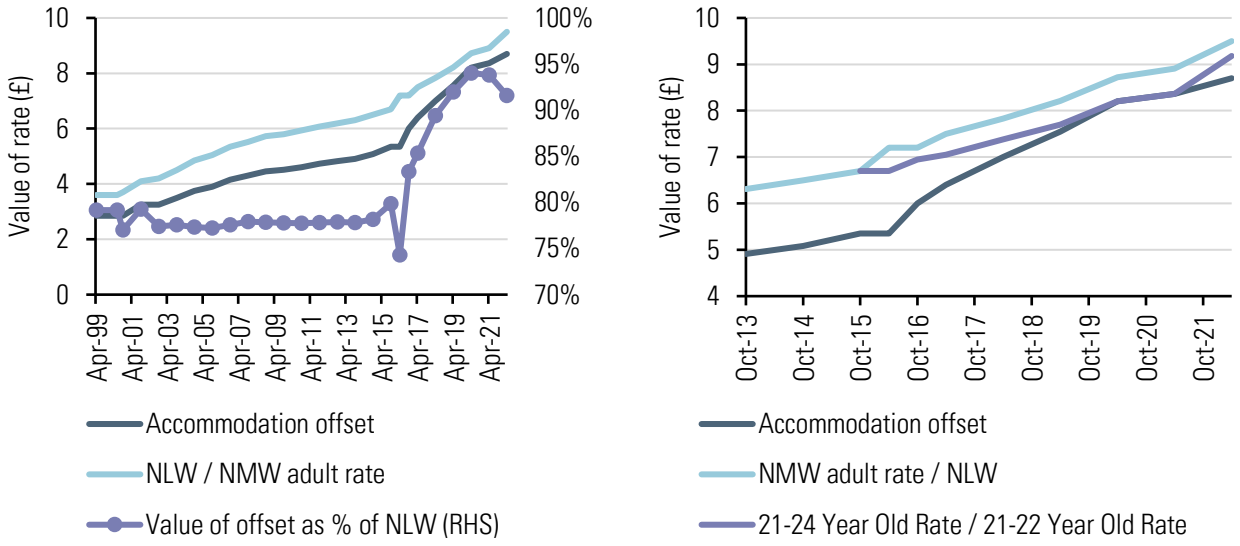
- Kamila works 35 hours a week in a rural hotel and is paid £9.75 per hour. She lives in a room in a separate annex to the hotel, for which she is charged £10 per day.
- Kamila's weekly pay is £341.25 (35*9.75) minus £70 = £271.25. This is non-compliant.
- A simple check is to add the offset charge to Kamila's weekly wage and then work out her effective hourly rate (£271.25+£60.90=£332.15). In this case, her hourly rate would be £9.49, which is below the NLW.

Example C (compliant):

- Svetlana works 40 hours a week in the same hotel as Kamila. She is a shift manager and paid £10.50 per hour. She lives in the same annex and is charged the same rate of £10 per day.
- Svetlana's weekly pay is £420 (40*10.5) minus £70 = £350. This is compliant.
- Adding the offset charge to Svetlana's weekly wage gives: £350+£58.52=£408.52. For a forty-hour week, this equates to an hourly wage of £10.21.

8.6 The outcome of the 2013 review of the offset was to accelerate increases in the rate, both in nominal terms and relative to other NMW rates. As Figure 8.1 shows below, until 2013 the daily offset had been worth between 75 and 80 per cent of the hourly minimum wage. The decision to close that gap led to faster increases up to the offset's alignment with what was the 21-24 Year Old Rate (subsequently the 21-22 Year Old Rate) in April 2020.

Figure 8.1: Relative value of the Accommodation Offset to the National Living Wage / National Minimum Wage adult rate, 1999-2022



Source: Previous LPC reports.
Note: The NMW adult rate was the highest rate of the NMW, for workers aged 21 and over, until April 2016, when the NLW was introduced for workers aged 25 and over. The NMW adult rate remained as the 21-24 Year Old Rate and subsequently (from April 2021) the 21-22 Year Old Rate.

Stakeholder evidence

8.7 Our review encompassed discussions with workers, employers, charities and research bodies, held during the spring and summer of 2022. This section summarises the evidence we heard.

Use of the offset is mainly confined to a small number of sectors

8.8 We started this review with the assumption that there were two sectors where the offset was most frequently used: agriculture and, to a lesser extent, hotels, particularly those in rural locations. We were nevertheless keen to uncover other areas where low-paid workers would be affected by the offset. In the final analysis, we are confident that the offset is used most extensively in those two sectors, and therefore they are where our recommendations have the greatest impact. The evidence in this section focuses primarily on agriculture, where we believe the question of the offset is most fundamental.

8.9 During the course of this work, we heard some examples of other areas where employers provide accommodation and use the offset. The Equestrian Employers' Association (EEA) made a valuable submission showing that around a third of their members provided accommodation. Members of the British Beer & Pub Association (BBPA) told us that pubs may apply the offset in respect of staff accommodated on-site. A research report into live-in carers by the University of Nottingham's Rights Lab found examples of care agencies deducting the offset from workers' pay. The consultation exercise suggests that the use in agriculture is (far) more extensive than in any other sector.

8.10 Another group we believe to be affected are seafarers. As of 2019, the Government has legislated to extend the NMW to seafarers on vessels operating between UK ports, bringing this group into the protection of the minimum wage for the first time. The Trades Union Congress (TUC) and the

National Union of Rail, Maritime and Transport Workers (RMT) have long argued that the Accommodation Offset should not apply to seafarers. With the extension of the NMW, this argument has gained additional salience, and made the application of the offset more than a theoretical question. This year the RMT shared seafarers' payslips with us, that showed shipping companies were making a deduction for accommodation, in line with the offset.

8.11 RMT told us that while the offset had barely been used in the past, it was now being applied by the crewing agents who employ seafarers to mitigate the costs of having to pay seafarers the NMW. They told us this undermined the intent of recent legislation in the maritime sector. They argued that seafarers had no practical option but to take accommodation on board vessels; and that their presence on the vessel, even asleep, was necessary to fulfil regulatory obligations. They were required to be available in case of an emergency regardless of their shift patterns. The TUC described the offset as 'an unacceptable tax on the lowest paid seafarers', which again risked undermining the Government's response to the P&O Ferries case. They advocated using the Harbours (Seafarers' Remuneration) Bill to exclude employers of seafarers from deducting the offset.

Accommodation type is standardised but quality is variable

8.12 In the course of this year's consultation, we heard (and saw) various examples of accommodation provided by employers. One labour provider gave us a tour of a large caravan site they had recently set up, with integrated facilities and four workers to a caravan. We spoke to National Farmers' Union (NFU) members who described the accommodation they had provided to workers. For most farms, this meant caravans and mobile homes. One NFU member described the rationale for moving from purpose-built brick buildings towards caravans, 'because that's preferred and we've noticed that through feedback on surveys that people like to live in more self-contained accommodation'. Labour providers and farmers we spoke to told us they would put four workers in each caravan, in part because post-Covid workers demanded more space: 'what was six in a room is now four in a room maximum' (NFU member). In contrast, workers we spoke to in a focus group were uniformly housed six to a caravan.

8.13 The employers we spoke to almost all told us they had to provide other facilities: 'football pitches, entertainment tents … lovely communal rooms with big flat screens in three or four places, pool tables, snooker tables, table tennis tables'. Providing accommodation also meant providing other services such as WiFi and transport to local shops. As one NFU member said: 'we are creating communities within our farms'. The diversity of the workforce created challenges: 'we've got 18 different nationalities … we've had to accommodate people with different cultures, different religions, and therefore different accommodation requirements'.

8.14 We spoke to employers who told us they prioritised quality and welfare: 'If I wouldn't be prepared to sleep there, I wouldn't expect anybody else to'; 'would I sleep there for six months and would I put my daughter there for six months – if we can tick both those boxes, that accommodation is acceptable'. NFU members all told us that reputation and the need to attract high-productivity returning workers created the incentive to provide 'good' accommodation.

'if you don't maintain standards, people will vote with their feet. They all talk to each other'.

'there's a social world out there which says [our site] is good or [our site] is bad. So we have to achieve the good otherwise no one comes to work with us'

'much more important than any of that you don't get returnees. One of the big problems we've had in the last 12, 18 months .. is that lack of returnees, just meaning more training all the time'

'have wonderful accommodation and have a happy workforce. Don't do that, don't have any workers. It is as simple as that. So it's a cost the business has to cover.'

8.15 Research by the Feeding the Nation project supported this point that facilities and accommodation were used as marketing tools to attract and retain workers. Their survey of farmers found that tied accommodation at accessible rates and of good quality was essential, given the high price of rental housing and transport in rural areas. The alternative was to risk labour shortages. A competitive labour market, as well as the pandemic and social distancing requirements, had pushed employers to invest in accommodation. Some farmers surveyed, on the other hand, thought there had been a reduction in accommodation, in part as a result of labour shortages leading to less production.

8.16 In their written evidence, the Association of Labour Providers (ALP) argued that the level of the offset meant employers provided basic accommodation only: 'employers economically cannot legally provide accommodation to their own workers paid at or around NMW other than in the most basic forms of accommodation'. This meant caravans, mobile homes, hostel-style accommodation or houses of multiple occupation. Labour providers we spoke to directly recognised that the caravans where they housed workers were not designed to be occupied for months at a time.

8.17 A distinct case was that of employers who owned bricks-and-mortar homes and acted as landlords for permanent (non-seasonal) staff. The offset still operates in the same way and constrains employers from charging market rates. We spoke with one fruit producer who had been found non-compliant by HMRC over accommodation charges: 'We've got about 70 legacy homes for our employees and we've built another 13 in recent years. All accommodating current staff and or retired staff at subsidised rates … anywhere between 75 per cent and 50 per cent of the benchmark rate for accommodation locally'. Problems arose because even at these subsidised rates, accommodation charges were greater than the offset and workers consequently underpaid. The employer argued that the application of the offset created perverse incentives not to offer subsidised accommodation for lower-paid workers: 'The person who's got the significantly discounted property is at a distinct advantage and is very pleased with their situation but from an HMRC point of view, we are deemed to be disadvantaging the person who's got the discounted property'.

8.18 Hotel operators we spoke to described a similar imperative to provide high-quality accommodation to attract and retain workers. They reported a particular shift in worker expectations as the labour market had tightened since the pandemic. As one HR director told us, 'you can no longer offer a caravan outside. You have to offer single ensuite accommodation, otherwise it won't work'. The accommodation provided ranged from repurposed hotel rooms to purpose-built staff blocks, to existing local properties either purchased or rented. Employers emphasised the need to adequately furnish and equip accommodation, and the costs they incurred from wear, tear and loss.

Workers were not impressed with accommodation quality – although they often had more pressing concerns about working conditions

8.19 Workers tended to have a markedly different view of accommodation and facilities than employers. It was apparent to us that there was no easy consensus over what constitutes 'good'

accommodation, and the experience and expectations of the workers living on a site can be very different from the view of the employer running it.

8.20 The workers we spoke to, based across a number of farms in south east England, painted an unappealing picture of their accommodation. They generally described their accommodation as cramped and uncomfortable. The majority of workers we spoke to were accommodated six to a caravan or a room. In most cases, workers felt their accommodation did not match what they had been led to expect before arriving – in particular, caravans did not come with their own facilities. One worker said that the advert for her job had promised a caravan with its own toilet and shower; but that in reality she was situated in a caravan without these, and relied on kitchen and toilet blocks around 100 metres away. Others told us they were five minutes' walk from their kitchen and bathroom facilities.

8.21 Workers did not feel they had a choice over their accommodation. Workers who wished to rent privately were concerned about difficulties of travelling to work. Some migrant workers were also unsure of whether their visa conditions would allow them to live off-site. Some workers did not feel it was practical or affordable to rent privately; others thought they would not be able to afford a deposit. Although the terms of their visas in principle allowed them to request transfers from one farm to another, it was hard to exercise this right in practice. Workers worried employers would refuse requests unless they had a 'very good reason' for making one. They worried they would have no choice over where they were transferred and lacked the information needed to confidently exercise this right. Migrants from central Asian countries in particular did not often have personal networks in the UK so had little chance to get information on work and accommodation in different locations. The Work Rights Centre (WRC) shared examples of workers reluctant to request a transfer 'because they may end up sitting in the caravan without work or doing minimal work for a couple of weeks while they wait for the transfer to happen'.

8.22 Research by Feeding the Nation found significant variation in quality of accommodation, even as work and pay were constant. Agricultural workers often complained about the cost and quality of the accommodation provided on UK farms. Workers often used the going rates for accommodation in their home country as a point of comparison, with the offset rate more expensive than typical rents in many migrants' home countries. Researchers found that workers were most often accommodated in caravans, which tended to be cramped; workers' experiences depended heavily on who they shared space with. In some cases, workers had asked to move based on the quality of the accommodation. The quality and maintenance of the caravans varied considerably between farms, and some workers reported 'hidden costs' (such as for laundry or internet) charged by employers.

8.23 All the workers we spoke to told us their work was hard. The work required skills which were not easily acquired by newcomers. The work was governed by production targets which were never less than challenging, could vary week to week and were often not laid out clearly in contracts. Overachieving targets could theoretically result in higher pay, but only the most skilful and experienced workers were able to achieve this. A number of workers we spoke to described situations where they were underpaid; they worked for ten or eleven hours per day, but if they failed to meet targets they only received the NMW for eight hours. Work-related injuries were common and workers felt proper medical treatment was hard to come by.

8.24 A strong theme of our discussions with agriculture workers was their isolation and relative dependency on their employers. Their experience of living in isolated rural locations was constraining –

employers laid on buses to take workers to the shops once a week, when workers are expected to do all their shopping. Workers who had arrived with expectations of seeing the UK found that they had no such opportunities, with their existence effectively confined to the farm. An additional anxiety for some workers was that their contracts did not extend to the end of their visa period. To get their visa they had been obliged to purchase return tickets for their visa expiry date. The mismatch between visa and contract expiry dates potentially left them with a period when they would have no job and no accommodation. Focus on Labour Exploitation (FLEX) argued that the rapid expansion of the agricultural Seasonal Worker visa scheme to new countries for this route, without sufficient planning, oversight, safeguards or due diligence creates risks of exploitation; 'new markets come with new risks, a lack of clear agreements with local authorities in place, oversight or monitoring of the whole recruitment process creates a risk of workers being financially exploited'.

8.25 Some NFU members argued for the benefits of the current employment model in agriculture: '[seasonal work] is a real win-win for the individuals and for the businesses. For the individuals, it gives them the opportunity to come to a country … that gives them the ability to earn between five and eight times what they were doing at home, not just for one season, but often for two, three or four seasons … The benefit [for us in the UK] is that you get your fruit and veg picked'. Migrant workers we spoke to, however, took a different view of the balance of benefits.

> 'When we all came here from Central Asia we expected the UK to be a great country … we wanted to see Stonehenge, Scotland, but we can only see work, usually hard work … They have no flexibility to do anything but work. These conditions are hard, and it's leaving people with a sour taste'.
>
> Migrant farm worker, Kent

Work and incomes are variable and the offset exacerbates this

8.26 Our engagement with workers took place in July and August, high season during a hot summer, when there was pressure to work long hours to pick crops. Other submissions suggested that workers could not rely on such conditions all year round, and that at other points in the season hours and hence income could be much more limited. The offset, as a fixed daily reduction, can leave low-hours workers with little money left over. This was a point keenly felt by several employers we spoke to, who were sensitive to the risk of workers on low hours becoming unsettled. The Seasonal Worker visa specifies workers cannot be put on zero-hours contracts; we heard that visa operators tend to provide minimum contracts of around 30 hours; we saw examples of other employers guaranteeing 20 hours. Nevertheless, there is an inherent risk that weather conditions or crop failures leave workers unable to work. We also heard about other risks; of workers falling out of favour with supervisors, or being 'zeroed down[8]' for low productivity or having to limit their hours because of medical factors.

8.27 One labour provider we spoke to applied a scaled charge depending on working hours: 'if at the beginning of the season, it's a slow ramp-up, and people aren't working sufficient hours, they get charged less'. They thought it was 'generally accepted' that if a worker worked less than 16 hours in a

[8] 'Zeroing down' is a term used to refer to situations where workers whose contracts guarantee them no or low hours have their working hours restricted as a punitive measure by management.

week, they aren't charged for accommodation; typically, they told us, people work 50-60 hours a week and if weekly hours drop below 45, the workforce start to look elsewhere. Pro-Force provide a guaranteed 30 hours – the visa regulation just provides that they contract is 'not zero hours,' but they don't feel that's fair so they require growers to pay workers for a minimum of 30 hours a week. Several NFU members told us they applied similar scaling to their accommodation charges.

8.28 As in our own evidence-gathering, researchers from Feeding the Nation found that some farms offered a weekly waiver of the accommodation fee during weeks where there is limited or no work to do. Other farms did not, due to the cost impact of such a measure. Researchers found that less than half of farms or labour providers operated a minimum number of hours under which workers cannot be charged for accommodation.

Table 8.1: Example of scaling accommodation charges

Weekly hours	Weekly accommodation charge
Up to 15 hours	No charge
Up to 20 hours	£40
Up to 25 hours	£50
Up to 30 hours	£60
Up to 35 hours	£70
Over 36 hours	£75

Note: Accommodation charges above the current weekly level of the offset (£60.90) can still be compliant if workers are paid above the NLW.

8.29 Despite visa conditions prohibiting zero-hours contracts, we nonetheless heard evidence that these were frequently used in the sector. Researchers at Feeding the Nation told us these were widespread, and that their use often left workers in 'low pay-no pay situations'. They provided examples of workers who only got two days of work in a week and could be left with practically no income after costs and deductions. 'I've seen a couple of cases…where people were working very few [hours], perhaps two days they were earning £120 that week…After they paid everything they needed [sic] for that week. They have four pounds or two pounds. And the optics of that is terrible and is where the public perception of exploitation and everything comes [from] and that is damaging for the sector and for the country.'

8.30 Evidence from the WRC noted that although seasonal workers were generally not on zero-hours contracts, their guaranteed contractual hours could still be very low. As a charity providing advice and support, they had received enquiries from workers in situations where they could not work full time or sometimes at all, but who were expected to pay for accommodation. This could arise because workers were waiting to be transferred between farms or because the crop ended at the time. The WRC also noted that contracts with low guaranteed hours disincentivised workers from complaining or raising problems with their accommodation; and created competition for shifts among workers, increasing their vulnerability and dependence on the goodwill of their employer.

Low hours and low pay-no pay

From April 2022, the Accommodation Offset was worth £8.70 per day. Among employers and workers we spoke to, it was more common to hear them refer to the equivalent weekly figure of £60.90. The weekly figure aligns with the prevalence of weekly pay reference periods.

Over the course of a week, a worker had to work at least seven hours at the NLW (or six hours at the seasonal worker visa rate of £10.10), to make up this weekly accommodation charge. The examples below give a sense of the sums involved for workers in accommodation on low hours.

Worker A works 15 hours. His weekly pay before the offset is £142.50. His weekly pay after the offset is deducted is £81.60.

Worker B works 10 hours. Her weekly pay before the offset is £95. Her weekly pay after the offset is deducted is £34.10.

Worker C works 5 hours. His weekly pay before the offset is £47.50. His weekly pay after the offset is nil (the offset exceeds pay by £13.40).

There are overlapping audit regimes – but risks around accommodation quality

8.31 We heard a variety of views about enforcement and compliance. It was often difficult to untangle the specific issue of accommodation – and enforcement relating to it – from wider concerns about the overall burden of regulation on the sector. As is the case more generally, the perspectives of employers and workers were very different; the former were preoccupied by the burden of enforcement, while for the latter enforcement bodies were perceived as remote.

8.32 Agriculture employers we spoke to uniformly felt they were heavily audited; the audits and initiatives which weighed heaviest in their concerns tended to be private, industry-led ones. For many employers, public enforcement and regulation felt more remote. When asked about standards and scrutiny, employers rarely mentioned the Gangmasters and Labour Abuse Authority (GLAA) or local authorities ('we would never see the local authority. So forget. No time, no money, no interest'). But they were deeply aware of the need to meet audits by seasonal worker scheme permit operators ('we are … given quite clear and quite stringent checks on what can or cannot be the case for our accommodation') and retailers ('supermarket reputation is probably your strongest weapon to making sure our accommodation hits the standard'). We heard about overlapping layers of private audit (Red Tractor audits, Leaf audits, British Retail Consortium audits, CEDEX audits), and heard pleas not to add further layers of regulation. 'The supermarkets rep comes around with a clipboard and about 20 pages of checklists. And it covers everything. And if we don't pass our fruit doesn't get sold'.

8.33 Employers were aligned on the need for clearer guidance over the offset. Some of this reflected general confusion over the complexity of calculations; but the specific issue which caused most friction was around provision of utilities and services. Employers were annoyed about ambiguity over what utilities were 'essential' (for example, whether WiFi counted as such); and frustrated that they were unable to cap or control their workers' energy usage. Some employers thought competitors were routinely breaking the rules by charging workers extra for electricity, gas and other items, and that much of this non-compliance went undetected: 'it is clear that many businesses … are trying to circumvent the system by adopting various dubious practices in the hope that HMRC will not find out and investigate'.

8.34 The NFU asked for clear guidance and worked examples to provide clarity for employers using the seasonal worker scheme. The ALP told us that the current guidance is inadequate and pointed to inconsistencies over whether some charges (e.g. WiFi) count towards the offset. They alleged that HMRC's treatment varied depending on how such charges were recouped. The Chartered Institute of Payroll Professionals (CIPP) told us that employers would like clearer guidance on how the offset was

used. One labour provider told us the guidance on the offset needed to be clearer: 'what is considered essential for the worker may not be considered essential for the employer'.

8.35 The evidence we heard from workers emphasised the incentives against them making a complaint, echoing themes we have heard and explored in other sectors. As the WRC told us, 'there's a huge risk in speaking out because you may then end up not getting work above the very, very minimum hours and you have to you have to make this money back'. Groups argued that the current arrangements relied on vulnerable workers' whistleblowing, and that this reactive approach would never be fully effective. FLEX argued that 'workers may … quite understandably not being willing to do that, with a logical calculation. They stand to lose a lot more by doing something than they might ever gain'. The number of different enforcement bodies was another discouraging factor; the separate and overlapping roles of HMRC, the GLAA and Home Office created scope for gaps and confusion.

8.36 Similarly, redress and enforcement mechanisms were not designed with migrant workers in mind. FLEX told us of concerns that there is no practical structure in place to support workers to raise complaints through existing processes; they argued there should be more resources allocated to proactive labour market enforcement. They told us a fundamental problem is a lack of independent monitoring combined with the fact that enforcement cases or employment tribunals take far longer than the six months allocated to workers under the visa scheme. There is no provision for workers to support themselves if not employed through the scheme making it impractical to raise an employment complaint in practice.

In most cases, the amount chargeable under the offset doesn't meet investment or operating costs

8.37 In both hospitality and agriculture, almost every employer we spoke to made the point that the offset did not cover the cost of providing accommodation. We received a few more detailed breakdowns of the cost of provision, which are set out below.

8.38 One labour provider offered a detailed breakdown of the capital and operational costs involved in setting up and running a site with 22 caravans. Their total set-up costs come to over £405,000,with operating costs of £14,800 per caravan per annum (rising to £16,100 as energy costs rise). They estimate their current cost of provision as just under £89 per person per week, rising to £95 once energy cost increases come through. They project these to fall over the lifetime of a site as caravans are replaced. The per-person costs were dependent on a number of assumptions and parameters – for example, the figures were based on four people per caravan, but each caravan has six berths. The labour provider's view was that the current model of the offset doesn't support long-term investment, particularly the uncertainty around future rates. There is also significant uncertainty around future labour supply, which adds risk. 'We don't know if we'll have a workforce beyond 2024, especially with the Home Office looking to reduce migration.'

8.39 One NFU member, growing apples and hops and housing workers in caravans., gave us a less rigorous breakdown of costs: the headline was that 'we're bringing in an income [via the offset] of about five grand but the cost [of providing accommodation] is eight to nine grand'.

Table 8.2: Estimated of cost of accommodation provision, NFU member

Furnishings and fittings	£1000-£2000	Covers items such as bathroom and kitchen fittings.
Administration and rentals	£2000-£3000	Costs are high because of high turnover and transfer of staff on and off site.
Capital costs	£3000-£4000	Based on a five year life for the unit.
Utility costs	£1000	
Totals	£8000-£9000	

8.40 Other NFU members on the call endorsed this breakdown. On a separate call, another member told us that from 'the calculations I've done … £60.90 is about 75 per cent of what it actually costs us', with others saying this was in the right ballpark.

8.41 One labour provider submitting evidence told us that in some locations around the UK, it was possible to place workers with landlords for as little as £50 per bed per week. In most locations, however, this was not possible; accommodation costs were greater than the offset and about to increase further.

8.42 Hospitality employers we spoke to did not provide as detailed a breakdown of cost of provision compared with the offset; they described making substantial investments. For example, one hotel manager in Devon: 'We've recently bought a nursing home in the village which shut down … we're spending one and a half million, spending another 600,000 doing that up to provide 26 rooms probably about 30 members of staff accommodation'.

8.43 Hospitality employers also told us that if accommodation was assessed as a benefit in kind by HMRC, this could impose significant additional costs: one hotel operator based in Scotland told us 'in terms of benefit in kind, I have 19 year old waiters on £34,000 a year'. If HMRC judges that accommodation is a benefit in kind, employers and workers have to pay National Insurance on its value. This does not affect every employer who provides accommodation to workers; under section 99 of the Income Tax (Earnings and Pensions) Act 2003, accommodation will not be considered a benefit in kind 'if it is necessary for the proper performance of the employee's duties that the employee should reside in it'. A number of hotels we spoke to had been assessed by HMRC as providing a benefit-in-kind. They had incurred large tax bills in consequence. In these cases, HMRC had judged that the accommodation was not necessary for the performance of the employee's duties.

8.44 The EEA told us that the majority of their members who provided accommodation 'have said that the offset rate hasn't influenced their decision on whether to provide accommodation or not … Some employers commented that the true cost of providing the accommodation, e.g., covering bills, meant that it was no longer cost-effective for them to offer it.'

The labour market is tight where the offset is used and there are significant skills shortages

8.45 More generally, one NFU member spoke about their reliance on migrant workers: 'we couldn't get local labour at any point. No matter which site I look at around the country I'm beholden to bringing in SAWs [seasonal agricultural workers] to be able to get my tomatoes harvested'.

8.46 This point was also the key point for hospitality employers we spoke to who provided accommodation; UKHospitality (UKH) noted that the decision for hotels to provide accommodation reflected the realities of local labour and housing markets. Several employers spoke about lack of accommodation as a limiting factor on the growth of their business.

'They can say to us, 'look, I don't have any accommodation, you've got private accommodation, or you can't employ me'. The labour market is such that we can't pick and choose staff. We're all understaffed.'

'There's an assumption because we're in hotels that the accommodation is provided, it should be very minimally charged, but that the standard needs to be right up here, almost like a hotel bedroom. And that disconnect is becoming really hard for us to provide at the level of Accommodation Offset.'

'I could probably employ 75 people, I could grow my business ... but one of the delimiters was enough accommodation.'

'I have people here who would work here longer if they could find accommodation but they can't.'

Employers have divergent views over what accommodation charge would be fair and appropriate

8.47 The majority of employers we spoke to viewed the current level of the Accommodation Offset as 'a good deal' for workers, usually on the basis of a comparison with the cost of provision and what workers could rent locally. Employers who had some staff in accommodation they provided and some in private accommodation thought the offset was unfair on the latter group.

'I see it as a much reduced rental charge on what they could achieve in our local area'

'our accommodation is far, far better than that what you can go and rent locally'

'I have staff who live out who think it is totally unfair and unreasonable that staff living in pay £4,000 a year, all inclusive. Whereas they probably have £12,000 mortgages, let alone paying for their food and their bills'

8.48 Many employers were frustrated that they were unable to pass through the growing costs of provision.

'it doesn't rise anywhere near the rising costs. So every year the subsidy we put in is greater'

'electricity pricing itself has gone up 600%, I've passed none of that on'

'With the price of gas and electric. Again, unless the accommodation goes up by at least 10% Then it's going to get worse because all the costs … have gone up by more than 10%'

8.49 Employers we spoke to took the view that the offset should be higher; but there was a spectrum of opinion over where that rate should be. This extended from alignment with the NLW, to alignment with the seasonal worker visa rate of £10.10, to levels that better reflected or even matched the cost of provision or the cost of local market rents.

'I'd link it to the £10.10 and not the National Minimum Wage … the majority of our accommodation is seasonal workers.'

'the median average rent in the UK for all workers is 23% of their salary … if you just took a 40 hour week, that's £440 pounds a week, 23 per cent, that'd be £92.92, so we're still some way off'

'Why couldn't there be some … commercial valuation … that said, this is the value of the market, this is what you charge for the house, why couldn't that be used as a base?'

'there should be something in the legislation where employers can show that they break even … I'm not suggesting that we charge the going rate, £1,000 a month or anything like that, but I don't believe an employer should have to make a loss on providing standard accommodation'.

'I think you need to look at market rates and you know, usually involve agents in sort of Red Book values or something or HMRC … I understand some people produce pretty horrendous accommodation, and they shouldn't be able to charge for that. But when we're investing heavily to give the best, we should be able to charge something close to market rates'

'I think we can charge a lot more than the offset and people would tolerate that'

8.50 UKH argued at oral evidence that the offset has not kept pace with housing costs, and this has meant employers are becoming less likely to provide accommodation. They urged us to look at adjusting the offset so it reflects costs of providing accommodation. We also heard from Torridon Hotel on a virtual Scotland visit that the Accommodation Offset was too low and did not cover the expense the employer is required to put in. They claimed that staff pay on average £3,000 a year for accommodation, and it costs the employer £9,000.

8.51 The NFU's submission argued that the offset had never taken into account the type of accommodation provided, the geographical location or the status of the worker. 'Any changes in approach to recommending the offset rate must be carefully considered to ensure that it does not have an adverse effect on either the employer or the employee.'

8.52 CDS Labour's view was that the offset was 'outdated compared to the costs employers face and must pay today'. They point to the disparity between the offset and private rental. They argue that workers opting for employer-provided accommodation 'should expect to pay more or at the very least a contribution towards say energy and/or maintenance costs'. They argue that a higher rate wouldn't deter workers as it would still be cheaper than renting privatively.

8.53 The TUC's submission argued that the offset should not rise faster than the minimum wage: 'this will undermine the principle of a wage floor'. They note the offset has increased by 45 per cent since 2016, while the NLW has increased by 32 per cent. Their central argument was that employers benefit from having workers in on-site accommodation, therefore the offset should not be used where workers have no choice over accommodation and employers should otherwise bear as much of the cost as possible: 'Employers benefit from access to sufficient labour on site. They also benefit as employees see their power diminished in their relationship with their employer. This pushes down absences and labour turnover. It is harder to leave your job if it also means leaving accommodation'.

8.54 The TUC also argued that use of the offset should be linked to accommodation quality. 'Enforcement action and regulation should be strengthened to eliminate the use of the offset where accommodation is mandatory or substandard.' They noted the findings of the Seasonal Workers Pilot review: '15 per cent of workers said their accommodation was neither safe, comfortable, hygienic nor warm and 10 per cent said their accommodation had no bathroom, no running water, and no kitchen.'

8.55 The Living Wage Foundation noted that they do not allow an Accommodation Offset to the Living Wage, as the offset shifts control of working and living conditions away from the worker towards the employer. As accommodation cannot be audited there is a danger it would not be suitable, and they believe that benefits in lieu of cash payments should be explicitly opt-in.

Options and considerations

8.56 The evidence discussed so far leads us to consider three separate but interrelated areas for our review. These are the level of the offset itself; the quality of accommodation; and the situation of workers who find themselves with no or low pay. We discuss each of these in more detail before making our recommendations.

The level of the offset

8.57 We recommend the level of the Accommodation Offset each year, but this recommendation is distinct from those we make for other NMW rates. For those other rates, we have a clear remit, whether (as with the NLW) to achieve a target; or to raise rates as high as possible without affecting employment. For those other rates, we have access to good data sources through which we can assess the impact of our decisions on key metrics, in particular employment. Our recommendation on the offset is different on both counts. Our remit does not set out a clear principle to apply in determining the level. Nor are there data sources which allow us to track the effects of our recommendations on employers' or workers' decisions. We do not know how widespread provision of accommodation or use of the offset are; we do not know how either of these affect workers' choices over employment and accommodation.

8.58 The original rationale for the offset referred to the benefits of employer-provided accommodation, which flowed to both the worker (who benefits by the provision of housing) and the employer (who benefits by having workers housed close at hand). The level of the offset – and how this changes over time – determines the balance of these benefits. When the offset rises quickly, employers can recoup more for accommodation costs from low-paid workers' wages. When the offset rises slowly, workers retain more of their wages. The rate of increase relative to the minimum wage over time is a key consideration when looking at the balance of benefits between worker and employer. As set out earlier in this chapter, the offset has increased more quickly in recent years than in the early years of the NMW. This is in common with other NMW rates; but the offset has also grown more quickly than those since 2016, and its value as a proportion of the NLW has increased in recent years, although fell below its peak with last year's increases.

8.59 During our evidence-gathering, we heard arguments for the radical change of removing the Accommodation Offset from the NMW framework altogether. This proposition comes in two varieties. Some employers told us there should be no cap on what they can charge workers to whom they provide accommodation; they believed that if they charged a market rate – or something significantly closer to a market rate – they would still be able to attract a workforce, while meeting a much greater share of their costs of provision.

8.60 On the other hand, unions argued there should be no permitted deduction for accommodation at all; if employers wanted to provide accommodation for minimum wage workers, they should be obliged to do this without charge. The argument here is that the benefits of tied accommodation arrangements

are already weighted heavily in favour of employers, and place workers in a position of dependency and vulnerability.

8.61 The majority of employers we spoke to did not advocate an uncapped accommodation charge, but they uniformly urged us to increase the offset, so they could recoup something closer to the cost of provision. One option to achieve this is by linking the offset to the NLW; several employers thought the principle of a day's accommodation for an hour's wage was a fair one. Some employers viewed this as a logical extension of the previous ambition to align the offset with the NMW Adult Rate (subsequently the 21-22 Year Old Rate).

8.62 Beyond links to the NLW or other NMW rates, we also considered whether other values or indexes could inform our recommendations on the rate year-to-year. Employers noted that inflation, and in particular rising energy costs, were increasing their cost of provision substantially, and that our recommendations on the offset should take account of inflation levels. Alongside these, we considered wage growth and changes in rental prices as other potential indexes which could guide recommendations on the offset.

8.63 When thinking about the level of the offset, our key guide was the aforementioned balance of benefits between workers and employers. In this we take account of evidence from employers on their costs of provision and how far the offset goes in offsetting these, as well as the experiences of workers. We also gave consideration to the impact of our recommendations on the provision of accommodation by employers, and on the functioning of the labour market in affected sectors.

The policy framework around the offset

Accommodation quality

8.64 It is clear from evidence we have heard that the nature and quality of employer-provided accommodation is variable and that in some cases it does not match what workers have been led to expect before they arrive on site. The most common complaints we heard were about space and density of occupation (for example, workers sleeping six to a caravan) and the separate location of cooking and bathroom facilities. We have not heard first-hand examples of accommodation that is dirty, unhygienic or unsafe, but these have been recorded in previous research by FLEX and in Defra's own 2019 review of the seasonal workers pilot. In the latter review, 15 per cent of workers interviewed said their accommodation was neither safe, comfortable, hygienic nor warm and 10 per cent said their accommodation had no bathroom, no running water, and no kitchen. Research by Feeding the Nation found that workers lamented the quality of caravan accommodation in particular.

8.65 Agriculture employers complained to us that their sector was already heavily regulated and audited. While we accept this is true, we think there is nevertheless a weakness in the enforcement regime around accommodation quality. Most private sector audits do not address accommodation specifically. The GLAA's licensing standards, which apply to labour providers placing agricultural workers, require providers to meet standards around accommodation. But this enforcement regime is essentially reactive and inspection capacity is limited.

Existing accommodation standards

Accommodation is one of eight standards against which GLAA licence holders are inspected. The GLAA standards are non-specific when it comes to the nature and quality of accommodation ('accommodation

must be maintained in a good state of repair, must contain adequate kitchen, bathroom and toilet facilities for the number of occupants and must not be overcrowded'). The standards link to the Housing Health and Safety Rating system, which requires landlords to carry out an assessment of a wide range of hazards and to address any serious problems. The ultimate sanction available to the GLAA is to strip a labour provider of their licence; but there can be intermediate stages along the way, where employers are asked to remedy problems or workers are rehoused in accommodation which is fit for purpose. In practice, we have heard that GLAA enforcement is slow and that effective enforcement capacity is low.

Other audit regimes are vaguer in their requirements when it comes to accommodation. Home Office visa conditions contain a high-level condition around accommodation, stating only that sponsors must ensure that 'workers are housed in hygienic and safe accommodation that is in a good state of repair'. The only private audit regime which addresses accommodation is SEDEX, but the standard it sets is not detailed ('Accommodation, where provided, shall be clean, safe and meet the basic needs of the workers').

8.66 We consider that accommodation quality is an important factor in the balance of benefits between worker and employer. Overall, the evidence base suggests that the offset is applied to workers housed in poor-quality accommodation and in a position of substantial dependency on their employers.

8.67 In this context, we are interested in the recent consultation on extension of the Decent Homes Standard, by the Department for Levelling Up, Housing and Communities (DLUHC). This consultation proposes extending the standard, which currently applies to social housing and is enforced by local authorities, to the private rented sector, with specific questions concerning caravans and tied accommodation. It proposes creating a legal duty for landlords to certify compliance with the standard, backed by a criminal offence. The consultation closed in October 2022 and applies to England only. We are not aware of equivalent proposals in devolved administrations.

8.68 We support the reinforcement of standards and the strengthening of enforcement options. These would materially change our approach in making future recommendations on the Accommodation Offset. Until such measures are in place, we are not comfortable making recommendations which significantly increase the value of the offset.

Protections against 'low pay-no pay'

8.69 It is a feature of the offset that it is a daily rate, while the rest of the NMW framework is based on hourly rates. The amount the employer is permitted to deduct does not vary whether the worker works for twelve hours, six hours or one hour. We heard arguments that the offset exacerbates the effects of fluctuating hours on workers' incomes. Workers in employer-provided accommodation whose hours are reduced over the course of a week can find themselves with very low incomes once the offset is deducted. As set out above, Feeding the Nation found cases of 'low pay-no pay' to be endemic among agriculture workers during periods away from seasonal peaks. This was exacerbated by use of zero-hours contracts.

8.70 In response to this, we have considered the case for measures to protect workers' incomes and reduce the incidence of workers in accommodation experiencing a 'low pay-no pay' situation.

8.71 Our main option would parallel the systems already in place among several agriculture employers who gave us evidence. In these cases, employers effectively waived the accommodation charge for any workers who fell below a given weekly hours threshold. (In the examples we saw, this was generally set at 16 hours). After this, there was a scaling accommodation charge applied, with workers not subject to the full charge unless they were working full-time hours.

8.72 We have therefore looked at a minimum working hours threshold, below which employers would not be permitted to make a deduction for accommodation. The design of any such threshold would need careful consideration. In particular, there is a trade-off between the desire for simplicity; and the cliff-edges which a crude threshold could create. The central question is about the level of the threshold; but below this are tricky questions about whether this level is based on hours or income; and its application to workers paid above the NLW and whose accommodation charge is higher than the offset. A potential approach we consider feasible is outlined in the box below.

8.73 In effect, such a measure would ask employers to bear more of the risk of fluctuating hours. The rationale for this additional protection would be to recognise the particular vulnerability of workers in accommodation and their dependency on their employers. As set out already in this chapter, we know that some employers in agriculture already have in place equivalent measures, although we do not know how prevalent these are.

The design of a minimum hours threshold

We propose setting the threshold based on a cash figure. This would be tied to a given number of hours at the NLW and would set a floor below which the income of a worker in employer-provided accommodation could not fall. The example below uses 16 hours minus the offset as the weekly threshold. The advantage of this approach is that it avoids cliff edges and is applicable to workers on higher rates of pay.

Calculation of the threshold

16 hours at the NLW: £152

Accommodation Offset over a week: £8.70*7 = £60.90

Income floor = £152 - £60.90 = £90.10

Example 1

Frank works on an asparagus farm and is paid £9.50 an hour. He is charged for his accommodation at the offset rate of £8.70 per day He usually works 40 hour weeks, but this week, because of unseasonal frosts, he only works 15 hours.

Weekly pay before accommodation: £142.50

Weekly pay after accommodation charge: £142.50 - £60.90 = £81.60

This falls below the threshold, so Frank's pay is 'topped up' to £90.10. Frank's employer recoups £52.40 rather than the 'full' offset amount of £60.90.

Example 2

Francesca works in a rural hotel and is paid £10.50 per hour. She is charged £10 per day for the on-site accommodation where she stays (this is NMW-compliant because Francesca is paid above the NLW).

Because of freak snowstorms, the hotel closes for several days and Francesca only works 10 hours this week.

Weekly pay before accommodation: £105.

Weekly pay after accommodation charge: £105 - £70 = £35

This falls below the threshold, so Francesca's pay is topped up to £90.10. Francesca's employer recoups £14.90 rather than the 'full' offset amount of £60.90.

Conclusions and recommendations

8.74 We reaffirm our support for the existence of the Accommodation Offset. There are two important principles underpinning the offset. Firstly, restrictions on deductions from the NMW are an important measure to protect workers and prevent exploitation. Secondly, accommodation charges – capped by the offset – should be the only permitted deductions which can take a worker's pay below the NMW. This recognises the particular balance of benefits between employers and workers when accommodation is provided. Removing the offset would impose significant additional costs on employers who use it. We believe the offset should continue to apply whether or not a worker has a choice over taking accommodation.

8.75 We recognise the offset does not meet employers' costs. This is a feature of the policy and has been the case as long as the NMW has been in place. We judge that there are considerable benefits to employers from being able to utilise the offset and have workers on site. We recognise as well that the offset covers workers in different sectors, local employment markets and housing markets. Setting the rate will always require a considerable amount of judgement in balancing across these requirements – but this is inherent in setting NMW rates across the UK labour market.

8.76 It is important not to add unnecessary complexity to the NMW framework. Most employers and workers we spoke to understood how the offset worked. Compliance issues which arise are more related to the clarity of guidance and enforcement, or frictional problems related to the level of the offset, rather than the policy design.

The level of the offset

8.77 Our review has considered the trajectory of the Accommodation Offset over the long term. Our judgement on this needs to take account of the functioning of the labour market in these sectors; and the circumstances of the workers in accommodation whose pay is affected by the offset. We think it is desirable to have a long-term trajectory for the offset, not least because a level of predictability will aid employers' planning. Long-term alignment with the NLW would achieve this; but our willingness to recommend this is contingent on other elements of the policy framework.

8.78 We note the evidence that the offset covers between 60 and 80 per cent of the accommodation costs borne by employers we spoke to. Employers stressed the importance to their business of providing decent accommodation and it is clear to us they benefit from providing accommodation to their workforces – indeed, for many it is a necessary condition of running their businesses. We have heard no evidence that the offset affects decisions over whether or not to continue doing this. In some cases, it may influence the nature and quality of the accommodation provided. But the need to attract and retain workers also drives this in many cases, especially in a tight labour market.

8.79 Set against this, we heard that the costs of providing accommodation for many employers are likely to rise sharply in the near term, as inflation and energy costs in particular begin to bite. We also recognise that business conditions more generally are challenging for many employers who use the offset. If the offset were not uprated, some employers would be squeezed. If their ability to recoup some accommodation costs from workers were removed, it would be likely to disrupt the labour market in those sectors where the offset is used.

8.80 The benefit to workers from the offset is less clear cut. In most cases, taking employer-provided accommodation is the only feasible option. Having accepted a job and entered employer-provided accommodation, there are real practical constraints on workers' ability to move or to complain about their conditions. This is true in general for workers in rural locations; it is especially true for workers on a seasonal visa. This group are particularly dependent on their employer. They only have agency or mobility within the terms of the visa scheme and at the discretion of their employer. In these circumstances, accommodation is less a benefit-in-kind to the worker than a necessary fact of their job. The benefit is better thought of as being able to access work in the first place, via the visa scheme, and the benefit is undermined by the ongoing presence of cramped, poor-quality accommodation.

8.81 Several employers suggested to us the virtues of linking the NLW to the Accommodation Offset, informed by the principle that an hour's pay is a fair charge for a day's accommodation. We are attracted to the simplicity of such a proposal, but aware that it represents a transfer from employer to worker in comparison with the current offset rate.

8.82 Ultimately, our approach to recommending the level of the offset is contingent on other elements of the policy framework. Two factors in particular are crucial: the quality of accommodation, and protection for workers at risk of very low or no pay. We make recommendations on each of these areas below. The value of the offset as a proportion of the NLW will not increase significantly until we are confident our recommendations have been addressed.

Policy framework

8.83 Firstly, there needs to be greater assurance of the quality of the accommodation for which the offset can apply before we recommend further changes that could significantly increase the value of the offset. We think it is imperative that a quality standard and suitable enforcement regime are put into place as soon as possible. If and when there is a reliable standard in place, employers' ability to deduct the offset should be dependent on meeting this. Until such a standard is in place, increases in the offset will be restrained. **The value of the offset as a proportion of the NLW will not increase significantly until we have some assurance that there are robust minimum standards in place for accommodation quality and that these are enforced**.

8.84 We note that the DLUHC have recently consulted on plans to extend the Decent Homes Standard from social housing to the private sector, including tied accommodation and caravans of the kind for which the offset is deducted. This proposal applies to England only at this stage, while the offset applies UK-wide, and it remains to be seen if the Government will go ahead with this policy change. Were this change to take place, Commissioners could be more confident that the quality of accommodation in the sector is rising and therefore accompanying increases in the offset would be appropriate. We are keen to have a reliable, UK-wide benchmark against which the quality of accommodation can be assessed.

8.85 Secondly, Commissioners are concerned that current arrangements leave workers with low weekly hours at risk of very low income if the offset is taken in full. We have seen and heard evidence of workers with cancelled shifts or short hours having to pay the full offset with little earnings. We have also seen examples of employers with measures in place to protect workers against this risk. **We therefore recommend a minimum hours requirement for these workers before accommodation costs can be deducted.** We think the design proposed above should be the starting point for this, but appreciate the Government may wish to consult more widely on the level and design of this requirement.

8.86 **We also recommend that seafarers be exempt from the Accommodation Offset while on board ship**, meaning employers would not be able to deduct accommodation costs from their pay below the NMW. The position of seafarers is distinct from other groups of workers in accommodation for a couple of reasons. Firstly, seafarers are in a unique situation while at sea, of being confined to their work premises which also happen to be their only available accommodation. Secondly, the seafarer's presence on the vessel is required even while they are asleep – the worker is required to be present in case of an emergency.

Interactions with the Seasonal Workers visa scheme

8.87 In the course of this review, we have become aware of the overlap between this policy and the seasonal worker scheme. There is an obvious interaction between the £10.10 visa rate and the offset. In principle, an employer recruiting seasonal migrant workers, and obliged to pay the higher rate, can allay the extra expense by increasing the accommodation charge they recoup from workers. As long as workers receive an hourly rate of £10.10, the employer is compliant with the visa regime; as long as workers' pay net of accommodation charges does not fall below the floor set by the offset, the employer is compliant with the NMW. The policy intent of the higher visa rate is undermined; the benefit to workers of higher hourly pay is removed.

8.88 In practice, none of the employers we spoke to were operating in this way; they continued to charge for accommodation at the rate set by the offset. Many, though, were aware of the discrepancy and some suspected that less scrupulous competitors could be taking advantage of it. It is impossible to know how many employers, if any, have increased accommodation charges to mitigate the costs imposed by the migration system. The fact that such a manoeuvre is theoretically possible points to a larger disconnect between different parts of government policy. In this matter, the immigration system and labour market regulation do not join up. We have not undertaken to design a solution to this problem ourselves; immigration policy is not in our remit and is not our area of expertise. We nevertheless think it is important that these inconsistencies are highlighted and resolved. **We recommend that BEIS and the Home Office work together to address the interactions between the seasonal workers rate and the Accommodation Offset**.

8.89 Beyond their concerns over interactions with the offset, employers we spoke to were dismayed at how the visa rate had been introduced, with a higher rate overlaid on the NMW with comparatively little notice. **We urge the Government to provide more notice to employers in low-paying sectors of future changes in the seasonal workers rate and to align the process as far as possible with NMW upratings.**

Seasonal Worker visas in agriculture

In 2019 the seasonal agricultural worker scheme (SAWS) was reintroduced to allow employers in agriculture and horticulture to recruit seasonal workers from abroad. As part of our review of the Accommodation Offset we heard from agricultural businesses about the scheme, its implementation and effects. A high proportion of the sector's seasonal workforce has for a number of years been supplied by non-UK workers. Defra's Food Security Report (Department for Environment, Food & Rural Affairs, 2021) estimated that until 2020 99 per cent of seasonal workers in the horticultural sector came from outside the UK each season. The visa is intended to alleviate labour shortages in the sector but is not intended to meet all the estimated need for labour. The Government maintains that the agricultural sector should make greater use of automation and recruitment of domestic workers to meet demand (House of Commons Library 2022).

In December 2021, the Government announced a minimum wage of £10.10 per hour for workers on the scheme. This change came into effect for workers arriving after 6 April 2022, effectively supplanting the NLW as the minimum benchmark for pay in the sector. The majority of farmers and labour providers told us they had increased the pay of all workers to at least £10.10, whether or not they were seasonal workers and whether or not they were migrants.

Much of the feedback we received centred on the introduction of the new rate at short notice. The ALP described this as 'shambolic. It was introduced without consultation or industry engagement, with minimal notice and without impact assessment.' They stated that most businesses have had to increase pay for all workers at short notice. The NFU described implementation as 'completely unsatisfactory', taking place during the course of the recruitment season, with some workers already on farms, leaving employers no choice but to pay. They criticised the rationale for a higher rate, noting the cost of recruitment for seasonal workers was already higher than for domestic workers.

An April 2022 report, Labour Shortages in the Food and Farming Sector (House of Common Environment, Food and Rural Affairs Committee, 2022), criticised the planning of the scheme: 'It was not until 24 December 2021 that the Government officially confirmed the pilot would operate in 2022 and how many Seasonal Worker Visas would be available. This repeated the unhelpful practice of late announcements in previous years. In addition, the official announcement did not confirm the 2023 and 2024 figures'.

The NFU argued that the higher rate had negative consequences for productivity and turnover; seasonal workers arrived 'with a particular ambition in mind on how much they want to earn'. A higher rate meant workers achieved this ambition more quickly and were likely to return home after this. One labour provider complained to us that the higher pay premium meant they could not reward more productive workers with higher bonuses. Although the £10.10 rate made it slightly easier to recruit domestic workers, this was still challenging due to the seasonality and geographical remoteness of the work.

Unions and charities were concerned about the conditions and welfare of workers on the scheme. Unite noted evidence from the 2019 review of the seasonal workers pilot (Department for Environment, Food & Rural Affairs, and Home Office, 2021) and FLEX's response to this. The review uncovered poor working and living conditions and vulnerability to exploitation, specifically: a risk of 'unfree recruitment'; living and working under duress from employers; and the impossibility of leaving employers.

The WRC told us that minimum guaranteed hours under the visa often fell short of a full-time schedule: 'Some visa operators offer no more than a monthly average of 20 hours work per week, with others offering 25 to 32 hours. This falls short of a full-time schedule, creating a perverse over-supply scenario

in which workers have to compete for shifts'. They also gave examples of farms offering less than contractual minimum hours; workers not being provided with details of key policies; and workers not having contracts translated into their language. They noted 'a big discrepancy in the standard of service provided by visa operators, and the third parties contracted to communicate with workers on their behalf' – the operators' own policies and standards were not always upheld by their subcontractors.

Compliance and enforcement of the National Minimum Wage

8.90 We received a wide range of evidence this year on the compliance and enforcement of the NMW, summarised in this section in advance of a standalone report in 2023. Earlier this year we published a report looking at enforcement of the NMW in the Leicester textiles industry (Low Pay Commission, 2022d), and will continue to build on this work in the year to come.

Views on HMRC's enforcement work

8.91 Employer groups, nearly unanimously, argued for a change in approach to enforcement that would draw a distinction between serious and minor or unintentional breaches. The Confederation of British Industry (CBI) told us that HMRC should take a different, more 'compliance-focused' approach: 'as more employers are covered by the minimum wage, it is important that HMRC focuses much more on providing clear information and compliance assistance on the assumption that most employers will comply with their obligations'. They described enforcement as ambiguous and 'not collaborative', with 'varied interpretations' of the rules by HMRC officials. The British Chambers of Commerce (BCC) and Federation of Small Businesses (FSB) agreed that the approach taken by HMRC was perceived by small businesses as unhelpful considering that many errors were not deliberate, and that an approach which sought to educate would be more appropriate unless there was wilful non-compliance . UKH stressed that enforcement should focus on deliberate rather than small accidental breaches. The British Retail Consortium (BRC) told us their members 'continue to report an overzealous attitude by HMRC in the audit process … Retailers would like to see HMRC take a more pragmatic approach'. CIPP argued the system should be harsh on multiple offenders but provide guidance and assistance for firms who unwittingly broke regulations. The Association of Convenience Stores (ACS) recommended HMRC provide more support to firms in understanding regulations. 'Strong enforcement for firms deliberately flouting the rules? Absolutely. A bit of empathy on administrative challenges would be a good partner to that.'

8.92 Unions and workers, on the other hand, were more concerned about the scale of enforcement activity than the approach taken. The TUC argued the system was under-resourced: 'the UK would need an additional 1,797 labour market inspectors to meet the International Labour Organisation (ILO) benchmark [of one inspector for 10,000 workers] … just one in 171 workplaces had a safety or labour rights inspection during the pandemic.' Unite were particularly concerned about the lack of enforcement in construction. 'We are not convinced that the number of inspectors necessary to monitor construction workplaces is available from current resources'. Union of Shop, Distributive and Allied Workers (Usdaw) argued HMRC needed to increase their efforts and work more closely with trade unions to improve awareness of the NMW: 'Rigorous enforcement must continue to be a priority, with stringent penalties and prosecutions to ensure a credible deterrent'. The TUC argued that unions should be represented on

the boards of enforcement bodies: unions 'have a unique understanding of workplace issues and commonplace issues of non-compliance'.

8.93 We heard the scarcity of inspectors was felt by workers bringing complaints: Unite shared evidence of the experience of a group of workers making a complaint to HMRC; after over three years of trying to get their case through with union support, workers had given up. Their case worker had changed a number of times, and each time workers felt they had to start from scratch.

8.94 In our work on non-compliance earlier this year, we noted the difficulties caused by the lack of a functional third-party complaints system and asked HMRC to address our previous recommendations in this area. Unions supported this request. The TUC argued HMRC should provide updates to third parties making complaints. The lack of feedback 'discourages third party complaints and makes them less effective, as complainants cannot determine how effective their complaints have been'. RMT told us about the problems the current system caused for them: individuals at sea were reluctant to complain, feeling they could jeopardise their own employment; but when RMT complained on behalf of a seafarer they felt barred from the process and unable to get any further details.

8.95 The Low Incomes Tax Reform Group (LITRG) told us of their concern that HMRC were 'focussing on … cases of genuine confusion or misunderstanding where the resulting underpayments are small and, of themselves, probably do not cause significant worker detriment'. They argued this 'does nothing to help those workers whose employers are recklessly or consciously underpaying the minimum wage'. They also told us that the fact that the single enforcement body had yet to materialise 'does not send out a strong deterrent message to employers who may be considering turning to such devices [i.e. non-compliance].' The Recruitment & Employment Confederation (REC) also called for a single enforcement body. 'A properly resourced SEB will be able to operate effectively in the recruitment sector and across the UK labour market and will provide some much-needed clarity for workers as to how they can enforce their rights.'

8.96 The ALP argued that HMRC's enforcement was ineffective and offered poor value for money. They pointed to the most recent published figures, showing HMRC closed six cases per official per year, and only two of those resulted in arrears. They advised the LPC should recommend the development of better indicators for measuring HMRC's performance. They thought enforcement would benefit from regular meetings on policy matters between HMRC and stakeholders; these would be an opportunity 'to discuss and agree technical exemptions in specific situations where the literal application of NMW legislation has perverse and/or unintended consequences that impose burdens on business and have a neutral or negative impact on low-paid workers'.

8.97 Several employer groups offered comments on naming rounds. REC told us that naming companies for non-compliance was a 'blunt tool' and they would like to see more done 'to educate business and identify instances of accidental non-compliance'. The National Hair & Beauty Federation (NHBF) also complained that naming rounds did not account for honest or one-off mistakes. The FSB argued naming should be limited to the most egregious cases; a shorter naming list would be more effective and avoid unfairly damaging the reputations of those who have made legitimate errors. Among worker groups, Unite told us naming rounds were ineffective. 'we see many employers pleading ignorance when called out claiming that if they don't know they can't be blamed and therefore we shouldn't be held liable'.

Guidance and regulations

8.98 The accessibility and quality of guidance was a point of concern for many employers. The FSB told us that some small businesses find adhering to employment law challenging, as many of these businesses have 'no or limited HR or legal support'. The ALP told us that online guidance 'has been made less accessible and is inadequate in supporting industry in correct and consistent application of the law'. They asked for guidance to be aligned with HMRC's NMW manual. The CIPP requested more guidance on how exemptions and processes work, with more examples that cover more sectors. The LITRG told us that guidance was sometimes inadequate; they noted a particular issue around the withdrawal of PDF versions, which employers were able to print off and read at their own convenience. The TUC argued that BEIS and HMRC should provide sector-specific guidance: 'This is particularly true in sectors such as arts and entertainment and the gig economy'.

8.99 The CIPP asked the LPC and the Government to review the use of salary sacrifice schemes for low-paid individuals. One CIPP member commented that where an individual was working full time at minimum wage and had been automatically enrolled into a pension scheme, they could be roughly £120 per year worse off than if they were permitted to contribute via salary sacrifice (because they do not pay National Insurance on their contributions in the latter scenario): 'This is effectively a tax on being low-paid'. The Food and Drink Federation (FDF) told us they would like to see salary sacrifice permitted for low-paid workers, where current rules created a disincentive for larger companies to contribute into other benefits such as pensions. 'The knock-on effect for larger companies is that to comply with NLW requirements they have to remove the lowest-paid employees from these schemes.'

8.100 The TUC made a variety of policy recommendations related to compliance and enforcement. These included the expansion of joint and several liability to supply chains; and a firewall between immigration enforcement and labour market enforcement bodies. The TUC argued the expansion of liability would incentivise greater care among employers over sub-contracting and give workers more options for recourse, for example if their direct employer had ceased trading.

8.101 UNISON submitted a number of recommendations aimed at improving compliance in the care sector. They called for improvements to local authorities' commissioning practices, via HMRC guidance to local authorities. They criticised the lack of enforcement of record-keeping requirements. They called for an end to self-correction of non-compliance by employers as a means of avoiding penalties. At oral evidence we heard about continuing problems with payment of travel time. GMB also reported continued issues with travel and waiting time being paid for domiciliary social care workers. They linked this to the minute-by-minute commissioning model of local authorities. LITRG told us there was a high risk of non-compliance in the care sector: 'huge cost pressures are effectively being pushed onto private service providers, who in turn have to find ways to operate at a lower cost. Care workers are already likely to be at risk of being underpaid the NMW because of non-payment of their travel time and expenses'. They argued enforcement bodies should focus on live-in care workers, as a group facing a number of potential risk factors: sleep-in shifts, application of the accommodation offset, application of the domestic worker exemption and bogus self-employment.

Examples of non-compliance

8.102 Over the course of our consultation, we heard various examples of non-compliant practices. Unite complained about continuing abuse of tipping via tronc system. 'unscrupulous employers are

diverting tips and service charges to boost back of house pay by depriving its minimum wage waiting staff of their hard-earned tips'. In the absence of further legislation, Unite want to see HMRC 'modernise' its guidance on tips. Improved access 'would allow unions to inform workers of their rights and critically encourage efforts to ensure the enforcement of those rights', saving time and money for the enforcement system. At the time of writing, a Private Members' Bill to ensure that tips, gratuities and service charges paid by customers are allocated to workers was passing through the House of Commons.

8.103 The EEA told us of widespread non-compliance in the equestrian sector. They alleged that businesses unable to afford to pay the NMW were in some cases not paying staff correctly; and that other businesses unaware of pay reference periods were unintentionally paying their staff incorrectly. Additionally, employees in some roles were working long hours of unpaid overtime. They argue 'there is the potential for compliance issues to increase.'

8.104 The WRC told us that hospitality, construction and cleaning were the leading sectors for reports of non-payment made to them. Together these made up nearly half of WRC's casework between 2016 and 2022. Among workers reporting non-payment to WRC, 'almost half (42 per cent) of the workers in this group worked in positions which provided them with no written terms of work, and just over a third (36 per cent) had no written terms of pay'.

8.105 LITRG told us that false self-employment was a growing problem, driven by 'avoidance of work protections, including the minimum wage'. They outlined problems that false self-employment created for workers including uncertainty over tax status, and denial of holiday, sick pay and leave entitlements. They pointed to the recent naming round, where only four employers were on the list for worker status error. REC noted that since IR35 changes last year introduced to limit erroneous self-employment, 'A number of new umbrella companies have been established [to supply temporary workers] and are making unclear and ambiguous deductions from workers' wages that may impact on NMW'.

Seafarers

8.106 The RMT have for many years submitted evidence to us on low pay and employment practices affecting seafarer ratings in the maritime sector. The scandal caused by P&O Ferries' sacking of nearly 800 directly employed UK ratings and officers in March 2022 brought employment practices in the shipping industry into sharp focus.

8.107 Seafarer entitlement to the NMW is complicated by the international nature of the industry. The Government legislated in October 2020 to extend the right to the NMW to seafarers working in the UK territorial sea between domestic ports and to those working from a UK port to oil and gas installations on the UK continental shelf, regardless of nationality or where their vessel was registered. Prior to this change, seafarer entitlement to NMW was restricted to those working in UK internal waters or on UK flagged ships.

8.108 The October 2020 change affected seafarers working on domestic ferry, offshore supply and cargo routes, bringing the pay of thousands of mainly foreign seafarers up to the UK NMW. It continued to exclude those working on ships which run between UK and international ports, or which call at a UK port as part of a longer voyage. RMT noted that as the new regulations apply to the UK continental shelf

rather than UK exclusive economic zone, seafarers working in the UK offshore renewable energy sector are excluded from the NMW regulations.

8.109 The extension of the NMW to new groups of workers was welcome but created new challenges around awareness and enforcement. RMT complained to us that BEIS guidance was only published 18 months after changes came into force, and that this led to 'long periods of confusion'. The RMT also described an uneven terrain when it came to the enforcement of the new entitlements.

8.110 It is clear, however, that shipping presents particular challenges because of the long hours worked, convoluted employment and ownership arrangements and the mobile nature of both the workforce and the workplace. Delay in addressing complaints can see vessels leave UK ports before enforcement bodies respond. RMT argued this required a greater degree of coordination between labour market enforcement bodies such as HMRC, industry regulator the Maritime and Coastguard Agency and the Department for Transport. Since October 2020, RMT continued to identify NMW-eligible seafarers on illegally low rates of pay but had little visibility over the enforcement response.

8.111 More generally, RMT described an industry where low pay, fatigue, a lack of apprenticeships and inferior employment rights are making it harder to recruit UK crew, with the sector steadily increasing its reliance on internationally-recruited agency staff. Pay for seafarers on routes not covered by the NMW or by collective bargaining agreements can be as low as £1.75 per hour on short term contracts requiring long hours and no pension or social security benefits. RMT described the P&O scandal as the culmination of long-term problems in the sector. They also described the combination of low pay, exploited foreign labour, flags of convenience and an aging workforce as signs the industry is 'about to go over a cliff edge.'

8.112 In the wake of the P&O Ferries scandal, the Government introduced a Nine Point Plan, including the Seafarers' Wages Bill. The Bill seeks to ensure that crew are paid an equivalent to the NMW for work carried out in UK waters. UK ports will have responsibility for overseeing employer compliance. This equivalent rate does not confer the same rights for seafarers as the NMW, but we will monitor progress of the Bill with interest, not least for lessons learned on enforcement of seafarers' existing entitlement to the NMW and on low pay in the maritime sector.

Chapter 9

The path of the National Living Wage

Key findings

- This chapter shows how we plot the path to the National Living Wage (NLW) target of two-thirds of the median hourly earnings of those aged 21 and over by October 2024. We aim for the October of each year, rather than April when the rates come in, to ensure the target is achieved on average over the whole minimum wage year. We take the median hourly rate from the Annual Survey of Hours and Earnings (ASHE) in April each year as our baseline. We then project forward using a combination the Office for National Statistics (ONS) Average Weekly Earnings series and earnings forecasts from the Bank of England and HM Treasury's panel of independent forecasters.
- We project the median hourly earnings of those aged 23 and over to increase to £16.30 in October 2023. With the smoothed bite (the value of the NLW relative to median earnings) path at 63.9 per cent, that gives an on-course NLW of £10.42 for 2023. Extending the NLW to 21 and 22 year olds in 2024 lowers the target median in October 2024 from £16.86 to £16.62. To achieve the two-thirds target would therefore require a NLW of around £11.08 in 2024.
- The path has responded to economic conditions, with our estimates of the target falling as the pandemic took hold before rebounding as restrictions were eased. The subsequent supply chain disruptions and labour shortages that have tightened the labour market have fed through into higher wage growth and forecasts with the target now much higher than before the pandemic. Higher inflation will also have played a role.
- We expected our recommended increases for April 2022 to be a real-terms rise. However, inflation turned out much higher in 2022 than anticipated. So, despite a 6.6 per cent nominal increase, the NLW fell in real terms. Though the real value of the NLW increased from its introduction in 2016 to 2020, it then plateaued before falling in 2022. The next two NLW increases (in 2023 and 2024) are expected to be higher than forecast inflation, with the real value of the NLW set to be at its highest ever in 2024.
- Stakeholder views on the on-course rates to 2024 were based on NLW estimates we made in spring 2022, of £10.32 in 2023 and £10.95 in 2024. There was considerable support for the on-course rates among both trade unions and some employer organisations – recognising difficulties workers faced with the cost of living – but many trade unions also called for higher rates. Other employer groups argued we should be cautious when recommending the rate, as many businesses would have to increase their prices. However, even among this group, some recognised that the rising cost of living meant wages would have to increase.

9.1 Our remit for the National Living Wage (NLW) is to plot a path to achieve a target of two-thirds of median hourly earnings by 2024. We previously recommended (Low Pay Commission, 2019a) lowering the age of eligibility for the NLW from 25 years to 21 years and the Government subsequently tasked us with doing so over the same time frame (by 2024). This change takes place in two steps: in April 2021, the eligible age was reduced to 23 years, and in 2024 it will come down to 21 years.

9.2 The path of the NLW is determined by two main elements: the baseline; and wage growth between the baseline and the target date. We estimate our baseline from the latest Annual Survey of Hours and Earnings (ASHE), the best measure of the structure and distribution of earnings in the UK. The baseline is the median of gross hourly earnings, excluding overtime and premia (for example, for shifts and unsocial hours), for those in the relevant age group (for the upratings since April 2021 that has been those aged 23 and over). In April 2022, it was £15.11 an hour for those aged 23 and over (and £14.90 for those aged 21 and over).

9.3 Pay estimates from the April 2020 and April 2021 ASHE data were less robust than usual because of furlough and sample size reductions. The composition of the workforce changed during the pandemic with more low-paid workers than high-paid workers losing their jobs or being furloughed. Response rates from employers to the survey also fell. Although sample sizes have still not yet returned to pre-pandemic levels, there are no furlough effects in 2022. However, the estimates of growth will be affected by the furlough effects in 2021.

9.4 From the day it comes into effect the NLW is fixed for 12 months, but median earnings continue to grow as workers receive pay rises and/or move to better-paying jobs. This means the bite peaks when a new rate is implemented (on 1 April), but then falls throughout the year and is at its lowest on 31 March, as shown in Figure 9.6. This is why the target date is October 2024, as this mid-year point (October) means the bite should be roughly equivalent to the average bite for that NLW year. If we aimed for April instead this could mean the bite target is only hit for a matter of days of week before falling below again.

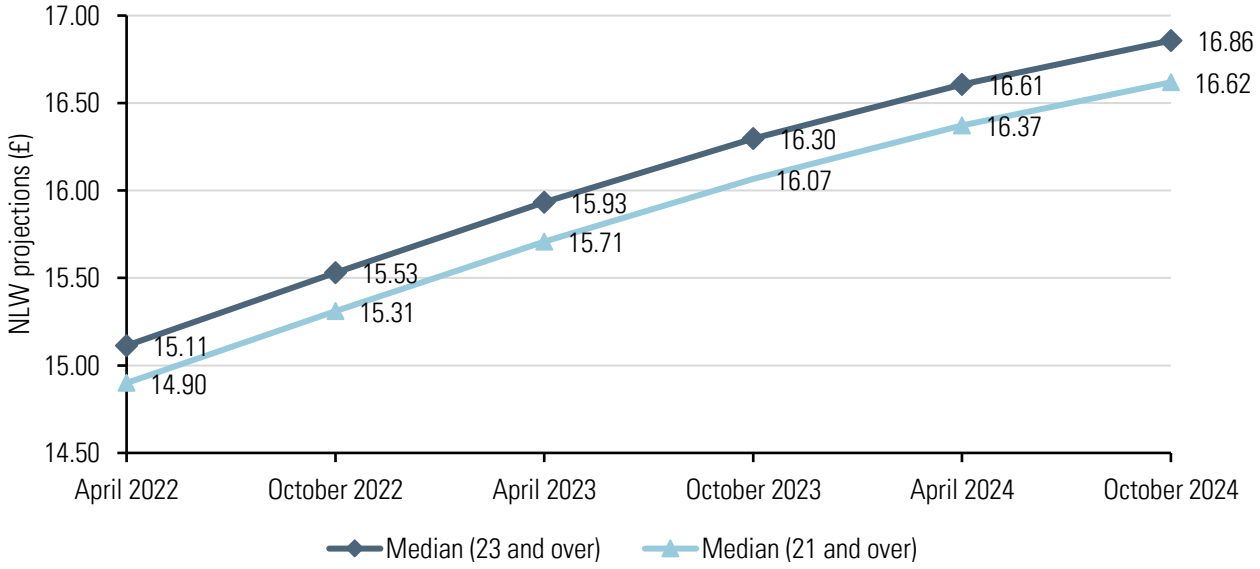
9.5 We split our estimate of wage growth between the baseline and the target date into two sequential periods: firstly, from the baseline to the latest available wage growth data (April to August 2022); and secondly forecast wage growth from that point to the target date (September 2022 to October 2024). There is no suitable, reliable and timely forecast of hourly wage growth that is consistent with the median derived from ASHE. As a proxy, we use the Office for National Statistics (ONS) measure of Average Weekly Earnings (AWE) total pay, which includes bonuses (as forecasts are also produced for this measure) but covers all employees on the payroll irrespective of age. It is available monthly with a six-week time lag (the latest data available for this report covered the period up to August 2022). We average the level over 12 months to remove some of the volatility around timing of bonuses. This measure recorded annual wage growth of 5.5 per cent up to August 2022.

9.6 For the second part we use forecasts to project the level of wages from the latest available wage growth data (August 2022) until the end of the path (in this case, October 2024 or the fourth quarter of 2024). We combine forecasts from the monthly HM Treasury panel of independent forecasters with those from the most recent Bank of England Monetary Policy Report. Recent Office for Budget Responsibility (OBR) forecasts were not available to us at the time we calculated the path.

9.7 The HM Treasury panel consists of around 35 City forecasters (including Citigroup, HSBC, NatWest Markets and Ernst and Young ITEM club), business representatives (including the Confederation of British Industry (CBI) and British Chambers of Commerce (BCC)) and other academic and think tank organisations (including the National Institute for Economic and Social Research (NIESR), the Centre for Economics and Business Research (CEBR), Economic Perspectives and Oxford Economics). There are usually around 16-20 short-term wage forecasts (for this year and next) and 9-10 medium-term forecasts (for the next five years). The short-term forecasts are published monthly, while the medium-term forecasts are produced quarterly. We then add quarterly forecasts from the Bank of England. If they were available and had been produced in the last three months, we would also have added those from the OBR. For our projected wage growth measure, we use the median of the average wage growth forecasts for those forecasts made in the last three months. The median of average wage forecasts available in October for 2022 was 5.9 per cent, slowing to 4.6 per cent in 2023 and then 3.1 per cent in 2024.

9.8 As shown in Figure 9.1, we project median hourly earnings for those aged 23 and over to increase from £15.11 an hour in April 2022 to £15.93 in April 2023 and to £16.86 in October 2024. The assumed earnings growth for those aged 21 and over is the same as for those aged 23 and over (as the projected data is not disaggregated by age – even though wage growth may differ across age groups). The median for those aged 21 and over is projected to increase from £14.90 in April 2022 to £16.62 in October 2024.

Figure 9.1: Projection of the median hourly earnings, 2022-2024



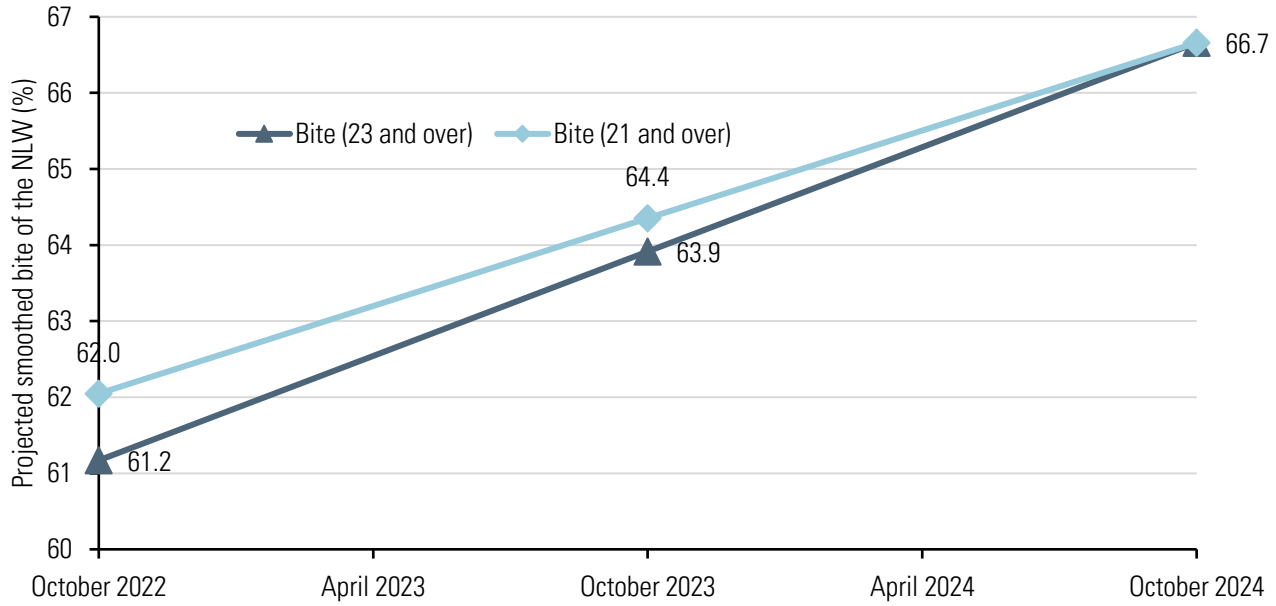
Source: LPC projections using ONS data (ASHE and AWE) and forecasts from the HM Treasury (2022c and 2022g) panel of independent forecasters and the Bank of England (2022c). For more information on projection methodology see Appendix 3.

9.9 Having projected the median for those aged 23 and over, we estimate the bite of the current NLW using the latest available ASHE data. We then calculate a smooth bite path using equal increases in the bite to reach two-thirds of the median by 2024 (for the appropriate age group – those aged 23 and over) and these numbers are used for our projections of the NLW in 2023. However, our target in 2024 covers those aged 21 and over, so the 2024 target number relates to that age group. We also plot this path in 2023 for those aged 21 and over, in case we had decided to make an earlier recommendation for

reducing the age of eligibility to the NLW. Conversely, we also plot the target path out to 2024 for those aged 23 and over to illustrate how the lowering the age threshold affects the target.

9.10 Figure 9.2 shows that we project the bite for those aged 23 and over to be 61.2 per cent in October 2022, leaving us 5.5 percentage points away from reaching our target of 66.7 per cent with two years to achieve that. This implies that we need to increase the bite by around 2.7 percentage points each year, meaning a bite of around 63.9 per cent in October 2023. When 21-22 year olds are entitled to the NLW in April 2025, the end target (two-thirds of median earnings) will be the same.

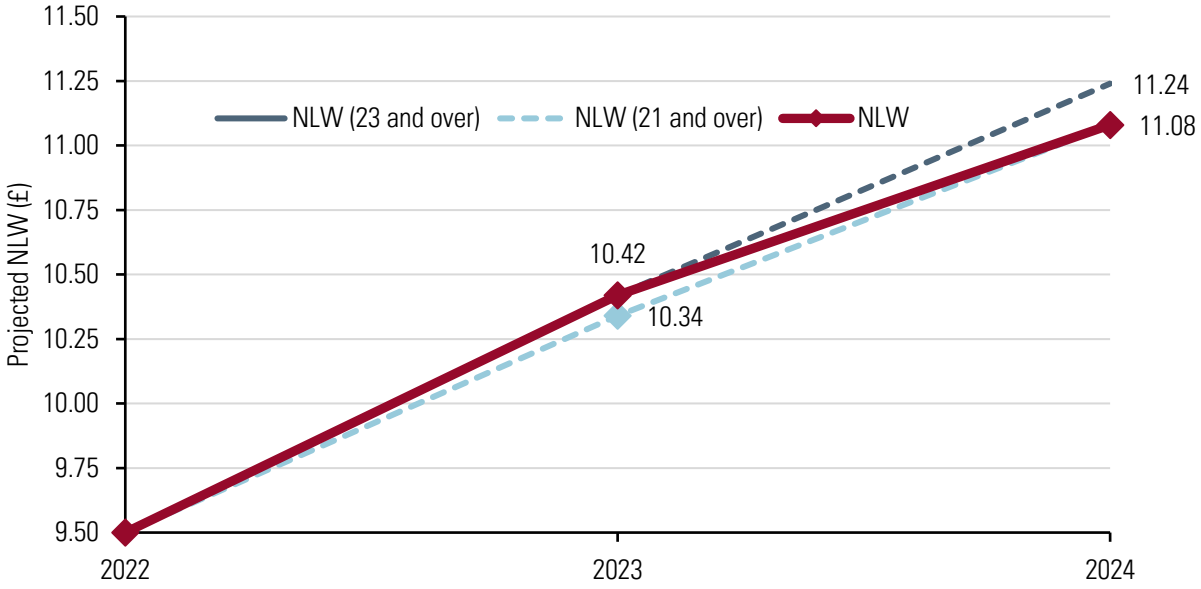
Figure 9.2: The projected smoothed bite of the NLW, 2022-2024



Source: LPC projections using ONS data (ASHE and AWE) and forecasts from the HM Treasury (2022c and 2022g) panel of independent forecasters and the Bank of England (2022c). For more information on projection methodology see Appendix 3.

9.11 The medians in Figure 9.1 and the bites in Figure 9.2 determine the NLW path shown in Figure 9.3. For those aged 23 and over, 63.9 per cent of £16.30 – the bite and median in October 2023 – is £10.42, so this is the on-course rate for the NLW in 2023. Similarly, two-thirds of £16.86 is £11.24, making this the on-course rate for 2024 were the NLW age threshold to stay at 23. If the age of entitlement was lowered to 21 in April 2023, the on-course rates would be £10.34 in 2023 – reducing the on-course rate by 8 pence – and £11.08 in 2024.

Figure 9.3: The projected path of the NLW, 2022-2024



Source: LPC projections using ONS data (ASHE and AWE) and forecasts from the HM Treasury (2022c and 2022g) panel of independent forecasters and the Bank of England (2022c). For more information on projection methodology see Appendix 3.

9.12 In our model, the median of forecast wage growth for 2022 in the HM Treasury panel and the Bank of England is 5.9 per cent in 2022, 4.6 per cent in 2023 and 3.1 per cent in 2024. There is, however, uncertainty around the wage forecasts, as shown in Table 9.1.

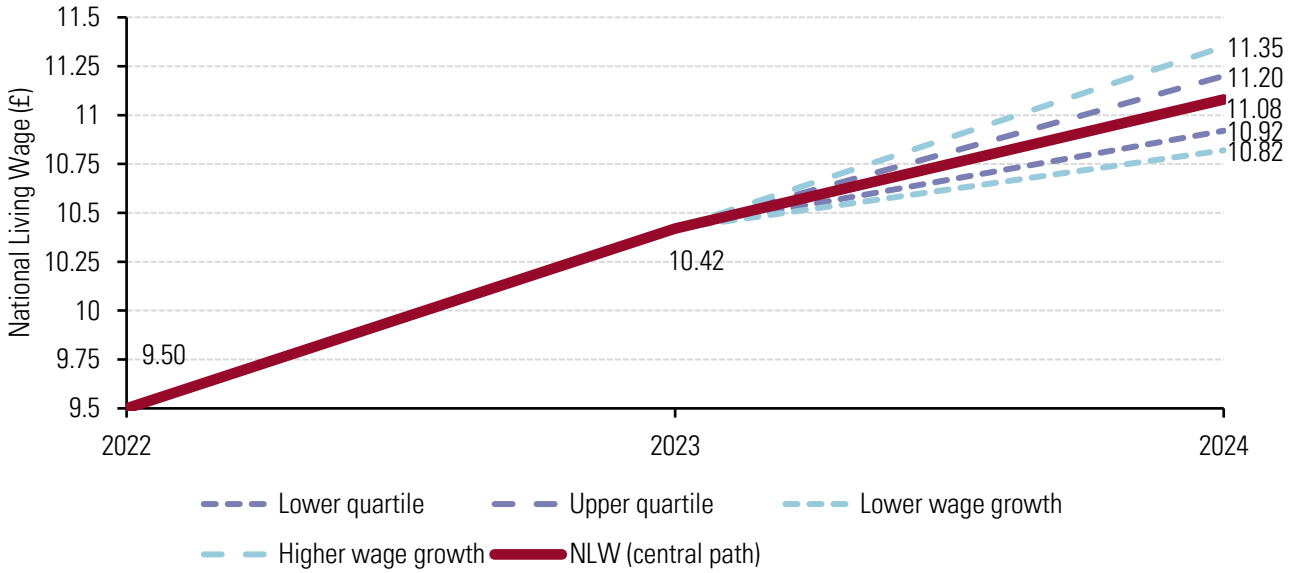
Table 9.1: Wage growth forecasts, 2022-2024

HM Treasury panel and Bank of England (average wage forecasts)	2022	2023	2024
Median	5.9	4.6	3.1
Mean	5.8	4.5	3.5
Maximum	7.3	6.6	2.7
Minimum	4.1	2.7	6.2
Range			3.5
Lower quartile	5.3	3.6	2.8
Upper quartile	6.3	5.0	3.5
Interquartile range	1.1	1.4	0.7
Bank of England (only)	5.3	5.3	2.8

Source: LPC analysis using forecasts from the HM Treasury panel of independent forecasters (2022 August and October) and the Bank of England (2022 August). For more information on projection methodology see appendix 3.

9.13 Reflecting the uncertainty around the forecasts, we have calculated a range for our target rate in 2024 using two methods, as shown in Figure 9.4. The first, a wider range, allows the for the forecast wage growth to be ±1 percentage point higher or lower in each year. This is greater than the usual difference between the forecast and outcome (around 0.5 per cent pre-pandemic) but uncertainty has greatly increased since the pandemic and that has been exacerbated this year with the inflation outlook unclear. This creates a range for the NLW target which spans from £10.82 to £11.35 in 2024. An alternative using the interquartile range for the wage forecasts in each of the years produces a narrower range – from £10.92 to £11.20.

Figure 9.4: The projected path of the NLW, 2022-2024



Source: LPC projections using ONS data (ASHE and AWE) and forecasts from the HM Treasury (2022c and 2022g) panel of independent forecasters and the Bank of England (2022c). For more information on projection methodology see Appendix 3.

The path of the NLW has evolved in response to changing economic circumstances

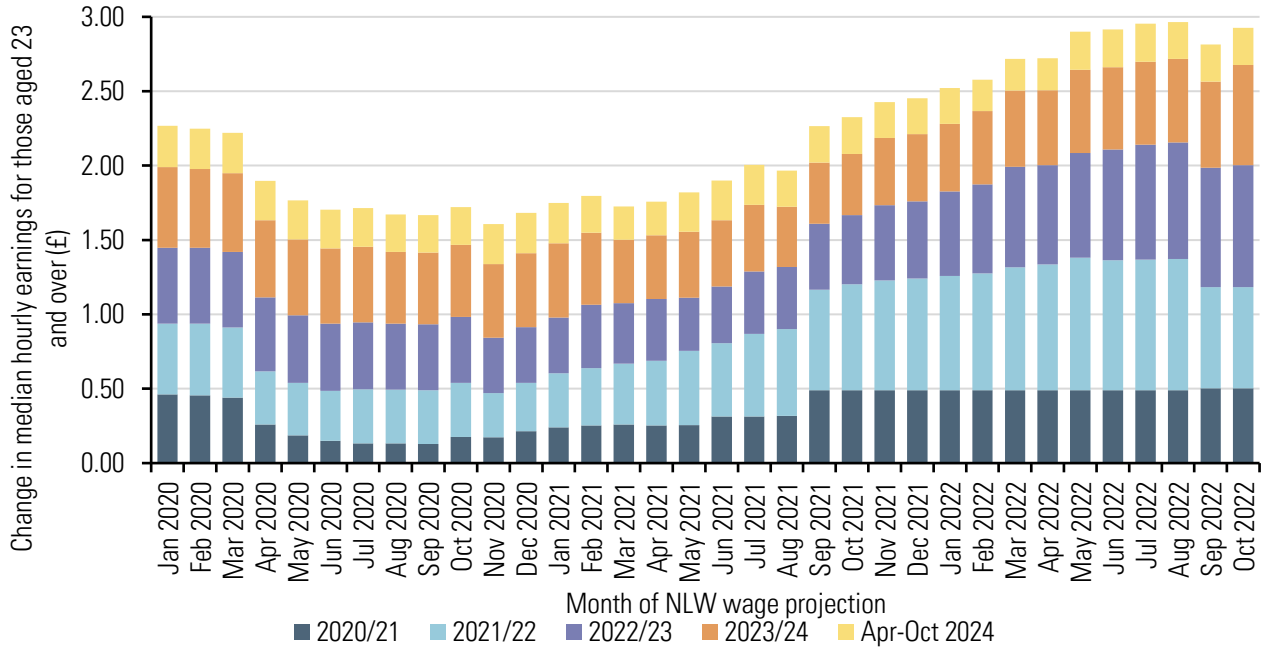
9.14 Changes in the economy affect earnings growth, and in turn, the target. Table 9.2 shows that the 2024 target fell with the onset of the pandemic and collapsing economic growth. It then grew again as the economy rebounded, and, with the tight post-pandemic labour market and higher inflation, wage growth and wage growth forecasts pushed the target above its starting point of £10.69 to £11.08.

Table 9.2: Evolution of the projected path of the NLW, 2020-2022

	Pre-pandemic (February 2020)	LPC (2020 Report – October 2020)	LPC (2021 Report – October 2021)	LPC consultation (March 2022)	LPC (2022 Report – October 2022)
2019	8.21	8.21	8.21	8.21	8.21
2020	8.72	8.72	8.72	8.72	8.72
2021	9.22	9.06	8.91	8.91	8.91
2022	9.75	9.50	9.58	9.50	9.50
2023	10.21	9.99	10.18	10.32	10.42
2024	**10.69**	**10.32**	**10.70**	**10.95**	**11.08**

Source: LPC projections using ONS data (ASHE and AWE) and forecasts from the HM Treasury panel of independent forecasters (2022 August and October) and the Bank of England (2022 August). For more information on projection methodology see appendix 3.
Note: The figures in bold burgundy are the rates of the NLW at the time of the projection. The figures in bold black are the rates for the target NLW in 2024.

Figure 9.5: Change in projected wage growth from 2020-2024, January 2020-October 2022



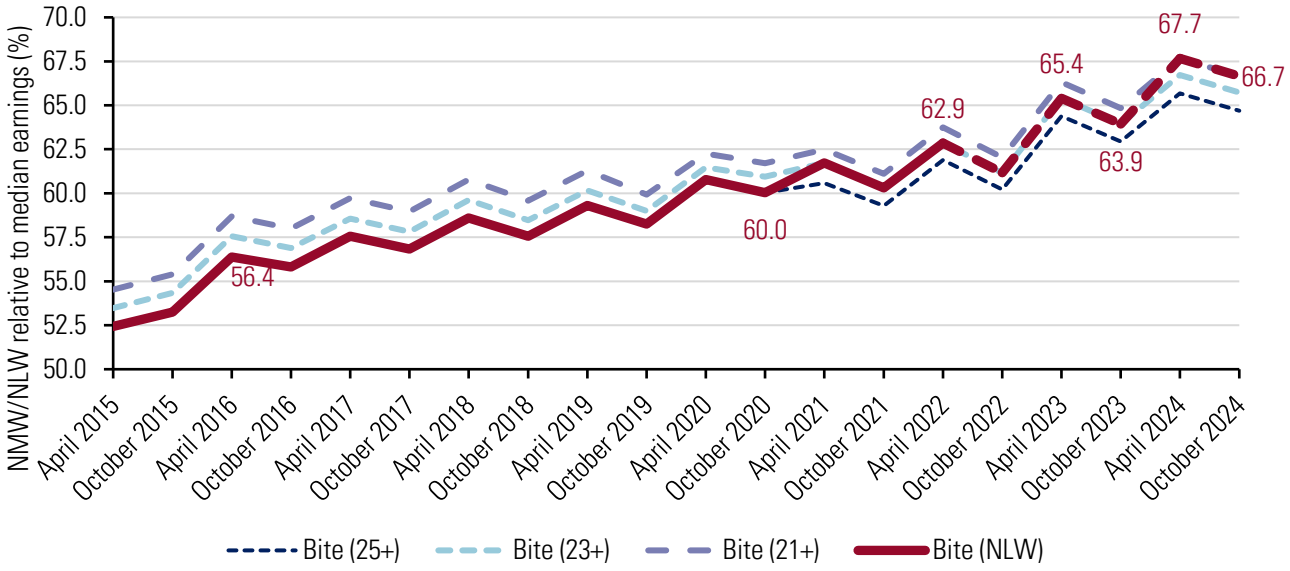
Source: LPC projections using ONS data (ASHE and AWE) and forecasts from the HM Treasury (2022c and 2022g) panel of independent forecasters and the Bank of England (2022c). For more information on projection methodology see Appendix 3.

9.15 The way that our estimate of wage growth from 2020 to 2024 has evolved over the pandemic and its aftermath is shown in Figure 9.5. Prior to the pandemic, the median of hourly wages for those aged 23 and over was projected to increase by a similar percentage across each year of the projected path – around 3.3 per cent (or about 50 pence). However, the onset of the pandemic initially reduced the forecast for wage growth in both 2020/21 and 2021/22. But as the pandemic restrictions were eased and labour shortages became apparent, forecast wage growth increased – particularly for 2021/22 and 2022/23. The projected increase in the median between 2020 and 2024 is now nearly £3.00 – considerably up from around £2.25 prior to the pandemic.

Evolution of the bite of the NLW

9.16 When the introduction of the NLW was first announced (in July 2015), the bite of the adult rate of the minimum wage (£6.20) was 52.5 per cent of median hourly earnings for those aged 25 and over. It rose to 56.4 per cent in April 2016 when it was implemented (at £7.20). The first target (60 per cent) was achieved when the NLW increased to £8.72 in April 2020. The NLW was extended to 23 and 24 year olds in April 2021, when the bite increased to 61.7 per cent (it was 60.6 per cent for those aged 25 and over). The bite of the NLW for those aged 23 and over reached 62.9 per cent following the 6.6 per cent increase in April 2022. The on-course increase in the NLW to £10.42 in April 2023 is expected to have a bite of 65.4 per cent. The projected increase in April 2024 to £11.08 should take the bite for those aged 21 and over to 67.7 per cent before it falls back to 66.7 per cent in October 2024.

Figure 9.6: Actual and projected bite of the NLW since its introduction, 2015-2024



Source: LPC projections using ONS data (ASHE and AWE) and forecasts from the HM Treasury (2022c and 2022g) panel of independent forecasters and the Bank of England (2022c). For more information on projection methodology see Appendix 3.

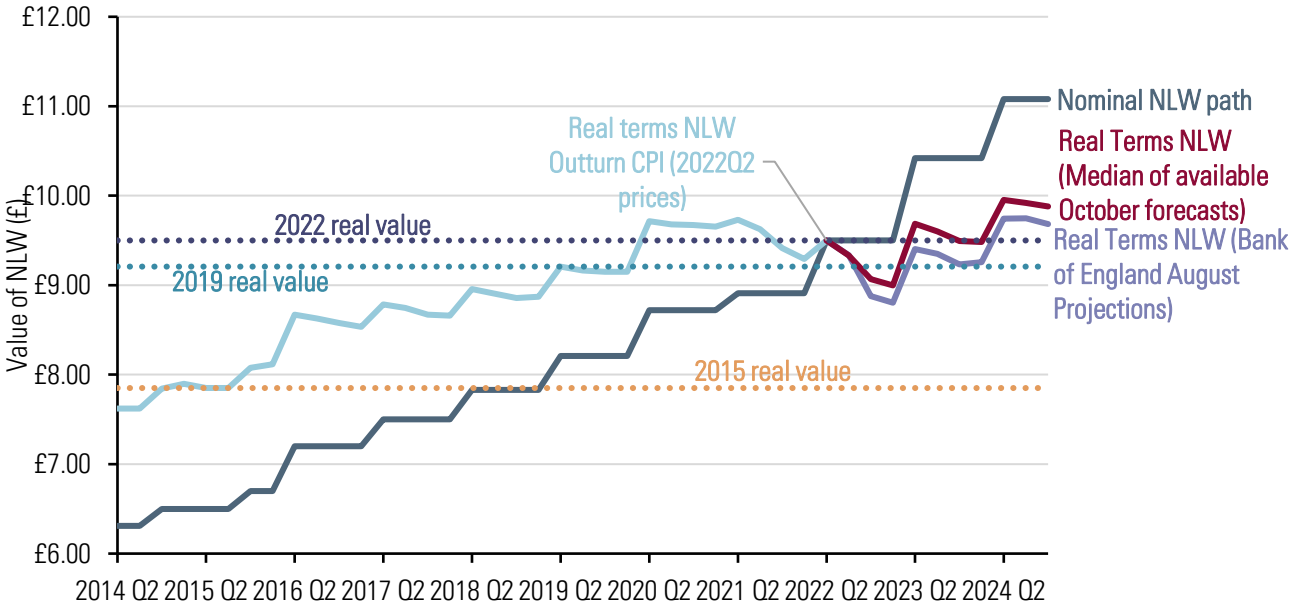
The real value of the NLW grew rapidly from 2015 to 2020 but fell after the surge in inflation in 2021 and 2022

9.17 The NLW increased faster than prices from its inception to 2020, as shown in Figure 9.7. Between 2015 and 2020, CPI inflation averaged 1.6 per cent a year, compared with increases in the NLW of 6.1 per cent. This meant that by 2020, the NLW was worth £9.73 in 2022 prices, £1.88 more (in real terms) than it was worth five years earlier. The smaller increase in the NLW between 2020 and 2021 meant that the NLW grew at a similar rate to inflation from April 2020 to April 2021.

9.18 The surge in inflation in 2022 reduced the real value of the NLW slightly between 2021 and 2022. When we made our recommendation for 2022 in October 2021, most forecasters expected inflation to peak at just over 4 per cent in the autumn of 2021. However, inflation reached 9 per cent in April 2022, meaning the 6.6 per cent increase in the NLW in April 2022 amounted to a real-terms fall at the time of implementation.

9.19 Figure 9.7 also shows that the real value of the NLW peaks when it is increased (in the second quarter of any year), but then falls through the rest of the year as inflation erodes its value. It is at its lowest in the first quarter of the following year just prior to it increasing again. Over the last year, the real value of the NLW, in second quarter of 2022 prices, fell from £9.73 in the second quarter of 2021 to £9.29 in the first quarter of 2022 before the 6.6 per cent increase in the nominal minimum wage increased it up to £9.50 (an increase on the first quarter of 2022 of only 2.2 per cent in real terms).

Figure 9.7: Actual and projected real value of the National Minimum Wage and the National Living Wage, 2014-2024



Source: LPC analysis using ONS inflation data (D7BT), quarterly, UK, 2014 Q2-2022 Q2. Forecasts of CPI inflation estimated using Bank of England (2022c) Modal Inflation Projection based on market expectations of interest rates and the median of quarterly inflation forecasts from Citibank, CEBR, Oxford Economics, and Heteronomics, October 2022.

9.20 The real value of the NLW depends, in part, on energy prices and related government policy. In August 2022 the Government introduced an Energy Price Guarantee (EPG), which limited household energy prices to the equivalent of £2,500 per year for the average household until the end of March 2023. When we made our decision in October, the Government had yet to provide details on the EPG beyond this point. This meant there was considerable uncertainty over future inflation and therefore the future real value of the NLW. Figure 9.7 shows the real value of the NLW from 2022 onwards under two inflation scenarios. First, it shows projections of the real value of the NLW using forecasts from October, which assume that the EPG will remain in its original form through 2023. Under these projections, the real value of the NLW will increase between April 2022 and April 2023. Alternatively, if there is no EPG, as modelled in the Bank of England (2022c) inflation projections, then the real value of the NLW may fall. [9]

[9] These estimates compare the real value of the NLW in the second quarter (as the uprating comes in) with the same quarter in the previous year. For the 2023 uprating they compare the real value of the NLW in the second quarter of 2023 against the second quarter of 2022. Alternative approaches include comparing the value of the NLW in the first quarter of the following year (when it is about to be replaced) with the real value of the NLW just before it comes in; or averaging over the whole year. The on-course 2023 NLW uprating represents a real terms increase using any of these methods based on the forecasts available.

Stakeholder views on the NLW path

9.21 As part of our consultation, we sought stakeholders' views on the future path of the NLW. Our consultation was carried out earlier in the year and based on projected NLW rates of £10.32 in 2023 and £10.95 in 2024. Much of the evidence was gathered over the spring and summer before full details of the energy support package for businesses was announced on 21 September 2022.

Worker representatives supported increases at least in line with the on-course rates

9.22 This year worker representatives generally argued that a return to the on-course NLW rate was the minimum acceptable increase. They argued this would help protect workers' living standards at a time of rising living costs. Many pointed to the strong labour market and argued conditions were right for a large increase.

9.23 The Trades Union Congress (TUC) argued the NLW needed to increase by more than inflation to maintain low-paid workers' living standards. It stressed the importance of hitting the 2024 target: 'The Low Pay Commission (LPC) has recommended increases below the on-course rate for two years in a row. This cannot continue into a third year'. It argued that undershooting the on-course rate risked missing the 2024 target and that recent recommendations had meant a real value pay cut for minimum wage workers, of 6.6 per cent over two years against Retail Price Index (RPI) and 2.9 per cent against Consumer Price Index (CPI). At oral evidence the TUC told us that 'this is the year that the National Minimum Wage (NMW) has to rise by at least the level of inflation'.

9.24 Unite said 'unless the LPC is bolder in its recommendation for 2023, the Government will fail to achieve its minimum wage target by 2024'. UNISON argued the economic context offered no reason to veer away from the path to achieve the 2024 target: historic low unemployment, the surging cost of living, strong earnings growth and record employer surpluses. In recognition of the cost of living crisis, it recommended an emergency uplift should be made in October 2022.

9.25 The Union of Shop, Distributive and Allied Workers (USDAW) told us that the LPC should explore an increase above the trajectory 'as an emergency response to the very real need of low-paid workers up and down the country. There is growing support for a minimum wage that takes into account the cost of living'. Community told us the projected 2024 target was inadequate, and that members thought an NLW of £12 per hour was the minimum needed to afford housing and necessities: 'members also regard the current living wage to be inadequate in terms of supporting living standards. For this reason, a moderately above inflation increase to NLW is not sufficient.' USDAW told us the uplift should be implemented in January rather than April and take into account the cost of living.

9.26 A number of worker representatives, including the TUC, Unite, UNISON, GMB and USDAW, set out arguments for a £15 per hour minimum wage as soon as possible. Unite submitted independent research looking at the benefits of a £15 rate. The Progressive Economy Forum also made a submission arguing the case for £15.

9.27 The Living Wage Foundation told us that it 'supports a strong minimum wage and would encourage the LPC to continue to raise the NMW to equal to two-thirds of median earnings by 2024.'

They argued the NLW was still not sufficient to meet the cost of living, especially in London. Its analysis found that a UK worker earning the NLW would need an extra £780 each year to bring their income in line with the real Living Wage (or £3,000 extra per year in London).

9.28 Mind (a mental health charity) stated that the NLW should be increased at least in line with inflation. Current projected rates did not cover the cost of living: 'Housing price increases, in particular, have left people with mental health problems in high-risk situations.' The Scottish Women's Convention (SWC) welcomed any rise in the minimum wage but called for the NLW to be calculated in relation to the cost of living. One woman interviewed by the SWC reflected that the NLW 'is just so low compared to the cost of everything… Living in dignity means being able to afford more than just the basics, and at the moment it feels like the Government just wants everyone to get a house and food, but that's just not enough.' The SWC suggested the minimum wage should be higher than the projected rate of £10.32.

Some employer representatives supported meeting the target, albeit with caveats

9.29 The Chartered Institute of Personnel and Development (CIPD) acknowledged that the tight labour market meant there was room for a higher NLW but thought this would need to be reconsidered in case of a recession. 'Due to the labour shortages reported by many employers, £10.32 an hour does not look unreasonable currently. However, if we enter a recession towards the end of the year, then this figure will need to be revised downwards.'

9.30 Make UK supported meeting the two-thirds target by 2024. They told us it was useful to have the trajectory to 2024 and the smaller 6 per cent increase projected for April 2024 assuaged some employer concerns. For 2023 they preferred an increase closer to 6 per cent than 8 per cent. Some manufacturers were concerned that the 'rapid upwards trajectory in the NLW rate … would both feed the current inflationary pressures that are affecting businesses and have an effect on pay differentials', increasing business costs at a difficult time. The Chartered Institute of Payroll Professionals (CIPP) survey results showed that firms had mixed views on the on-course rates. Approximately a third approved, a third disapproved and a third were unsure.

9.31 The Institute for the Future of Work (IFW) told us they supported 'the increase of the NLW as having a positive impact on workers, employers, the labour market and economy.' They added there was evidence that pay and benefits positively correlated with productivity, and a good wage was essential for worker wellbeing and productivity.

Some employers and their representatives argued for caution, with particular concerns about the impact on prices

9.32 We heard from several employer stakeholders that we should be cautious when recommending the NLW rate, as many businesses would have to increase their prices in response. Some groups did recognise that the rising cost of living meant wages for low-paid workers would have to increase. The Federation of Small Businesses (FSB) told us that 'we're not pitching for a particular rate because we recognise that it's tough for everybody. We wouldn't want to be in the position of saying let's bear down on the NLW'. In written evidence, they argued the projected (8.6 per cent) increase in rates could

lead some small businesses to close as they would be unable to absorb the cost or pass it on. The FSB argued that in light of economic conditions, the LPC's next recommendation should be delayed until December to allow a better understanding of the inflation position. The LPC must continue to play an independent role and 'be free to deviate from a political trajectory, if economic and labour market conditions warrant doing so'.

9.33 At oral evidence, the BCC told us 'the sentiment among our members is that we have to help people afford the rising cost of living, so we expect a rate around what you're suggesting [the on-course rate] is probably about right, but we're worried about fuelling inflation'. Their written evidence set out a concern shared by most employer groups: 'At a time when the Government is urging business to keep wage rates under control, too high a rise in the NLW could further fuel inflation and damage business and the economy.' Additionally, the Londonderry Chamber of Commerce cautioned that 'that our small businesses may struggle with the rising wage costs alongside other inflationary pressures and the retail sector in particular could be impacted.'

9.34 The National Farmers' Union (NFU) supported the principle of the NLW and NMW, but warned that any rises would hit profitability and must be balanced against consumer needs. 'Any increase in the NLW rate needs to be done in a way that balances the needs of employees facing cost of living increases, whilst recognising that businesses are operating in the same economic climate'.

9.35 In retail, the Association of Convenience Stores (ACS) told us that if the NLW rose as currently projected most retailers would see differentials reduced, profitability reduced and would have to increase prices. 'It is for these reasons that we believe that the LPC must take a cautious approach when setting the future wage rate for 2023 and beyond'. The British Retail Consortium (BRC) also recommended a 'cautious' approach: 'With the current trading environment and the very uncertain economic outlook, the retail industry would like to see the LPC adopt a cautious approach to setting the increase in the NLW for the coming year.' They argued there was a 'strong case to adopt an extended timescale to raise the NLW in line with other policy initiatives to support productivity growth and in-work progression'.

9.36 UKHospitality (UKH) recommended we delay implementation of the two-thirds target from 2024 to 2025 from fear we were approaching a 'tipping point where the level of the NLW does have a detrimental effect on employment levels in some parts of the country'. Whitbread told us we should 'consider the timeframe for reaching [the] target of two thirds of median earnings given the continued challenge of recovery from the pandemic and the pressure of cost inflation'. They recommended the NLW should increase at a similar rate to other rates of pay across the economy as the current projections 'could cause further inflationary pressures'.

9.37 Community Leisure UK told us the projected increase would be difficult for employers and would lead to price increases thereby increasing inflation. With rising energy prices, people's ability to pay for leisure and recreation would fall, creating a downward spiral. The majority of members thought the predicted rate for 2023 was too high. 'According to our members survey, 5 per cent thought there should be no increase in the rate; 10 per cent thought the rate should be under £10; 33 per cent thought it should be £10; 26 per cent thought it should be £10.01-£10.20'.

9.38 Other employers warned strongly against significant rate rises. NFU Scotland asked that the increase in the NMW be as low as possible, as the Government should first control input costs. The

National Hair & Beauty Federation (NHBF) asked for all rates to be frozen in 2023 to allow businesses a period of recovery: 29 per cent of its members said further NLW rises would be unaffordable for their business (up from 17 per cent in 2021). The Federation of Wholesale Distributors (FWD) also supported either a freeze to the NLW for 2023 or no more than a 6 per cent rise. It reported that 75 per cent of its members were concerned about the proposed increases in 2023 and more than 75 per cent reported concern over the proposed 2024 increase, due to soaring costs in the sector and businesses facing economic uncertainty.

9.39 The Equestrian Employers Association (EEA) told us that 56 per cent of its members said it would like to see a rate between £9.50 and £10. 'In the EEA survey conducted on the impact of the rise in the NMW (January 2022), 71 per cent of respondents were concerned that their business would be negatively affected by the rise over the next 2 years.'

Stakeholders agreed the NLW age threshold should reduce to 21 but views varied on when this should take place

9.40 Some employer representatives argued that the age for eligibility for the NLW should not be reduced to 21 years before 2024. The BCC's research showed most firms would prefer simplified NLW/NMW rates to help minimise the cost and reputational risk of accidental non-compliance, but 'if brought in too quickly this policy could exacerbate existing pressures on sectors that employ significant numbers of young people.'

9.41 The CIPP told us that two-thirds of survey respondents thought that lowering the age at which the NLW is payable could be brought forward to April 2023. Of the remaining third, there were comments stating that businesses would need more time to prepare and the fear that employers would resort to staff redundancies if rates were increased too quickly.

9.42 We heard from ACS that half of retailers surveyed were already paying store colleagues aged 21 and over the NLW, but some of those surveyed reported a significant impact on costs. At oral evidence, ACS supported the move to 21 and over. The Food and Drink Federation (FDF) also told us that 'Employers in the food and drink manufacturing sector tend to pay all employees the NLW or higher regardless of their age, therefore the lowering of the threshold will make little difference in the industry.'

9.43 The FWD told us that over half of its members said the NLW age threshold should be lowered to 21 immediately, 'the one caveat was that businesses should be given enough time to plan ahead if this was to be introduced'. This is because 86 per cent of members said they do not use the 21-22 Year Old Rate as they tend to pay employees over the age of 18 the real living wage. 'This is to avoid discrimination in pay if they are doing the same job.'

9.44 We heard from some employer representatives that the LPC should be cautious about lowering the age of eligibility. The FSB told us that careful analysis of sectoral differences in the labour market for young people is needed before making the decision to lower the threshold. There are risks that employers may respond by removing other benefits or that it would act as a barrier to young people who are out of work. 'FSB supports the gradual age reduction for eligibility for the NLW provided this has no adverse impacts on employers or employees'. UKH also told us that care should be taken to avoid employment prospects being damaged and also to be aware that there are certain roles and

'responsibilities that cannot be undertaken by younger people (unsupervised sale of alcohol, operation of certain machinery etc).'

9.45 The Recruitment & Employment Confederation (REC) recommended we delay extending the NLW to 21 year olds to 'help protect the employment position of young people in a competitive labour market. Despite worker shortages, young people can still find themselves at a disadvantage in comparison to more experienced candidates'.

9.46 Community Leisure UK stated most of their 'members do not differentiate based on age. For those who do, a period of 4 years has been suggested to enable organisations time to recover from the pandemic and current economic crisis'. The NHBF also called for a delay to the lowering of the age threshold until 2026 to allow business time to adapt.

9.47 The Scottish Grocers' Federation (SGF) told us that care should be taken when raising any rate or reducing the age threshold further. 'Any increase needs to be proportionate, or it may damage the viability, profitability and long-term sustainability of Scottish convenience retailers and the opportunities the sector can offer by way of work experience and a route into employment.'

9.48 The CIPP told us that two-thirds of survey respondents thought the change could be brought forward to April 2023. Of the remaining third, there were comments stating that businesses would need more time to prepare and the fear that employers would resort to staff redundancies if rates were increased too quickly. KeyRing, a social care employer, supported lowering the age threshold as young people often have the same financial outlays and responsibilities as older workers. Youth Employment UK told us that the age threshold should be reduced in 2023; it did not believe this would negatively impact employment.

9.49 The TUC told us the expansion of the NLW to 21 and 22 year olds should go ahead. They argued that 'the evidence shows that this group's experiences are like those older than them. Throughout the pandemic employment rates have held up for 21 and 22 year olds. Paying the full rate to this group will not damage their employment prospects'. GMB welcomed the lowering of the NLW age to 23 and recommended the Government go further and set one minimum wage rate for all workers. Unite also told us the lower age threshold had helped younger workers. This 'has undoubtedly had a positive impact on those workers aged 23 & 24 years by putting much needed pounds in their pockets and improving their living standards'.

Stakeholders had mixed views on the future of the youth rates, with some calling for their removal

9.50 Worker representatives and some NGOs argued for the removal of youth rates, on the basis that young people perform the same roles and experience the same cost pressures as other workers.

9.51 The TUC told us their 'long-term view is that all workers should receive the standard rate of the minimum wage.' In the meantime, they recommended large increases in the youth rates and cited the tight labour market as a reason this could be easily achieved. Unite argued the youth rates should be abolished: 'The creation of age rates for the minimum wage has had a systemically negative impact on young people'. They told us the 21-22 Year Old Rate was misused by hospitality employers: 'having represented hundreds of workers in this age bracket, the 21-22 rate is very rarely used by employers

positively. We know of scores of examples of where hospitality employers have opted for younger workers purely because they are cheaper to employ'.

9.52 UNISON recommended we harmonise NMW rates into a single rate, arguing it was unfair to pay people differently for doing the same job. They argued that youth rates were rarely used by many employers in recognition of their detrimental effects on retention and morale for young staff. They noted that while the real value of the NLW/NMW had increased since 2009 for those aged 21 and over, it had fallen for 16-20 year olds. USDAW also told us they believed youth rates should not exist as young workers experience the same pressures as adult workers but have a weaker employment rights framework. 'Our recent survey of our members showed that those young workers (under 27) are significantly more likely to be underemployed.'

9.53 Mind stated there should be no age discrimination of the rates. 'It beggars belief that young people under 18 are expected to get by on as little as £4.81 an hour, despite many facing the same living costs as their older counterparts.' They argued that the young people who have to survive on youth rates are often the most vulnerable, and that young people with mental health problems often had no choice but to live independently. The SWC demanded an end to age discrimination and wanted to see a universal NLW rate.

9.54 The Prince's Trust recommended the LPC move towards parity for over-18s in the long term; they argued that in a tight labour market employers would take on young people without the need for lower rates to act as an incentive. They also told us that youth rates did not reflect young people's cost of living. 'Differential pay rates for younger adult workers … does not reflect the reality that many will be living independently or supporting families themselves.'

9.55 Community, on the other hand, expressed some concern that by eliminating youth rates employers may be less incentivised to hire new inexperienced staff. They stated their support for equal pay as a principle and 84 per cent of members agreed with the statement: 'It does not matter how old you are, you should be paid the same for an hour's work'

9.56 The FWD told us that youth rates were generally too low. 'Although members are wary about the increases to lower pay bands, nearly all agree that the rate of pay for young people and apprentices is far too low.' Just over 40 per cent of members said there should be fewer specific wage rates below the NLW. The BCC told us that youth rates should be simplified: 'qualitative research shows most of our members would prefer a simplified NMW rate for under 21s'. They told us that youth and apprentice rates should be raised by the same percentage as the NLW.

9.57 The NFU told us that 'whilst the rate is not widely used within the industry it is important during the current economic climate for employers to have the option of lower youth rates'. They cautioned that 'any increase in the NMW youth rate needs to be done in a way that balances the needs of employees facing cost of living increases whilst recognising that businesses are operating in the same economic climate.'

9.58 A number of employer representatives did not offer direct recommendations on the youth rates or include it as a question in their survey. In some cases, this decision was because the majority of their members are already paying above the youth rates. As the FDF explained 'most of our members already pay according to the market and over the rate of the NMW for young people'.

Some stakeholders had additional views on the future of minimum wage policy

9.59 The TUC told us that 'the government should seek to bring together minimum wage and workplace pensions policy to make sure low-paid workers can build adequate retirement incomes.' To this end, the LPC should 'factor this into assessments of the rates it recommends'. Under the current interactions, 'very few workers on low income will accumulate pension savings at a rate that would achieve' a decent standard of living in retirement.

9.60 A number of submissions gave views on what should happen once the 2024 target was reached. As set out above, we received a number of submissions from unions and other groups arguing for an increase to £15 per hour as soon as possible. Employer groups were more likely to argue for a non-target based approach. The ACS told us the LPC should revert to its old remit as it argued 'for statutory wage rates to return to being set based on objective economic analysis instead of politically set targets.' The CBI argued once the NLW target had been met further targets (and ambitious increases) would undermine the business investment needed to increase living standards. It added during oral evidence that two-thirds would be an effective floor, with a focus on creating conditions for investment and growth. The British Beer & Pub Association (BBPA) told us that the post 2024 remit should be to limit the NMW at no more than two-thirds of median earnings. We have not considered arguments on the NLW after 2024 in depth in this report; but will return to them if we are asked to provide advice on this question in the future.

Conclusion

9.61 The value of the NLW target in 2024 has ebbed and flowed with economic conditions. That is intentional. The policy framework sets the target relative to median earnings, and the expected value of those earnings varies as economic prospects change. As the pandemic took hold, the economy closed down and workers were furloughed, it fell from £10.69 to £10.32. Then, as the economy recovered and the labour market tightened it surpassed these figures to reach £11.08. However, uncertainty over the future means it could vary by around 27 pence in each direction.

9.62 The real value of the NLW increased each year from its introduction in 2016 to reaching its first target of 60 per cent of median earnings in 2020. However, increasing inflation and a more cautious uprating in April 2021 led to the real value of the NLW plateauing in 2020 and 2021 before falling in 2022. The on-course path to the target in 2024 is expected to see the real value increase in 2023 and again in 2024. By April 2024, the real value of the NLW is expected to be its highest on record, but that will of course depend on the progress of inflation over the next two years.

9.63 Worker representatives called for at least the on-course rate, with many going further suggesting a NLW target of £15 an hour, arguing a real-terms increase was critical for low-paid workers. Employer views were more mixed, many accepted the target but were worried about price rises, while others called for caution warning of cost rises elsewhere. However, much of the evidence we gathered from employers was taken before the Government announced the energy support for businesses.

Chapter 10

Rate recommendations

Key findings

- While the economy has slowed the labour market remains tight with record vacancies, employers struggling to recruit and wages rising faster in low paying parts of the economy than elsewhere. On this basis, Commissioners agreed that the NLW can continue on its path to the Government's target of two-thirds of median earnings without significant risks to employment prospects of the workers affected.
- Similarly, the strength in the youth labour market, with wages growing faster than for adults and an abundance of vacancies in youth-friendly, sectors led Commissioners to recommend similar increases for young workers and apprentices.
- However, Commissioners note that the economy and labour market more generally will likely weaken over 2023 and into 2024. As such, the balance of NLW increases needed to hit the target in 2024 – with a higher increase in 2023 than in 2024 – is appropriate to economic circumstances.
- We estimate that total coverage of all NMW and NLW workers will increase from 1.6 million this year to 2 million next year, reversing the fall seen in recent years. However, these estimates are uncertain as forecasting coverage is challenging and the economic outlook is unpredictable.
- Changes in household incomes for NLW workers depend on tax and benefit policy as well as the NLW uprating. The government's decision to uprate benefits by 10.1 per cent will mean that a single earner households on benefits without housing costs, will see their income rise at a similar rate to the NLW uprating. However, the freezing of tax thresholds mean that some NLW workers will pay a greater share of their wages on taxes.

10.1 This chapter sets out our remit from Government and how we've met it i.e. the rates we've recommended for each of the national minimum wages, including the National Living Wage. We also set out the rationale for these recommendations and how this relates to the evidence in the rest of this report. We also describe some of the likely impacts on household incomes and coverage and bite of the new rates.

Our recommendations

10.2 Our remit (as outlined in our introduction) from the Government is to recommend the rate of the NLW consistent with reaching the target of two-thirds of median earnings for all workers aged 21 and over by 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 our NLW recommendation of 6.6 per cent aimed to put us back on course to hit the 2024 target, having recommended a below on-course rate in the midst of the pandemic. In preparation for extending the NLW to 21-22 year olds by 2024, we recommended a higher increase (9.8 per cent) for this group to avoid a very large jump when they become eligible. For those aged under 21, we recommended increases in line with forecast increases in average earnings.

10.4 Since we made those recommendations, the economic situation has changed substantially. Last October, when we made our recommendations for April 2022, the Bank of England expected inflation to peak at just over 4 per cent and the forecast consensus was for wages to grow at just over 3 per cent. Since then, post-pandemic supply chain issues, exacerbated by the Russian invasion of Ukraine, have caused prices – especially for energy – to increase rapidly, driving the highest levels of inflation we've seen in decades. This means that while we expected the NLW rise in April 2022 to comfortably be a real-terms increase, it turned out to be a real-terms cut, though NLW workers still saw higher pay increases than most other workers.

10.5 Earnings have also grown more strongly than forecast, driven by a tight labour market. However, earnings growth has been less than inflation and the gap between wage growth and price growth is the highest for decades. This brings us to our recommendations for 2023.

The National Living Wage

10.6 The arguments on what to do with the NLW are finely balanced. Both employers and workers are worried about rising costs. For workers, an NLW rise normally guarantees their pay rises faster than prices, protecting their living standards. In the current context this is more important than ever. But for employers, rising wages are another bill alongside their energy, raw materials and other costs that can threaten jobs or may need to be passed on through higher prices.

10.7 The economy is in an unusual position. GDP has recovered faster than in previous recessions, but growth has been negligible over the summer of 2022 as consumer confidence and spending power have been sapped by inflation. Yet the labour market remains very strong. While they have softened slightly in recent months, vacancy levels remain at historic highs, suggesting no shortage of demand for labour. Instead, we have heard frequently that employers are struggling to find staff.

10.8 Employers told us that while they were concerned about the forthcoming rise in the NLW, they were more concerned about other cost pressures. The majority thought pay would need to rise because of the tight labour market and because low-paid workers needed a response to the increase in inflation. This year's data confirmed that the number of workers paid the minimum wage had fallen in recent years, reversing a near 20-year trend of rising and then steady coverage. Many employers have raised pay, and more workers have moved to different jobs, taking advantage of abundant job vacancies.

10.9 Worker representatives told us a real-terms increase was critical to protect the living standards of the lowest-paid at a time of crisis. Over the course of the year, we heard powerful testimony from low-paid workers across the economy on their struggles in dealing with rapidly rising costs. Unions argued that record vacancy levels gave scope for ambitious increases without risking employment. They characterised increases in the NLW since 2020 as overly cautious and called for a bolder approach in

setting the 2023 rate, with the on-course path portrayed as the minimum acceptable step in securing the 2024 target.

10.10 We recommend the NLW increases by 9.7 per cent (92 pence) in April 2023 to £10.42. This is the on-course rate consistent with achieving the target of two-thirds of median earnings by 2024. We estimate an increase of 6.3 per cent will be required in 2024 (when average wage growth is expected to have slowed) to achieve this target, which we currently estimate to be £11.08. We judge this balance, with a higher increase in 2023 than 2024, is appropriate given prevailing economic conditions. While the economy has slowed recently, the labour market is very strong. It is sensible to have a larger increase to reach the Government's target while the labour market is still strong. The consensus among forecasters is for GDP growth to slow in 2023, and among more recent forecasts to turn negative over the year. The labour market is also expected to soften over the course of 2023, meaning a lower increase may be more appropriate in 2024.

10.11 It is Commissioners' strong preference to recommend real-terms increases to the rates as long as they do not present a "significant risk" to employment chances, as per our remit. However, inflation is extremely unpredictable given the ongoing conflict in Ukraine and the response of Government policy to tackling inflation. For example, at the time we write there are no details as to the design of the energy bill support from April 2023, though the Government has said it will protect those most in need, making the impact difficult to predict. The inflation forecasts available to us at this time suggest a range of 6 to 12 per cent, depending on the scale and method for mitigating energy price rises and the response of the Bank of England to inflation. Our intent with this recommendation is to deliver a real-terms increase for workers on the NLW.

National Minimum Wage

10.12 Younger workers – those aged under 23 – were the most likely to lose employment during the pandemic. But their recovery was rapid throughout 2021 and 2022 and their employment rates are now close to pre-pandemic levels, aided by the tight labour market and strong demand for labour in youth-friendly sectors.

10.13 This tight labour market has also improved pay for these workers, where pay has increased substantially, particularly for those aged under 21. Because of this labour market strength for 16-17 and 18-20 year olds we recommend increases of 9.7 per cent – in line with the increase in the NLW – for both of these groups, to £5.28 and £7.49 respectively.

10.14 Last year we recommended aligning the Apprentice Rate and the 16-17 Year Old Rate and we continue to support this position as we have seen no evidence of negative effects stemming from this change. With this in mind, we are considering if there is a need for a separate Apprentice Rate long term. Next year we expect a new Apprenticeship Evaluation Survey, which would provide the level of evidence necessary to see if a separate rate for apprentices is still justified.

10.15 The evidence continues to support the decision to bring 23 and 24 year olds into the NLW and the Commission's view remains that 21-22 year olds should also be brought into the NLW by 2024. To smooth this transition and avoid a very large increase once they become eligible, we recommend a 10.9 per cent increase for this group, taking them to £10.18 in 2023.

Accommodation Offset

10.16 We recommend the Accommodation Offset be increased by 4.6 per cent (40 pence), which is in line with forecast average earnings growth, to £9.10. In line with our remit, we have reviewed the operation of the offset. We continue to believe there should be an Accommodation Offset, allowing employers to make a deduction when they provide accommodation; but there are two areas where we would like to see changes to better protect low-paid workers affected by the offset.

10.17 Firstly, there needs to be greater assurance of the quality of the accommodation for which the offset can apply before we recommend further changes that could increase the value of the offset more quickly. We think it is imperative that a quality standard and suitable enforcement regime are put into place as soon as possible. If and when there is a reliable standard in place, employers' ability to deduct the offset should be dependent on meeting this. Until such a standard is in place, increases in the offset will be restrained. The value of the offset as a proportion of the NLW will not increase significantly until we have some assurance that there are robust minimum standards in place for accommodation quality and that these are enforced.

10.18 Secondly, Commissioners are concerned that current arrangements leave workers with low weekly hours at risk of very low income if the offset is taken in full. We have seen and heard evidence of workers with cancelled shifts or short hours having to pay the full offset with little earnings. We have also seen examples of employers with measures in place to protect workers against this risk. We therefore recommend a minimum hours requirement for these workers before accommodation costs can be deducted. We think the design proposed in Chapter 8 (see recommendations starting from paragraph 8.74) should be the starting point for this, but appreciate the Government may wish to consult more widely on the level and design of this requirement.

10.19 We also recommend that seafarers be exempt from the Accommodation Offset while on board ship, meaning employers would not be able to deduct accommodation costs from their pay below the NMW. The position of seafarers is distinct from other groups of workers in accommodation for a couple of reasons. Firstly, seafarers are in a unique situation while at sea, of being confined to their work premises which also happen to be their only available accommodation. Secondly, the seafarer's presence on the vessel is required even while they are asleep – the worker is required to be present in case of an emergency.

10.20 Finally, we recommend that BEIS and the Home Office work together to address the interactions between the seasonal workers rate and the Accommodation Offset. There is an obvious interaction between the offset and the minimum hourly rate mandated by the seasonal workers visa. In principle, an employer recruiting seasonal migrant workers, and obliged to pay the higher rate, can allay the extra expense by increasing the accommodation charge they recoup from workers. The policy intent of the higher visa rate is undermined; the benefit to workers of higher hourly pay is removed.

10.21 This time next year we expect to recommend the rate needed to achieve the Government's target of two-thirds of median hourly earnings by 2024, subject to economic conditions and the emergency brake. This is a close horizon for businesses in particular, and we have already heard representations from employers and workers on what should happen after 2024. The Commission stands ready to advise and gather evidence on the minimum wage framework beyond 2024 to inform the Government's decision on this policy.

Implications of the rates

10.22 In this section we look at how our recommended rates might change the bite of the minimum wage for different rate populations. We also investigate how many workers might be paid the minimum wage next year and how the changes will affect the post-tax and benefit income for workers.

What will the bite of the minimum wage be next year?

10.23 The ratio between the minimum wage and the median wage is termed the bite (or the Kaitz index). It is a widely used measure of the toughness of the wage floor and is used in the Government's target for the NLW. To examine how our recommended minimum wages would change the bite we need to forecast the level of wage growth in the median wage. We project the median wage forward using a combination of the latest official earnings data and a panel of independent forecasts of earnings growth, as discussed in Chapter 9. We estimate that between April 2022 and April 2023 median hourly earnings will grow by 5.45 per cent for all workers.

10.24 Table 10.1 shows projections for the bite for different rate populations. We apply the same wage growth assumption for each rate population. Based on these projections, the bite will increase by 2-4 percentage points for each rate population. This is because the minimum wage rates are projected to grow faster than median earnings. Each minimum wage is due to increase by 9.7 per cent or more, whereas we project median earnings will only increase by 5.45 per cent in each group.

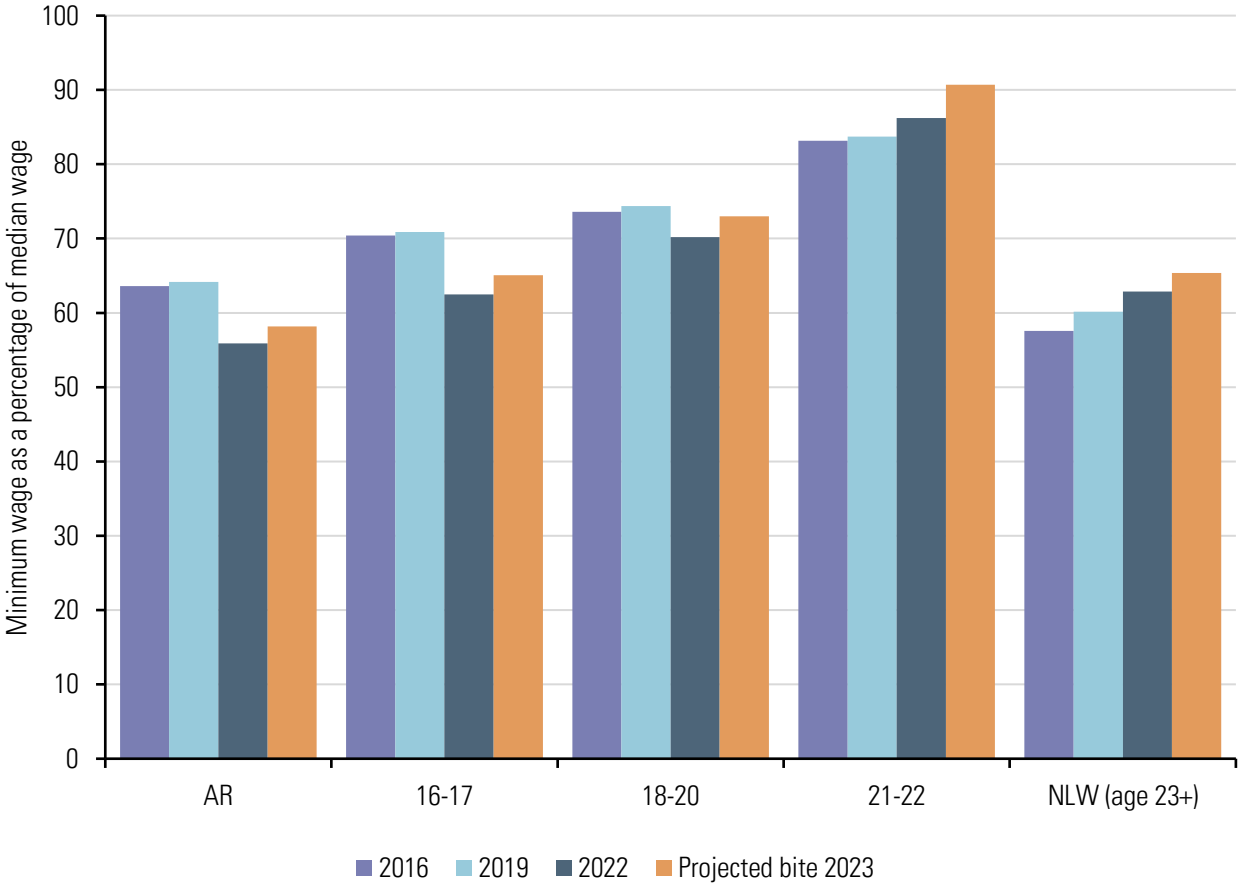
10.25 The projections in Table 10.1 are likely to overestimate the bite for the younger populations. We assume for these projections that median earnings will grow at the same rate for each rate population. Over the last five years, younger rate populations have experienced faster pay growth, as discussed in Chapter 5. We think it is likely that pay will continue to grow more strongly for younger workers, but we do not have enough information to forecast the age-specific growth rates in median earnings.

Table 10.1: Projections for median hourly pay and bite of the NMW/NLW after uprating, UK, 2022-2023

Minimum wage band	April 2022			April 2023 projections		
	NMW/NLW	Median hourly pay	Bite (per cent)	NMW/NLW	Median hourly rate	Bite (per cent)
16-17	£4.81	£7.70	62.5	£5.28	£8.12	65.1
18-20	£6.83	£9.73	70.2	£7.49	£10.26	73.0
21-22	£9.18	£10.65	86.2	£10.18	£11.23	90.7
AR	£4.81	£8.61	55.9	£5.28	£9.08	58.2
NLW	£9.50	£15.11	62.9	£10.42	£15.94	65.4

Source: LPC estimates using ASHE, SOC20 weights, UK, 2022. April 2023 medians assume 5.45 per cent uprating in April 2022 median for each group. Figures for the whole apprentice rate population should be treated with caution, as ASHE data is not typically representative for this group.

Figure 10.1: Historical and projected bite for different minimum wage populations, 2016-2023



Source: LPC estimates using ASHE, 2016-2022, UK and LPC data on minimum wage rates. Bite of the NLW is estimated using the 23+ population for all years; 23-24 year olds became entitled to the NLW in April 2021. Pre-2020 figures are chain-linked to make them comparable with later figures.

How many jobs will be paid the minimum wage next year?

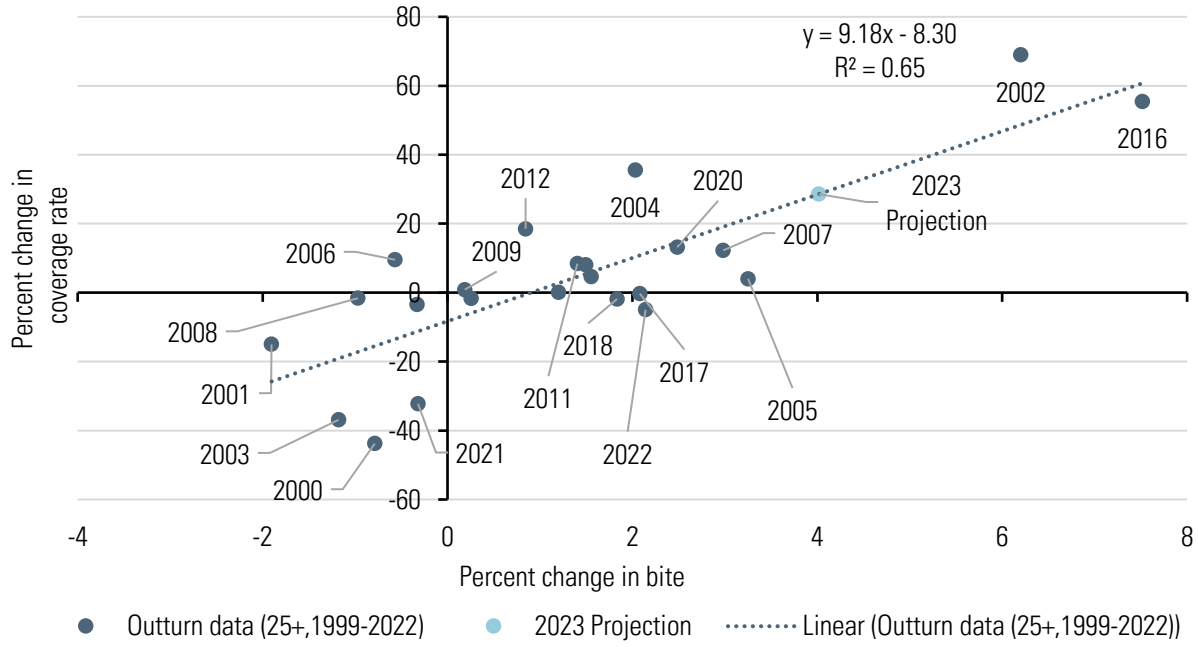
10.26 Coverage refers to jobs paid within 5 pence of the worker's eligible minimum wage rate. It is key for understanding the impact of a change in the minimum wage; the more workers are covered the greater the effect on pay and risk to jobs.

10.27 We project the number of jobs paid the minimum wage in two ways. Our first approach assumes that pay for all workers would grow by the 5.45 per cent forecast by the HM Treasury panel for 2022/2023 in the absence of a minimum wage rise (`counterfactual wage growth`).This requires strong assumptions.First, this approach assumes that in the absence of the minimum wage pay growth will be uniform across the distribution. We have seen that coverage fell this year as other factors were also driving up pay at the bottom of the pay distribution. These factors could drive up pay at the bottom of the distribution again next year. Equally, before the NLW we often saw the opposite pattern, with weaker pay growth at the bottom of the distribution (Low Pay Commission, 2019c). If counterfactual wage growth is stronger at the bottom of the pay distribution, our estimate of future coverage will be an overestimate. If counterfactual wage growth is weaker at the bottom of the pay distribution our estimate of future coverage will be an underestimate.

10.28 Second, it does not allow for spillover effects. It assumes that firms would allow all their workers to fall on to the minimum wage, whereas we have seen that firms aim to maintain their pay differentials between workers, which pushes up pay growth for workers near the minimum wage. These spillover effects mean it is less likely that workers fall onto the minimum wage. We discuss this in detail in Chapter 4. For this reason, we expect this approach to overestimate coverage next year as it has done in recent years. Nevertheless, it is a useful indication of how many jobs would be paid the minimum wage, if pay grew by 5.45 percent for all workers otherwise.

10.29 Our second approach is based on the historic relationship between growth in coverage and the growth in the bite of the minimum wage (Figure 10.1). In the past, the two measures have tended to move together; when coverage rates grow the bite grows too. If we assume this relationship stays the same, we can estimate how coverage rates will change based on the projected bite change in Table 10.1. This approach indirectly takes account of spillover effects and uneven counterfactual pay growth as these issues occurred in previous years and are embedded in the historic relationship between bite and coverage. The light blue dot shows what this means for the NLW projection in 2023. We expect this projection to be a more realistic estimate of what coverage will be next year.

Figure 10.2: Per cent change in coverage rate and per cent change in bite, UK, 25+, 1999-2022



Source: LPC analysis using ASHE, workers aged 25 and over, 1999-2022. Figures before 2022 are chain-linked to make figures comparable. Excludes first year apprentices. Historical relationship estimated using a linear regression. 2023 projection based on historical relationship.

10.30 Table 10.2 shows that we project coverage to increase using both approaches. Using the first approach, we estimate that the coverage rate for all workers will almost double, increasing from 5.4 per cent in April 2022 to 9.6 per cent in 2023. 2.7 million jobs would be directly affected by the minimum wage. Alternatively, using the second approach, we estimate that the coverage rate will increase to 7.0 percent in 2023 and 2 million jobs will be paid the minimum wage next year. This would bring coverage back to 2016-2019 levels, after it fell between 2019 and 2022. In either case our projections suggest that coverage will increase next year, as the minimum wage is due to grow faster than median wages

for all rate populations. However, coverage next year remains highly uncertain as a wide range of other factors also play a role in determining pay for low-paid workers.

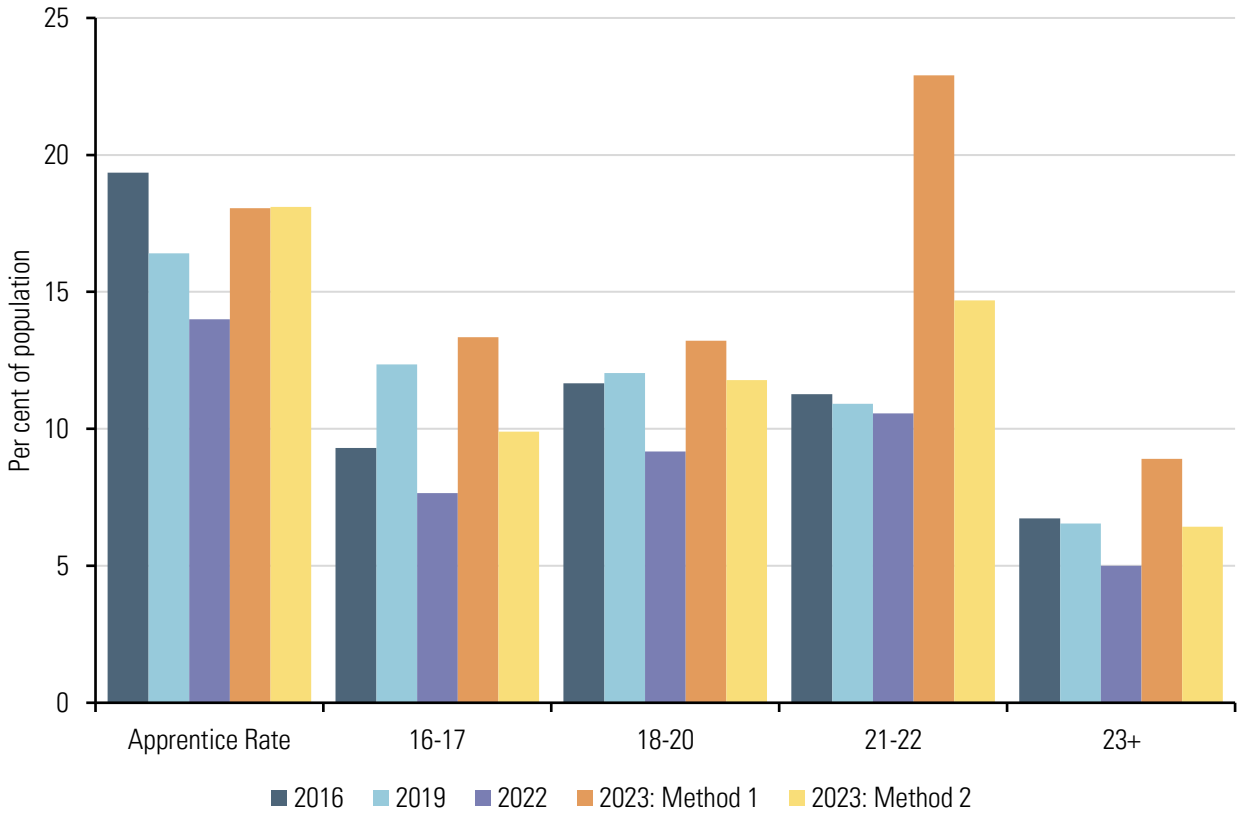
10.31 Our coverage estimates are likely to overestimate coverage in younger age groups. Both estimates rely on wages growing at the same rate on average in the younger rate populations as in the NLW population. As discussed in Chapter 5, in the recent past average pay has grown faster in younger populations. Like our bite projections, we have not found a reasonable alternative way of forecasting coverage for these groups. We therefore use these forecasts as indicative numbers, but it should be noted they are likely to overestimate.

Table 10.2: Projections of coverage for different minimum wage populations, UK, 2022-2023

	April 2022		April 2023 (Method 1: Uniform counterfactual pay growth of 5.45 per cent)		April 2023 (Method 2: Historical relationship between bite and coverage)	
Minimum wage band	Coverage (thousands)	Coverage rate (per cent)	Coverage (thousands)	Coverage rate (per cent)	Coverage (thousands)	Coverage rate (per cent)
16-17	25	7.7	44	13.4	32	9.9
18-20	82	9.2	119	13.2	106	11.8
21-22	89	10.6	193	22.9	124	14.7
AR	31	14.0	40	18.1	40	18.1
NLW	1343	5.0	2389	8.9	1727	6.4
Total	**1570**	**5.4**	**2784**	**9.6**	**2029**	**7.0**

Source: LPC analysis using ASHE, SOC20 low pay weights, UK,1999-2022. Figures before 2022 are chain-linked to make figures comparable. Historical relationship estimated using a linear regression. We use historical relationship estimated on 25 and over for all rate populations. Figures for the whole apprentice rate population should be treated with caution, as ASHE data is not typically representative for this group.

Figure 10.3: Historical and projected coverage for different minimum wage populations, 2016-2023



Source: LPC analysis using ASHE, SOC20 low pay weights, UK,1999-2022. Figures before 2022 are chain-linked to make figures comparable. Historical relationship estimated using a linear regression. We use historical relationship estimated on 25 and over for all rate populations. Figures for the whole apprentice rate population should be treated with caution, as ASHE data is not typically representative for this group.

Impact of the rates on household incomes

10.32 We have established in previous chapters that the NLW and NMW have had a big impact on hourly wages for low-paid workers. However, hourly wages are only one determinant of household incomes. Household incomes also depend on the number of hours worked and the tax and benefit system.

10.33 Table 10.3, provided by HM Treasury, shows how household incomes will change for two representative households between this year and next. First, it shows the example of a single worker, working 35 hours a week on the NLW. This worker's hourly wages will increase by 9.7 per cent this year, but their income will only increase by 7.3 per cent. This is caused by the interaction of the NLW uprating with taxes. The government has frozen the income and National Insurance (NICs) thresholds. This (alongside other changes to taxes) means next year a single NLW worker on 35 hours will pay a greater proportion of their wages in taxes. Their household income will as a result increase at a slower rate than their wages.

10.34 A family with one worker on the NLW and two children will see their income rise at a faster rate, than the single worker. This is due to the government's recent decision to uprate benefits by 10.1 per cent next year. This means that the second example household in Table 10.3 sees their income rise by

9.3 per cent next year. This is a slower increase than their wage rise (9.7 per cent) but faster than the income rise for a single worker (7.3 per cent). For this household the benefit rise of 10.1 per cent partially offsets the increase in taxes paid on their higher wages. This means their income increases nearly as fast as their wages next year This is different from the period (2015-2020), where NLW households on benefits often saw much smaller increases in household incomes than wages (Low Pay Commission, 2019c).

Table 10.3: Change in household income for two example households with a NLW worker, 2022-2023

25+ worker, 35 hour week	2022/23	2023/24	Increase (pounds)	Increase (per cent)
Pre-tax hourly rate	£9.50	£10.42	£0.92	9.7
Annual pay	£17337.50	£19016.50	£1679.00	9.7
Tax threshold	£12570.00	£12570.00	£0.00	0.0
Taxable pay annual	£4767.50	£6446.50	£1679.00	35.2
Weekly pay before tax and benefits	£332.50	£364.70	£32.20	9.7
Single, no children				
Weekly household income after tax	£303.35	£325.25	£21.90	7.2
Post-tax/benefit change (pounds)	-£29.15	-£39.45		
Post-tax/benefit change (per cent)	-9.61	-12.13		
Hourly rate after tax	£8.67	£9.29	£0.63	7.2
Couple, one working, 2 children				
Weekly household income after tax and benefits	£489.30	£534.79	£45.49	9.3
Post-tax/benefit change (pounds)	£156.80	£170.09		
Post-tax/benefit change (per cent)	32.05	31.18		
Hourly rate after tax and benefits	£13.98	£15.28	£1.30	9.3

Source: HMT analysis based on Autumn Fiscal Statement 2022 announcements.

Notes:

a. Estimates assume that the households have no housing costs, and the second household (couple) is in receipt of Universal Credit.
b. Estimates assume the couples in the examples are of the same age. Families with two children are assumed to have one child born prior to 2017. Child benefit is included in the calculations for families with children.
c. Couples are assumed to be unmarried (and therefore do not benefit from marriage allowance).
d. Estimates exclude council tax support.
e. Average hourly rate refers to the hourly rate when working 35 hours. This rate decreases as hours worked increases.
f. 2023-24 calculations were derived from internal estimates of planned UC allowances and tax thresholds, based on current policy as of Autumn Statement 2022.
g. '2022-23' here refers to just before the new rates come into effect next April. The figures therefore do not account for the lower NICs threshold and higher NICs rate in the first half of 2022.
h. Figures also do not account for one-off cost of living payments in either 2022-23 or 2023-24.

10.35 These demonstrations reflect two example households, Income changes will vary based on how many members of the household work, how many hours they work and other circumstances (e.g. whether the household receives housing related benefits.) The impact on cost of living for different households will also depend on the consumption basket of each household.

10.36 These estimates reflect change in household incomes over time, so they capture changes in other policies alongside the change in the minimum wage. The change in incomes over time depends on both the NLW uprating and other policy changes.

Conclusion

10.37 While the economy has slowed the labour market remains tight with record vacancies, employers struggling to recruit and wages rising faster in low-paying parts of the economy than elsewhere. On this basis, Commissioners agreed that the NLW can continue on its path to the Government's target of two-thirds of median earnings without significant risks to employment prospects of the workers affected.

10.38 Similarly, the strength in the youth labour market, with wages growing faster than for adults and an abundance of vacancies in youth-friendly sectors led Commissioners to recommend similar increases for young workers and apprentices.

10.39 However, Commissioners note that the economy and labour market more generally will likely weaken over 2023 and into 2024. As such, the balance of NLW increases needed to hit the target in 2024 – with a higher increase in 2023 than in 2023 – are appropriate to economic circumstances.

10.40 Uprating benefits by inflation means that a worker on benefits (without housing costs) will see their income rise at almost the same rate as the NLW, an important consideration during this period of high inflation.

Appendix 1

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 visits and meetings. All such individuals and organisations are listed below unless they expressed a wish to remain unacknowledged.

Aegis the Union

Association of Convenience Stores

Association of Directors of Adult Social Services

Association of Labour Providers

British Beer & Pub Association

British Chambers of Commerce

British Cleaning Council

British Independent Retailers Association

British Retail Consortium

Care England

CBI

CDS Labour (Agriculture) Ltd

Chartered Institute of Payroll Professionals

Chartered Institute of Personnel and Development (CIPD)

Coalition of Care and Support Providers in Scotland

Community Leisure UK

Community Trade Union

Construction Employers Federation

Coventry & Warwickshire Chamber of Commerce

Derry City and Strabane District Council

Derry Trades Union Council

Dr Nik Hammer, University of Leicester

Early Years Alliance

Equestrian Employers Association

Federation of Small Businesses

Federation of Small Businesses Scotland

Federation of Small Businesses Wales

Federation of Wholesale Distributors

Focus on Labour Exploitation (FLEX)

Food and Drink Federation

Forum of Private Business

GMB Union

Greggs Plc

Hastings Borough Council

Hilton Gardens Inn

Hipster Group Limited

HIT Training Ltd

HM Government

Homecare Association

Incomes Data Research

Institute for Fiscal Studies

Institute for the Future of Work

Institute of Workplace and Facilities Management

Jempson's

Jerome Scott

Joseph Rowntree Foundation

KeyRing Living Support Networks

Labour Behind the Label

Labour Research Department

Leicester City Council

Living Wage Foundation

Local Government Association

Londonderry Chamber of Commerce

Low Incomes Tax Reform Group

Make UK

Manufacturing NI

Maria Cooper

McDonald's UK

Mind

National Care Association

National Farmers' Union

National Hair & Beauty Federation

National Institute of Economic and Social Research

National Union of Rail, Maritime and Transport Workers

NFU Cymru

NFU Scotland

Nicola Alison

Northern Ireland Hotel Federation

Professor Deirdre McCann, Durham Law School, Durham University

Progressive Economy Forum

Pro-Force Limited

Rascals Day Nurseries

Recruitment & Employment Confederation

Renfrewshire Citizens Advice Bureau

Resolution Foundation

Royal Mencap Society

Samantha Geeves

School of Sociology and Social Policy, University of Leeds

Scottish Care

Scottish Grocers' Federation

Scottish Women's Convention

Skills for Care

Social Market Foundation

Source BMX

Tesco Plc

The boohoo group PLC

The Prince's Trust

Trades Union Congress

Travis Perkins PLC

UKHospitality

Ulster Farmers Union

Union of Shop, Distributive and Allied Workers

UNISON

Unite the Union

Walsall Council

Whitbread Plc

White Horse Child Care Limited

Women's Budget Group

Work Rights Centre

XpertHR

Youth Employment UK

Appendix 2

Research evidence

A2.1 The pandemic has inhibited studies of the impact of increases in the minimum wage on earnings, employment, and hours. First, the quality of the main data sources on pay and employment worsened with reduced sample sizes and changes to collection methods (moving away from face-to-face interviews). Second, policies to control the pandemic, such as furlough, made estimates of earnings and employment more difficult. Third, it is almost impossible to separate effects of minimum wage increases from those of the pandemic as many of the locked down or affected sectors were ones with more minimum wage workers. However, new data sources, such as HMRC Real Time Information and the Business Insights and Conditions Survey from the Office for National Statistics (ONS), have provided new information and useful insights.

A2.2 For this report, we commissioned three external research projects, which were less affected by the issues highlighted above: Incomes Data Research (IDR) to assess the influence of the NLW on pay setting, differentials and progression; London Economics assessing the impact in the reduction in the age of eligibility to the National Living Wage (NLW) from 25 to 23; and Leeds University to look at the workings of the Accommodation Offset in the agricultural sector. In addition, we have also undertaken some econometric analysis in-house to look at the initial impact of the most recent uprating in April 2022.

Commissioned research

A2.3 We start by summarising qualitative research that looked at the impact of the most recent minimum wage upratings that were implemented in April 2022. We then go on to review the econometric research that assessed the impact of the reduction in the age of entitlement to the NLW from the age of 25 to 23 in April 2021. The section is concluded by considering the research that explored the use of the Accommodation Offset of the National Minimum Wage in the agricultural sector.

The influence of the NLW on pay setting, differentials, and progression

A2.4 The study by Incomes Data Research (2022d) was based on primary evidence gathered from HR professionals. It consisted of two strands: a survey of 56 organisations employing nearly 1 million workers, targeted at those in low-paying sectors, looking at how the latest increase in the National Living Wage had affected approaches to pay setting, differentials, and progression opportunities; and 16 case studies exploring survey responses in more detail.

A2.5 While many employers report that staff have a say in how the organisation is run, pay rises are most commonly decided by senior management without input from employees. Most pay reviews take place in April (around three-quarters of those with fixed pay review dates). The median pay review outcome in 2022 for respondents' most populous role was 4.6 per cent (with an average of 5.1 per cent). For around four-fifths of the respondents, the 2022 pay award was higher than that for 2021, with most of the rest giving a similar increase to the previous year. A number of respondents reported paying additional mid-year increases in a trend evident both in low-paying sectors and across the wider economy.

A2.6 Around five in six respondents reported that affordability was a 'very important' factor in their latest pay review, while increases to the NLW, inflation, recruitment and retention and the future business outlook also featured highly. Inflation, recruitment, and retention have grown significantly in importance over the past year.

A2.7 Just over a third of respondents set their lowest adult rate level at the National Living Wage (NLW), while the median adult rate across the sample was just 10 pence above the statutory floor. Only 1 in 8 respondents – primarily in childcare and hospitality – used youth rates. Although, for the most part among these firms, 21-22 year olds were paid the 21-22 Year Old Rate, those aged under 21 were generally paid above the age-appropriate NMW but less than the rate for 21-22 year olds.

A2.8 Around a quarter of employers reported that they sought to maintain fixed differentials between their main grade staff and the grade above. However, these are more commonly calculated in monetary terms, on either an hourly or annual basis, rather than in percentage terms. Over a third reported differentials have narrowed, with the NLW cited as a factor.

A2.9 Around a quarter of the sample perceived that changes in differentials have affected promotions, largely because staff no longer feel the extra money on offer is worth the additional responsibility involved. Just under half of affected employers report that changes in differentials have affected recruitment and retention of key supervisory grades. Skilled or supervisory roles are generally filled internally, with almost half of respondents reporting that existing staff are appointed to at least 60 per cent of such positions

A2.10 Employers continue to face labour market challenges, with three-quarters reporting that recruitment issues have worsened over the past year. They generally expected these difficulties to persist and remain a challenge over the medium to long term. The most common means of addressing recruitment difficulties was to raise advertised pay rates (around half of all respondents), while a quarter of employers had implemented market or retention supplements and with a further sixth having introduced signing-on bonuses.

A2.11 A similar number of respondents also reported that retention issues had worsened over the past twelve months. The vast majority also anticipated that such difficulties would persist over the medium to long term. Around half of respondents had raised salaries to address retention difficulties while a quarter had improved training. Few had adopted greater opportunities for promotion or restructured pay to provide more progression.

A2.12 Although the NLW helped recruitment, few felt it had improved retention. Employers were more likely to regard it as a hindrance as it narrowed differentials and limited employers' ability to offer

meaningful pay progression on promotion. However, Brexit and the pandemic seem to have had a greater effect than the NLW on staff turnover.

A2.13 Few employers provided accommodation for their workers but did make use of the Accommodation Offset. Those that did were in leisure and hospitality. The respondents provided little further insight into the operation of the offset. Our research from Barbulescu and Robertson (2022) addresses this evidence gap to some extent.

A2.14 Incomes Data Research (2022d) concluded that the NLW had affected the timing of reviews and influenced the level of pay rises, however the cost of living has become a much greater concern for employers over the last year with many applying additional increases. The NLW rise has led to a further narrowing of differentials with progression affected as staff have become less willing to take promotion for lower additional rewards.

Assessing the impact in the reduction in the age of eligibility to the National Living Wage (NLW) from 25 to 23

A2.15 Prior to the NLW, the eligible age for the highest rate of the National Minimum Wage (NMW) was 21 years. Since the introduction of the NLW in 2016, those aged 25 and over have been eligible for a higher minimum wage than those aged 21-24. The age of entitlement to the NLW was cut from 25 to 23 years in April 2021 – resulting in an 8.7 per cent increase in the minimum wage for 23-24 year olds. That compared with increases of just 2.2 per cent for those aged 25 and over, and 2.0 per cent for those aged 21-22. London Economics (2022) assessed the impact of this change. It is important to understand the impact of the most recent reduction in the age of the entitlement to the NLW that took place in April 2021 before the planned further reduction in the age of entitlement to the NLW 23 to 21 by 2024.

A2.16 London Economics (2022) investigated the impact on the labour market outcomes (employment, hours worked, and hourly earnings) of those newly eligible for the NLW (23-24 year olds). It built on previous work by Dickens, Riley, and Wilkinson (2014), Crawford, Greaves, Jin, Swaffield, and Vignoles (2011), Fidrmuc and Tena (2011), and London Economics (2015). These analyses used the discontinuity in the age of entitlement for the adult rate of the minimum wage and in general found little or no evidence of a negative impact on employment and hours. London Economics (2015) explored the impact of lowering the age of entitlement to the adult rate from 22 to 21. It found a small positive employment effect for women aged 21 on becoming eligible for the adult rate. For men, they found a reduction in inactivity (an increase in labour market participation), but resulting in increased unemployment rather than employment. It should be noted that the lowering of the age threshold for the adult rate to 21 was implemented in 2010, when the economy was only just emerging from recession and unemployment was still rising.

A2.17 Prior to the age of entitlement to the adult NMW being lowered from 22 to 21, Dickens, Riley, and Wilkinson (2010) undertook research to examine the impact of the large jump from the Youth Development Rate (covering 18-21 year olds) to the adult rate (for those aged 22 and over). They exploited the age discontinuity in changes in the minimum wage at the age threshold of 22 years old to investigate the likely effects of reducing the age of entitlement to the adult rate of the NMW to 21. They

found a significant positive effect at the adult NMW threshold on the probability of being employed for low-skilled individuals. That is, similar individuals were more likely to be employed when the minimum wage was higher. However, when using a sample including individuals slightly further from the threshold age, Fidrmuc and Tena (2013) found no statistically significant discontinuity effect. In contrast, they found a significant negative effect one year before the threshold age and argued this could be because firms lay off workers in anticipation of the minimum wage increase at the threshold age.

A2.18 Crawford, Graves, Jin, Swaffield and Vignoles (2011) investigated the impact of the introduction of the 16-17 Year Old Rate in 2010 on the employment and education choices of 16-17 year olds. They found that the introduction of the 16-17 Year Old Rate had little impact on the probability of remaining in full-time education, the probability of being NEET (not in education, employment, or training), and the probability of employment for those not in full-time education. They did, however, find evidence that the 16-17 Year Old Rate had increased the probability of full-time students in low-wage areas engaging in part-time work.

A2.19 London Economics (2022) used the Labour Force Survey (LFS) and the Annual Survey of Hours and Earnings (ASHE) and employed a difference-in-differences approach. They compared changes in the trends experienced by the 23-24 year olds after April 2021 (the treated group) to changes in trends experienced by those of similar ages who were not newly eligible for the NLW (the control group). The researchers found that 22 and 25 year olds followed different trends in employment and hours to the treated group, which limited their suitability as a control group. As a result, their main analysis used 26 year olds as a control group. Visual inspection of pre-treatment trends and more formal testing suggested that this was an appropriate age group to use, although limiting the control group to a single year did limit sample sizes.

A2.20 For 23-24 year olds as a whole, the impact of the reduction in the age of entitlement on employment, hours worked, and hourly earnings was estimated to be insignificant. The researchers thought that the insignificant impact on hourly earnings may be a result of the sample including many workers who already earned above the NLW and were thus unlikely to be affected by the change in eligibility.

A2.21 As a result, they undertook heterogeneity analysis, in some cases focusing on groups that were more likely to be affected by changes in the minimum wage. Although sample sizes were not sufficiently large for all groups, they were able to investigate some subgroups of the population. When limiting their sample to only 23-24 year olds in low-paying occupations and low-paying sectors, the researchers found that, although there was no change in employment, 23 and 24 year olds worked fewer hours relative to 26 year olds following the change in the age threshold. The change in hours worked was greater in magnitude than the statistically significant increase in hourly earnings, which may limit the extent to which changes in earnings can be seen as the main or only causal factor. The estimated decrease in average hours worked was 5.5 per cent for those working in low-paying sectors (compared to an increase of hourly earnings of 2.1 per cent) and 5.2 per cent for those in low-paying occupations (compared to an increase in hourly earnings of 2.5 per cent).

A2.22 The negative impact on hours worked was particularly large for female workers in low-paid occupations (an 8.2 per cent reduction), although the effect on earnings for this group was not significant and was lower than for men in low-paid occupations. They found evidence that this change in hours worked was driven by an increase in the proportion of 23-24 year old employees working part-

time relative to 26 year olds, with no significant impact on the hours worked by those in full-time employment. It was not possible to clearly identify whether this was caused by full-time workers moving to part-time work or new entrants moving into part-time work (or indeed the opposite trends among the 26 year old population).

A2.23 They also found a range of both positive and negative effects in other subgroups: they found negative and significant impact on actual hours worked and a weakly significant negative effect on employment for individuals of non-white ethnicities and a significant negative effect on hours worked in rural areas. In both these subgroups, the effect on earnings was not significant (for non-white groups, the earnings coefficient was positive; for rural areas it was negative). The researchers do note that the 'non-white' group is not a homogenous group, and it is comprised of groups of different ethnicities with quite different trends in labour market outcomes. Unfortunately, sample sizes do not allow them to split the group down further for this analysis. They found a weakly significant positive impact on actual hours worked by those with dependent children and a weakly positive employment effect in the most deprived areas and urban areas. Relative to 26 year olds with dependent children, they found that 23-24 year olds with dependent children experienced a 7.6 per cent increase in actual hours worked after the reduction in the eligibility age.

A2.24 They undertook a set of robustness checks to validate the choice of treatment and control groups and found that their results were not sensitive to a range of different specifications (such as the exclusion of the 2020-21 tax year, which was heavily affected by the COVID-19 pandemic). However, the reduction in age eligibility was implemented during the pandemic – just prior to the economy opening up again in April 2021 – with the furlough in operation until September 2021. Since then, the labour market has continued to be affected by labour shortages and supply chain issues that have also been exacerbated by leaving the EU. Thus, it may be difficult to separate the specific impacts of the reduction in the age of eligibility from those of the pandemic.

A2.25 The research concluded that the change in entitlement appeared to have had no significant impact on employment – either for the whole 23-24 year old population or for most subgroups within the population. They did not find an effect on hours worked for the whole population, but they did find that 23-24 year old workers in low-paid sectors and occupations, particularly women, became more likely to work part-time (compared to their 26-year old counterparts) after becoming entitled to the NLW. At the same time, the analysis found that changes in earnings were positive and significant for those working in low-paid occupations and sectors, but were smaller than changes in hours worked, while some groups saw significant changes in hours without significant changes in earnings and vice versa. Combined with the fact that the change in entitlement took place at the same time as other major changes in the labour market induced by the pandemic, this makes it difficult to determine with certainty the extent to which becoming entitled to the NLW led to these changes and if it did, whether this was demand- or supply- led. The researchers highlight that future work could look at impact of the changes in NLW entitlement over a longer period, as well as further investigate the mechanisms by which it might be associated with a change in working hours.

The workings of the Accommodation Offset in the agricultural sector

A2.26 Barbulescu and Robertson (2022) explored the Accommodation Offset of the National Minimum Wage in seasonal agricultural work. This work consisted of three parts: first, understanding the use of the Accommodation Offset and its impact on workers; second, studying the role of employers in providing accommodation; and third, case studies of how employer-provided accommodation is treated in other countries.

A2.27 They started by looking at how the Accommodation Offset affected workers. They used data collected as part of an ESRC funded project entitled 'Feeding the nation, seasonal migrant workers and food security during the COVID pandemic', supplemented by a set of follow-up interviews with participants. They investigated seasonal work covering fruit and vegetable farms, packing houses for imported food, flowers, and poultry workers and butchers. Workers typically worked 39-40 hours over 6 days a week and were paid weekly. But work shifts varied according to when crops needed harvesting. Zero-hours contracts continued to be widely used in the sector with 'low pay-no pay' (workers being left with low or no total pay once accommodation charges are deducted) endemic during non-peak seasons, such as the winter months. Workers also complained about no-work days during peak harvest time due to the weather or waiting for crops to ripen.

A2.28 They estimated that around 63,000 seasonal migrant workers were subject to the Accommodation Offset. They calculated this estimate from three components: 40,000 Tier 5 Visa seasonal workers (those recruited abroad and arrive in the UK on a six month only visa); 15,000 covered by the EU Settlement Scheme (a conservative estimate as the NFU (2017) suggested that there were 35,000 Eastern European seasonal workers with EUSS); and 8,000 on Tier 5 Visas for poultry workers and butchers. Each year 10,000 additional Tier 5 visas have been made available for the agrifood sector and in the last year these have been used to bring in poultry workers. An additional 30,000 were also provided with accommodation but they worked on piece rates or on higher rates of pay (particularly in abattoirs and the poultry sector). They noted that few of these migrant workers had recourse to any in-work benefits. The no recourse to public funds (NRPF) provisions of the visa also meant these migrants workers could not access support or benefits from other sources.

A2.29 There was widespread awareness among workers that the Accommodation Offset was £60.90 a week, with the same rate applied to caravans and non-caravan accommodation. The Accommodation Offset was considerably cheaper than alternative local accommodation. But the daily rate of the offset or how hourly and weekly pay was calculated were not commonly known. Both workers and businesses were aware that it was uprated annually. It helped workers to budget and businesses to plan. It helps prevent exploitation as workers move between farms as they know the cost of the accommodation.

A2.30 Some farms offered an accommodation waiver to cover weeks with low or no work. One example given was that no accommodation was charged in a week where pay was less than £100. Others reduced the weekly amount (£60.90) by the daily offset (£8.70) for a reduction in days worked.

A2.31 Price and quality of accommodation mattered to workers when choosing an employer/farm. Workers lamented the quality of the accommodation mostly in multiple occupancy stationary caravans. Utilities, such as gas, electric and water are included in the offset but it was less clear about other

items, including laundry costs. Internet access was of particular importance for migrant workers. Sometimes firms advertised all-inclusive rents that were lower than the offset in order to attract workers. Workers, particularly couples and those returning year after year, took pride in their caravans making them homely but also adding maintenance costs.

A2.32 Based on responses to the Feed the Nation project, the best quality accommodation was generally in high-profit, low-labour intensity sectors such as mushrooms, with the worst accommodation in farms that picked daffodils followed by strawberries, as these sectors had much smaller profit margins. In Northern Ireland, where the Accommodation Offset was fixed by the Agriculture Wage Board at £46 per week in 2022, workers reported similar concerns as those in England and Wales.

A2.33 Workers noted other costs, and terms and conditions affected pay. When workers rented privately, the employer often had to provide transport as public transport was limited to bring them from that rented accommodation to the farm. However, workers often had to cover that cost (with daily transport costs regularly similar to the daily cost of accommodation). There were issues where work clothes were not provided and travel to work, which could take a while, was not counted as work time. There was also wide variation in defining overtime. On some farms, it started after 39 hours but on others, it did not start until 48 or 60 hours. There were also concerns about pricing when buying food from the farm store or hot meals from the farm canteen. Lower rates paid to younger workers was also an issue.

A2.34 They concluded this part of the research by noting that the benefits of the Accommodation Offset were that caravan and non-caravan accommodation were available at accessible and fixed prices. It also made the work package more attractive for seasonal workers as they did not have to worry about finding a home. With workers close to the workplace, employers had ready access to workers and were able to use flexible, non-standard work patterns.

A2.35 The second part of the research used two methods to investigate accommodation provision from employers for seasonal farm workers: local planning applications by employers seeking to develop their accommodation provision, and surveys and interviews with farm employers. In October 2022, they identified six planning applications for seasonal worker accommodation across the UK, from Cornwall in the South of England to Angus in Scotland. The research looked at the rationale given for the planned provision of additional accommodation by employers. This information was supplemented by a postal survey that the researchers had previously undertaken in May-October 2021, as part of an ESRC funded project entitled 'Feeding the nation, seasonal migrant workers and food security during the COVID pandemic'. They had conducted follow-up interviews with 53 growers, covering vegetables, flowers, fruit, and salad crops. Around 85 per cent of these offered on-site accommodation for seasonal workers.

A2.36 Drawing on that research and the new information from the planning applications, they identified three main reasons for employers investing in on-site accommodation: recruitment of staff and viability of farm businesses; lack of off-farm housing availability and affordability; and increased health and safety requirements.

A2.37 The provision of accommodation for horticultural workers was found to be vital for the economic viability of farms – supporting the expansion of businesses and meeting the labour requirements to pick and process fresh produce. Following changes to immigration policy since leaving the EU, recruitment of workers from abroad had become more difficult and more expensive. Offering accommodation was a

way of attracting and retaining workers from overseas. In planning applications, accommodation was presented as necessary in attracting migrant labour, supporting the local economy, and meeting the needs of farmers to recruit sufficient workers.

A2.38 In the planning proposals, farmers often highlighted the lack of alternative accommodation in terms of availability and affordability. Agriculture had to compete with tourism for short-term rentals reducing the capacity of off-farm lets. Holiday homes also affected the availability of accommodation in many rural areas – making off-farm accommodation unaffordable for both locals and migrant workers. The planning applications also emphasised the lack of facilities in rural areas and often included social facilities – a shop, canteen, bar, gym, and social meeting rooms. Given the high prices and low availability of rental housing, transport and facilities in rural areas, these facilities were often essential to attract labour.

A2.39 Farm businesses invested in additional accommodation during the pandemic to allow for social distancing and isolation, in order to prevent the spread of Covid-19. Planning applications in 2022 continued to reflect these concerns with a decrease in the quantity of workers sharing each caravan. This has not only reduced the financial return from accommodation charges for each caravan, it has also required the provision of additional caravans.

A2.40 The employer survey also considered the challenges facing farmers in 2021. It had become much more difficult to recruit seasonal workers after the UK had left the EU. British workers had not made up the shortfall despite efforts to attract workers, including improving worker facilities, increasing wages, and creating flexible shifts for 16-18 year olds and for adults with children. Local labour can be cheaper to employ than seasonal migrants as they do not require accommodation or have to meet visa requirements. But unemployment was low in rural areas, public transport limited, and other sectors could offer higher pay (and more flexible hours). Indeed, migrant seasonal workers continued to predominate over local workers, who were not available at the right time or in the right place.

A2.41 Farmers had implemented automated technologies where possible, especially in processing and packing. But the automated technology was not yet developed to substantially reduce labour needs in dealing with fragile crops. There were also financial resource constraints and a shortage of available skilled labour to supervise workers using the new technology or for its maintenance.

A2.42 Barbulescu and Robertson (2022) concluded this part of the research by finding that on-site worker accommodation was a benefit to employers as it enabled higher staff recruitment, reduced worker travel, and provided a ready source of labour at all times.

A2.43 In the third and final part of the research, Barbulescu and Robertson (2022) looked at how other countries dealt with accommodation provided by the employer. In general, they noted that similar policies covering accommodation for low-paid workers and those in agriculture were predominantly used in countries which sought to push the regulatory cost onto employers rather than through publicly-funded housing subsidies. In these countries, the legislation related to accommodation was covered under more general Wage Boards but sometimes was covered under minimum wage legislation. However, they focused this part of the research on three countries – the United States, Canada, and Austria.

A2.44 In the United States, the Fair Labor Standards Act (1938) sets out the minimum wage (currently $7.25 per hour). Credit for board and lodging credit may not exceed the "reasonable cost" or "fair

value" of the facilities furnished, whichever is less. The federal minimum wage was not extended to cover farm workers until 1966. The Migrant and Seasonal Agricultural Worker Protection Act of 1983 provides some additional protection for farm workers. Seasonal workers who arrive on the H2a visa are offered free lodging and travel expenses as a mechanism to support legal migration and move away from undocumented migrants working in the sector. There are also State-wide regulations.

A2.45 In Canada, there are different regulations across its Provinces and Territories. In Ontario where the minimum wage is set as part of Employment Standards and is tied to the increase in the Ontario Consumer Price Index. There are allowances for board and lodging. A private room can have C$31.70 per week deducted (and C$15.85 for a non-private room). No deduction is allowed for domestic workers in non-private rooms. Meals can be charged at C$2.55 each or a maximum of C$53.55 per week. For full board and lodging, deductions are C$85.25 for a private room, C$69.40 for a non-private room, and C$53.55 for domestic workers in non-private rooms. For harvest workers only, deductions are allowed up to C$99.35 for serviced housing and C$73.30 for unserviced housing.

A2.46 In Austria, there are regulations covering employer-provided accommodation in agriculture. Accommodation costs are capped for farm workers in special legislation. The cap is revised periodically but not annually and has been agreed as part of the collective bargaining agreement in the sector. Currently, the costs are capped at €39.24 per week for accommodation and utilities (€19.62 each for accommodation and heating) with the costs for room and board (volle freie Station) capped at €196.20 per week. However, there are maxima for each aspect of provision: accommodation (10 per cent); utilities (10 per cent); breakfast (10 per cent); lunch (30 per cent); snacks (10 per cent); and dinner (20 per cent). However, the Austrian researcher reported that in practice employers often escaped this cap by developing diverse businesses with other company names managing the housing portfolio, thus dissociating the roles of employer and private landlord. Thus, accommodation to workers would then be offered at private rental prices.

A2.47 In conclusion, the case studies showed a variety of practices across the globe with no particular framework more common than others. The system in the UK was most closely replicated by countries with liberal welfare policies.

In-house econometric research

A2.48 For this report, we have conducted two initial econometric assessments of the impact of the increase in the NLW to £9.50 an hour in April 2022. The findings from both of these are provisional and will be published in due course. The first, Butcher and Dickens (forthcoming), used the variation in wages across geographies, ages, and gender to assess the impact of the most recent increases in the National Living Wage (NLW). The second, Latimer (forthcoming) applied a bunching approach to compare employment in the same 'job types' across low-paying and high-paying areas, before and after an increase in the NLW.

The impact of the National Living Wage on labour market outcomes using geographic and demographic variation in wages

A2.49 Butcher and Dickens (forthcoming) adopted a methodology similar to that of Manning (2016), Dickens and Lind (2018) and Dube (2019). It assessed the impact of the National Living Wage (NLW) since the onset of the pandemic and extended the research by Butcher and Dickens (2022) to also re-examine the impact of the introduction and subsequent increases in the NLW. They examined differential changes in labour market outcomes of interest across area-gender-age groups that were more or less exposed to the minimum wage. For example, we should expect a greater exposure to the minimum wage in lower-paying areas of the UK, such as the North East, Northern Ireland or Wales, rather than in London or South East. Women, who are more likely to work part-time and be employed in lower-paying occupations, are also likely to be more exposed to the minimum wage than men. Similarly, we might expect greater exposure among younger and older age groups than those in mid-career.

A2.50 An advantage of this approach is that it is able to capture all employment change and not just job retention and can be used to examine the impact of the NLW on a range of outcomes such as pay, employment, unemployment, hours of work, self-employment, inactivity, and non-standard contracts.

A2.51 They used two alternative measures of minimum wage exposure: the 'bite' of the NLW in 2015 (as measured by the ratio of the NLW to the median earnings of each area-gender-age group); and the coverage of the NLW in 2015 for each area-gender-age group (the proportion paid below the then upcoming NLW rate of £7.20 an hour). They derive both of these minimum wage exposure measures from the April 2015 Annual Survey of Hours and Earnings (ASHE). For robustness, they tested other base years (2013 and 2014), but the results were largely unchanged. The baseline exposure measures were then interacted with the time effects for each year from 2016 to 2022. They ran the model so that they could identify individual year effects as well as the cumulative effect over the whole period from 2015-2022.

A2.52 One of the key assumptions of this type of model is that the labour market measures of interest have evolved in a similar way for both greater and less affected area-gender-age groups. However, a minimum wage policy existed prior to the introduction of the NLW – making testing pre-treatment differences in trends more difficult. We would need to go back to a period with limited regulation in the labour market (pre-1999). But the UK labour market has changed since then. They carried out some placebo tests on the period prior to 2015, when the increases in the minimum wage were more modest. They also attempted to control for migration and skill. When estimating their results, they used clustered and robust standard errors in their regressions, weighted by group population.

A2.53 They defined minimum wage years as the period from April to March. The final year of the analysis, 2022, used the 2022 ASHE and the quarterly LFS from the second quarter of 2022. Some of the period covered – from the first quarter of 2020 to the first quarter of 2022 – will be during periods to control the pandemic outbreak and may affect the results and their interpretation.

A2.54 They created annual panels of area, gender, and age groups. In their base analysis, they used the 20 regions and countries of the UK (Standard Government Office Regions with separate

Metropolitan counties and London divided into inner and outer). The analysis was limited to those aged 25 and over as they were the workers covered by the introduction of the NLW. Ages were banded into eight groups (25-29, 30-34, 35-39, 40-45, 45-49, 50-54, 55-59, 60-64) and gender into two (male and female). They therefore had 320 separate region/age/sex groups. They also experimented with alternative geographies, such as NUTS2 and travel-to-work areas (TTWAs), and fewer age groups (the larger the number of geographies, the smaller the cell sizes and the need to reduce the age groups). The quarterly Labour Force Survey (LFS) was used to derive the measures for the labour market outcomes for each of the area-gender-age groups.

A2.55 They found strong and robust evidence that the introduction and subsequent upratings of the NLW significantly increased the average hourly wage in their region-gender-age groups and that the impact was stronger in those groups most exposed to the NLW (whether measured by the minimum wage bite or coverage).

A2.56 They found no significant negative impacts on employment or hours across the whole period (up to the second quarter of 2022). However, looking at individual years, they did find a strong significant negative employment effect in 2020 using both the minimum wage bite and coverage measures of NLW exposure. The timing of this effect coincides with the implementation of measures to control the pandemic which took hold in the UK at roughly the same time as the NLW was increased to £8.72 in April 2020. It was not possible to disentangle a minimum wage effect from a pandemic effect as many of the low-paying sectors and low-paid workers were the most affected by these measures. This strong negative finding was not replicated in 2021 or 2022, suggesting that the finding in 2020 was a result of the pandemic. These results appeared to be robust to using different definitions of geography and the age gender mix.

A2.57 The NLW may have boosted participation over the whole period from 2015-2022 as inactivity was significantly reduced (for cells more exposed to the minimum wage) without an increase in unemployment. However, the strong negative effects on inactivity were found prior to the pandemic. During the pandemic, the negative effects of the NLW on inactivity fall away and become insignificant. They also investigated the impact of the NLW on self-employment, the use of zero hours contracts, and the share of part-time workers but found no evidence of any long-term effects in any of their specifications.

A2.58 These results are consistent with previous analysis by Butcher and Dickens (2022) suggesting no adverse employment effects of the NLW up to first quarter of 2020. However, since then we have seen further increases in the NLW during a period that has been affected by measures to control the global pandemic. These results suggest that the NLW continues to have had a limited effect on employment.

Impact of the NLW using a bunching approach

A2.59 Latimer (forthcoming) investigated the impact of the 2019 to 2022 NLW increases using a bunching approach. We replicated and extended the bunching approach to assessing minimum wage impacts pioneered by Cengiz, Dube, Lindner, and Zipperer (2019) and adapted to the UK by Cribb, Giupponi, Joyce, Lindner, Waters, Wernham, and Xu (2021). The approach compares employment in the same 'job types' across low-paying and high-paying areas, before and after an increase in the NLW. The number of jobs 'lost' below the new minimum wage is then compared with the number of jobs 'gained'

which at and above the new minimum wage. If pay increases for a job see it moves from being below the new minimum wage to above the new minimum wage it is counted as having been `lost' and then `gained.'

A2.60 The idea behind the analysis is to categorise all jobs into small wage bands (for example, £9.00-9.25 or £12.75-£13.00). Increasing the minimum wage will reduce the number of jobs in wage bands below the incoming rate and increase the number of jobs in wage bands above the rate. The bunching analysis compares the number of jobs created above the incoming minimum wage (either new jobs or jobs moved from a lower-paying band), to the number of jobs lost below the incoming rate. If more jobs are destroyed below the new minimum wage than created above it, there are negative employment effects.

A2.61 The bunching approach relies on comparisons between lower and higher-paying areas. Even if there was no minimum wage change, we would expect there to be fewer low-paid jobs over time as pay increases. To control for other factors which drive up pay over time, Cribb, Giupponi, Joyce, Lindner, Waters, Wernham, and Xu (2021) carried out a difference-in-difference analysis. They estimated local wage effects and then subtracting them from pay. They then grouped jobs based on their 'job type' (wage excluding the local pay effect) before comparing what happens to jobs of the same 'job type' in low-paying areas with a control group of the top ten highest-paid areas. In theory, jobs of the same 'job type' would be paid approximately the same, if they were in the same place. They then compared outcomes for jobs in low-paid areas which are affected by the NLW, to jobs of the same 'job type' in better-paid areas which were less likely to be affected by the NLW. The jobs in the lower-paid areas had worse pay, so are more affected by the NLW. Cribb, Giupponi, Joyce, Lindner, Waters, Wernham, and Xu (2021) provide a more detailed discussion of their method.

A2.62 We replicated that analysis and extended it to cover the 2019-2022 period with some small adjustments to their method. First, their analysis used the Annual Population Survey (APS) to reweight the Annual Survey of Hours and Earnings (ASHE) so that it was representative at the local level. We use the Labour Force Survey (LFS) quarterly data instead. The APS is made up of four quarters of the LFS and a sample boost. It is a larger sample and is weighted to population totals at a more granular level, so it would be preferable to the LFS. However, we used the LFS as it is timelier. In September 2022 when we did the analysis, LFS data were available for the quarter after the 2022 NLW uprating. The equivalent APS dataset covering the post-2022 NLW uprating won't be available until the summer of 2023. We compared our results for the 2015 to 2019 periods to the previous analysis, using the two different datasets, and found similar results. However, as we only use data from the first quarter after the 2022 uprating of the NLW, our results only captured the immediate impacts from the change.

A2.63 Second, we excluded workers who were paid less than they usually would be due to sickness or absence. These workers might bias the analysis as workers who were off work ill or on maternity leave would look like they had low hourly pay. If loss of pay becomes more or less common over time this could alter the results. We also exclude workers who worked for the household as an employer (SIC Major Group T) or worked in another country (SIC Major Group U). These are the standard filters used for our pay analysis of minimum wage workers in this report and ONS use them in its analysis of the prevalence of low and high-paid jobs. Finally, we exclude overtime pay, shift premium pay, and overtime hours from our measure of pay – making our definition of pay similar to that in the minimum wage legislation. We tested these two changes against the Cribb, Giupponi, Joyce, Lindner, Waters,

Wernham, and Xu (2021) approach for the 2015-2019 period and again found relatively small differences.

A2.64 We found large pay effects from the NLW increases in the 2019 to 2022. We also found statistically significant increases in the number of workers in pay bands as much as £3.50 above the rate, suggesting large spillover effects. However, given the potential confounding effect of Covid and other factors discussed above, we cannot be certain these effects reflect genuine minimum wage effects.

A2.65 We also found a statistically significant negative employment change in the treatment group (relatively low-paid workers in low-paying areas) relatively to the control group (relatively low-paid workers in better-paid areas). Our estimate suggests that employment in wage bins up to £5 above the minimum wage in treatment groups fell by 1.5 per cent of total employment in the affected areas between 2019 and 2022 relative to comparable jobs in better-paying areas. We also estimated an own-wage elasticity of employment of -0.79, which suggests large employment effects relative to the existing literature.[10] Dube (2019) found an average own-wage elasticity of -0.04, based on a review of high quality studies of minimum wage effects.

A2.66 However, it has not been possible to disentangle the effects of the minimum wage from those of the pandemic. There are four reasons for this. First, workers in the treatment and control group work in different occupations. We estimate that in 2019, 47 per cent of jobs in the treatment group were in low-paying occupations, whereas only 35 per cent of jobs in the control group were. Low-paying occupations are the occupations where minimum wage workers are most likely to work (full definition in Appendix 4).This means if the pandemic had a worse effect on low-paying occupations, then this might appear as a minimum wage effect. We know this to be the case as those parts of the economy involving high personal contact, such as retail and hospitality, were forced to close temporarily. It is these sectors where we tend to find large numbers of people in low-paying occupations. In our analysis, we found that employment in low-paying occupations fell more sharply following the pandemic (see Chapter 4). This happened both in the UK and in other developed countries, which did not experience large minimum wage hikes, suggesting that it is a pandemic effect rather than a minimum wage effect (Duval et al., 2021).

A2.67 Second, the timing of the effects suggest the effect is temporary. Our main estimates compared outcomes in April 2022 with outcomes in April 2019. We also estimated the wage and employment effects between 2019 and 2020 and between 2020 and 2021. There is more uncertainty over these estimates due to data issues relating to the ASHE data in 2020 and 2021 (see LPC, 2021). Nevertheless, these estimates suggest larger employment effects in 2020 and 2021 which then weaken for 2022. This is surprising given the minimum wage grew slower than average wages in 2021,

[10] The own-wage elasticity of employment refers to the percentage change in employment associated with a minimum wage rise divided by the percentage change in wages. Dube (2019) suggests it should be used as a measure to compare employment effects across different studies, as it accounts for the size of the wage effect.

but then considerably faster than average wages in 2022. We would expect a minimum wage effect to be larger in a year where the minimum wage grew more relative to average wages.

A2.68 Third, the employment effects are considerably larger for men than women, which is counter to previous evidence on UK minimum wages. Around 59 per cent of minimum wage workers are women and average pay is lower for women. It is likely that any negative employment effects would hit women first. Previous studies of the NMW have found more evidence of negative employment effects for women than men (Cribb, Giupponi, Joyce, Lindner, Waters, Wernham, and Xu, 2021, Aitken, Dolton, and Riley, 2018 and Lord, 2022). However, we found much larger negative employment effects for men than women. While a minimum wage effect could disproportionately affect men, if it is concentrated in certain sectors, this is another piece of evidence that complicates the interpretation of the minimum wage effect found.

A2.69 Fourth, most of the reduction in employment in low-paying areas was due to increased inactivity. As a companion to our bunching analysis, we compare employment rates, inactivity rates and unemployment rates in the treatment and comparator areas. This analysis includes all workers in the areas rather than just the relatively low-paid, who are the focus of the bunching analysis. We found that employment fell more in low-paying areas but most of this reduction in employment was due to increased inactivity rather than unemployment. If our results reflected an employment effect due to reduced labour demand, we might expect to see higher unemployment (people wanting a job but not being able to find it) rather than higher inactivity (people not looking for a job). Alone this point is not conclusive, it is feasible that a minimum wage does increase inactivity rather than unemployment. Nevertheless, alongside the other issues noted, it is another point which suggests a confounding factor is affecting our results.

Conclusions based on two internal research projects

A2.70 Both our internal research projects struggle to isolate the impacts of the minimum wage on wages and employment from other factors such as the pandemic induced recession. The pandemic-induced recession hit certain sectors of the economy and groups of workers harder than others. The groups hardest hit by the recession were similar to the groups identified as most exposed to the minimum wage in both research projects. This means the negative employment effects found in both research projects could reflect either pandemic effects or minimum wage effects.

A2.71 Our current judgement is that the negative employment findings in both research projects most likely reflect pandemic effects rather than minimum wage effects. In both research projects, the negative employment effects are greatest in 2020 and then are smaller afterwards. In Butcher and Dickens (forthcoming) the negative employment effects are not statistically significant after 2020. This suggests a temporary pandemic effect rather than a lasting minimum wage effect. Other characteristics of the measured effects, such as the larger negative effects for men than women, also point towards pandemic effects rather than minimum wage effects. Broader evidence, such as stakeholder evidence of employers struggling to recruit and high vacancy rates also suggest the results are not necessarily driven by minimum wage effects. For these reasons, our current judgement is that the main driver for the measured effects is the pandemic rather than the minimum wage.

A2.72 However, we remain open to the possibility that an element of our findings do reflect negative minimum wage effects. We will continue to gather more evidence to ascertain a clearer picture of the drivers of these results. We will update these analyses with new data when it becomes available. We also plan to expand our econometric analysis to include new data sources such as the PAYE administrative data. We have also commissioned two new external research projects that propose using new techniques to investigate the employment effects of the NLW.

Annual Research Workshop and the Tenth Annual Research Symposium 2022

A2.73 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.

A2.74 Delays in our commissioning process this year, meant that we had only commissioned two research projects for our 2022 Report in time for our event in April. Since then, we have commissioned another project for our 2022 Report, along with a further three projects that will deliver findings in time for our 2023 Report next autumn. All six of these commissioned projects were presented at our September research symposium.

A2.75 As well as those two commissioned research projects, the research workshop in April also covered four other presentations. Two of those were from organisations with which we are collaborating and two were independent research projects funded externally. The workshop started with presentations of those externally funded projects. Elodie Andrieu (Kings College London) presented work with Malgorzata Kuczera (OECD) that analysed millions of UK job vacancies. Their results showed a higher national minimum wage led to a decrease in the share of non-graduate ads and an increase in technical requirements in low and middle-skilled occupations. She concluded that firms were increasing productivity to compensate higher labour costs.

A2.76 Silvia Avram (University of Essex) then presented the preliminary findings from her work with Susan Harkness (University of Bristol) on the impact of the minimum wage on the gender pay gap. They found that increases in the minimum wage between 2009 and 2019 substantially lowered the gender wage gap in the bottom half of the distribution. She thought her estimates were conservative and almost certainly an underestimate as the minimum wage likely changed returns to other characteristics. She concluded that minimum wages can be a powerful tool for reducing gender wage gaps.

A2.77 The next two presentations were from the two commissioned research projects. Katherine Heffernan (Incomes Data Research) presented her team's initial work on the impact of the NLW on pay setting and differentials in 2022, before Su-Min Lee (London Economics) presented the initial findings from the research looking at the reduction in the age of entitlement to the NLW from 25 to 23.

A2.78 The remaining two presentations were from organisations that have been working in collaboration with us to address evidence gaps. Imelda McCarthy (Aston University) presented analysis from an ESRC-funded project – Productivity from below: addressing the productivity challenges of microbusinesses – at the Centre for Research in Ethnic Minority Entrepreneurship (CREME). It focused

on ethnic minority-owned microbusinesses in the West Midlands and looked at how microbusinesses in retail, catering and the creative industries coped with the pandemic and how productivity can be improved. The final presentation was given by Alex Bryson (Work and Employment Dynamics Project). He looked at how wages had grown over five-year periods using ASHE data from 2004-2019. Wage growth was higher for those who had changed employer, moved out of a low-paying occupation or moved region. Transition out of low pay was slow – around two-thirds of those in a low-paying occupation were still in that low-paying occupation five years later. We are grateful to the participants at that event and for the feedback that helped develop the commissioned research projects.

A2.79 The second event, held on 1 September 2022, was our tenth annual research symposium. This was another opportunity for the researchers on our commissioned research projects to present, discuss and receive feedback on their methodology and findings. The event began with a presentation on the latest developments in the UK labour market from David Freeman (ONS). He reported that employment and hours worked had increased but were not yet back to pre-pandemic levels; there had been no significant increase in redundancies; vacancies were at record levels and above pre-pandemic levels for all industries; and although wage growth in nominal terms was up, real wages had fallen sharply.

A2.80 Louisa Withers (Incomes Data Research) then gave an overview of the findings from the commissioned research on the influence of the NLW on pay setting, differentials, and progression. These findings are detailed in Table A2.1 below. Johnny Runge (National Institute for Economic and Social Research) followed with two presentations. The first summarised the experiences of workers in the hospitality sector in Scotland. The research had been commissioned by the Fair Wage Convention to look at pay, working hours, working conditions, workplace relationships and progression and training. It found that hospitality workers often faced financial insecurity from uncertain hours. The second presented the approach and methodology that would be used in a newly-commissioned research project on exploring pay-setting among employers in low-paying sectors in the context of the pandemic, Brexit, and the rise in the cost of living.

A2.81 Su-Min Lee (London Economics) presented the findings from the research looking at the reduction in the age of entitlement to the NLW from 25 to 23. These findings are detailed in Table A2.1 below. He then presented the methodology and data sources that would be used in another newly-commissioned research project – identifying minimum wage groups using machine-learning classification. Similarly, Kate Lauderdale (Frontier Economics) presented the methods and data sources to be used in newly-commissioned research on monopsony, minimum wages, and the UK labour market. These two research projects will inform our 2023 Report.

A2.82 The next session covered data developments from the Wage and Employment Dynamics project, in which the Low Pay Commission is a participant. Felix Ritchie (University of the West of England) explained the developments in the ASHE panel including longitudinal weights and linking with the 2011 Census. He also noted that the next steps were to link the ASHE Census data to the Real Time Information and self-assessment data from HMRC as well as the Migrant Workers Scan.

A2.83 The symposium concluded with a presentation by Roxana Barbulescu and Bethany Robertson (University of Leeds) on the workings of the Accommodation Offset in the agricultural sector. The findings are detailed in Table A2.1 below.

A2.84 Overall, the symposium covered a range of areas and methods (including both quantitative and qualitative analysis), and they formed an important part of our evidence base in October when we met to agree our recommendations for 2023.

A2.85 We would also like to thank all of those who acted as discussants or chairs at our research events: Nicola Allison (Office of Manpower Economics), Alex Bryson (University College London), Richard Dickens (University of Sussex), Peter Dickinson (University of Warwick), Mirko Draca (Warwick University), Lucila Granada (Focus on Labour Exploitation), Helen Gray (Institute for Employment Studies), Tim Harrison (Office of the Director of Labour Market Enforcement), Alan Manning (London School of Economics), Ken Mulkearn (Incomes Data Research), Karen Mumford (University of York), Kerry Papps (University of Bath), Rebecca Riley (King's College London), Felix Ritchie (University of the West of England), Kate Roberts (Focus on Labour Exploitation), and Xiaowei Xu (Institute for Fiscal Studies). The comments and suggestions have contributed to the development of our research programme.

Conclusion

A2.86 The research continues to generally find that the introduction of the National Living Wage and subsequent upratings have significantly increased the earnings of the lowest paid but that, to date, there has been no strong evidence of any negative employment effect in aggregate over the whole period. However, some evidence of negative employment effects has been found in some specifications for some years and for some groups of workers. The in-house research did find significant negative employment effects but these coincided with onset of the pandemic (and measures to control it that led to the closure or restrictions in trading of many low-paying sectors). It has not been possible so far to separate the minimum wage effects from the pandemic ones.

Next steps

A2.87 We have commissioned a further three research projects for our 2023 Report. These are:

- Identification of minimum wage groups using machine-learning classification
  Gavan Conlon, James Forrester, Su-Min Lee, Lucy Manly, and Pietro Patrignani (London Economics)

- Labour market concentration and the minimum wage
  Katharine Lauderdale and Danail Popov, Frontier Economics)

- Exploration of Pay-Setting among Employers in Low-Paying Sectors in the Context of the Pandemic, Brexit, and the Rise in the Cost of Living
  Jasmin Rostron, Johnny Runge, Katharine Stockland, and Lucy Stokes (National Institute of Economic and Social Research (NIESR))

A2.88 We will also look to commission further research in the new year.

Table A2.1: Research for the 2022 Report

Project title and researchers	Aims and methodology	Key Findings
The influence of the NLW on pay setting, differentials, and progression **Katherine Heffernan, Ken Mulkearn, Catherine Rickard, Katherine Sutton, Louisa Withers** and **Zoe Woolacott** (Incomes Data Research)	The aim of this report was to provide qualitative insights from employers into the effects of the latest uprating of the National Living Wage (NLW) on pay setting, differentials, and progression. The research was in two parts: a survey; and semi-structured interviews with HR managers. First, the findings from a survey conducted in June and July 2022, which was targeted predominantly at employers in the low-paying sectors of childcare, hospitality, housing and social care, leisure, and retail. The sample also included respondents from sectors such as financial services and food manufacturing, where some employers are starting to see the NLW encroach upon their minimum pay rates. Second, it gathered primary evidence from HR managers by way of semi-structured follow-up interviews conducted with 16 survey participants. These covered childcare, hospitality, housing and social care, leisure, retail, and hairdressing. They were predominantly larger organisations (although the hairdresser had just three staff). Research was conducted on the basis that all contributors would be anonymous in the report, although company names have been shared with the LPC.	The main findings were: • Most pay review take place in April. • The median pay award in 2022 was generally higher than that in 2021 with very few awards lower. • Affordability and the NLW were the most important factors determining pay awards but inflation, and retention and recruitment had increased in importance this year. • Among respondents, youth rates were not much used. Where they were, they were generally above the age-appropriate statutory rates but below the NLW. • Many employers had sought to maintain differentials (many set them in monetary terms, on either an hourly or annual basis) but NLW increases had made that difficult. • Labour market challenges had increased and were expected to persist. Employers had tried to raise salaries to address recruitment and retention. • Squeezed differentials increased retention difficulties and reduced promotion opportunities. • Recruitment had also become more difficult, but the NLW had helped address that. • Technology had not affected headcount but had changed job content. • Staff turnover had increased in the past 12 months. However, factors such as Brexit and the pandemic appear to have had more of an impact than the NLW. • There was little evidence on the use of the Accommodation Offset of the NMW.

Project title and researchers	Aims and methodology	Key Findings
Assessing the impact in the reduction in the age of eligibility to the National Living Wage (NLW) from 25 to 23 **Gavan Conlon, Su-Min Lee, Lucy Manly,** and **Pietro Patrignani** (London Economics)	The aim of the research was to assess the impact of the reduction in the age of entitlement to the National Living Wage (NLW) from the age of 25 to the age of 23 in April 2021, when the increase in the statutory minimum wage was much greater for 23-24 year olds than for 21-22 year olds or for those aged 25 and over. They adopted a difference-in-difference approach to estimate differences in outcomes between the treatment (23-24 year olds) and control groups (26 year olds). They accounted for pre-existing differences; macroeconomic shocks (regional and sectoral); and individual characteristics. Their research used a range of control variables to improve the precision of the coefficient of interest (by including variables that contribute to labour market outcomes), and alleviate potential omitted variable bias (by including variables that both contribute to labour market outcomes and systematically differs between treatment and control groups). They noted that any potential bias in the estimates would arise from a factor that influenced the treatment and control groups differently after April 2021, that also influenced labour market outcomes, and is not already controlled for in the baseline specification. The primary data source used was the Labour Force Survey as it has a broad range of personal characteristics but the Annual Survey of Hours and Earnings was used as a robustness check. Small sample sizes were still problematic with the 23-24 year olds being treated as a single group. The method builds on previous work by Dickens, Riley, and Wilkinson (2014), Crawford, Greaves, Jin, Swaffield, and Vignoles (2011), Fidrmuc and Tena (2011), and London Economics (2015).	The main findings were: • The age of entitlement to the NLW was reduced from 25 to 23 on 1 April 2021. • This resulted in an increase in the statutory minimum wage for 23-24 year olds of 8.7 per cent compared with 2.2 per cent for those aged 25 and over, and 2.0 per cent for those aged 21-22. • They used pre-April 2021 trends to identify the most suitable control group to make comparisons with 23-24 year olds. 26-year-olds were identified as having similar pre-treatment trends whereas 22 and 25 year olds had different pre-treatment trends. • There appears to be no significant impact on the labour market outcomes when using the entire sample of 23 and 24 year olds. • However, there was a significant decrease in average hours worked when focusing on low-paying sectors and occupations: in particular, for female workers, driven by shift to part-time work. The effects were larger than the increase in hourly wages, suggesting a fall in weekly earnings. • Small sample sizes restricted the heterogeneity analysis, but there were significant results for some groups. • There was a negative employment impact on those from minority ethnic backgrounds. But a positive impact on hours worked by those with dependent children. • A number of robustness checks were used to validate the methodology and the choice of control group as a counterfactual: testing pre-treatment trends; testing placebo treatment/control groups; and controlling for month of birth and Regression Discontinuity Design.

Project title and researchers	Aims and methodology	Key Findings
The workings of the Accommodation Offset in the agricultural sector **Roxana Barbulescu,** and **Bethany Robertson** (University of Leeds)	The aim of the research was to explore the workings of the Accommodation Offset of the National Minimum Wage in seasonal agricultural work. The research was in three main parts: • understanding the use of the Accommodation Offset and its impact on workers in seasonal agricultural work; • studying the role of employers in providing accommodation; and • case studies of how employer-provided accommodation is treated in other countries. As part of an ESRC funded project entitled 'Feeding the nation, seasonal migrant workers and food security during the COVID pandemic', the researchers had collected data from a survey of seasonal agricultural workers and their employers. The first part used data collected from a survey of workers. This research focused on aspects of pay and the importance of the Accommodation Offset in their decision to work in the sector. The second part used data collected from employers supplemented by interviews with growers covering vegetables, fruit, flowers, and salad crops. It was supplemented with information from planning applications for seasonal worker accommodation. The third looked at the international treatment of employer-provided accommodation in agriculture. It reported on legislation in the United States, Canada, and Austria.	The main findings were: • The Accommodation Offset was used widely for migrant seasonal agricultural workers. • There was widespread awareness that the weekly offset was £60.90 for caravans and non-caravan accommodation and that it was uprated annually. It helped workers to budget and businesses to plan. • However, few knew the daily offset or how it was determined. • There was also some confusion over what it covered. Especially in relation to broadband and laundry costs. • Concerns were raised about the quality of accommodation, particularly ageing caravans • Some farms offered an accommodation waiver to cover weeks with low or no work • Workers noted other costs and work conditions affected disposable income – transport, work clothes and travel to work time. • The benefits of the Accommodation Offset were that caravan and non-caravan accommodation was available at accessible and fixed prices. Work and accommodation were a package. Employers benefited from having workers on site. • they identified three main reasons for employers investing in on-site accommodation: recruitment of staff and viability of farm businesses; lack of off-farm housing availability and affordability; and increased health and safety requirements. • It had become much more difficult to recruit seasonal workers after the UK had left the EU. The technology did not yet exist to replace these workers and there was an insufficient pool of British workers. • On-site worker accommodation was a benefit to employers as it enabled higher staff recruitment, reduced worker travel, and provided a ready source of labour at all times • The case studies showed a variety of practices across the globe with no particular framework more common than others. The system in the UK was similar to that of other countries which also sought to push the regulatory cost onto employers rather than through publicly-funded housing subsidies.

Table A2.2: Low Pay Commission in-house research

Project title and researchers	Aims and methodology	Key Findings
The impact of the National Living Wage on labour market outcomes using geographic and demographic variation in wages **Tim Butcher** and **Richard Dickens** (Low Pay Commission and University of Sussex)	The aim of this report was to assess the impact of the NLW on labour market outcomes using variation in the pay of geographic, age and gender groups. The research adopted a methodology similar to that of Manning (2016) and Dube (2019) and extended the previous analysis by Dickens and Lind (2018) and Butcher and Dickens (2022) to cover the period after the onset of the pandemic. They created annual panels of area, gender, and age groups. For example, the base case used 20 regions and countries of the UK, eight age groups (five-tear bands) and two gender making 320 separate region/age/sex groups. They limited their analysis to those aged 25 and over as they were the workers covered at the introduction of the NLW. They used the 2015 Annual Survey of Hours and Earnings (ASHE) to define the baseline exposure to the NLW. This was prior to the introduction of the NLW. They used two measures – exposure defined by the minimum wage bite (the value of the NLW (£7.20) relative to the median hourly pay for the region/age/sex groups) and exposure defined by coverage (the proportion paid below £7.20 in 2015). The baseline exposure measures were then interacted with the time effects for each year from 2016 to 2022. Difference-in-difference parameters were then estimated for individual year effects as well as the cumulative effect over the whole period. The Labour Force Survey from the second quarter of 2013 to the second quarter of 2022 was used to derive the labour market outcomes for each region/age/sex group. These included employment rate, unemployment rate, inactivity, self-employment, and zero hours contracts.	The main findings were: • They found significant effects of the introduction and subsequent increases of the NLW on pay at the median (using both the bite and coverage exposure measures). • They found no significant negative impacts on employment or hours across the whole period. However, they did find a strong negative employment effect in 2020 – as the pandemic hit and the UK took measures to control its spread by closing down or limiting activity in many low-paying sectors. It was not possible to separately identify NLW effects from pandemic effects. The significant negative finding weakens in 2021 and is actually positive over the whole period. • Over the whole period from 2015-2022, the NLW may have boosted participation as they found that inactivity had significantly reduced in the lowest-paying region/age/sex groups, but this had not led to an increase in unemployment. However, they did find that the negative effects on inactivity fell away during the pandemic. • Some significant positive effects were found on self-employment but only in 2020. No effects were found on the use of zero hours contracts. • These results were consistent with previous analysis that suggests that there had been no significant adverse employment effects of the NLW to date.

Project title and researchers	Aims and methodology	Key Findings
The impact of the National Living Wage on labour market outcomes using bunching analysis **Eduin Latimer** (Low Pay Commission)	Cribb, Giupponi, Joyce, Lindner, Waters, Wernham, and Xu (2021) provided a comprehensive assessment of the impact of the NLW, up to the onset of the pandemic, on earnings, employment, hours, and incomes. This research project replicated that previous analysis and extended it to also cover the period since the onset of the pandemic, with minor methodological changes. It focused on the impact on earnings, employment, and hours. The research adapted the bunching approach in Cengiz, Dube, Lindner, and Zipperer (2019) to estimate the effect of NLW on employment and wages jointly. It exploited differences in wage levels across geographical areas but focused on the impacts on those aged 25 and over. The approach compares employment in the same 'job types' across low-paying and high-paying areas, before and after an increase in the NLW. The number of jobs 'lost' below the new minimum wage is then compared with the number of jobs 'gained' at and above the new minimum wage. The analysis on earnings, employment, and hours used ASHE (for high quality wage data) and the Labour Force Survey (LFS) at Travel-to-Work-Area (TTWA) level. The research provided initial econometric findings on the impact of the NLW during the pandemic and as restrictions were eased.	The main findings were: • Large pay effects of the 2019 to 2022 minimum wage increases. Our estimates suggest that the minimum wage increased wages of affected workers by 12 per cent. We also estimate that wage effects spread as far as £3.50 above the minimum wage (approximately the 38th percentile of the wage distribution). • Employment in relatively low-paid jobs within low-paying areas fell relative to comparable workers in better-paying areas. These effects are relatively large, equivalent to approximately a 1.5 per cent reduction in total employment. • However, we judged that these results were more likely driven by confounding factors rather than the minimum wage for four reasons: 1. Low-paying occupations are overrepresented in the treatment group relative to the comparator group. The pandemic disproportionately reduced employment in low-paying occupations, so could be driving the result. 2. We estimated larger employment effects in 2020 and 2021 which faded in 2022. This suggests the effect may be temporary rather than a permanent minimum wage effect. 3. We estimated larger negative employment effects for men than women. This is not in line with previous evidence on the minimum wage in the UK. 4. In supporting analysis, we found that economic inactivity rather than unemployment was driving the negative employment effects. This indicates that it may be a labour supply issue rather than labour demand.

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 2021 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), HMRC Real Time Information (RTI) and the Labour Force Survey (LFS). We use two main sources to understand employment: the LFS and HMRC Real Time Information (RTI). The LFS captures the number of people in employment, whereas the RTI series measures the number of Pay As You Earn (PAYE) employments 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), although the RTI series is collected by HMRC.

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 has made to its GDP estimates.

A3.3 In 2020 and 2021 there were significant limitations across several of the datasets we use due to the impact of the pandemic. Data from 2022 is largely free from the direct impact of pandemic restrictions, although some impacts on data collections have persisted and our estimates of annual changes are affected by using data collected during the pandemic as a base. For this reason, throughout the report we have also compared the latest data with 2019 where possible and we continue to use some higher frequency data – such as weekly LFS data – where this gives a clearer picture of more recent changes.

Annual Survey of Hours and Earnings

A3.4 The Annual Survey of Hours and Earnings (ASHE) is our main source for analysis of the structure and distribution of earnings 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 reference date for the 2022 survey was the pay week (or other pay-period if the employee was paid less frequently) which included 27 April 2022. The sampling frame consists of a one per cent sample of employee jobs in Pay As You Earn (PAYE) income tax schemes obtained from HM Revenue & Customs (HMRC). It is weighted to be representative of the population of employees in the UK by gender, broad age group, region and occupation.

A3.5 As ASHE surveys only employee jobs paid through PAYE, some workers are excluded: it will not capture the self-employed or workers who are not paid through PAYE. This latter group could include workers in the 'gig economy' who retain the rights of workers – including to the minimum wage – but are not classed as employees and may not appear on a company payroll. It could also include a small number of employees who earn less than the limit at which their employers are required to pay them through PAYE (currently £123 a week) – although in most cases, employees are paid through PAYE regardless of their earnings.

A3.6 We exclude overtime pay and shift premiums in our analysis of hourly pay using ASHE. We do this to make our measure of pay as close as possible to the legal definition used in minimum wage legislation.

A3.7 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 in subsequent reports: thus, for this report we received 2021 final data at the same time as receiving provisional data for 2022.

Changes to the ASHE data in 2022

A3.8 An important change to this year's ASHE data (both 2021 final and 2022 provisional) is the move to a new system for classifying occupations. Since 2011, job roles in ASHE have been classified using the Standard Occupational Classification (SOC) 2010, which has now been revised to produce SOC 2020. SOC 2010 and SOC 2020 retain the same structure, and many occupations can be closely mapped between the two. However, a small number of occupations have been reclassified, merged with others, or split across multiple SOC codes. Full details of the changes are available in SOC 2020 Volume 1 (ONS, 2021).

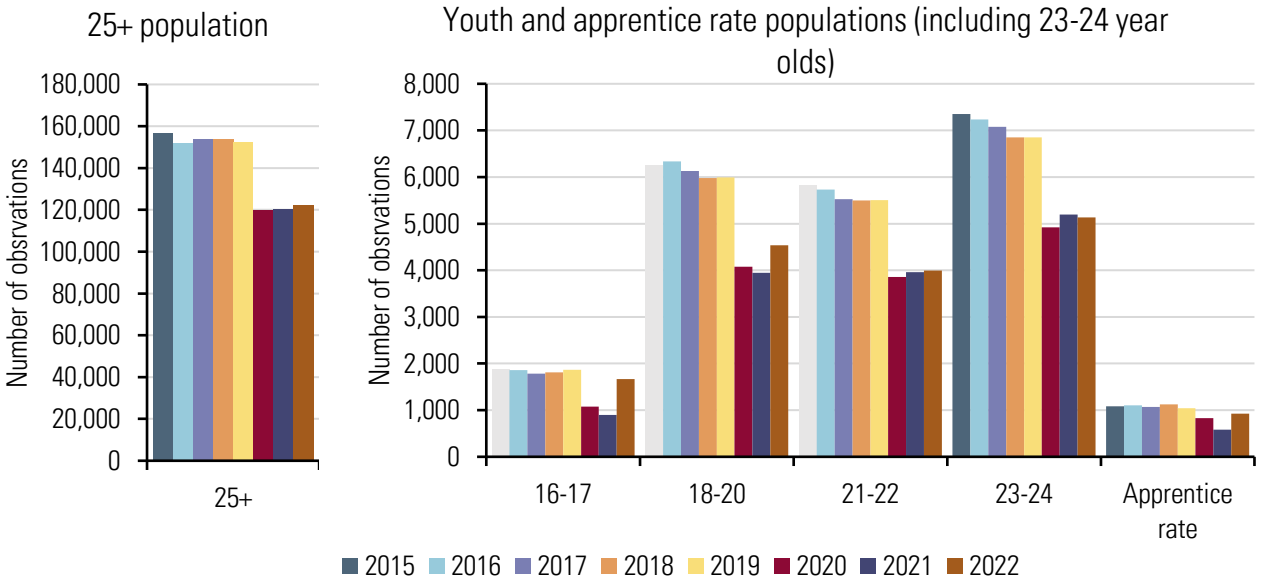
A3.9 The change to the SOC codes introduces a discontinuity into the 2021 final and 2022 provisional ASHE data compared with previous years. This has both a direct and indirect effect on our analysis. Firstly, some of the changes affect occupations that we have classified as 'low-paying' (See Table A3.1). For this report, we have mapped low-paying occupations to their closest SOC 2020 equivalent, based on the share of workers that overlap between each old and new SOC code. We plan to fully review and update our definition of low-paying occupations and industries in 2023. Secondly, occupation is used to weight observations in ASHE to make it representative of the whole population of employee jobs. This means that the move to SOC 2020 has a knock-on effect on estimates of pay and hours across all breakdowns, making it more difficult to compare estimates before and after 2021. We consider the impact of this and how we have dealt with it in our analysis in Box 1.

A3.10 In 2020 and 2021, estimates from ASHE data were affected by furlough. Where we refer to the 2021 ASHE data in this report, we use our central estimate of workers' pay unless otherwise stated. This is adjusted to remove the effect of reduced payments due to furlough. We use additional questions asked in ASHE 2021 to determine the ratio between measured pay and normal pay for each job and adjust 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. This is discussed in detail in LPC (2021), Appendix 3. Figures in this report may vary from central estimates reported in LPC (2021) due to the SOC update, although the methodology used is the same. By the ASHE reference date in 2022, no workers were on furlough and questions relating to furlough were removed from the

survey. However, growth comparisons will be affected by the furlough effects and how they were measured in 2020 and 2021.

A3.11 Although the 2022 ASHE is mostly free from the impacts of the pandemic, the response rate has not recovered and the total sample size is only 80 per cent of what it was in 2019. Figure A3.1 shows the sample size for each rate population after applying basic filters for loss of pay and valid low-pay weights, which reflects the 'usable' sample for our analysis. We split out 23-24 year olds as we analyse this group separately in some chapters of the report. The 2020 and 2021 ASHE saw particularly large drop-offs in sample size for youth populations, and although the sample for 18-24 year olds has recovered somewhat, it remains at only 75 per cent of the 2019 sample. Sample sizes for 16-17 year olds and apprentices have recovered to just under 90 per cent of their 2019 levels.

Figure A3.1: ASHE usable sample size, by rate population, 2015-2022



Source: LPC estimates using ASHE, unweighted, UK, 2015-2022. Age groups exclude workers eligible for the Apprentice Rate.

Box 1: Changes to Standard Occupational Classification (SOC) in ASHE: impact on estimates of pay and hours

The move to SOC 2020 from the 2021 final ASHE data onwards changes the weighting of each observation in the data and means that there is a discontinuity in ASHE estimates of pay and hours before and after 2021. In this box we look at the impact of this change and explain how we have accounted for it in our estimates.

The fact that we have 2021 data with both the SOC 2010 weights and SOC 2020 weights allows us to chain link estimates of pay and hours by applying the same proportional change we see between the two different sets of 2021 data to previous years, approximating the change we would see if occupations in those years were classified using SOC 2020. This helps to remove any step change induced by the discontinuity in 2021.

However, there are some limitations to this approach: Firstly, the two sets of data we have for 2021 are not identical. The change between the provisional and final versions will capture any corrections made

or new records added between the two, as well as the change in SOC coding. We cannot precisely separate the impact of these two sets of changes, but updates between the provisional and final data set affect a small number of records relative to the overall population (new records make up just over 1 per cent of all records) and so we expect the reweighting changes to dominate. Secondly, using 2021 as a linking year assumes that the 2021 data is similar to that of previous years, particularly in terms of the distribution of the variables used to weight the dataset – age, gender, occupation and region. This is broadly the case for the NLW population aged 25 and over, but less so for the apprentice and youth rate populations, as we discuss below.

In order to balance the need for consistency with the risks of carrying through distortions found in the 2021 data, we have taken the following approach in this report:

We chain link in the following cases:

1. Estimates of median pay are chain linked across the board, including for analysis of subgroups. The median is relatively robust to small shifts in the distribution, and changes introduced through chain-linking are minimal for most groups (Table A3.1). By extension, estimates of the bite of the minimum wages are also chain linked.

2. In Chapter 4, covering the NLW population (those aged 25 and over from 2016-2020 and those aged 23 and over from 2021), all estimates using ASHE data are chain linked. While the 2021 link may be less reliable for subsets of this population, we chain link to maintain consistency with whole population estimates. We also chain-link estimates of bite and coverage back to 1999 for the 21+ and 25+ populations.

3. In Chapters 3 and 10, estimates of coverage and underpayment are chain linked. These Chapters present data for the whole population and as this is dominated by the NLW population we follow the methodology used in Chapter 4.

We do not chain link in the following cases:

1. In Chapters 5 and 6, where we look at the youth and apprentice populations in detail, we do not chain link any measures except median pay. So, for example, wage distributions and coverage are presented without chain linking. This is because the 2021 data was more atypical for youth and apprentice populations and because the occupational structure of these groups varies more over time.

We provide a comparison of chain-linked and non-chain-linked estimates of the key measures (median, bite and coverage) in Table A3.1 below. From this, it can be seen that for most minimum wage rate populations, chain linking has very little impact. The exception to this is the Apprentice Rate population. As highlighted in Chapter 6, there is considerable sampling variation in this population in ASHE, exacerbated by the fact that it is a small population spread over a broad range of ages and occupations. As a result, all estimates for the whole apprentice population should be treated with caution. Added to this, there have also been significant (real) changes in the age and occupation profile of apprentices over time, which makes chain linking at the whole population level particularly unreliable for this group.

ASHE 2021 compared with other years

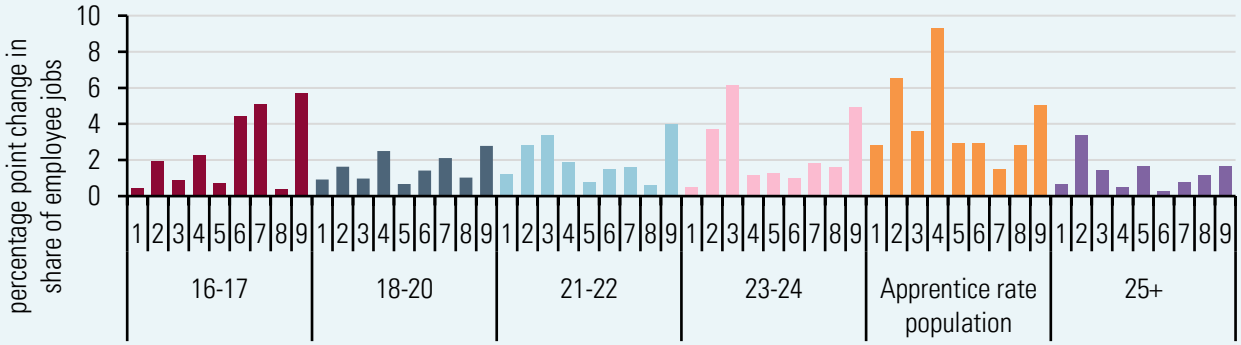
The use of chain linking relies on the 2021 data being broadly comparable to that of previous years. While we know that 2021 data was affected by the pandemic, it is considerably more reliable than the 2020 data. Importantly, the inclusion of questions relating to furlough allowed us to produce a much-improved estimate of hourly pay than had been possible in 2020. However, the response rate remained well below where it had been in 2019 and for many groups – particularly young people – employment

was still considerably below its usual level in April 2021, affecting the distribution of pay and occupations across the economy.

We have examined the breakdown of the minimum wage rate populations by the main weighting variables used in ASHE and compared the distribution of these between 2015 and 2019 with the distribution in 2021. Figure Y illustrates the variation in the (SOC 2010) occupation dimension for different minimum wage rate populations. For the NLW population as a whole (particularly those aged 25 and over), variation is minimal: that is, the share of the population in each combined gender, age group, region and occupation group is very similar in 2021 and 2015-2019. The main exception to this is the increase in the share of workers in Professional Occupations (major group 2) in 2021, potentially due to the pattern of employment change during the pandemic.

For the youth and apprentice populations, there is more variation, both in occupational composition as shown in Figure Y and other weighting variables. This is in part due to additional sampling variation in these small groups. However, 'real' changes in occupational composition over time, such as the increase in young people working outside of low-paying sectors, will also feed into this variation. Youth groups will also be more sensitive to changes that affect a specific cohort of the population (for example, the size of birth cohorts over time). Along with continued low employment in 2021 and the lower sample size, we have therefore decided not to chain link estimates when looking at the whole distribution of wages across the youth and apprentice populations. We continue to chain-link medians, and – as can be seen in Table A3.1 – this results in no or very small changes for most groups. We recommend treating medians for the whole apprentice rate population with caution, for reasons discussed above.

Figure A3.2: Variation relative to 2021, by age and major occupation group, 2015-2019



Source: LPC estimates using ASHE microdata, standard (SOC 2019) weights. Variation is measured as the maximum absolute difference between 2021 and any of the years 2015-2019.

Chain-linking methodology

We chain-link estimates for variables from 2020 or earlier by using the following method:

First, we estimate a chain-linking factor for the relevant variable at the relevant disaggregated level. For estimates between 2011 and 2020 we estimate this factor as follows:

$$Chain - linking\ factor(X) = X_{2021}^{SOC2020} / X_{2021}^{SOC2010}$$

The chain-link factor reflects the factor by which the variable changes in 2021 under the new weighting system relative to the old weighting system.

Second, we estimate the variable using the old weighting system.

Finally, we multiple the estimate using the old weighting system by the chain-link factor to provide the chain-linked estimate. This gives an estimate of what the variable would have been in a given year, if the SOC2020 weights had been available in that year. As previously discussed it relies on the assumption that if the SOC2020 weighting system had been introduced earlier, it would have changed estimates by the same factor as it did in 2021.

For estimates earlier than 2010, we follow a similar process. There were methodological changes to ASHE in 2011, 2007, and 2004 as well as 2021. Chain-linked estimates for the period before 2011 need to account for these changes. We do this by estimating a chain-linking factor which accounts for multiple methodology changes. This chain-linking factor is the product of factors for each methodology change. For instance, for an estimate in 2010 the chain-linking factor would be as follows:

$$Chain-linking\ factor(X^{2010\ method}) = \frac{X_{2021}^{SOC2020}}{X_{2021}^{SOC2010}} * \frac{X_{2011}^{SOC2010}}{X_{2011}^{SOC2000}}$$

The chain-linking factor here includes an adjustment based on the methodology change in 2021 and the methodology change in 2011. For estimates before 2006, we multiply by another factor to account for the 2006 change. For estimates before 2004 we multiply by the factor to account for the 2006 change and another factor to account for the 2004 change.

Other things to note relating to our chain-linked estimates:

-For 2021 estimates on a SOC2010 basis, we exclude the approx. 300 records which appear in the provisional data but not the final data

-For estimates of coverage and other estimates of incidence (e.g. low-pay) we separately chain-link the estimated totals and the estimated rates. This means that the implied total employee numbers by the rates will sometimes differ slightly from the total employee estimates without chain-linking.

-We use our central estimates of pay in 2021, which apply an adjustment for furloughed workers, for chain linking. For more detail on this adjustment, see chapter 3 of the 2021 Low Pay Commission report.

Table A3.1: Chain-linked and non-chain-linked estimates of median, coverage rate and underpayment rate, by rate population, 2015-2019

	2015	2016	2017	2018	2019
25+ NLW population					
Median (chain linked)	£12.40	£12.77	£13.03	£13.36	£13.84
Median (not chain linked)	£12.38	£12.76	£13.01	£13.35	£13.83
Coverage (chain linked)	4.3	6.7	6.7	6.6	6.6
Coverage (not chain linked)	4.3	6.7	6.6	6.5	6.5
Underpayment (chain linked)	15.5	19.9	21.9	24.0	22.1
Underpayment (not chain linked)	15.0	19.2	21.1	23.1	21.3
23-24 year olds					
Median (chain linked)	£9.00	£9.41	£9.78	£10.10	£10.77
Median (not chain linked)	£8.97	£9.37	£9.75	£10.06	£10.73
Coverage (chain linked)	9.6	6.3	5.7	6.0	5.2
Coverage (not chain linked)	9.5	6.3	5.7	6.0	5.2
Underpayment (chain linked)	10.3	18.3	23.6	19.2	21.6
Underpayment (not chain linked)	10.3	18.2	23.4	19.0	21.4
21-22 year olds					
Median (chain linked)	£7.70	£8.06	£8.46	£8.73	£9.20
Median (not chain linked)	£7.70	£8.06	£8.46	£8.73	£9.20
Coverage (chain linked)	16.5	11.3	11.8	11.6	10.9
Coverage (not chain linked)	16.3	11.2	11.7	11.5	10.8
Underpayment (chain linked)	13.8	17.2	24.1	22.6	20.9
Underpayment (not chain linked)	13.7	17.0	23.8	22.4	20.7
18-20 year olds					
Median (chain linked)	£6.80	£7.20	£7.50	£7.83	£8.27
Median (not chain linked)	£6.80	£7.20	£7.50	£7.83	£8.27
Coverage (chain linked)	12.1	11.7	12.0	12.2	12.0
Coverage (not chain linked)	12.0	11.5	11.9	12.1	11.9
Underpayment (chain linked)	17.3	17.6	22.6	19.2	16.3
Underpayment (not chain linked)	17.4	17.7	22.7	19.3	16.4

	2015	2016	2017	2018	2019
16-17 year olds					
Median (chain linked)	£5.30	£5.50	£5.59	£5.89	£6.14
Median (not chain linked)	£5.30	£5.50	£5.60	£5.90	£6.14
Coverage (chain linked)	10.1	9.3	12.1	13.1	12.3
Coverage (not chain linked)	10.1	9.3	12.2	13.2	12.4
Underpayment (chain linked)	6.6	7.6	12.9	9.3	9.4
Underpayment (not chain linked)	6.5	7.4	12.5	9.1	9.2
Apprentice rate population					
Median (chain linked)	£4.92	£5.19	£5.49	£5.79	£6.08
Median (not chain linked)	£5.01	£5.29	£5.60	£5.90	£6.20
Coverage (chain linked)	15.2	19.4	16.6	16.8	16.4
Coverage (not chain linked)	14.9	19.0	16.3	16.5	16.1
Underpayment (chain linked)	27.3	19.9	27.5	26.9	29.7
Underpayment (not chain linked)	26.4	19.2	26.6	26.0	28.8

Source: LPC estimates using ASHE, UK, 2015-2021. Median and bite are calculated using standard weights; coverage and underpayment are calculated using low pay weights. Coverage is shown as a percentage of employee jobs held by the rate population and includes any job paid up to 5 pence above the relevant minimum wage. Underpayment is shown as a percentage of the covered population.

Other considerations

A3.12 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 uprated to ensure alignment with the NLW. This introduced a break in the time series, with a step change in estimates of both the bite and underpayment.

A3.13 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 the 2016 ASHE survey to identify the start of the pay period. The timing of the ASHE survey usually determines the number affected by this variable. As discussed in Chapter 3, 2022 presents an anomaly in underpayment: the reference date for ASHE this year the pay period that included 27 April 2022. As would be expected with a reference date later in the month, the number of records flagged as relating to the previous pay period was low. However, the number of workers recorded as paid at the previous rates of the minimum wage was higher than normal. We will consider underpayment in more detail in our 2023 Non-Compliance Report.

A3.14 The distribution of earnings growth since 2019 is different between ASHE and other sources such as the HMRC Real Time Information administrative data. The ASHE data tend to show stronger pay growth at the bottom of the distribution relative to the RTI and weaker growth at the top. There are a number of factors which could be driving this difference. Firstly, ASHE is based on a sample of

employees, and is affected by non-response. Non-response rates have increased since 2019 and the weighting system in ASHE could be underweighting certain types of business (Phan, Stokes, Forth, Bryson, Singleton, Ritchie and Whittard, 2022). Secondly, the RTI data includes all earnings including bonuses, whereas ASHE has a more limited coverage of bonuses. Strong growth in bonuses as a share of total pay could partly explain the stronger pay growth at the top of the distribution in the RTI. Thirdly, compositional effects from the pandemic are likely to affect different data sources in different ways. As an administrative data source, the RTI should capture all new jobs and these flows can alter the pay distribution (for example, new low-paid workers lower measures of median pay). While ASHE is affected by the same dynamics, the effects may be smaller since it is a survey rather than administrative data. We continue to use ASHE as our main data source on pay and earnings, as it is currently the only data source with detailed information on hourly earnings. However, we compare ASHE with other data sources where possible.

Average Weekly Earnings

A3.15 Average Weekly Earnings (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).

A3.16 The ONS publishes 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 December 1999, while public and private sector series are available from January 1990 to December 1999. 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 (when both measures were available). 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 now only available up to 1999, even though the AEI was not discontinued until 2010, there is no fully consistent complete time series for these data sets up to the present time.

A3.17 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. Details of the findings of the most recent review and revisions made as a result can be found in ONS (2019).

A3.18 In April 2020, lockdown measures and furloughing led to significant changes in employee pay, making it necessary to change the way that AWE data are 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 had been substantial pay changes, this imputation may not always be accurate. The ONS therefore increased the level of data validation over this period. Response rates are now back to 81 per cent, close to pre-pandemic levels. As a result, AWE validation is back to normal.

Average Earnings Forecasts and Projection of Path for Minimum Wage

A3.19 We project the path for the minimum wage using three data sources. First, we calculate a baseline estimate of median hourly earnings. We do this using the ASHE data. This estimate is based on the eligible population for the NLW. It excludes overtime and shift premia and excludes workers with less pay than normal due to sickness or absence (based on "lop" variable in ASHE dataset). We also exclude workers where their hourly pay estimate is zero or the low-pay weight is missing for them.

A3.20 Second, we use the 12 month smoothed growth rate of AWE total pay (ONS Code: KAB9) to project the growth rate of median hourly earnings in each month between the latest ASHE data and the latest available AWE data.

A3.21 If there are more than 6 months of AWE data since the latest ASHE publication, we calculate the smoothed AWE growth rate for the relevant 6 month period and use it in our projections. We then use the latest AWE data for any remaining months of available AWE data. For instance, if the latest AWE data relates to December and the latest ASHE data relates to April, we would apply the 12 month smoothed October AWE growth rate to the six months between April and October and then the 12 month smoothed December AWE growth rate for the remaining months between October and December.

A3.22 Finally, we use forecasts for average earnings to project the growth of median hourly earnings for periods where no AWE or ASHE data is available. We take these forecasts from the HM Treasury Panel of Independent forecasts. The median wage growth for 2022 and 2023 is taken from the forecasts for the last three months in the HM Treasury panel of independent forecasters (Table 2 and Table 5 in October 2022). The median wage growth for 2024 is taken from the forecasts for the last three months in the HM Treasury panel of independent forecasters (Table M6, August 2022). The Bank of England (2022aug) conditioning assumptions on average wage growth are included in those medians.

A3.23 We assume that pay grows at the same rate each month within the year in our projection. For instance, if the forecast growth rate for pay in 2023 is 5 per cent (and we only have forecast data for 2023), we would assume that each month in 2023 pay grows by 0.4 per cent month-on-month as growth at this rate compounds over 12 months to equal 5 per cent.

Labour Force Survey

A3.24 The Labour Force Survey (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.

A3.25 Analyses of aggregate employment, unemployment and hours worked use seasonally adjusted monthly and quarterly LFS data published by ONS using the latest 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 previous years, we have generally used 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. Since the start of the pandemic, tracking movements in the labour market over shorter periods of time has become important. As a result, we have increasingly used single quarter estimates (not seasonally adjusted), or single quarter estimates compared with the same quarter of a previous year where data is highly seasonal. Consequently, our analyses based on LFS microdata may produce estimates that differ from headline aggregates published by ONS.

A3.26 It is possible to identify LFS responses by the week that the response refers to. 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. It published these series as experimental statistics between May 2020 and June 2022 in order to monitor any sudden change in labour market conditions arising from the pandemic and lockdown measures.

A3.27 Between April 2020 and June 2022, ONS provided us with LFS microdata on a monthly basis, enabling us to 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. Although the sample in any individual week is not representative, and the number of responses changes between weeks, the weekly time series helped us monitor developments in the labour market. We are very grateful to the ONS for providing us with the LFS microdata on a monthly basis during the pandemic.

A3.28 A move to telephone-only interviewing during the pandemic introduced non-response bias to the survey. ONS introduced housing tenure-based weights and produced revised datasets in October 2020. In July 2021 HMRC RTI data was used to improve the population weights used to produce labour market estimates.

A3.29 In March 2022 updated RTI by nation and region were published. This data was then used to address two minor issues that arose from the previous reweighting exercise. The result of these revisions was a revised set of weights which led to slightly higher LFS population totals - 2021 Q4 showed revised weight total of 53,746,000 compared to 53,573,000 from the old weights. Other differences included an increase to those non-UK born (moreso for Non-EU born than EU born), a downwards revision to the employment rate and increases to both unemployment and inactivity rates in Northern Ireland. Other countries were largely unaffected. Revised quarterly datasets from 2020 Q1 to 2021 Q4 were published by ONS from June 2022.

A3.30 As with ASHE data, the LFS has transitioned from coding occupations on a SOC 2010 basis to a SOC 2020 basis. The LFS adopted the new classification in January 2021. The ONS noted in July 2022

that there had been an error in coding some occupations to the new SOC 2020 codes. They are currently investigating this issue and plan to publish revisions in Spring 2023.

PAYE Real Time Information

A3.31 An additional data source that allows us to understand trends in the number of employees and their earnings is from HMRC's Real Time Information (RTI) administrative data from Pay As You Earn (PAYE) records. Rather than using a sample, as with the other data sources discussed above, PAYE data covers the whole population of employees paid through PAYE. Monthly statistics are produced on the number of employees and the distribution of pay for the population of nearly all employees the UK. The data is available by age, industry and region, but it is not available by gender. The data does not include exact number of hours worked, and so cannot be used to estimate hourly pay, but does provide information on median and mean monthly pay and the median of pay growth.

A3.32 Where we use RTI data, this provides information on the number of employees, not the employment rate. This means that rises and falls can also be related to changes in the total population, due, for example, to shifts in migration patterns or the changing age profile of the population. Although these changes usually occur over an extended period, the pandemic precipitated dramatic changes in migration. This is most likely to affect workers in their mid-20s and 30s. Demographic changes will also be more pronounced for the under 17 and 18-24 age groups as they are smaller age groups.

Differences between RTI data and the Labour Force Survey

A3.33 Administrative data sources cannot be directly compared with 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 with statistics from AWE, ASHE and LFS because of differences in measurement and coverage.

A3.34 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 aged 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.

A3.35 Statistics on pay are also not directly comparable with AWE or ASHE. As well as published RTI pay measures being on a monthly basis, RTI estimates include earnings of employees whose pay was reduced for any reason and do not distinguish between full- and part-time work. RTI estimates are calculated on a person basis, including all jobs for which an individual is paid through PAYE, while AWE and ASHE 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 and price data

A3.36 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 Consumer Price Index including owner-occupied housing costs (CPIH). We have also used the Retail Prices Index (RPI), the Services Producer Price Index (SPPI), Producer Price Indices (PPI) and the GDP deflator. Traditionally RPI was used in wage negotiations but this has gradually been replaced by CPI over the last decade or so. Few negotiations now use RPI as a benchmark. CPIH is used as the ONS headline and for deriving the official AWE real wage series. It is also used in international comparisons. However, few organisations make forecasts for it, so we tend to use CPI as our measure for inflation prospects.

A3.37 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 and CPIH. 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 never been revised. 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. It has been revised twice when a new method was introduced. The first revision was on 24 March 2015, which incorporated improvements to the measurement of owner occupiers' housing costs. The second was on 21 March 2017, incorporating council tax and revised weights for owner occupiers' housing costs. In both cases, the full back series was revised. ONS does not intend to make any further revisions.

A3.38 The Services Producer Price Index (SPPI), Producer Price Indices (PPI) and the GDP deflator focus more on the costs for businesses. Producer price inflation, derived from the PPIs, measures changes in the prices of goods bought and sold by UK manufacturers, including price indices of materials and fuels purchased (input prices) and factory gate prices (output prices). The input price measures the price of materials and fuels bought by UK manufacturers for processing. It includes materials and fuels that are both imported or sourced within the domestic market. It is not limited to materials used in the final product but includes what is required by businesses in their normal day-to-day running, such as fuels. The factory gate price (output price) is the amount received by UK producers for the goods that they sell to the domestic market. It includes the margin that businesses make on goods, in addition to costs such as labour, raw materials and energy, as well as interest on loans, site or building maintenance, or rent. The input and output producer prices are published monthly.

A3.39 In July 2022, ONS extended the back series by making historical data readily available and revising the index to 2015=100. The headline PPI output series (GB7S) now goes back to January 1957. The headline input series (GHIP) now includes a back series to January 1984. Unlike the headline output index, the input headline was first introduced in the early 1990s. The addition of these back series does not affect the methodology used to calculate the previous ONS data to 1973. For the periods January 1957 to December 1972, ONS rescaled data from a number of historical rebased series to make these comparable with previously published data.

A3.40 The SPPI provides quarterly estimates of inflation in services bought and sold by UK manufacturers. There has been no change to the methodology since January 2021, when the SPPI was

produced with an annual weight update using the annual chain-linking method recommended by Eurostat. Previous SPPIs had their weights updated every five years using the rebasing method.

A3.41 The GDP deflator represents the broadest measure of inflation in the domestic economy, reflecting changes in the price of all goods and services that comprise GDP. It is important to note that the GDP deflator covers the whole of the economy, not just consumer spending. Movements in the implied GDP deflator in 2020, 2021 and 2022 have been largely affected by the Government consumption deflator, which is the expenditure that is incurred by the Government in producing non-market goods and services, such as health and education. The volume of government activity fell while at the same time government expenditure increased in nominal terms, reflecting how ONS record volume estimates of education and health.

Measuring price changes for items 'more exposed to the minimum wage'

A3.42 This year, we have also used the price microdata that are used to calculate these price indices and other ONS price statistics. These data have been made available by ONS since 2017 for research purposes only. They include the individual price quotes from which the ONS calculate their price indices and pre-calculated indices for the individual items that form part of the basket of goods used to measure inflation.

A3.43 Data is available for 2010 onwards for price quotes and 2005 onwards for item indices; however, during the pandemic there was serious disruption to price collections. For sectors that were shut down, prices could not be collected at all, and in-person price collection of other items could not take place in some months, leading to large reductions in sample size. In its item indices, the ONS imputed values for each item where there were gaps. This was typically done in such a way as to minimise the impact on the overall price index, and so imputed indices should not be used for comparing price changes of individual items. Price quotes data have not been imputed. In order to avoid the impact of these data collection issues, we avoid using price data for individual items during the period of disruption: In Figure 7.2 we use price quote data from August 2021 and in Figure 7.3 we use item indices from either side of the disrupted period.

A3.44 When comparing price changes between items and sectors most exposed to the minimum wage and others, we follow the method used by Wilson (2020) for compiling item-region indices. We then weight these indices using each item's CPI item weight as a share of the total CPI weight of exposed and less exposed items respectively. This approach helps to control for the fact that some sectors have many more items assigned to them than others and so would otherwise be disproportionately represented in the overall index. However, this should be considered a 'naïve' approach to weighting, as we have not adjusted the CPI weights to reflect the varying contribution of different regions to overall inflation. It should also be noted that weights do not reflect different patterns of expenditure in different regions. For example, the hourly rate for a domestic cleaner in Wales will receive the same weight as the hourly rate for a domestic cleaner in London, and both will contribute equally to the calculation of the index in Figure 7.2.

A3.45 Our classification of those products most exposed to the minimum wage and our mapping of items to sectors are taken from the data published in Wilson (2020) and Frontier Economics (2020).

These studies used data on wages and turnover from 2015-2018 to calculate exposure at the sector and region level. Due to data availability, we were not able to update these calculations this year, although we will look to do this once sufficient data beyond the pandemic is available. The basket of goods used to calculate inflation measures is updated each year, which means that items added to the basket since 2019 will not feature in our analysis. This is unlikely to have a noticeable effect on our estimates: the vast majority of items added each year are tradeable items, which we exclude to limit the effects of international price movements on the analysis.

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. In 2018, the ONS introduced a new publication model for GDP, reducing the number of published estimates of quarterly GDP from three to two. It sought to balance timeliness with accuracy of GDP estimates, with the aim of reducing the likelihood and frequency of revisions. It also enabled the publication of monthly estimates of GDP.

A3.47 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 also contains information from the income and expenditure approaches two weeks earlier than the previous model although data for these measures. A comprehensive (second) estimate of GDP continues to be released as part of the Quarterly National Accounts, available 85 days after the end of the reference quarter as previous.

A3.48 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.

Blue Book changes

A3.49 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. In 2022, several updates were made to the national accounts methodology, including updated data sources for measuring the insurance industry and pension schemes and introducing a package of sources and methods changes to improve the international comparability of UK GDP estimates.

A3.50 These changes led to revisions to the GDP series back to 1997. Between 1997 and 2019, changes are generally small, but revisions to 2020 GDP data were more significant: GDP growth in 2020 was revised down by 1.1 percentage point in current price terms, and by 1.7 percentage points in volume terms (giving a total fall in GDP of 11 per cent in volume terms in 2020).

Business Insights and Conditions Survey

A3.51 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.

A3.52 In November 2020, the Business Impact of Coronavirus (Covid-19) Survey was superseded by the Business Insights and Conditions Survey (BICS). 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. The latest data available were from Wave 67, covering the period from 3-16 October 2022.

Appendix 4

Low-paying and shutdown sectors

Low-paying sectors

A4.1 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.

A4.2 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.

A4.3 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 A4.1 shows our revised list of low-paying sectors, and the provisional mapping to SOC 2020 that we have used in this report. Now that we have data available in ASHE 2022 that is free from pandemic effects, we intend to review our list of low-paying occupations (using SOC 2020) and industries. We will carry out this work over the course of 2023.

Table A4.1: Definition of low-paying industries (SIC 07) and occupations (SOC 2010 and mapped SOC 2020)

Low-paying industry/occupation	Current industry definition (SIC 2007)	Pre-2017 industry definition (SIC 2007)	Current occupation definition (SOC 2010)	Mapped SOC 2020 codes	Pre-2017 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, 9251, 9259	3553, 5443, 7111, 7112, 7114, 7115, 7123-7125, 7131, 7132, 7219, 9241, 9249	1254, 5443, 7111, 7112, 7114, 7115, 7123-7125, 7130, 7219, 9251, 9259
Hospitality	55, 56	55, 56	5434, 5435, 9272-9274	5434, 5435, 9261, 9263, 9264-9266	5434, 5435, 9272-9274
Social care	86.10/2, 87, 88.1, 88.99	86.10/2, 87, 88.1	6145, 6146, 6147	6135, 6136, 6137	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, 6232, 6240, 9131, 9221, 9223-9226, 9229	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	3240, 3413, 3431, 3433, 6129, 6211, 6212, 6219, 9267, 9269	3413, 3441, 3443, 6131, 6139, 6211, 6212, 6219, 9275, 9279
Food processing	10	10	5431-5433, 8111, 9134	5431, 5432, 5433, 8111, 8160, 9132	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	3232, 6111, 6114, 6116, 6117, 9232	6121-6123, 9244
Agriculture	01, 03	01, 03	5112-5114, 5119, 9111, 9119	5112-5114, 5119, 9111, 9119	1213, 5112-5114, 5119, 9111, 9119
Security	80.1	-	7122, 9241, 9242	6312, 7122, 9231	-
Textiles and clothing	13, 14	13, 14	5411, 5414, 5419, 8113, 8137	5413, 5419, 8112, 8146	5412-5414, 5419, 8113, 8137
Hairdressing	96.02, 96.04	96.02, 96.04	622	6221, 6222	622
Office work	-	-	4129, 4133, 4216, 7213, 9219	4129, 4133, 4216, 7212, 9219	4129, 4216, 7213, 9219

Low-paying industry/occupation	Current industry definition (SIC 2007)	Pre-2017 industry definition (SIC 2007)	Current occupation definition (SOC 2010)	Mapped SOC 2020 codes	Pre-2017 occupation definition (SOC 2010)
Non-food processing	-	-	8112, 8115-8116, 8119, 8121, 8125, 8127, 8131, 8134, 8139, 9120, 9139	8114, 8119, 8120, 8131, 8135, 8141, 8144, 8149, 9121, 9129, 9139	5211, 5441, 8112, 8114-8116, 8125, 8131, 8134, 8139, 9120, 9139
Storage	-	-	9260	9251, 9252, 9253, 9259	9260
Transport	-	-	5231, 8135, 8212, 8214	5231, 8145, 8213, 8214, 8219	5231, 8135, 8212, 8214
Call centres	-	-	7113, 7211	7113, 7211	-

Note: '-' denotes not applicable.

Shutdown sectors

A4.4 During the coronavirus pandemic, certain sectors were unable to trade due to lockdown restrictions. Table A4.1 provides details of the sectors we classify as having been shut down in the analysis in this report.

Table A4.2: List of sectors directly affected by lockdown measures during the pandemic

Sector	4-digit SIC codes
Non-food, non-pharmaceutical retail	4719, 4730–4772, 4776–4799
Passenger transport	4910, 4931–4939, 5010, 5030, 5110
Accommodation and food	5510–5630
Travel	7911–7990
Childcare	8510, 8891
Arts and leisure	9001–9329 except 'artistic creation' 9003
Personal care	9601–9609 except 'funeral and related activities' 9603
Domestic services	9700

Appendix 5

International minimum wages

A5.1 As part of our work on the National Minimum Wage (NMW) we keep track of the international context and monitor developments in other countries' minimum wages and related public policy. We have regular contact with officials and counterpart bodies in a number of other countries and hold a workshop each autumn, where officials from around the globe share experiences of monitoring and setting minimum wages. At this year's event, we were joined by minimum wage commissioners and officials from Germany, France, the Netherlands, Ireland, Sweden and New Zealand, Eurofound and the Organisation for Economic Co-operation and Development (OECD).

Recent upratings in other countries

A5.2 Eurofound (2022), reporting on minimum wage upratings, found that EU member states had increased their nominal statutory rates, in contrast to last year when most countries settled for cautious increases or freezes. The average increase this year was 6 per cent, compared with 4 per cent last year. A number of countries, including France and Belgium, had made ad hoc index-linked changes during the year, in response to high inflation. Some of the largest increases were in Eastern Europe, including Hungary, who increased its rates by 19.5 per cent, and Lithuania, who increased its by 13.7 per cent. However, due to the large increases in inflation, there has been a general fall in the real value of minimum wages in 2022 across the EU.

A5.3 This year the German minimum wage saw three separate increases. Two of these had been announced by the German Minimum Wage Commission when it last made its decision in June 2020. These increases were a 2.3 per cent increase on 1 January 2022 to €9.82, followed by a 6.4 per cent increase on 1 June 2022 to €10.45. In September 2021, the parliamentary election led to a new coalition Government being elected – committed to increasing the minimum wage. In June 2022, the German Bundestag approved legislation that raised the national minimum wage by 14.8 per cent to €12.00 an hour on 1 October 2022. Compared with October 2021, the German national minimum wage has increased by 25.0 per cent from to €9.60 to €12.00. The Minimum Wage Commission has resumed responsibility for deciding on the minimum wage increase. It will make its decision in June 2023 on increases for the period from January 2024 to December 2026.

A5.4 In France, the minimum wage has increased by around 8 per cent since January 2021. The rate is increased on 1 January each year and set via a combination of index-linked adjustments and a discretionary boost advised by a panel of experts, which the Government may choose to apply; but there is also a mechanism to increase the rate within the year, when price increases exceed a certain level. This meant a separate increase in October 2021 (by 2.2 per cent to €10.48). The French minimum wage then increased by 0.9 per cent in January 2022 to €10.57. Further increases to track inflation were made in May (up 2.6 per cent to €10.85) and in August (up 2.0 per cent to €11.07).

A5.5 In the Netherlands the minimum wage is increased twice a year in January and July, in line with changes in average collectively agreed wages. The latest July increase saw the monthly minimum wage increase to €1,756.20 from the January wage of €1,725 for workers 21 years old and over. This was based on a formula which included the increase in negotiated wages of 2.9 per cent. The newly elected Government brought in new minimum wage proposals including increases of 7.5 per cent in three annual steps (around 2.5 per cent) and for an hourly minimum wage by 2024 based on a 36 hour work week. However, there is an inflation-adjustment mechanism. This was triggered in 2022 and has led to an announcement of an increase in the monthly minimum wage of 10.15 per cent to €1,934.45 in January 2023. The hourly rate depends on the sector, with hours varying across sectors but are usually 36, 38 or 40 hours a week. That means that the indicative Dutch hourly minimum wage will be €12.40 (for 36 hours), €11.75 (for 38 hours) and €11.16 (for 40 hours). From January 1st 2023 the minimum wage will increase by 10.15% to €1,934.45 per month. In announcing the uplift King Willem-Alexander said this and other announcements designed to protect people from rising prices 'will be paid for in part by higher taxes on profits and wealth, with small and medium-sized enterprises being spared as much as possible.'

A5.6 The Irish Low Pay Commission this year recommended an increase of 7.6 per cent or €0.80 to €11.30 per hour from 1 January 2023. The Commission was asked in 2021 to advise on how the Government could progress to a living wage. It published a report in June 2022 making 18 recommendations, including progressing towards a target of 60 per cent of the median wage threshold over a period of no more than five years. The Irish Government has since consulted on proposals to phase in a living wage set at this level by 2026.

A5.7 In New Zealand the minimum wage increased by 6.0 per cent in April 2022, from $20.00 to $21.20, in response to an inflation rate of 5.9 per cent. The current rate is 71.5 per cent of the median wage. The Minimum Wage Act requires the Minister to review the minimum wage each year. The review is conducted by the Ministry of Business, Innovation and Employment in consultation with social partners and stakeholders with the objective of increasing the minimum wage over time to protect the real income of low-paid workers while minimising job losses.

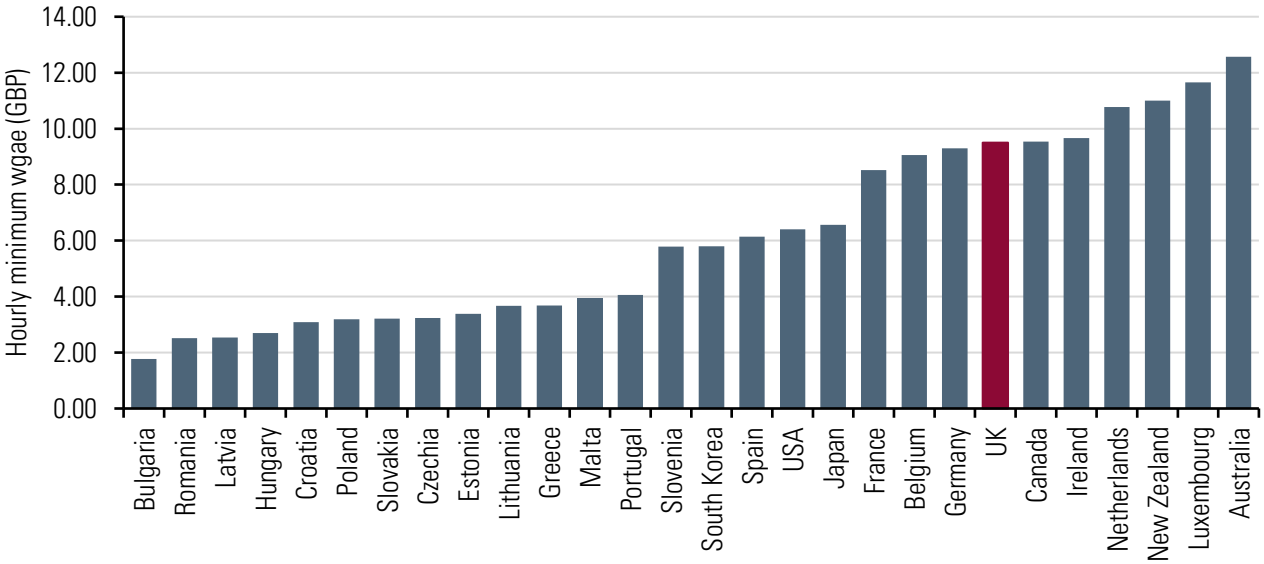
International comparisons of minimum wages

A5.8 Direct comparisons of the values of minimum wages across countries are inexact for a number of reasons and therefore should be considered with caveats. 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.

A5.9 In particular the UK has a relatively high age threshold for the adult rate at 23 years, in many countries it is 18 or 21 years. This affects comparisons of bite across countries as the UK's bite will appear lower than in other countries. The younger workers are included the lower the average wage (as young workers earn less on average) and therefore the higher the bite of the NMW relative to that average.

A5.10 Figure A5.1 compares the value of minimum wages across a range of countries. We compare the UK's NLW in April 2022 with the values of minimum wages in other countries as of January 2022. The minimum wage in the majority of countries is set as 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 sterling (GBP) using the January 2022 exchange rate. On this measure, the UK has a relatively medium to high minimum hourly wage, slightly behind Canada and Ireland and further behind Australia, Luxembourg, New Zealand and Netherlands.

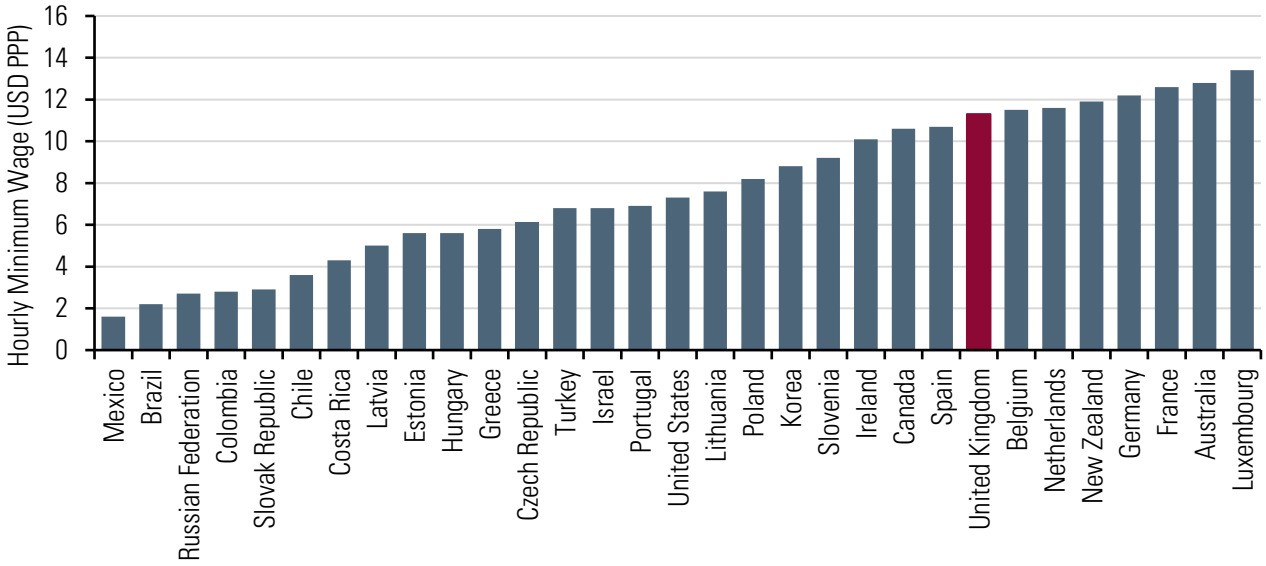
Figure A5.1: Comparison of international minimum wages, January 2022



Source: LPC estimates using Eurofound (2022) and wageindicator.org.
Note: Figures represent the minimum wage applicable in January 2022.

A5.11 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 2021. On this comparison, the UK is towards the upper end of the list of countries – above both Canada and Ireland.

Figure A5.2: Comparison of international minimum wages adjusted for purchasing power parity, OECD, 2021

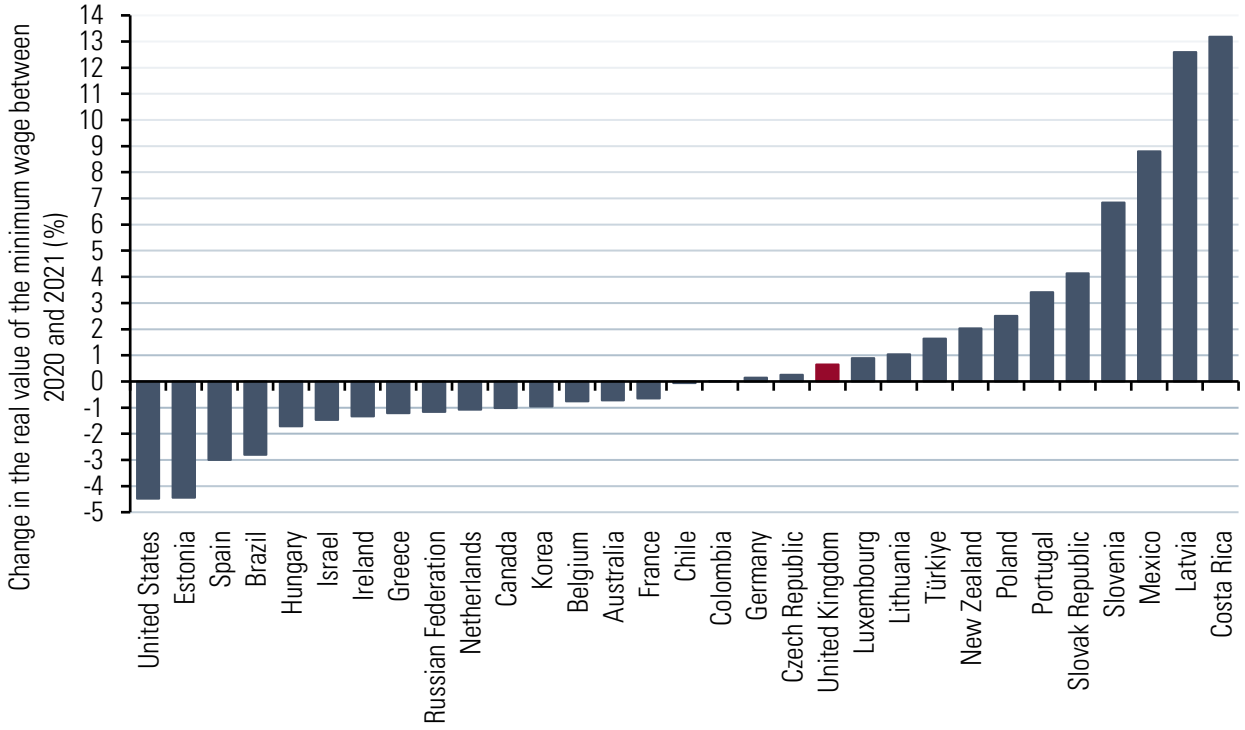


Source: OECD Real minimum wage data.

A5.12 The OECD (2022d) also derive a series for real minimum wages so that we can compare countries over time taking account of inflation. We can see from Figure A5.3 that the 2.2 per cent increase in the UK's NLW was an increase of 0.6 per cent in real terms using this OECD comparator. The increase in the UK was the 12th highest in the OECD in 2021 – the latest available data. It was higher than in Australia, France, Germany and Ireland, but lower than in New Zealand. The highest real increases in the minimum wage were in Central America (Costa Rica and Mexico) and in Eastern Europe (Latvia, Slovenia and the Slovak Republic). Over half of the countries experienced falls in their real minimum wages. The largest falls in the United States, where the federal minimum wage has not changed since 2008, and Estonia.

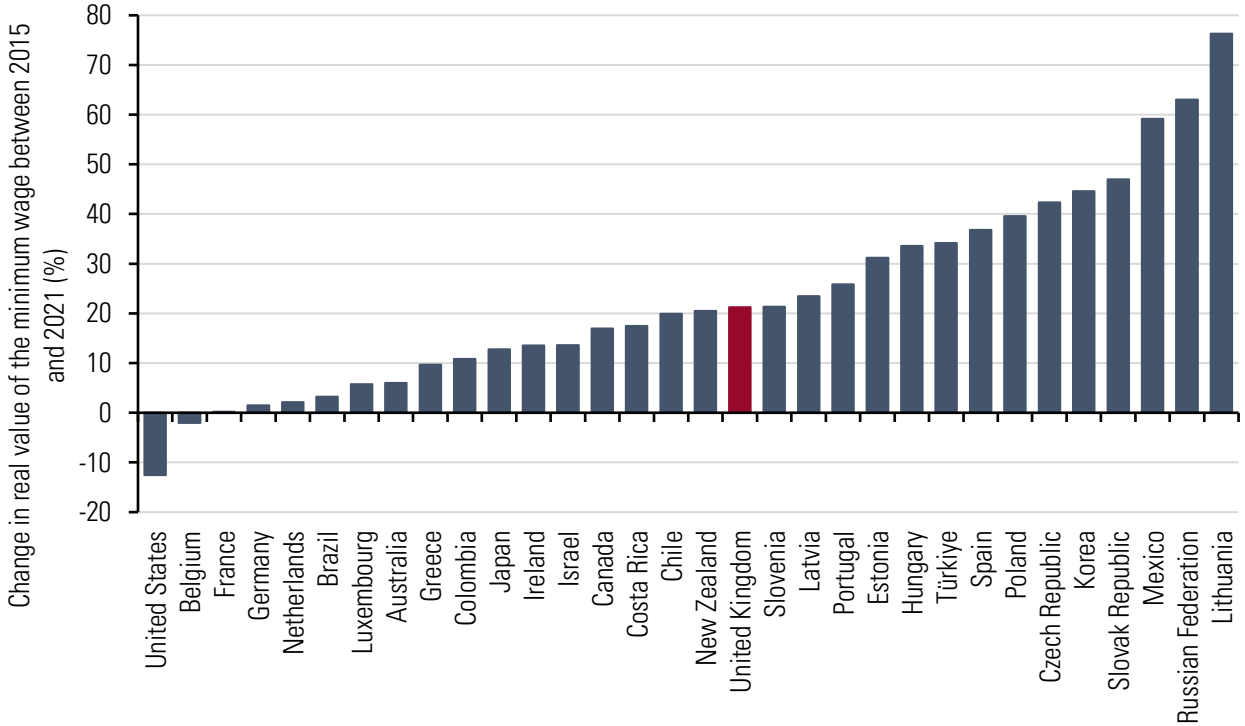
A5.13 We can also look at this measure over a longer time period. The UK's NLW was introduced in April 2016. Figure A5.4 shows how the real minimum wage has changed across OECD countries since then (and up to 2021). The UK's NLW has increased by 21.2 per cent in real terms, similar to the increase in New Zealand. The largest increases have been in Eastern Europe, Mexico and Korea. The only two countries that have seen the value of their minimum wage fall over this period are the United States and Belgium. However, the real minimum wage has also changed little in France, Germany and the Netherlands.

Figure A5.3: Change in the real value of minimum wages, 2020-2021



Source: OECD Real minimum wage data.

Figure A5.4: Change in real value of the minimum wage across OECD countries, 2015-2021

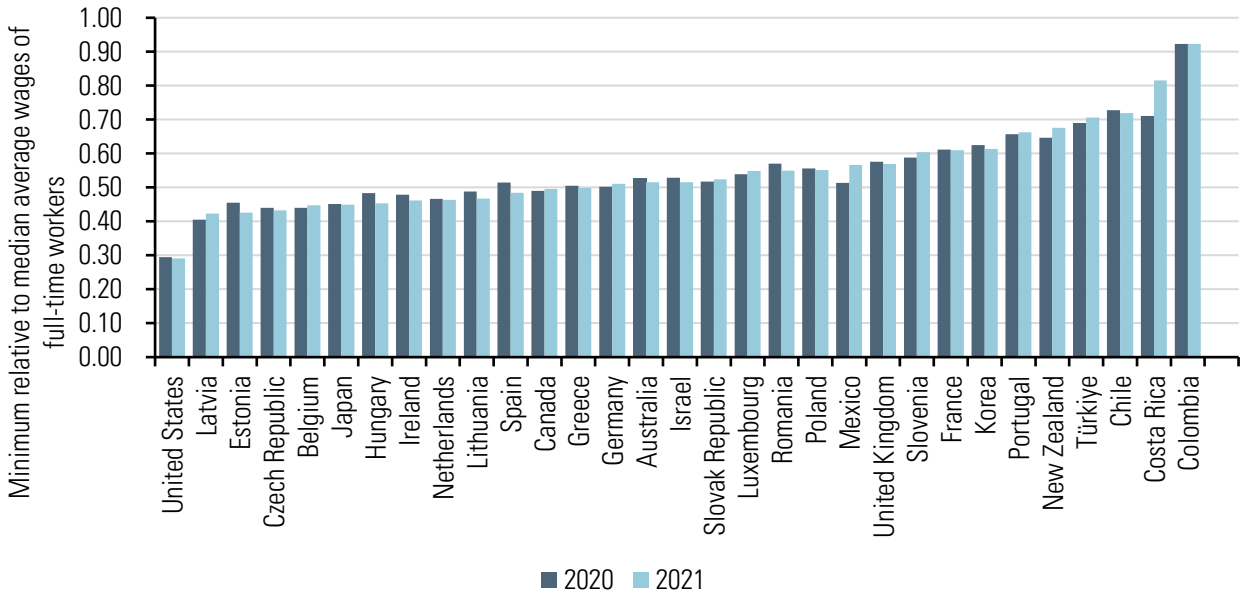


Source: OECD real minimum wages, in 2021 constant prices at 2021 USD PPPs, annual, US$, 2015-20-21.

A5.14 Another way of comparing minimum wages across countries uses its 'bite', defined here as the ratio of the minimum wage to a point on the hourly earnings distribution, such as the median hourly pay. 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. Median rather than mean earnings provide a better basis for international comparisons as it accounts for differences in earnings dispersion across countries.

A5.15 The OECD (2022e) uses full-time hourly earnings for its comparisons and also takes the average value of the minimum wage over the calendar year. This means the bites shown here are not comparable with those in the rest of this report, which uses all workers, not just full-timers. The bite of the UK's minimum wage was over 60 per cent in 2021 for all workers aged 23 and over, as the bite for part-time workers is much higher than 60 per cent. On the OECD full-time measure, the UK was reported to have a 'bite' of around 55 per cent in 2021 – towards the upper middle when compared with the other OECD countries. It was higher than Germany and Australia but lower than France and New Zealand.

Figure A5.5: Comparison of international minimum wages relative to average median wages of full-time workers



Source: OECD (2022e). National minimum wage relative to average wages of full-time workers, 2020-2021.

Conclusion

A5.16 Across the globe, there has generally been a commitment in recent years to higher minimum wages – that is particularly the case in many Eastern European countries as well as in the UK and New Zealand. Minimum wage increases have generally been larger in 2022 than in 2021. However, despite those larger nominal increases, rising inflation has eroded their value. That is also the case in the UK. Some countries, such as France and the Netherlands, have had additional increases during the year to compensate for that increase in inflation. Others, such as Germany, have seen new governments implementing increases. In Ireland, the Irish Low Pay Commission recommended a large increase in the minimum wage and a commitment to raise its minimum wage to 60 per cent of median earnings.

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ISBN 978-1-5286-3741-1
E02810433