



# **A Review of the Youth Rates of the National Minimum Wage**

**November 2019**

**Low Pay Commission**

# Contents

<b>Contents</b> .....	<b>iii</b>
<b>Introduction</b> .....	<b>v</b>
Aims, scope and approach .....	vi
<b>The Commissioners</b> .....	<b>ix</b>
<b>Executive Summary</b> .....	<b>x</b>
<b>List of figures</b> .....	<b>xiv</b>
<b>List of tables</b> .....	<b>xvi</b>
<b>Chapter 1: The history and evolution of the National Minimum Wage structure</b> .....	<b>1</b>
A history of the National Minimum Wage .....	1
The Adult Rate of the National Minimum Wage .....	2
The Youth Development Rate for 18-20 year olds (pre-2010 for 18-21 year olds) .....	2
The Older Workers' Development Rate .....	4
Exemptions: 16 and 17 year olds and apprentices .....	4
The 16-17 Year Old Rate .....	5
The Apprentice Rate .....	6
The National Living Wage and 21-24 Year Old Rate .....	7
<b>Chapter 2: The rates and use of the minimum wage</b> .....	<b>8</b>
<b>Chapter 3: The changing youth labour market</b> .....	<b>14</b>
<b>Chapter 4: Consideration of the age bands</b> .....	<b>20</b>
Educational and labour market participation .....	20
Pay and use of the rates .....	26
Bite of the minimum wage .....	29
Use of the youth rates for training and induction .....	31
Conclusion .....	34
<b>Chapter 5: Research evidence on the impact of the minimum wage on young workers</b> .....	<b>36</b>
Key findings .....	36
The impact on youth employment of increases in the minimum wage .....	38
The impact of the minimum wage on young workers in the UK .....	39

The introduction of the National Minimum Wage and its subsequent upratings .....	39
The introduction of the 16-17 Year Old Rate.....	40
The impact of lowering the age of entitlement to the adult rate .....	41
The increase in the Apprentice Rate .....	42
The introduction of the NLW .....	42
Research on how employers set pay for young workers .....	43
International evidence .....	44
Conclusion .....	46
<b>Chapter 6: Stakeholder views on the minimum wage structure .....</b>	<b>48</b>
Views in favour of retaining the current structure .....	48
Views in favour of reforming the minimum wage structure.....	49
Interactions with the post-2020 National Living Wage .....	51
<b>Chapter 7: Conclusions and recommendations.....</b>	<b>53</b>
Lowering the age of eligibility for the National Living Wage .....	53
Retaining the age structure for younger workers .....	55
<b>Appendix 1: Historic minimum wage rates.....</b>	<b>57</b>
<b>Appendix 2: International approaches to setting youth minimum wages.....</b>	<b>58</b>
Minimum wage regimes including sub-minimum rates for young people .....	59
Overview of international comparisons.....	60
European Union .....	63
English-speaking countries outside the EU .....	66
<b>References.....</b>	<b>70</b>

# Introduction

## Publication note

In August 2019 we provided advice (Low Pay Commission, 2019a) to Government recommending the lowering of the NLW age threshold to 21 from 25 in two stages. This report has not been updated following any subsequent announcements or policy changes.

**1** Since its inception the National Minimum Wage (NMW) framework has included lower rates for younger workers. Over the 20 years of the minimum wage the number of youth rates has increased and the labour market has changed. In our 2017 Report we proposed to look at the operation and effectiveness of the youth rates: the 21-24 Year Old Rate, the 18-20 Year Old Rate and the 16-17 Year Old Rate. There are three primary drivers for the review.

**2** The first driver is the introduction of the National Living Wage (NLW) in April 2016, which created a higher, adult, rate for workers aged 25 and over, and, by implication, a lower 'youth' rate for 21-24 year olds. A key question is whether it is appropriate to treat 21-24 year olds differently to their counterparts aged 25 and over.

**3** Consideration of this needs to take account of the different remit for the 21-24 Year Old Rate and the NLW. The NLW was introduced with a remit to reach 60 per cent of median hourly pay of workers aged 25 and over by October 2020. At the time of its introduction, the Office for Budget Responsibility (2015) estimated that the NLW could lead to reduced employment: the NLW policy therefore assumed some tolerance for such losses, albeit more than offset by an expectation of job growth across the economy. By comparison, the 21-24 Year Old Rate, and the other youth and apprentice rates, are bound by a more cautious remit, to raise pay as high as possible without harming job prospects. There is no target and no tolerance for job loss. This reflects evidence that younger workers are more likely to be unemployed and that these spells of unemployment may be more damaging for young workers, with long-term 'scarring effects' on their future earnings and employment.

**4** Secondly, there was a need to review the minimum wage structure for the youngest workers, in recognition of substantial changes to their educational – and labour market – participation, in the two decades since the introduction of the minimum wage. While the remit for the youth rates has not changed, when, how and where young people work has seen extensive change. Greater educational participation – as well as the increased difficulty of combining work with learning – has meant young people are entering the labour market later. When young people work, they more often work part-time. Linked to this, the types of jobs they perform are more likely to be low-skilled and low-paid. A key question for the review is whether the current age bands, and the relativities between the different rates, are appropriate for today’s youth labour market.

**5** Thirdly, and more broadly, there is a need to ensure that the minimum wage structure continues to work effectively within the broader Government strategy, particularly the Government’s Industrial Strategy, part of which aims to boost the earning power of the lowest paid through productivity gains, including those arising from improved skills and technical education. This means that the minimum wage structure should enable young workers to enter the labour market, gain skills and experience, and progress to higher pay. The youth rates should be set at a level that both incentivises young people to enter work – including part-time work alongside full-time education – and also incentivises employers to provide them with the opportunities to gain skills and experience.

## **Aims, scope and approach**

**6** The overall aim of the review is to establish whether the current youth rates meet the Government’s remit to the Low Pay Commission; that is, to raise young people’s pay as high as possible without harming their job prospects.

**7** The review has not considered changes to, or the implications of any changes for, the Apprenticeship Rate. Changes to the youth rates will have implications for some apprentices; those aged 19 and over who have completed their first year are currently entitled to receive their applicable age-rate.

**8** In reaching our conclusions we have drawn on a wide range of evidence:

- Extensive in-house analysis.
- A review of research evidence on the impact of the minimum wage on young workers.
- Specifically-commissioned research looking at how employers set pay and how the level of wages affects young peoples’ decision-making.
- Engagement with stakeholders representing workers, employers and young people.

## National Minimum Wage

**9** Chapters 1 and 2 present overviews of the evolving structure of the NMW's youth rates and changes in the youth labour market, setting the context for our current recommendations.

**10** In-house analysis was undertaken in stages. Our starting point was to review the changes that have taken place in the youth labour market over the two decades following the introduction of the minimum wage. This analysis is presented in Chapter 3.

**11** Drawing on this, we identified the key indicators which should inform our decisions on the scope to raise pay, including the relationship between age and patterns of educational and labour market participation; patterns of work, including how, and where young people worked; and variations in pay, bite and coverage of the minimum wage. This analysis is presented in Chapter 4.

**12** We examined how these factors varied by age, and the extent to which any age patterns suggested an alternative structure for the minimum wage. That is, whether there were natural breaks at particular ages which might indicate that different minimum wages were appropriate. The current structure of the NMW itself inevitably influences a number of these factors, and we have kept this in mind throughout our analysis.

**13** The next stage of analysis took each single year of age – from 24 down to 16 – and assessed whether there was scope to move any age group to the wage floor above. This was undertaken by comparing them, on a range of measures, to the youngest part of the wage floor above their current wage floor. We compared single ages on a range of measures to assess the extent to which the two age groups were similar or different to each other; and, by implication, whether there was a strong rationale for treating them differently. And we looked at the implications – for bite and coverage – of moving any age up to the wage floor above.

**14** We undertook further analysis to explore some of the original rationales for the youth rate structure, including the greater risk of unemployment and an expectation that young workers would receive accredited training.

**15** To evaluate the impact of raising the wage floor for young workers, we reviewed the available research literature and commissioned new research. Key questions were how employers, and young people, would respond to a higher wage floor. To build our understanding we commissioned two research projects. Bowyer, Cerqua, Pietro and Urwin (2019) undertook econometric analysis to explore the impact of a higher wage floor on young people’s decision-making, in particular whether a higher wage floor would encourage them to leave full-time education and enter low-paid work. They used the Department for Education’s Longitudinal Educational Outcomes (LEO) dataset to assess whether the introduction of the NLW had affected the employment of younger workers in England. Hudson-Sharp, Manzoni, Rolfe and Runge (2019) carried out qualitative research with employers to establish how they decided where to set pay for young workers and why they used – or did not use – the youth rates of the minimum wage. The findings from these research projects are summarised in Chapter 5.

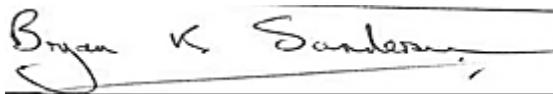
**16** Alongside research, we consulted directly with a wide range of stakeholders, including employers, unions and organisations representing young people, to gain a broad understanding of the range of perspectives. We asked what they thought about the current minimum wage structure, and whether, and how, they felt it should change. In addition, we collected their views on the current labour market for young people and their expectations for the near future, including the potential impact of the UK leaving the EU. The findings are summarised in Chapter 6.

**17** The conclusions and recommendations of this report are detailed in Chapter 7. They are also set out in the Executive Summary, which follows this introduction.

# The Commissioners

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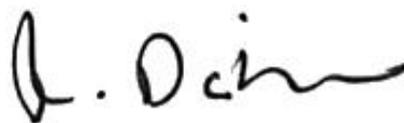
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# Executive Summary

**1** Since the introduction of the National Living Wage (NLW) in 2016, which indirectly created a new 21-24 Year Old Rate, it has been our intention to review in detail the structure and operation of the different sub-minimum rates. We committed to doing so in our 2017 Report, and this came into sharper focus as the Government began to consider the future of the NLW after 2020, as changing the structure of the youth rates would have implications for the NLW's future trajectory. We wrote to the Government with our recommendations on changes to the youth rate structure in August 2019. We subsequently submitted advice on the post-2020 remit for the NLW, published in a separate report alongside this one (Low Pay Commission, 2019b).

**2** We believe there is a strong case for lowering the age of eligibility for the NLW from 25 to 21. But we recommend using a phased approach, moving first to 23 from April 2021 and monitoring the impact of this change before completing the move to 21 at a later date. The LPC will review the evidence and advise the Government in October 2022 on the appropriate timetable for the next step.

**3** We are not proposing any changes to the structure of the rates for those aged between 16 and 20, but will carefully consider the differentials between these rates and the NLW as part of our usual rate recommendations each autumn. We will base our future advice on the 16-17 Year Old and 18-20 Year Old Rates primarily on the latest economic evidence on the strength of the labour market and the position of young people affected by our recommendations. Our main objective is to ensure that the NMW's structure and the level of the youth rates enables young people to make a successful transition from education to employment, and to access roles which provide them with the work experience valued by employers.

**4** In this report, we look at the history and evolution of the NMW youth rates from their introduction in 1999 until the present day. From the beginning, Commissioners have thought there was a case for differential minimum wage rates for younger workers, to preserve opportunities for this group to enter the labour market and protect them from the worst scarring effects of long-term unemployment. One rationale for the original 1998 recommendation for a (Youth) Development Rate of the NMW, for 18-21 year olds, was for it to be clearly linked to the provision by employers of structured training and developmental programmes; but there is little evidence that the lower rate has led employers to provide such training. Since then, the labour market and the structure of the NMW have

## National Minimum Wage

continued to evolve, most notably with a greater number of young people remaining in full-time education for longer. Young people are more likely to work part-time than older workers, often fitting work around education, and their presence has become particularly important for certain low-paying sectors, such as hospitality and retail.

**5** The number of 21-24 year old workers paid at the rate for their age has fallen substantially. In 2014, 12 per cent of 21-24 year olds were paid the NMW, which was the prevailing adult rate for those aged 21 and over. But since the introduction of the NLW this has halved to 6 per cent, as many employers have chosen to pay the NLW to all workers aged 21 and over. While around 8 per cent of 21-24 year olds are paid in between the 21-24 Year Old Rate and the NLW, overall there are now fewer workers paid just above the rate for their age; most have moved either to the NLW or beyond.

**6** We have also considered the 'bite' for these age groups – the ratio of the NMW rate to their median wage, a key measure of pressure arising from minimum wage rates. While moving 22 to 24 year olds onto the NLW would increase their bites, they would remain at reasonable levels. However, 21 year olds have the highest bite of any age group currently, and moving them up to the NLW would increase this further – this finding is a contributory factor behind our more cautious approach for this age group.

**7** For 16-20 year olds, a move up to the next rate could result in substantial bite increases, of over 20 percentage points in most cases, indicating a significant impact on their position in the labour market. This is a key reason why we are not proposing a change in the NMW structure for these workers.

**8** On most measures, including educational participation, employment and unemployment rates, as well as where – and how – they work, 23 and 24 year olds are very similar to the age groups above them. There is, on these measures, little basis for treating them differently in the minimum wage structure. The evidence base for extending the NLW to 21 and 22 year olds is less clear-cut; on many measures, they are more different to 25 year olds than 23 and 24 year olds. But in making this decision, we also considered findings from research into past upratings, both within the UK and internationally; and we have taken into account the views of employers and other stakeholders.

**9** Research suggests that on previous occasions when the minimum wage has been raised for younger workers, there have generally not been negative employment effects. In particular, the lowering of the threshold for the full adult rate in 2010 from 22 to 21 did not appear to have significant negative impacts. Despite the large size of that increase – and the timing of implementation, two years into the financial crisis – research has shown no negative effects on employment for 21 year-olds; indeed, there was some evidence that the higher wage floor stimulated movements into employment

for some young people. In part this was because the change was well managed – employers were given 18 months' notice to prepare.

**10** Research has tended to find that younger workers (those younger than 21, for example) are more vulnerable to negative impacts, an effect which may be related to the high proportion of them in part-time employment. The labour market for this group has not changed as significantly in the period since the introduction of the NMW, suggesting that our original rationale for a main minimum wage rate starting from 21 still holds.

**11** We also commissioned new research looking at how employers, and young people, would respond to a higher wage floor. Bowyer, Cerqua, Pietro and Urwin (2019) found that minimum wage rates don't have a strong effect in determining whether 16 and 17 year olds remain in education or enter employment; but do have some positive effect on whether they combine education and part-time work. Hudson-Sharp, Manzoni, Rolfe and Runge (2019) carried out qualitative research with employers. They found that employers' decisions over setting pay were principally informed by their competitors' rates and affordability, rather than a worker's age. The main reason given for use of youth rates was to reduce costs; using the youth rates offers a degree of flexibility in dealing with wage costs.

**12** Although there was not unanimous support for this proposal, the majority of employers in low-paying sectors told us they would support extending the NLW to 21 year olds. One important reason was fairness: 21-24 year old workers generally do the same work as older workers, with minimal differences in experience and productivity, particularly in low-paying sectors. Another reason was to reduce complexity, an important element in improving compliance. Employers noted that this would be the right move provided there was sufficient notice, so that small firms and others with tight margins could prepare. Their view was that 21 is a more 'natural' cut-off point. This was an important reason why the LPC argued throughout the 2000s for lowering the starting age of the NMW from 22 to 21.

**13** Finally, demographics are a key part of our rationale. Population projections suggest that the number of 21-24 year olds in the population will fall over the next five years. While they are projected to rise again subsequently, this reduction in numbers will provide further employment protection for this group over the period of transition that we are proposing.

**14** Overall, we think the evidence supports an extension of the NLW to workers aged 21-24 and that current economic conditions, of record high employment and a tightening labour market, are likely to offer protection to young workers. We believe this can be achieved without harming their employment prospects, provided employers are given sufficient notice. And we think it is important to signal clearly to employers our intention to bring the age of eligibility down to 21, to give them a long lead-in time to prepare.

## National Minimum Wage

**15** However, as we have noted, the evidence does indicate a difference in the labour market position of 21-22 year olds and those aged 23 and over. In addition, moving the age of eligibility to 21 in a single step would be a substantial change affecting a larger cohort than that implemented in 2010. For these reasons, we recommend a staged approach to this change, lowering the age of eligibility first to 23 and then to 21. This will provide us with an opportunity to review the evidence again and maintain flexibility over when to move to 21.

**16** We therefore recommend lowering of the age of eligibility for the NLW to 23 from April 2021, with a commitment to reduce the threshold to 21. This will give employers 18 months' notice in which to prepare for the initial change. By October 2022, the LPC will have sufficient evidence to make an initial assessment of the impact of this change and the circumstances of 21 and 22 year olds, and we will be in a better position to make a recommendation on the timetable for lowering the eligibility age further to 21.

**17** If this recommendation is accepted and the phased extension of the NLW to 21-24 year olds is announced, it is possible, indeed likely, that some employers will choose to move these workers onto the NLW sooner than is required. We will continue to monitor the evidence and, if this happens, it may provide scope to lower the age of eligibility more quickly.

**18** The changes we propose here will have a direct impact on the Government's ambitions for the minimum wage post-2020. The inclusion of younger workers in the NLW population will lower the median wage on which any target is based and therefore lower the nominal values of the NLW rates in the future. This means there are some clear trade-offs: younger workers benefit in the form of higher pay, but older NLW workers will receive less than they otherwise would have. At the same time, the overall risk of job loss for those aged 25 and over will be lower than it otherwise would have been, but it will be higher for 21-24 year olds. The Commission has considered these trade-offs and discussed them with employer and employee stakeholders. Our view is that this change is the right choice: it will make the system fairer and bring it back into line with natural and understood business practices.

# List of figures

Figure 2.1: Average annual growth in the minimum wage, by age, UK, 1999-2019.....	9
Figure 2.2: Relative value of the youth to adult/NLW rates, by age, UK, 1999-2019.....	10
Figure 2.3: Bite of the minimum wage, by age, UK, 1999-2018 .....	11
Figure 2.4: Use of the National Minimum Wage, by age, UK, 1999-2018. ....	12
Figure 2.5: Distribution of hourly pay for 21-24 year olds, 5 pence intervals, 2015 and 2018 .....	12
Figure 2.6: Distribution of 'distance' above NMW rates for 21-24 year olds, 5 pence intervals, 2015 and 2018.....	13
Figure 3.1: Percentage of population in full-time education (left panel), and employment (right panel) by age, UK, 1999-2019.....	15
Figure 3.2: Employment rate of those in full-time education (left) and not in full-time education (right) by age, UK, 1999-2019.....	16
Figure 3.3: Percentage of all jobs that are part-time, by age, UK, 1999-2018.....	17
Figure 3.4: Percentage of jobs held young people working in low-paying sectors (left), and in retail and hospitality (right), by age, UK, 1999-2018 .....	18
Figure 3.5: Population projections, by age, UK, 2020-2030.....	19
Figure 3.6: Projected population change over two periods, by age, UK, 2020-2030 .....	19
Figure 4.1: Participation in full-time education, by age, UK, 1999-2019 .....	21
Figure 4.2: Employment rate, by age, UK, 1999-2019.....	22
Figure 4.3: Employment rates (not in full-time education), by age, UK, 1999-2019.....	23
Figure 4.4: Unemployment rate for those not in full-time education (FTE), by age, UK, 1999-2019 .....	24
Figure 4.5: Distribution of full-time and part-time jobs, by age, UK, 2018.....	24
Figure 4.6: Distribution of jobs, by low-paying sector and age, UK, 2018.....	25
Figure 4.7: Hourly pay, by age and sector, UK, 2018.....	26
Figure 4.8: Percentage of jobs paid at or below the age-applicable minimum wage, by age and sector, UK, 2018.....	27
Figure 4.9: Percentage of jobs paid at or above the National Living Wage (NLW), by age and sector, UK, 2018.....	27
Figure 4.10: Percentage of jobs paid at or below the age-applicable minimum wage, by age and firm size, UK, 2018.....	28
Figure 4.11: Percentage of jobs paid below the next level of the minimum wage, by age, UK, 2018. ....	29
Figure 4.12: Bite of the age-applicable minimum wage, by age and sector, UK, 2018 .....	30
Figure 4.13: Hypothetical bite of the next level minimum wage, by age, UK, 2018.....	30

## National Minimum Wage

Figure 4.14: Job-related training or education undertaken in the last 3 months, by age and educational status, UK, Q1 2019 .....	32
Figure 4.15: Median hours spent on job-related education or training in the last 4 weeks, by age and type of training, UK, April-June 2018. ....	32
Figure 4.16: Low-paying sector jobs paid at the age-applicable minimum wage, by age and time in current job, UK, 2018 .....	33

# List of tables

Table A1.1: Path of the minimum wage, UK, 1999-2019 .....	57
Table A2.1: Comparison of adult minimum wages, by selected country, 2017-18.....	61
Table A2.2: Youth minimum wage rates as a percentage of adult minimum wage rates, by selected country, 2018.....	63
Table A2.3: Proportion of the full minimum wage for young workers in the Netherlands.....	66

# Chapter 1

## The history and evolution of the National Minimum Wage structure

1.1 This chapter examines how the minimum wage structure has evolved over the past two decades. It discusses the reasons for initially recommending an adult rate to apply from age 21, a youth rate for 18-20 year olds, and the reasons for initially excluding 16-17 year olds and apprentices from the minimum wage structure. We explain the reasons for subsequently including 16-17 year olds and apprentices in the minimum wage structure, and setting their wage floor below that of other workers. And we discuss the Government's rationale for setting the age threshold of the NLW at 25 when they introduced it in 2016.

### **A history of the National Minimum Wage**

1.2 The National Minimum Wage (NMW) was introduced as part of a three-pronged attack to make work pay: a minimum wage; in-work tax credits; and active labour market policies for the unemployed, such as the New Deal for Young People.

1.3 In our first report (Low Pay Commission, 1998), we set the parameters for the minimum wage as follows: 'The National Minimum Wage should support a competitive economy, be set at a prudent level, be simple and straightforward, and make a difference to the low paid'.

**1.4** The First Report proposed an adult rate to start from age 21, and a ‘Development Rate’ to apply to younger workers aged 18-20, so called because of the assumed link with work experience, structured training and development for young people. In making the case for a lower rate for 18-20 year olds, the First Report noted, ‘We cannot be certain that we know just how the youth labour market will respond to the introduction of the National Minimum Wage. Those in the youth labour market, or trying to enter that labour market, are among the most vulnerable in the workforce. Above all else they need work, and they need work which will allow them to acquire basic skills to enable them to develop. We believe that applying the full National Minimum Wage to all young people when their current earnings have fallen so far behind older workers puts these opportunities at unreasonable risk’.

## **The Adult Rate of the National Minimum Wage**

**1.5** The First Report acknowledged that workers aged 21 and over also faced the threat of unemployment, but considered that the NMW was not the right vehicle to address the risk in this group: ‘We remain concerned about unemployment at any age. But by age 21 people are likely to need positive labour market intervention, such as the Government’s New Deal and other unemployment and training strategies, to help them back to work. We consider therefore that by the age of 21 a worker should be regarded as an adult and be covered by the full National Minimum Wage’.

**1.6** In the event, the Government decided to take a more cautious approach, extending the Development Rate to those aged 18-21, with the adult rate applying from age 22. Over successive reports the Commission continued to urge the Government to move 21 year olds to the adult rate of the minimum wage and the Government finally accepted our recommendation following the 2009 Report, albeit delaying implementation until October 2010, when 21 year olds finally became eligible for the adult rate of the NMW.

## **The Youth Development Rate for 18-20 year olds (pre-2010 for 18-21 year olds)**

**1.7** The First Report highlighted a number of reasons for treating 18-20 year olds differently to those aged 21 and over, principally their lower average pay, particularly at the bottom of the pay distribution. While average pay data suggested that pay rose steadily until around 32 years of age, ‘looking at the lowest decile of earnings, where our interest mainly lies, we see that these [pay increases] begin to level off at age 20 or 21’. In low-paying sectors, including retail and hospitality, pay for 21-25 year olds was close to pay for those aged 26 and over, while pay for 18-20 year olds was lower.

## National Minimum Wage

**1.8** The First Report noted the concentration of 18-20 year olds in retail and hospitality, expressing concern that the minimum wage would lead these sectors to reduce their employment of young workers and switch to older workers. Commissioners noted, 'Too sudden a rise in the wage bill for young people would have a major impact on a small number of sectors, and these sectors are critically important in offering job opportunities for young people. If young workers suddenly become much more expensive, employers might in certain circumstances replace them with, or choose to, recruit instead, older workers'.

**1.9** Commissioners also took account of government policy to support employment, primarily the New Deal, which provided employment support for those aged 18-25 and claiming out-of-work benefits. Commissioners noted, 'In our deliberations about young people and the National Minimum Wage, we were keen to support the New Deal. We were clear about the need to avoid the National Minimum Wage acting as a disincentive for employers to become involved in the initial six-month phase or to offer permanent jobs. The aims of the New Deal played a significant part in our thinking while developing our recommendations'. It is plausible, although not stated, that the New Deal gave Commissioners some reassurance that there would be a functioning safety net for young people affected by the introduction of the minimum wage.

**1.10** The lower level of the Development Rate was primarily designed to protect young workers, but it also reflected an assumption that young workers would receive training in lieu of pay – hence its name. The First Report noted, 'Ideally, we would prefer to link a lower rate of the National Minimum Wage to such investment. In the longer term this lower rate, the 'Development Rate' for young people, should be linked with, and clearly dependent on, the promotion of structured training and development. Government, employers and training organisations need to develop coherent strategies for the education and training of 18–20 year olds'.

**1.11** Commissioners laid out their visions for the future youth labour market, noting several policies to improve development opportunities for young people. 'Our expectation is that development opportunities will increase in number and scope, to the mutual benefit of both workers and employers. More workers, particularly young workers, will secure better employment and higher wages as they improve their skills'. They added, 'We will also be looking not just for examples of proper use of the Development Rate, but for examples of employers providing accredited training while also paying at least the full rate of the National Minimum Wage. We look forward to the time when the Development Rate of the National Minimum Wage is solely dedicated to clearly identifiable and accredited training, fully supportive of a high-wage, high-skill economy'.

## **The Older Workers' Development Rate**

**1.12** Building on this, the First Report also proposed a Development Rate for workers aged 21 and over. The 'Adult Development Rate' could be used by employers taking on someone who had been out of the workforce for a long time, including mothers returning to work and the long-term unemployed. Commissioners recommended that the Adult Development Rate 'should be available for a maximum of six months for workers who are beginning a new job with a new employer and who are on accredited training'. They acknowledged that training may last longer than six months, but asserted, 'we believe that six months strikes a balance between the interests and productivity expectations of both employer and worker'.

**1.13** In 2006, the Older Workers' Development Rate was abolished, on the advice of the Commission, as evidence showed that there was very little use of it by employers. In recognition of the forthcoming Equal Treatment Directive it was decided that apprentices aged 26 and over, who had been entitled to the Older Workers Development Rate for the first six months of their apprenticeship, would now be treated the same as apprentices aged 19-25, in being exempt from the minimum wage for the first year of the apprenticeship.

## **Exemptions: 16 and 17 year olds and apprentices**

**1.14** Workers aged 16 and 17, and apprentices, were not originally covered by the NMW. The First Report noted, 'In considering exemptions for, or a possible lower rate of, the National Minimum Wage, we had to decide for what age groups these might apply. Our terms of reference explicitly asked us to consider young people up to the age of 25. The position for 16 and 17 year olds and apprentices is clear; they are essentially in a preparatory stage, and should be exempt from the National Minimum Wage'. They explained, 'Young people are more likely than older people to be unemployed or in low-paid jobs. They must receive the necessary coaching, experience and training to prepare them for a working life. The evidence suggests that 16 and 17 year olds should not be regarded as full participants in the labour market; they should be in education or training. Apprentices are on a structured programme of training that provides recognised, transferable skills leading to better employment prospects.'

## National Minimum Wage

**1.15** The First Report highlighted a number of factors in exempting 16 and 17 year olds. Commissioners expressed concern that young people could be incentivised to leave education prematurely if wages were too high, noting ‘...we do not wish to encourage these young people to enter the labour market fully too early by establishing their legal entitlement to a certain level of wage’. The report noted that ‘some 70 per cent of 16 and 17 year olds are in education or training.....if these young people are to establish a secure foothold in the labour market, they must develop the broad, basic and transferable skills that education and training offer’.

**1.16** A further factor in exempting 16 and 17 year olds related to existing and planned education and training initiatives, including the Government’s Investing in Young People Strategy. This focused on 16 and 17 year olds who had left compulsory education, and aimed to improve their employability through work-based training towards a Level 2 or equivalent qualification. Critically, the strategy included a statutory right to paid time off to pursue approved qualifications in the workplace. Commissioners considered that ‘it is unreasonable to expect employers necessarily to pay [16 and 17 year olds undertaking training] the same rate as they pay their experienced workers. Indeed, employers would probably be reluctant to offer work to 16 or 17 year olds in such circumstances’. The rationale for exempting apprentices was similar.

**1.17** Government accepted the recommendations, exempting 16-17 year olds and apprentices aged 16-18 years from the minimum wage. Apprentices aged 19-25 years would be exempt from the minimum wage for the first year of their apprenticeship only, and would then be entitled to the full age-applicable rate. Apprentices aged 26 years and over would be entitled to the Older Workers’ Development Rate for the first six months of their apprenticeship, after which they would be entitled to the full adult rate.

## The 16-17 Year Old Rate

**1.18** In the years following the introduction of the NMW, the Commission received numerous reports of 16 and 17 year olds in full-time jobs without any training, prompting the decision to reconsider the exemption of 16-17 year olds. The 2004 Report (Low Pay Commission, 2004) explained, ‘we became concerned by evidence of full-time jobs offering extremely low rates of pay and which provided minimal training and few development prospects. We therefore recommended to Government that we should review the 16–17 year old group in detail this year, and advise on whether a minimum wage could be introduced which put a stop to clear exploitation while neither encouraging young people out of education nor harming the supply of training places. We conclude that this balance is possible, and that a minimum wage for 16–17 year olds should be introduced’.

**1.19** The 2004 Report noted that the relativity with the 18-20 Year Old Rate should be reviewed going forwards, stating, the 16-17 Year Old Rate 'should be reviewed periodically but we see no reason automatically to link its level to that of the Youth Development Rate'.

**1.20** The 2004 Report again reiterated that 16–17 year old apprentices, and participants on specified pre-apprenticeship programmes, should be exempt from the 16–17 Year Old Rate, but added, 'In a few years' time we would wish to look again at the position of apprentices and participants on pre-apprenticeship programmes.'

## **The Apprentice Rate**

**1.21** In 2005, policy was introduced which required apprentices receiving government-funded training in England to be paid at least £80 per week (the Learning and Skills Council rate). The £80 weekly payment reflected the value of the benefits package that young people could receive if they were in college. Subsequent research continued to show that a proportion of apprentices in England were paid below their contractual minimum, rising to ten per cent in childcare and hairdressing. In Scotland and Northern Ireland, the devolved administrations were also hearing evidence of very low-paid apprentices, and considering introducing their own minimum wages for apprentices. The devolved administrations had suggested minimum rates – of around £55 in Scotland, £50 in Wales and £40 in Northern Ireland. This introduced the risk that there would be different minimum wages for apprentices in the different nations of the UK. Following recommendations in our 2006 and 2007 Reports, the Government asked the LPC to review the apprentice exemptions.

**1.22** The 2009 Report (Low Pay Commission, 2009) advised that a minimum wage should be introduced across the UK for those groups of employed apprentices currently exempted from the NMW – 16-18 year olds and those aged 19 and over in their first year. The case for treating apprentices differently to other workers included the need for a discount for the additional costs of an apprenticeship, both to employers and the state; and the 'considerable gains to individual apprentices through higher future earnings and increased employment prospects'. Commissioners also noted that demand for apprenticeships exceeded supply, expressing concern that 'without some discount...there is a danger that insufficient employers would provide places'.

### The National Living Wage and 21-24 Year Old Rate

**1.23** In July 2015, the Government announced its intention to introduce the National Living Wage (NLW) in April 2016. The new rate would apply to workers aged 25 and over, simultaneously creating a sub-minima 'youth' rate, for 21-24 year olds, who had previously received the 'adult rate' of the NMW. The NLW would have a new remit, with an ambitious target, to reach 60 per cent of median earnings by 2020, and alongside this, some tolerance for job loss. This marked a major change in UK minimum wage policy; until this point, the remit for the minimum wage rates had been to 'raise pay as high as possible without harming job prospects'. As such, there was no tolerance for job loss, and the LPC retained full flexibility to recommend increases in the rates according to the economic evidence, being ever mindful of the need to avoid any job loss. The remit for the new 21-24 Year Old Rate, along with the other youth and apprentice rates, would still be to help as many low-paid workers as possible without damaging their job prospects. These different remits implied that the wage gap between 24 and 25 year olds would likely increase over time.

**1.24** The Government's rationale for excluding 21-24 year olds from the NLW (Department for Business, Innovation and Skills, 2015) pointed to their weaker pay and labour market attachment and their implied greater vulnerability to large increases in the minimum wage: 'Introducing the NLW at a lower age threshold could damage employment prospects because the impact on the younger workers would be greater and they already face higher unemployment rates.' However, a range of stakeholders, including trade unions, groups representing young people and some employers, expressed opposition to the omission of 21-24 year olds from the NLW. These stakeholders argued that workers aged 21-24 performed the same jobs within low-paying sectors as their counterparts aged 25 and over. And, they argued, by the age of 21 workers were likely to have acquired the work experience and skills required by employers in these sectors.

# Chapter 2

## The rates and use of the minimum wage

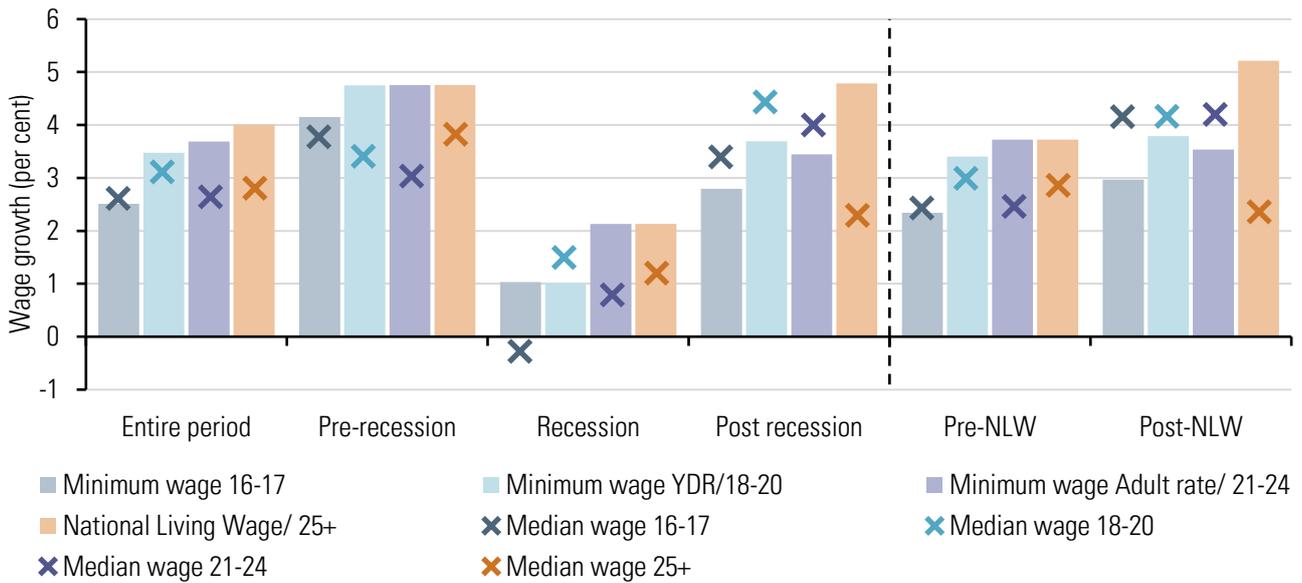
**2.1** Chapter 1 explained the history and rationale of the different rates of the National Minimum Wage (NMW) for young people. We now turn to the rates themselves and how they have affected pay (their impacts on employment are explored in Chapter 5).

**2.2** **Error! Reference source not found.** illustrates how minimum wage growth has varied across different phases. Before the recession the rates increased between 4 and 5 per cent per year, with younger workers, particularly 16-17 year olds, receiving slightly lower increases on average. NMW rates for all workers rose faster than average earnings before the recession. For a table of historic NMW rates see Table A1.1 in Appendix 1.

**2.3** Then, as economic conditions deteriorated in the recession of 2008 and 2009 the LPC recommended lower rates of increase, particularly for younger workers for whom labour market conditions worsened to a greater extent. Immediately following the recession, there was job growth in low-paying sectors, while the number of young people employed in other sectors continued to fall. In 2016, the introduction of the NLW for workers aged over 25 meant that the rates for younger and older workers diverged further.

National Minimum Wage

Figure 2.1: Average annual growth in the minimum wage, by age, UK, 1999-2019



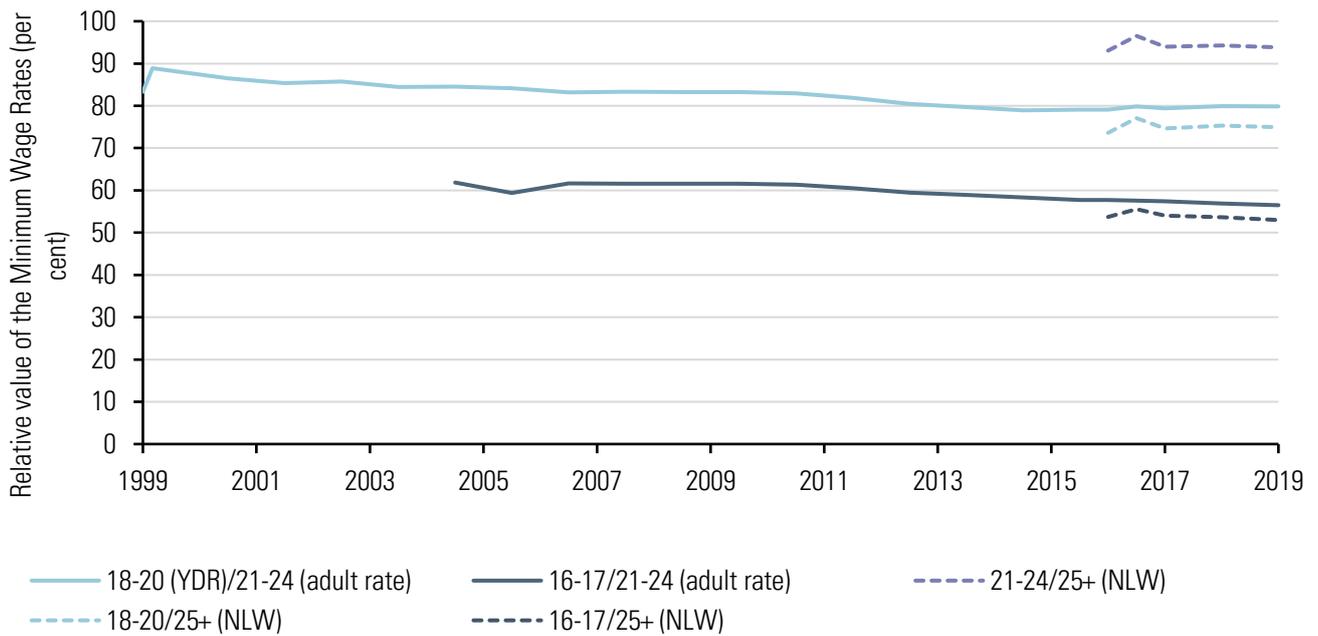
Source: LPC estimates using ASHE: without supplementary information, April 1999-2004; with supplementary information, April 2004-06; 2007 methodology, April 2006-11; and 2010 methodology, April 2011-18, standard weights, UK.

Notes:

- The NMW wage growth for Adult rate/21-24 is based on the adult rate which applied to those aged 22 and over between 1999 and 2010; applied to those aged 21 and over between 2010 and 2015; and applied to those aged 21-24 from April 2016.
- The YDR applied to workers aged 18-21 between 1999 and 2010; and applied to workers aged 18-20 from 2010.
- The 16-17 Year Old Rate was introduced in October 2004.
- Periods are defined as follows: Entire period – 1999-2019, Pre-recession – 1999-2009, Recession – 2009-2014, Post recession – 2014-2019, Pre-NLW – 1999-2016, Post-NLW – 2016-2019

**2.4** Figure 2.2 shows the value of each minimum wage rate relative to the rate immediately above it and, since its introduction, the NLW over time. The overall trend is that the rates for younger workers have seen slight relative declines. However, in the period since the NLW was introduced, the minimum wages for 18-20 and 21-24 year olds have gained value relative to their counterparts aged 25 and over. The minimum wage for 16-17 year olds has lost value relative to the NLW since its introduction, reflecting the younger group’s relatively poor labour market outcomes.

Figure 2.2: Relative value of the youth to adult/NLW rates, by age, UK, 1999-2019

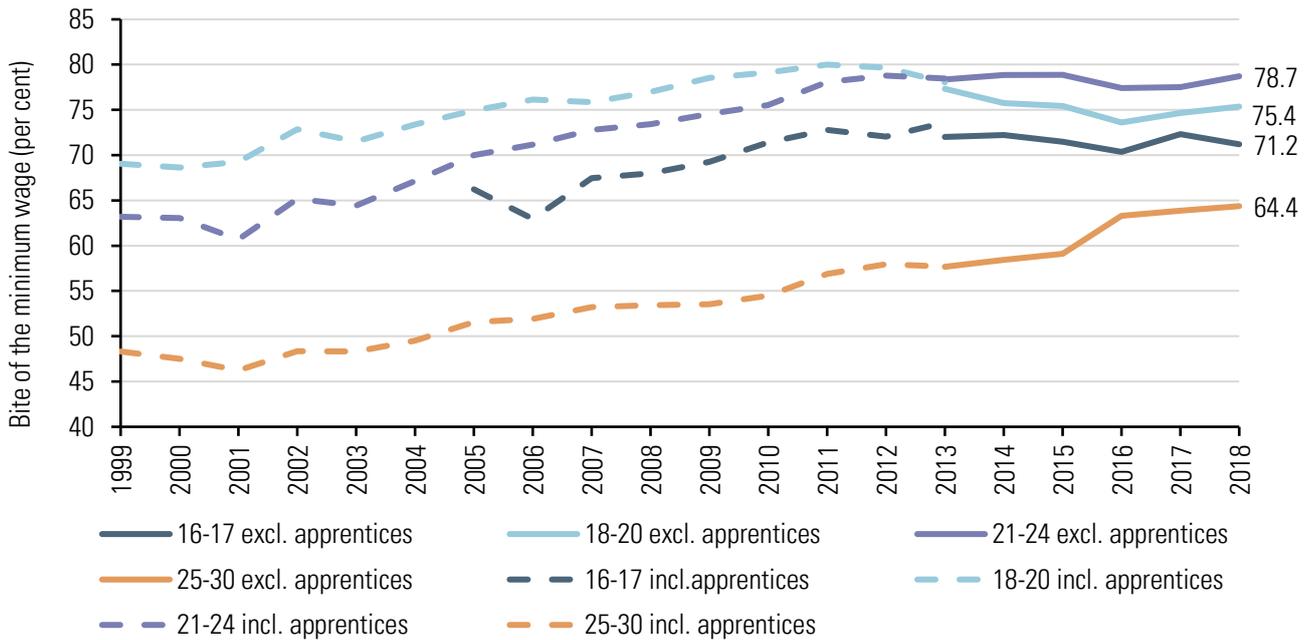


Source: LPC estimates using ASHE: without supplementary information, April 1999-2004; with supplementary information, April 2004-06; 2007 methodology, April 2006-11; and 2010 methodology, April 2011-18, standard weights, UK.

**2.5** Despite minimum wages for the youngest workers losing ground over time compared with those of their older counterparts, the NMW for these groups still increased faster than average wages for these younger age groups. This means that minimum wage bites for young workers – the value of their minimum wage relative to median earnings – have increased over time. Figure 2.3 shows the bite paths for various age groups since 1999. Prior to 2013, it was not possible to distinguish in ASHE data between apprentices – who are generally not covered by the age rates of the minimum wage – and other workers. The dotted lines likely over-estimate the bite for young workers to a small extent as apprentice pay is lower; hence their inclusion produces a lower estimate of median pay. However, the inclusion of an apprentice identifier in the data since 2013 has enabled us to exclude apprentices not entitled to the age-related rates. This does not change the bite estimate substantially, or change the upward path of the youth minimum wage rates’ bites, to any great extent. Figure 2.3 also shows that the bites for young workers have been stable, or fallen, in recent years, reflecting the relatively strong growth in youth wages from 2014 onwards.

## National Minimum Wage

Figure 2.3: Bite of the minimum wage, by age, UK, 1999-2018

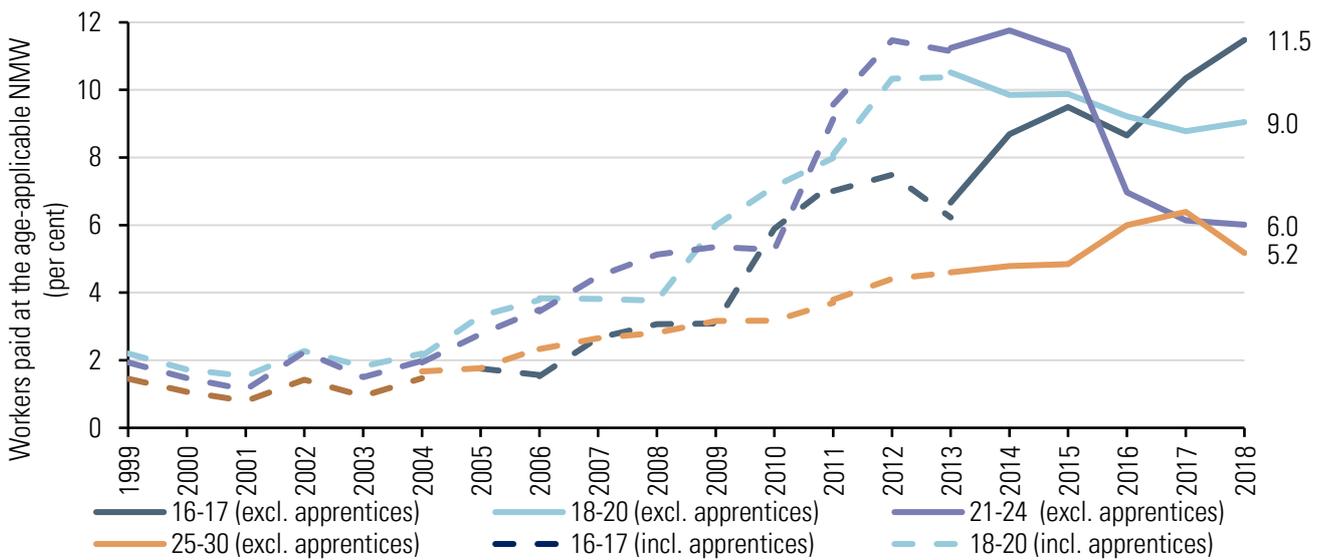


Source: LPC estimates using ASHE: without supplementary information, April 1999-2004; with supplementary information, April 2004-06; 2007 methodology, April 2006-11; and 2010 methodology, April 2011-18, standard weights, UK.

Note: For simplicity, the bite path for 21-24 year olds measures the adult rate relative to median pay for 21-24 year olds. Technically, the adult rate only applied to 21 year olds from October 2010; prior to this they were entitled to the Youth Development Rate, although many were paid the adult rate.

**2.6** While over the long term the number of young workers paid at their age-appropriate rate has increased, the introduction of the NLW has changed this pattern. Figure 2.4 shows that use of the youth rates has fallen in recent years, particularly for 21-24 year olds, but also slightly for 18-20 year olds. The number of 21-24 year olds paid at their age-appropriate rate fell steeply when the NLW was introduced, as many employers opted to pay the highest rate to workers aged 21-24 alongside their colleagues aged 25 and over. The relatively low usage of the 21-24 Year Old Rate since 2016 further emphasises the need to review the appropriateness of treating workers aged 21-24 differently to their counterparts aged 25 and over. We consider the impact of the NLW and use of the 21-24 Year Old Rate further below.

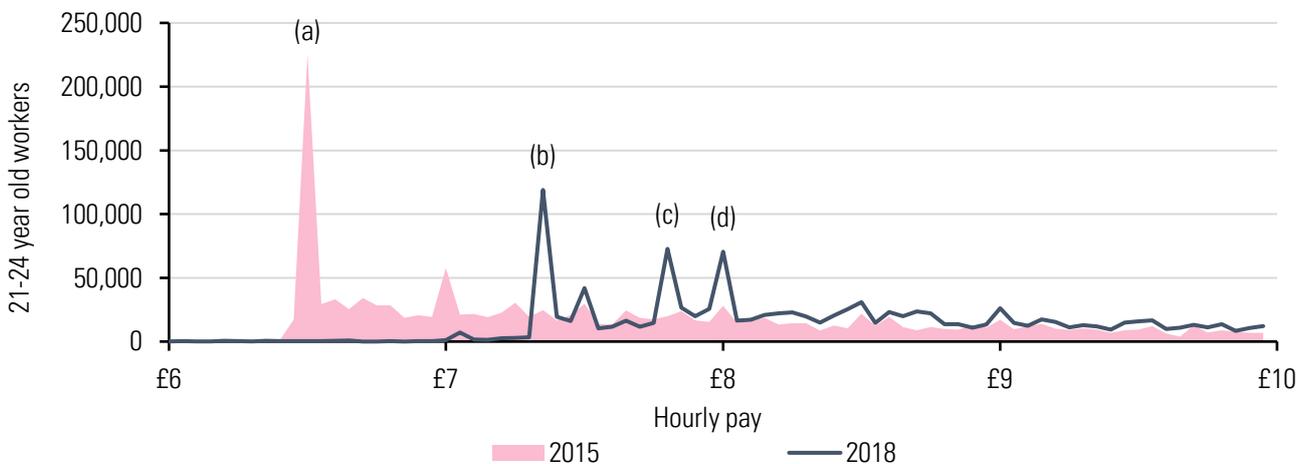
Figure 2.4: Use of the National Minimum Wage, by age, UK, 1999-2018.



Source: LPC estimates using ASHE: without supplementary information, April 1999-2004; with supplementary information, April 2004-06; 2007 methodology, April 2006-11; and 2010 methodology, April 2011-18, standard weights, UK.

2.7 The fall in usage of the 21-24 Year Old Rate following the introduction of the NLW raises questions about what has happened to pay for this age group, in particular, where in the distribution the workers paid at this rate have moved, whether up to the NLW or in between the 21-24 Year Old Rate and the NLW. Figure 2.5 shows the hourly pay distributions (in 5 pence intervals) for 2018 (the latest available data) and for 2015, the year before the NLW was introduced. The picture reflects the decline in usage shown in Figure 2.4, with the ‘spike’ – point (a) – at the then adult rate of the NMW (for those aged 21 and over) around twice as high as the equivalent spike at the 21-24 Year Old Rate in 2018 (point (b)).

Figure 2.5: Distribution of hourly pay for 21-24 year olds, 5 pence intervals, 2015 and 2018

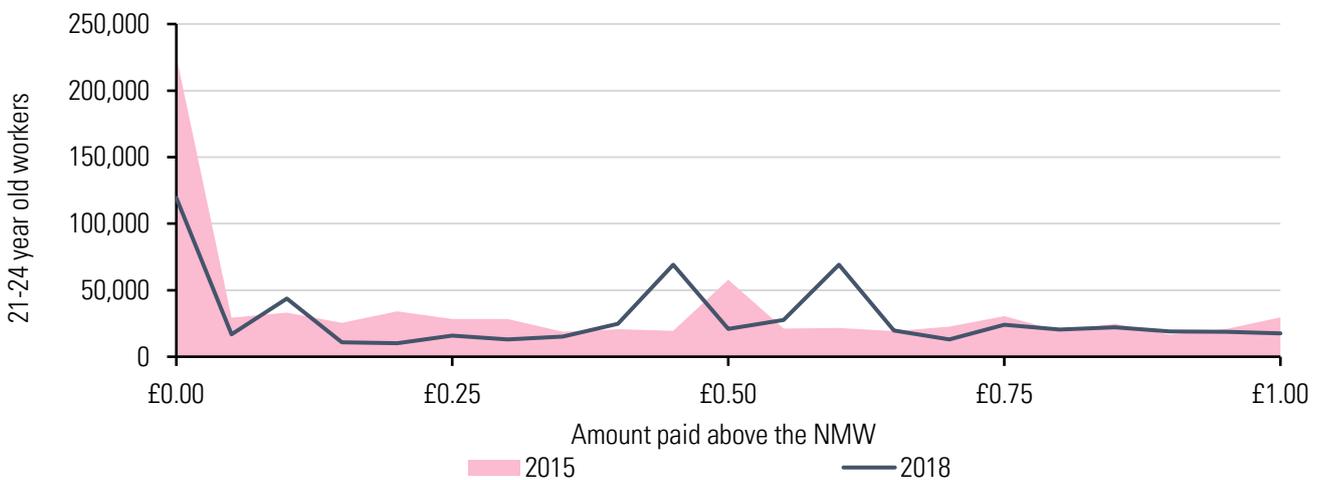


Source: LPC estimates using ASHE 2010 methodology, standard weights, UK, 2015 and 2018.

## National Minimum Wage

**2.8** Workers appear to have moved to the NLW, point (c), and £8 an hour, point (d). The latter trend – employers moving workers beyond the NLW to £8 an hour – is something we identified for workers aged 25 and over in our 2018 Report. Looking in further detail we can overlay the two distributions from 2015 and 2018 to understand if there is ‘bunching’ immediately above the 21-24 Year Old Rate. Were this to be the case then it may be an indication of pressure on employers. However, Figure 2.6 shows that not only has the number paid within 5 pence of the rate fallen, but so has the share paid between 15 pence and 35 pence above the rate. Whereas the increases are concentrated further up the distribution and correspond – as noted previously – with the NLW and £8 an hour.

**Figure 2.6: Distribution of ‘distance’ above NMW rates for 21-24 year olds, 5 pence intervals, 2015 and 2018**



Source: LPC estimates using ASHE 2010 methodology, standard weights, UK, 2015 and 2018.

**2.9** Over the lifetime of the NMW younger workers have seen lower increases in their NMW rates than those aged over 25. However, these increases have been faster than average earnings, meaning the bites have risen. During the recession the recommended increases were moderated to protect employment. However, since the introduction of the NLW usage of 21-24 Year Old Rate has fallen, as many employers chose to pay these workers at the NLW or above.

# Chapter 3

## The changing youth labour market

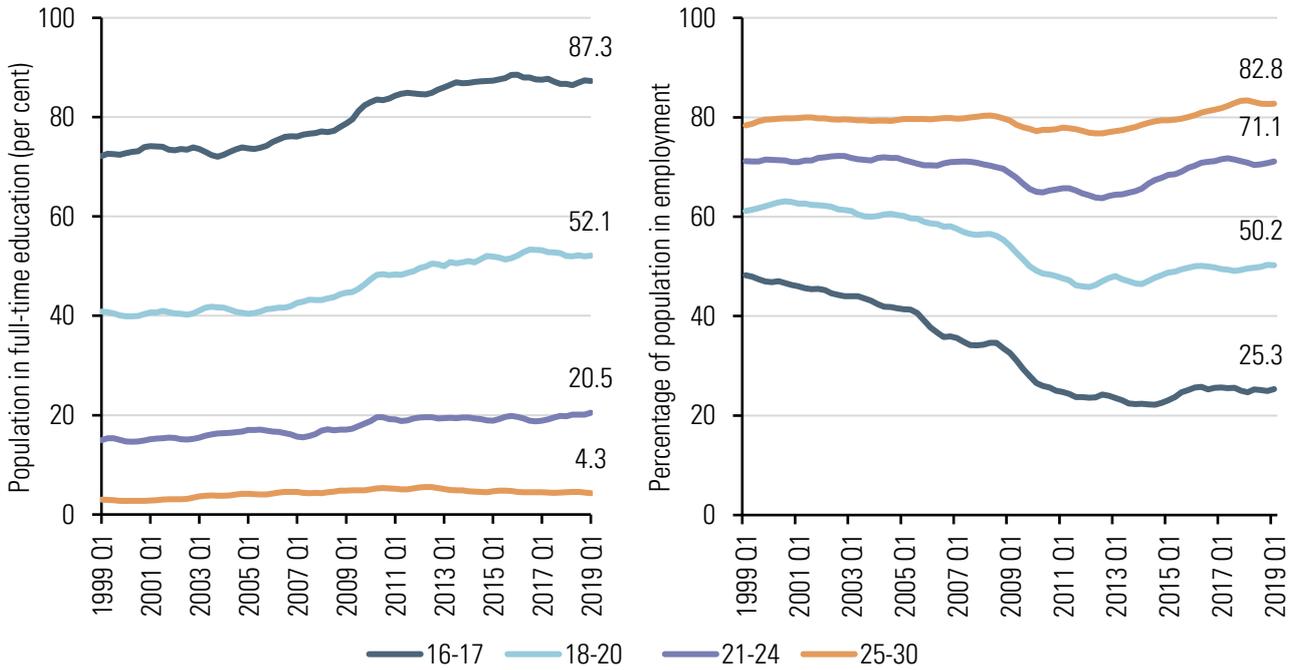
**3.1** The youth labour market has changed since the NMW was introduced. Increasing participation in full-time education, formalised in England with the Raising the Participation Age policy, has been associated with falling labour market participation and even greater falls in the number of full-time jobs undertaken by young workers. Young people are now entering the labour market later and are less likely to combine doing so with education than in the past. There have been slight increases in the share of young people working in low-paying occupations, though this mainly took place in the years leading up to the financial crisis of 2008.

**3.2** The relativities between the youth and adult rates were broadly maintained up until 2009, and then began to widen as we recommended smaller increases for the youngest workers in light of the deteriorating youth labour market following the financial crisis.

**3.3** This chapter presents an overview of the changes to the youth labour market over the last two decades. This includes a look at the changes to the youth and adult minimum wages over this period, including the widening differential between the youth and adult rates, coverage, and bite of the minimum wage. A key question for the review is whether the current age bands, and the relativities between the different rates, are appropriate for today's youth labour market.

**3.4** The aim of this chapter is to understand how the broader environment has changed for young workers. Participation in full-time education (FTE) increased for all ages over the last two decades as shown in the left hand panel of Figure 3.1. While educational participation has increased among 21-24 year olds, those in FTE still constitute a minority (20 per cent) of this population. The data also suggest that educational participation plateaued from 2016 onwards for 16-17 and 18-20 year olds, and from 2010 for 21-24 year olds.

Figure 3.1: Percentage of population in full-time education (left panel), and employment (right panel) by age, UK, 1999-2019



Source: LPC estimates using LFS microdata, quarterly, four-quarter moving average, UK, Q2 1998-Q1 2019.

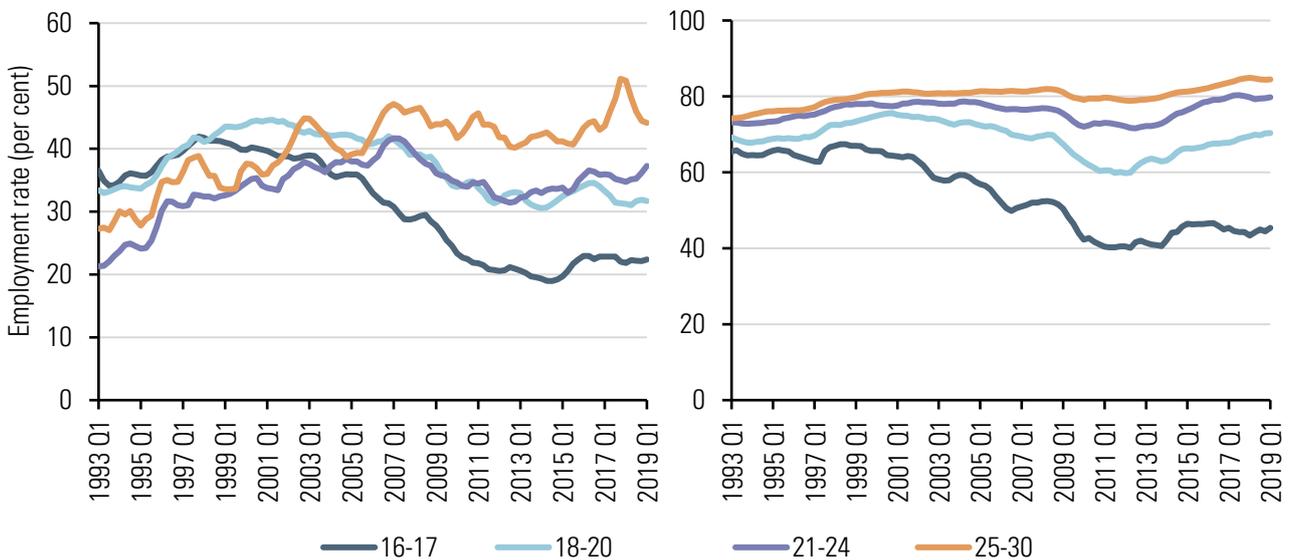
**3.5** Among 16-17 and 18-20 year olds, rising participation in FTE is accompanied by falling employment as shown in the right hand panel of Figure 3.1. However, it is important to note that there is no binary distinction between education and employment. Many students have part-time jobs (Figure 3.2) and many more would like one. The employment rate for 16-17 year olds fell by 24 percentage points over the two decades to the first quarter of 2019, reflecting more than just the increase in educational participation, as the period also saw reduced part-time working among students. Among 18-20 year olds, the fall in the employment rate mirrors the increase in educational participation over this period. There was a different pattern for 21-24 year olds, with increased educational participation having little impact on employment. As with educational participation, employment levels for young people have plateaued over the last two years.

**3.6** For decisions on the minimum wage, we are particularly interested in what is happening to the employment rate among young people not in FTE (even though the proportion of young people in this group has fallen over time as educational participation has increased). We focus on this group because, having left education, it is important that they transition successfully to the labour market. A large body of evidence (Gregg and Tominey, 2004; Bell and Blanchflower, 2011; Eurofound, 2017) suggests that periods of unemployment can damage young people’s pay and employment prospects for many years into the future. Indeed, utilising the National Child Development Survey to analyse the impact of youth unemployment, Gregg and Tominey (2005) found a large and significant wage penalty, even after controlling for education, region and a wealth of family and individual characteristics. Their results

suggested a scar from early unemployment in the magnitude of 13–21 per cent after twenty years. However, this penalty was lower, at 9–11 per cent, if individuals avoided repeat exposure to unemployment. We also monitor part-time working combined with education as this has been shown to lead to better labour market outcomes in the future for young people (UK Commission for Employment and Skills, 2015).

**3.7** The right hand panel of Figure 3.2 shows that employment rates for 21-24 year olds not in full-time education have surpassed their pre-recession highs. For 18-20 year olds employment rates are slightly below and for 16-17 year olds they are well below. However, for these two age groups this, at least in part, reflects their changing composition. While there are now less than half the number of 16-17 year olds not in full-time education compared with 2007 the proportion with no qualifications is slightly higher at 24 per cent compared with 22 per cent pre-recession. For 18-20 year olds however, the share with no qualifications has fallen from 12 per cent to 7.5 per cent. As more and more 16-20 year olds participate in full-time education, those that do not are more likely to face some kind of labour market barrier. Hence, we might expect this group to encounter more problems accessing the labour market today than their counterparts twenty years ago.

**Figure 3.2: Employment rate of those in full-time education (left) and not in full-time education (right) by age, UK, 1999-2019**



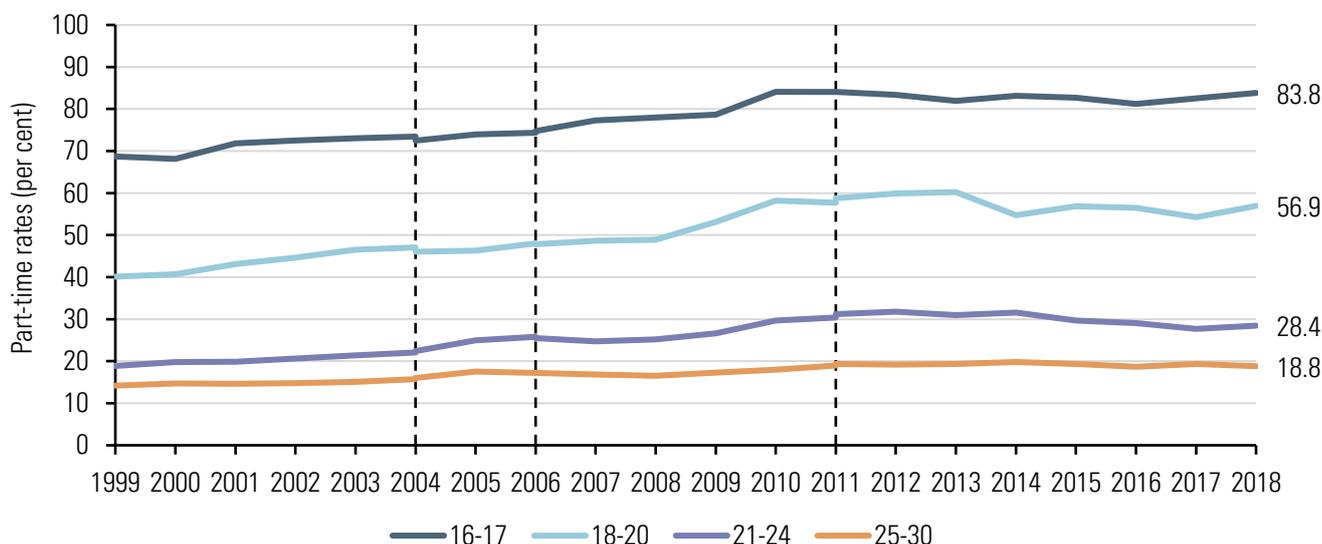
Source: LPC estimates using LFS microdata, quarterly, four-quarter moving average, UK Q2 1998-Q1 2019.

**3.8** Rising educational participation would be expected to change how, and where, young people work. Figure 3.3 shows a rise in part-time jobs at all ages over the two decades following the introduction of the NMW. Among 16-17 year olds, more than eight in ten jobs were part-time in April 2018, up from just under seven in ten jobs in April 1999. More than half of jobs held by 18-20 year olds were part-time in 2018, up from 40 per cent in 1999. The vast majority of jobs held by 21-24 year olds

## National Minimum Wage

were full-time throughout this period, although the proportion of jobs that were part-time rose from 20 to 28 per cent.

**Figure 3.3: Percentage of all jobs that are part-time, by age, UK, 1999-2018**

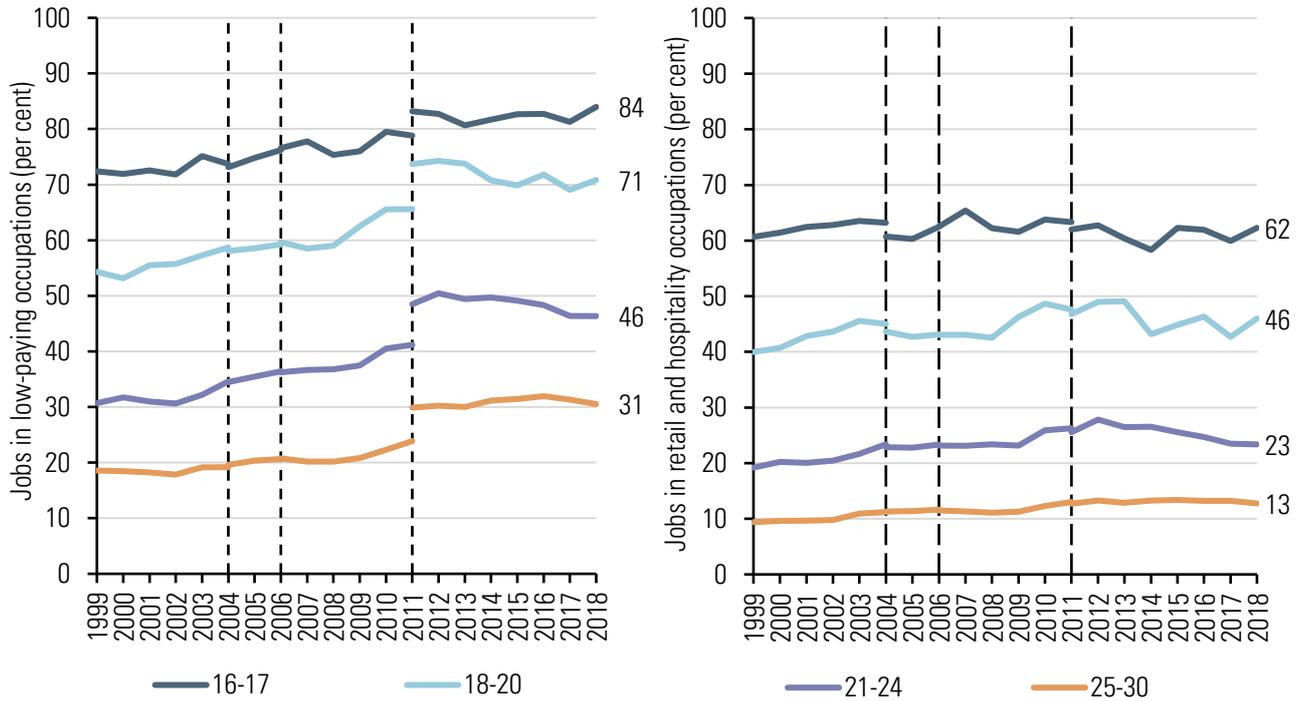


Source: LPC estimates using ASHE: without supplementary information, April 1999-2004; with supplementary information, April 2004-06; 2007 methodology, April 2006-11; and 2010 methodology, April 2011-18, standard weights, including those not on adult rates, including apprentices, UK.

**3.9** However, Figure 3.3 also shows that much of the increase in part-time working occurred before 2010, with the proportion of part-time jobs remaining stable, or falling slightly, in the following period.

**3.10** The past 20 years have also seen an increase, for all ages, in the proportion working in low-paying occupations – that is, sectors with relatively low pay, where there is typically greater use of the minimum wage. Part of this is due to relatively high levels of job growth in these sectors over time. In addition, for young people, increasing educational participation and increased reliance on part-time work may restrict the type of jobs they can do, with low-paying sectors such as hospitality and retail becoming more important. However, as with part-time working, consistent estimates using ASHE suggest very little change in the proportion of young people in low-paying sector jobs after 2011. Indeed, Figure 3.4 shows that the proportion of low-paying jobs for 18-20 and 21-24 year olds has fallen since 2011. Two low-paying sectors in particular, retail and hospitality, have always been important for young people accessing the labour market. Figure 3.4 shows that the proportion of young workers’ jobs in these two sectors has been relatively stable over the last two decades.

Figure 3.4: Percentage of jobs held young people working in low-paying sectors (left), and in retail and hospitality (right), by age, UK, 1999-2018

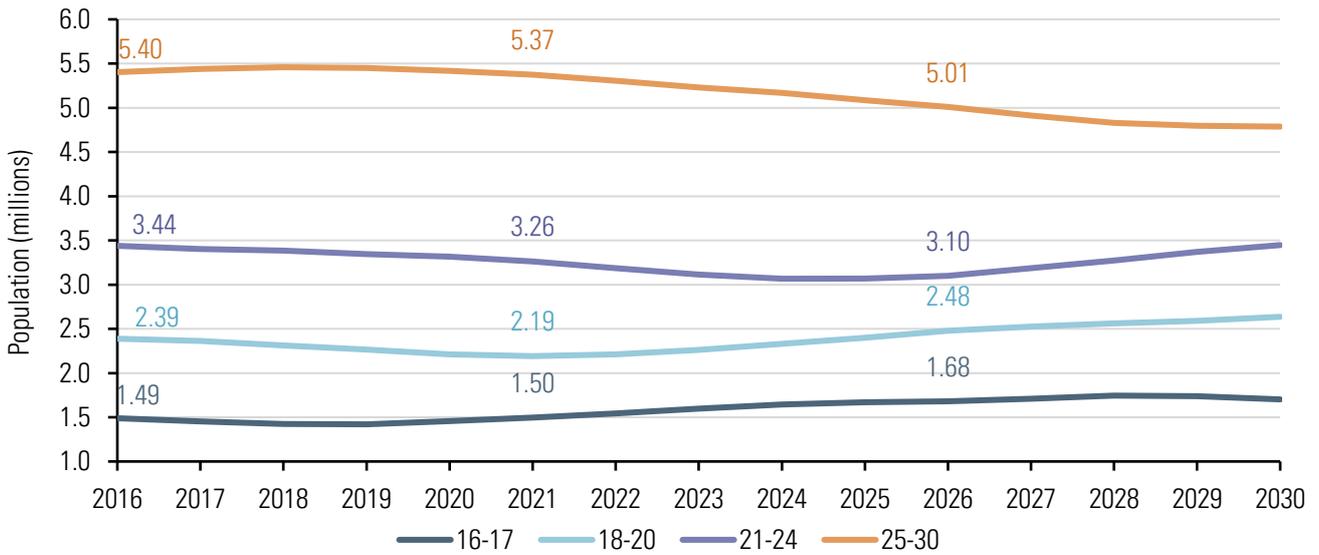


Source: LPC estimates using ASHE: without supplementary information, April 1999-2004; with supplementary information, April 2004-06; 2007 methodology, April 2006-11; and 2010 methodology, April 2011-18, standard weights, including those not on adult rates, including apprentices, UK.

**3.11** Broadly, the analysis of the youth labour market demonstrates substantial change over the last two decades for 16-17 year olds; more modest change for 18-20 year olds; and relatively less change for 21-24 year olds.

**3.12** Changing demographics are also an important determinant of outcomes and so population projections also provide important clues about how the youth labour market might change in the future. Figure 3.5 shows projected population growth to 2030. Theoretically, a falling population implies a tightening labour market – assuming the demand for labour remains constant. In principle, this could increase employment rates and wages. Figure 3.5 shows that the numbers of people aged 21-24 and 25-30 are projected to fall between 2020 and 2025. A declining number of 21-24 year olds – particularly alongside a declining number of 25-30 year olds, who may be natural substitutes – could strengthen the labour market position of 21-24 year olds over this period. From 2025, the number of 21-24 year olds begins to rise but the population aged 25-30 continues to fall.

Figure 3.5: Population projections, by age, UK, 2020-2030

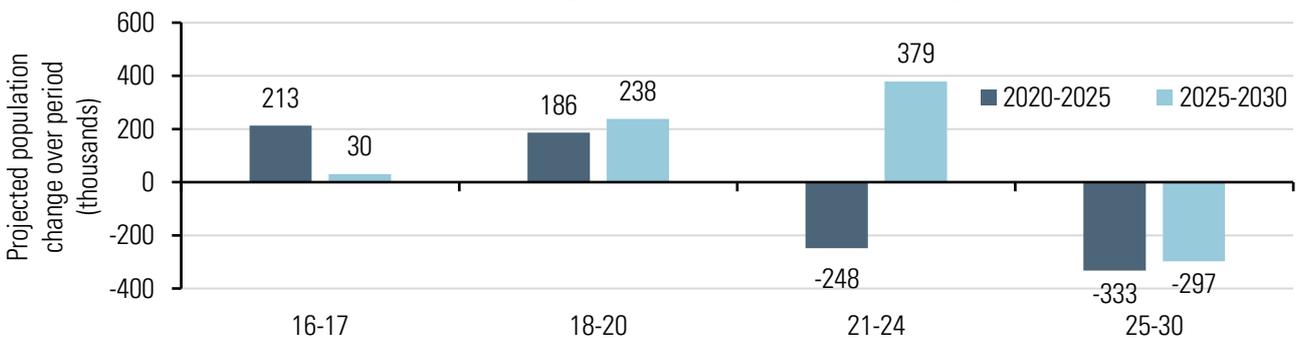


Source: Office for National Statistics, 2016 based National Population Projections, UK, 2020-30.

**3.13** There is a different pattern for younger workers. Between 2020 and 2025 the populations aged 16-17 and 18-20 are projected to rise. Generally, an increased labour supply might imply an increased risk of unemployment – and reduced incentives for employers to raise pay. However, these effects may be mediated to some extent by the fall in population aged 21-30 over this period, if younger workers are potential substitutes for these workers.

**3.14** Figure 3.6 shows that the projected fall in 21-30 year olds between 2020 and 2025 – totalling around 580,000 – more than offsets the projected increase in the number of 16-20 year olds (around 400,000). After 2025, the population aged 16-17 stabilises but there is continued growth in both the number of 18-20 year olds and 21-24 year olds, albeit alongside a continued fall in the number of 25-30 year olds. The impact of these changes on young workers will depend on what is happening to jobs across the economy, particularly in low-paying sectors, and the extent to which 21-24 year olds are able to access higher-paying jobs or have to compete with 18-20 year olds for low-paying jobs.

Figure 3.6: Projected population change over two periods, by age, UK, 2020-2030



Source: Office for National Statistics, 2016 based National Population Projections, UK, 2020-30.

# Chapter 4

## Consideration of the age bands

**4.1** This chapter looks at the key indicators which informed our decisions on the scope to raise the pay floor for young workers. These include: patterns of educational and labour market participation; patterns of work, including how, and where young people work; and variations in pay, bite and coverage of the minimum wage. We also consider the main rationales for the original age structure – the greater risk of unemployment for young people, and the expectation that young people will receive accredited training.

**4.2** We examine how each of the measures varies by age, and the extent to which they suggest an alternative structure for the minimum wage, that is, whether there are natural breaks at particular ages which might indicate that different minimum wages are appropriate.

**4.3** We assess the extent to which individual age groups are similar or different to each other; and, by implication, whether there is a strong rationale for treating them differently. And we examine the implications of moving any age group to the wage floor above.

### **Educational and labour market participation**

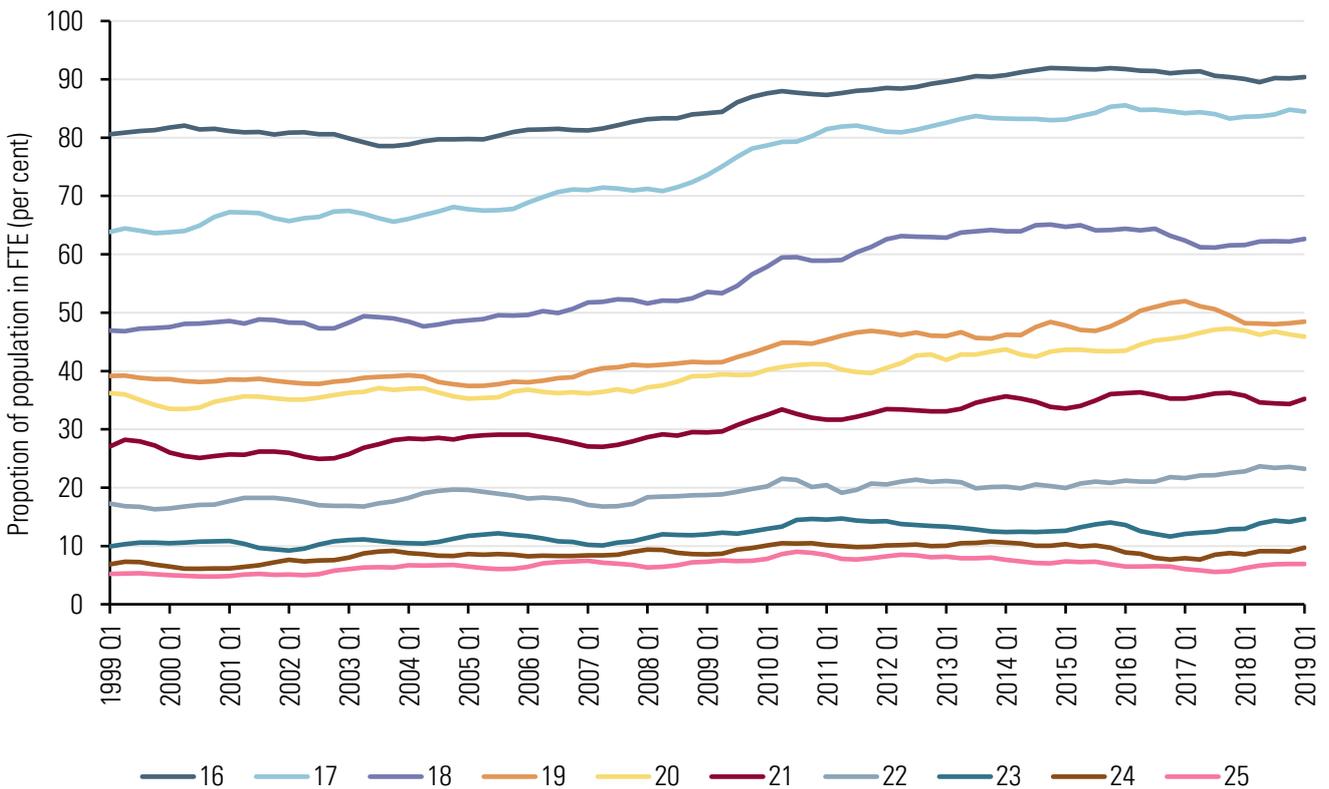
**4.4** When the National Minimum Wage (NMW) was introduced, a key consideration for treating young workers differently to older workers was their position in the labour market, including their greater participation in full-time education (FTE). While there is clearly a relationship with age, Figure 4.1 shows that there are few natural breaks which might point to an obvious minimum wage structure. The exception is the notable difference in educational participation between 17 and 18 year olds (22 percentage points), which supports a break at 18 (and therefore the rationale for the 16-17 Year Old Rate).

## National Minimum Wage

**4.5** There is a smaller difference at the upper boundary of the 18-20 Year Old Rate, between 19, 20 and 21 year olds. But there is a significant difference in the educational participation of 18 and 21 year olds. If the wage floor for 20 (and 19) year olds was aligned with that for 21 year olds, it would leave a single-year minimum wage band for 18 year olds, which would increase complexity, and possibly the risk of non-compliance. In our discussion with stakeholders many asked for a reduction in complexity. Participation in FTE falls by around 10 percentage points between ages 21 and 22, and similarly between ages 22 and 23. But by ages 23 and 24, rates of participation in FTE are only slightly above those of 25 year olds.

**4.6** Throughout the analysis we have considered the pay and employment of 16-30 year olds. However, there is only a 4 percentage point difference between the FTE participation rates of 25 and 30 year olds, and around a 3 percentage point difference between their overall employment rates. In some cases, we have therefore simplified the charts to show only the labour market trends for 16-25 year olds as the primary group of interest.

**Figure 4.1: Participation in full-time education, by age, UK, 1999-2019**

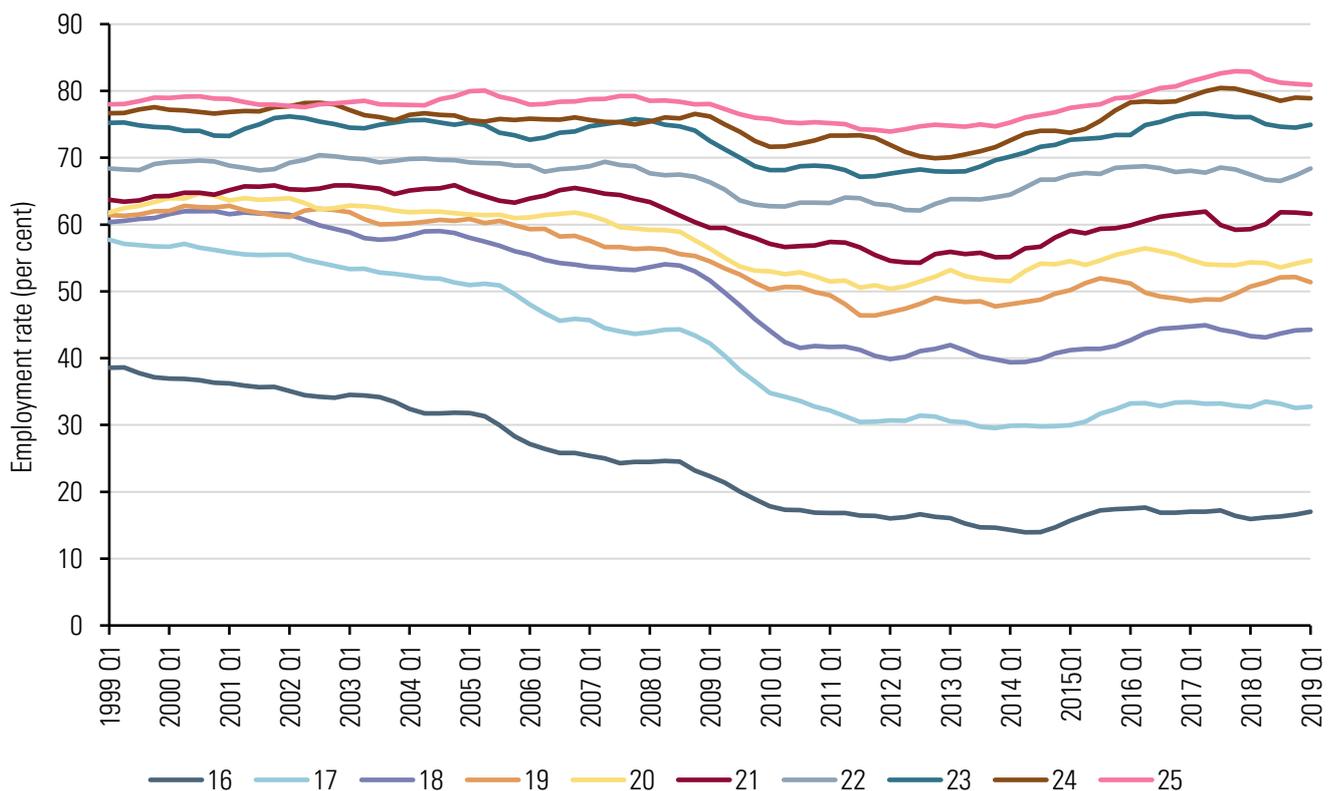


Source: LPC estimates using LFS microdata, quarterly, four-quarter moving average, UK, Q2 1998-Q1 2019.

4.7 Higher levels of educational participation are linked to lower employment, and also influence the type of work undertaken by young people. Young people in FTE are restricted in the number of hours they can work, the times they are available to work, and how far they can travel for work. These restrictions – in addition to their relative lack of work experience – likely reduce their bargaining power in the labour market and have implications for the type of jobs they undertake.

4.8 Figure 4.2 shows a clear relationship between employment and age – which has become more prominent over the last two decades – but again there are few clear implications – or natural breaks – for the minimum wage structure. There is a notable difference between 16 and 17 year olds (around 15 percentage points), and a smaller difference between 17 and 18 year olds (11 percentage points), but thereafter each additional year of age is generally associated with around a 6 percentage point increase in the employment rate up to age 23. As with educational participation, 23 and 24 year olds are similar to 25 year olds.

Figure 4.2: Employment rate, by age, UK, 1999-2019

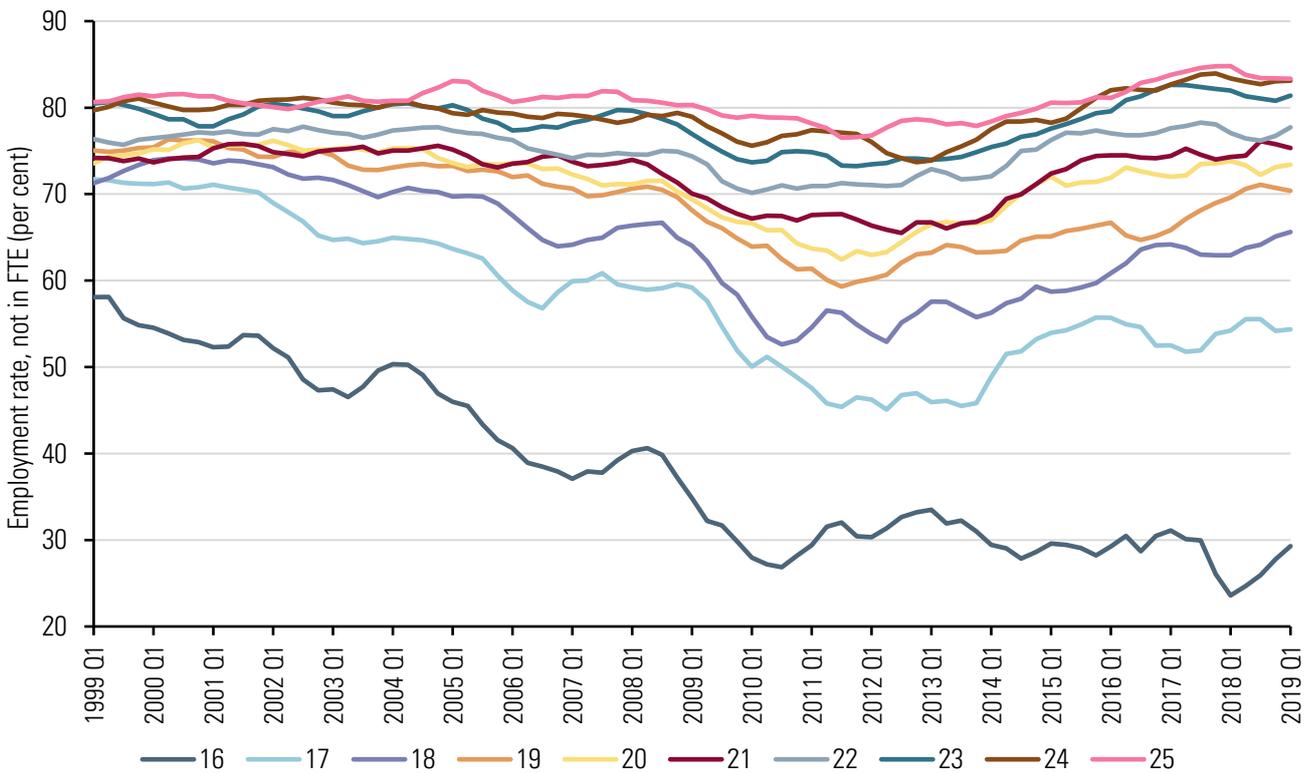


Source: LPC estimates using LFS microdata, quarterly, four-quarter moving average, UK, Q2 1998-Q1 2019.

## National Minimum Wage

**4.9** Figure 4.3 shows employment rates for the subset of young people not in FTE. This group is particularly important, as, once young people leave education, employment is essential for their future prospects. On this measure, the gulf between 16 and 17 year olds is greater (25 percentage points) but the vast majority of 16 year olds are in FTE – so not included here – and those 16 year olds that are not in FTE may have problems (for example related to health or disability) which present additional barriers to employment. In general, the patterns by age are similar to those shown in Figure 4.2, with the employment gap reducing with age, and little difference between 23, 24 and 25 year olds.

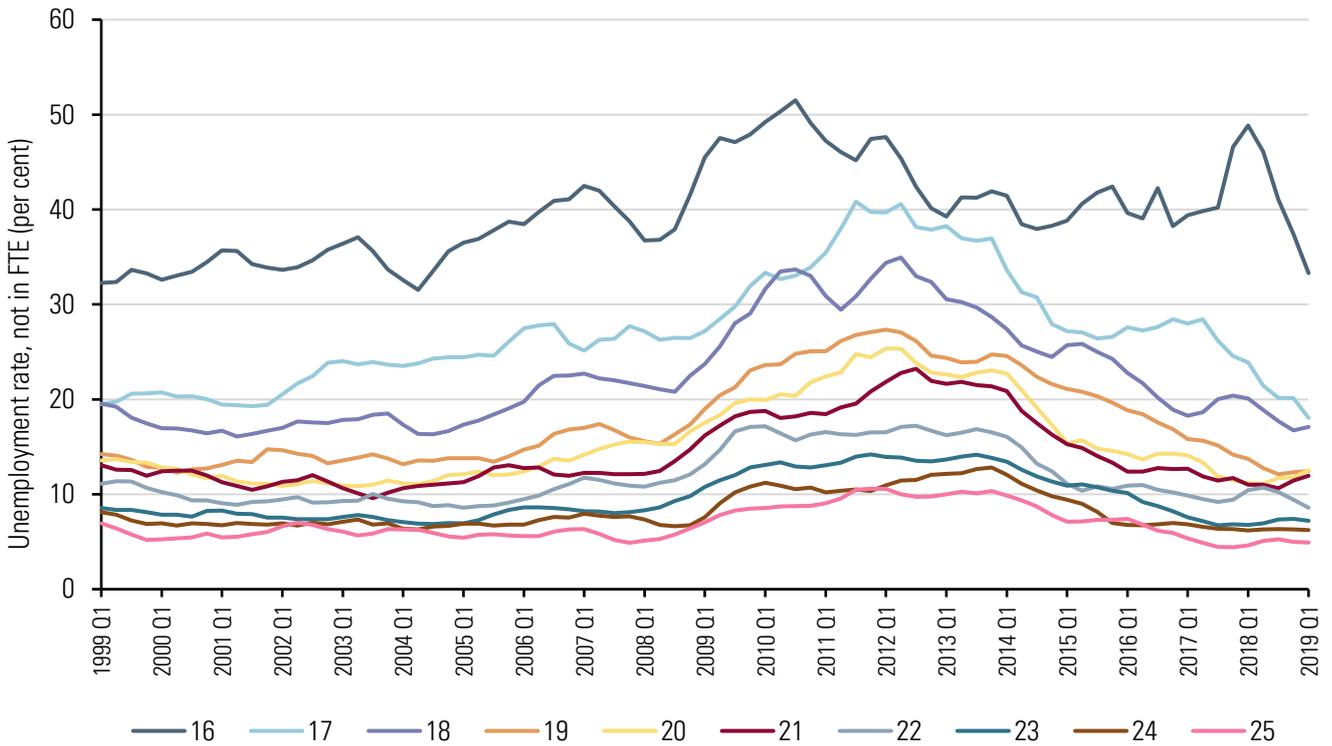
**Figure 4.3: Employment rates (not in full-time education), by age, UK, 1999-2019**



Source: LPC estimates using LFS microdata, quarterly, four-quarter moving average, UK, Q2 1998-Q1 2019.

**4.10** From the outset, the key rationale for lower youth minimum wage rates was evidence of relatively high youth unemployment rates, and long-term wage and employment scarring from spells of youth unemployment. Figure 4.4 shows unemployment rates for those not in FTE. As with employment, 16 year olds stand apart from 17 year olds; the unemployment rate for 16 year olds not in FTE is high, but as shown previously, the majority of 16 year olds are in FTE. While unemployment rates have moved in response to economic conditions, the broad patterns by age have changed little over the last two decades. Generally, unemployment rates fall with age; but there is relatively little difference between 23, 24 and 25 year olds. On this measure, 21 year olds are closer to 19 and 20 year olds while 22 year olds now have unemployment rates closer to 23 year olds than 19-21 year olds.

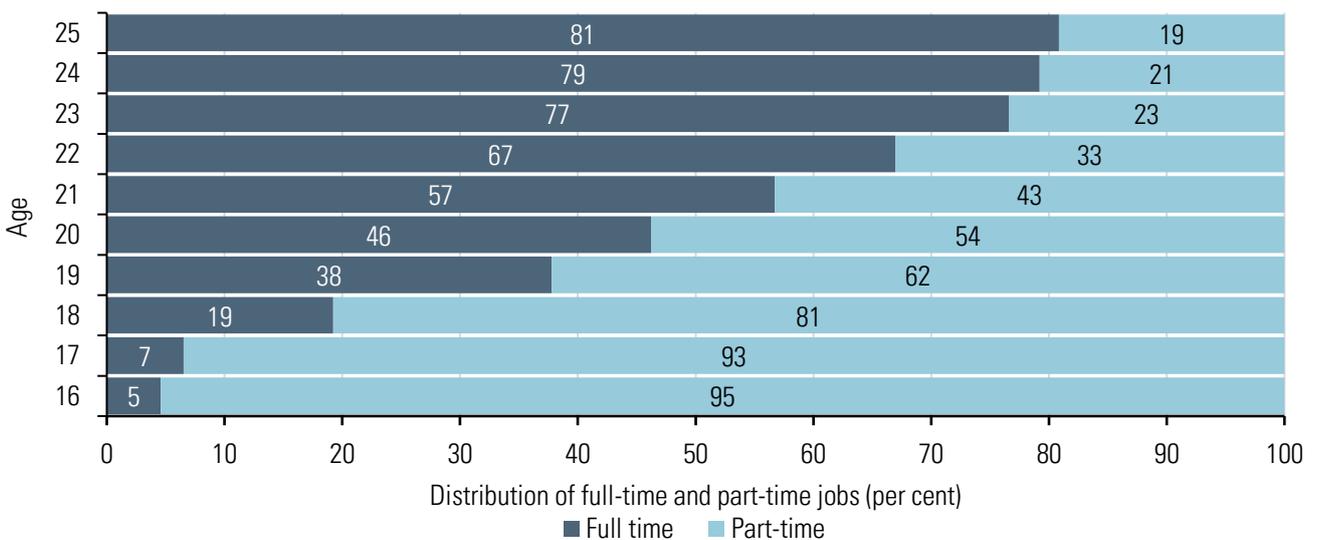
Figure 4.4: Unemployment rate for those not in full-time education (FTE), by age, UK, 1999-2019



Source: LPC estimates using LFS microdata, quarterly, four-quarter moving average, UK, Q2 1998-Q1 2019.

4.11 As mentioned previously, participation in education has implications for the types of jobs young people can undertake. Figure 4.5 shows that in April 2018, the majority of 16-20 year olds worked part-time; but from age 21, full-time working becomes more prevalent. Again, 23 and 24 year olds were similar to 25 year olds; around eight in ten worked full-time.

Figure 4.5: Distribution of full-time and part-time jobs, by age, UK, 2018

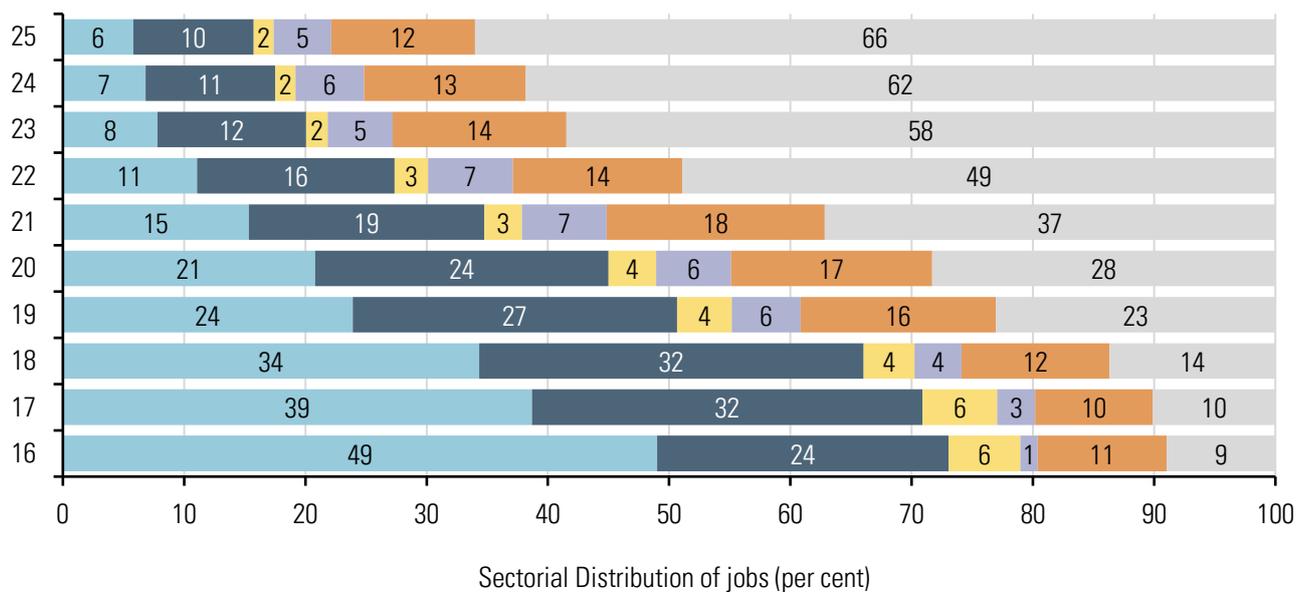


Source: LPC estimates using ASHE 2010 methodology, standard weights, UK, 2018.

## National Minimum Wage

**4.12** Figure 4.6 shows that young people are also concentrated in low-paying occupations, particularly in retail and hospitality, in part due to the availability of part-time work in these sectors. In April 2018, fewer than one in ten 16 year olds worked in a non low-paying occupation; but by age 22, half or more of jobs were in a non low-paying sector. The proportion of 23 and 24 year olds in non low-paying occupations was again similar to the proportion among 25 year olds.

**Figure 4.6: Distribution of jobs, by low-paying sector and age, UK, 2018**



Source: LPC estimates using ASHE 2010 methodology, standard weights, UK, 2018.

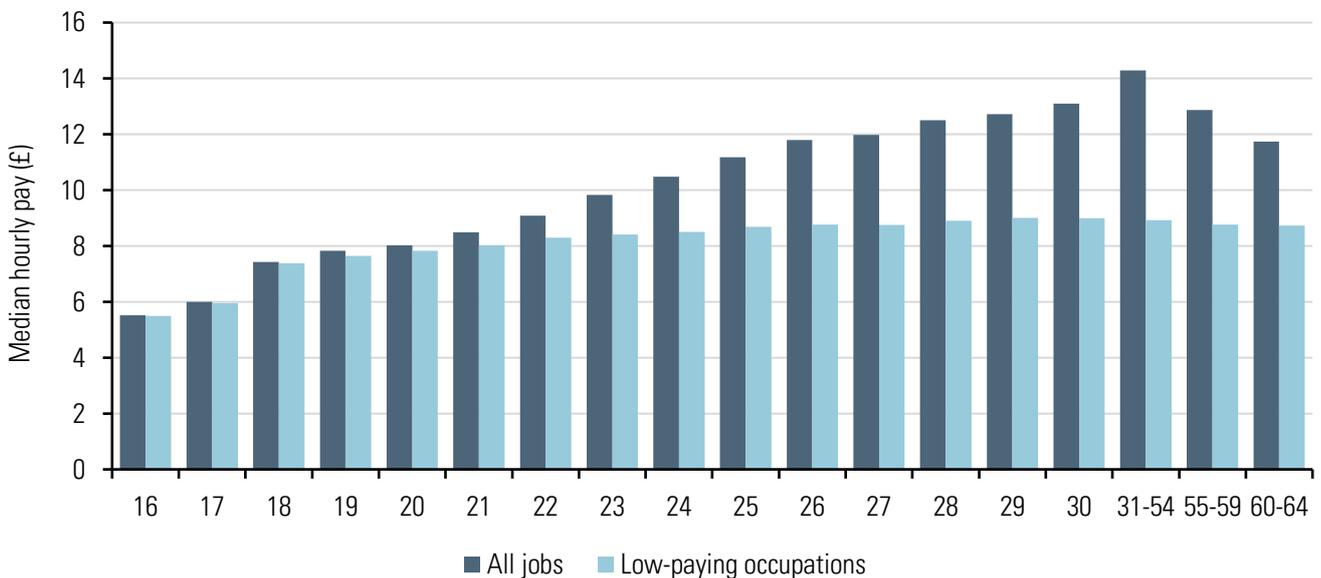
**4.13** It follows that young people are an important source of labour for some low-paying sectors, particularly retail and hospitality. In April 2018, workers aged 16-24 accounted for 29 per cent of the workforce in low-paying retail jobs, 41 per cent of the workforce in low-paying hospitality jobs but just 12 per cent of all jobs in the economy.

**4.14** Conducting qualitative research with low-paying sector employers, commissioned for this review, Hudson-Sharp, Manzoni, Rolfe and Runge (2019) found that young people were a valued source of labour, noting: ‘In hospitality, the recruitment of young people was described as meeting its considerable immediate labour requirements, particularly for shift work and seasonal jobs. They were also seen as important in ensuring the future supply of managers and supervisory staff. Similarly, in the retail sector, young people were a source of flexible, as well as permanent labour, with students employed in a range of part-time roles and graduates taken on in full-time and training posts. Across sectors, young people were valued for their ability to cope with the physical demands of some jobs, for example kitchen work and childcare. A further factor was image, and the preference of some employers to employ young people who fit the brand of businesses such as pubs and bars.’

## Pay and use of the rates

**4.15** While young workers may be an important source of labour for some firms, their relative lack of work experience reduces their ability to command higher pay compared with older workers. Figure 4.7 shows that across the whole economy, hourly pay rises steeply with age. However, in low-paying occupations, there is a more muted relationship with age. Pay rises quite steeply from age 16 to age 18 but thereafter it grows more slowly up to the age of around 25 then plateaus. In sectors such as retail and hospitality, the coverage of the NLW rates is high, and while age-applicable rates set the pay floor for young people, the NLW will often serve as a de facto pay ceiling.

**Figure 4.7: Hourly pay, by age and sector, UK, 2018**

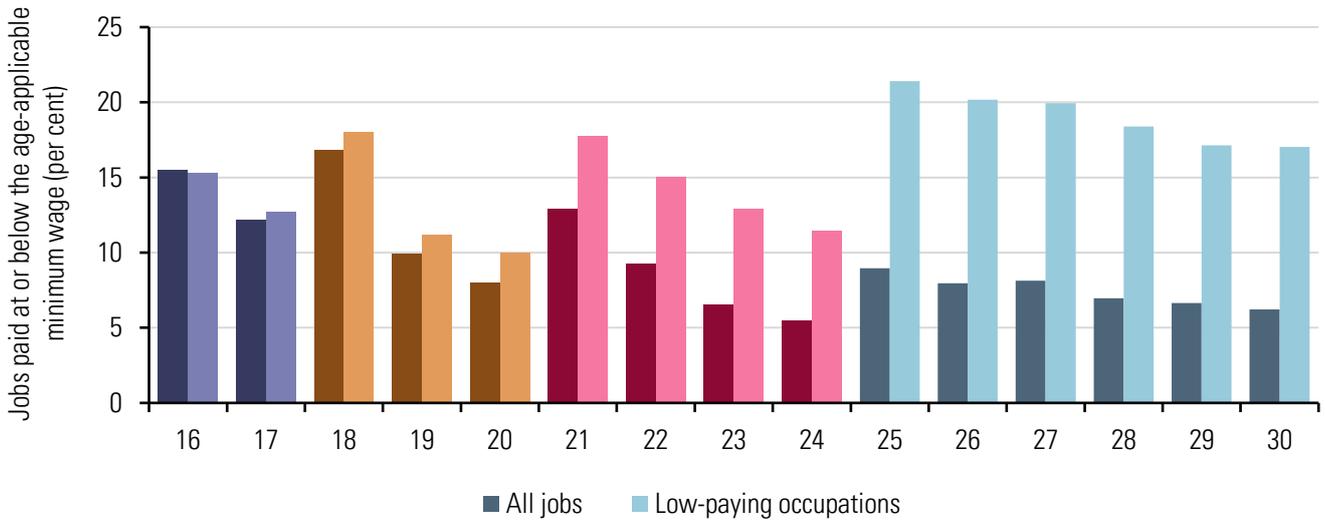


Source: LPC estimates using ASHE 2010 methodology, standard weights, UK, 2018.

**4.16** Figure 4.8 shows the percentage of workers paid at their age-applicable minimum wage, looking at jobs across the economy and in the low-paying occupations. Across the economy, young workers are more likely than their older counterparts to be paid at their age-applicable minimum wage, with use of the rates generally falling with age. But in low-paying occupations, because of high NLW coverage, this is less the case – workers aged 25 and over are more likely than younger workers to be paid at their age-applicable minimum wage (i.e. the NLW). This corresponds with evidence from employers in low-paying sectors, who tell us that they often pay young workers above their age-applicable rate, and sometimes at the NLW; but that the NLW is the ‘going rate’ for the job.

## National Minimum Wage

**Figure 4.8: Percentage of jobs paid at or below the age-applicable minimum wage, by age and sector, UK, 2018**

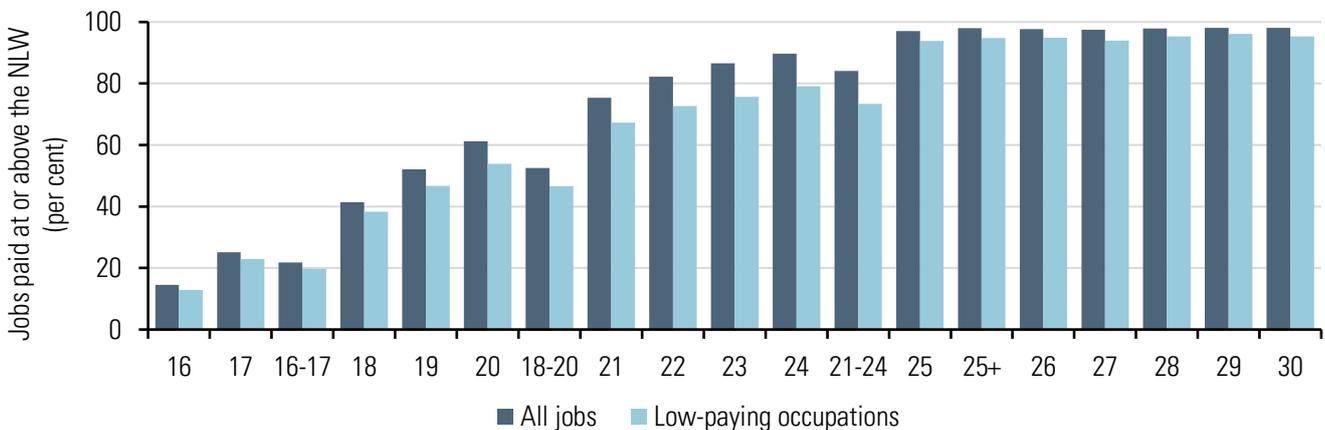


Source: LPC estimates using ASHE 2010 methodology, standard weights, UK, 2018.

**4.17** Figure 4.8 also shows that use of the minimum wage peaks for the lowest part of the age cohort covered by each rate – at age 16, 18, 21 and 25 – and then falls with age. This corresponds with anecdotal evidence from employers, who told us that the minimum wage was used when young people were new to the job, with pay rising thereafter. There is a slower drop-off from age 25, suggesting that the NLW is more often the pay ceiling.

**4.18** While young people in low-paying sector jobs were less likely than their counterparts aged 25-30 to be paid at their age-applicable NMW in April 2018, Figure 4.9 shows that very few 16-17 year olds, and a minority of 18-19 year olds were paid at or above the NLW. But by age 21, two-thirds of jobs in the low-paying occupations were paid at or above the NLW (67 per cent), rising to almost eight in ten of those held by 24 year olds (79 per cent).

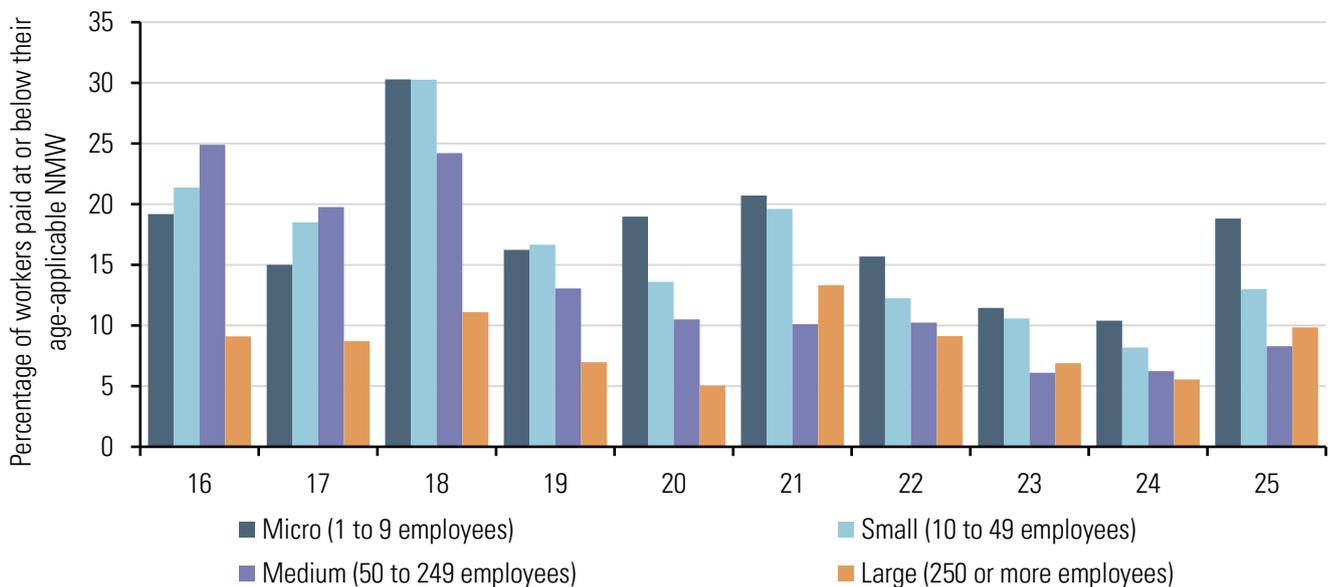
**Figure 4.9: Percentage of jobs paid at or above the National Living Wage (NLW), by age and sector, UK, 2018**



Source: LPC estimates using ASHE 2010 methodology, low pay weights, UK, 2018.

**4.19** The likelihood of being paid at the age-applicable NMW also varies between businesses. Figure 4.10 shows the proportion of jobs that are paid at or below the age-applicable wage by age and firm size. The picture is mixed for 16-17 year olds, but for those aged 18 and over, micro and small businesses (those with fewer than 50 employees) are most likely to use the age-related minimum wages. For example, in April 2018, 30 per cent of 18 year olds employed in micro businesses were paid at the 18-20 Year Old Rate compared with 11 per cent of those in large businesses. As smaller businesses are likely to be more dependent on these lower rates, they may experience greater cost pressures as the rates are increased, which could lead to a higher risk of negative employment effects.

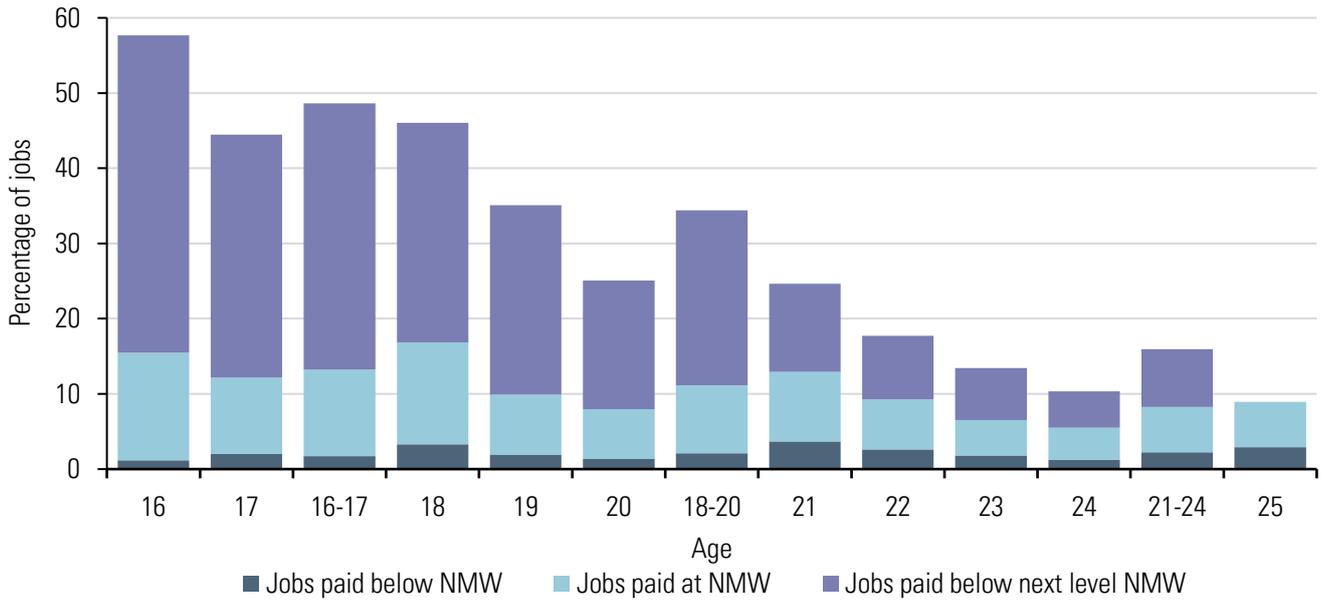
**Figure 4.10: Percentage of jobs paid at or below the age-applicable minimum wage, by age and firm size, UK, 2018**



Source: LPC estimates using ASHE 2010 methodology, low pay weights, UK, 2018.

**4.20** Any decision to raise the wage floor for young workers needs to consider the number of jobs that would be affected. Research on the impact of minimum wage increases for young workers – discussed in Chapter 5 – indicates that negative job impacts may be greater where a large number of jobs are affected by the higher minimum wage. Figure 4.11 suggests that moving young people aged 16-20 to the next level of the minimum wage structure – i.e. the wage floor above their current wage floor – would affect a large proportion of youth jobs. In April 2018, almost six in ten 16 year olds (58 per cent) and nearly half of 17 year olds (45 per cent), were paid less than the 18-20 Year Old Rate; and a similar proportion of 18 year olds (46 per cent) were paid less than the 21-24 Year Old Rate. The data suggest that raising the wage floor for these young workers to the level above could pose a substantial risk to their jobs if employers were unable or unwilling to pay them the higher rate. However, the number of jobs affected by raising the wage floor to the next level reduces with age; by age 24, just one in ten jobs were paid below the NLW.

Figure 4.11: Percentage of jobs paid below the next level of the minimum wage, by age, UK, 2018.



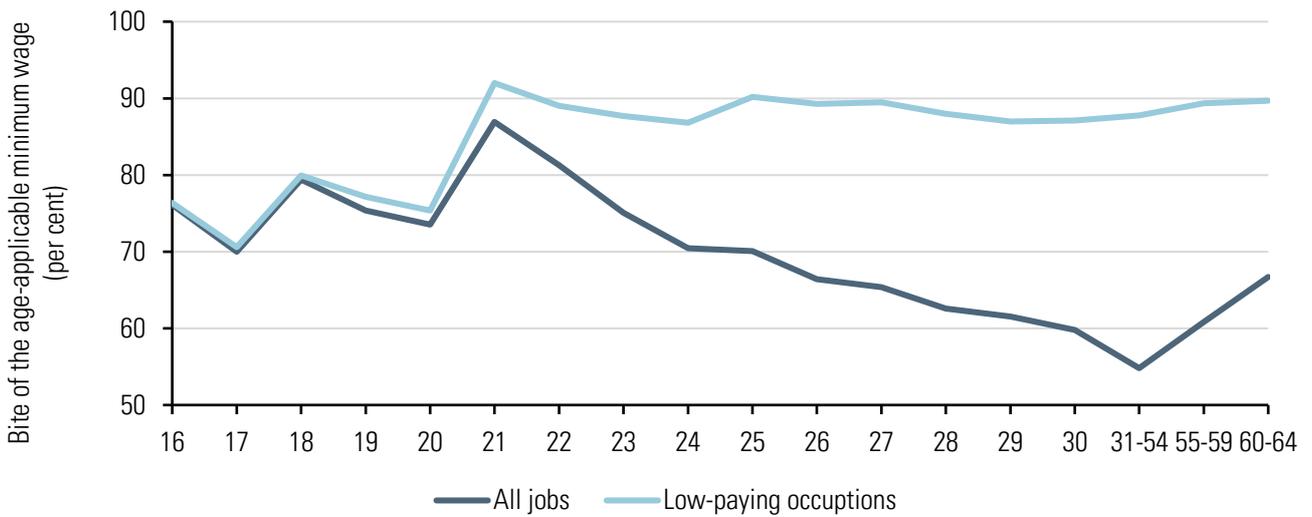
Source: LPC estimates using ASHE 2010 methodology, low pay weights, UK, 2018.

## Bite of the minimum wage

4.21 One measure for gauging the scope to raise pay is the bite of the minimum wage, calculated as the value of the minimum wage relative to median hourly pay. Since the introduction of the National Minimum Wage in 1999, we have monitored the bite as a potential indicator of the pressure produced by minimum wage increases.

4.22 Figure 4.12 shows that, measured against hourly pay across the economy for their age cohort, the bite of the minimum wage in April 2018 was relatively high for workers aged 16-20 (ranging from 70 to 80 per cent), and peaked at age 21 (87 per cent), before falling to 70 per cent for 25 year olds, and down to 60 per cent for 30 year olds. But in low-paying occupations – where the NMW/NLW is most likely to have an effect – show a different pattern. The lowest bites are for the youngest workers (aged 16-20); and although the bite still peaks for workers aged 21 (92 per cent), this is only slightly above the bite for 25 year olds (90 per cent), falling little thereafter.

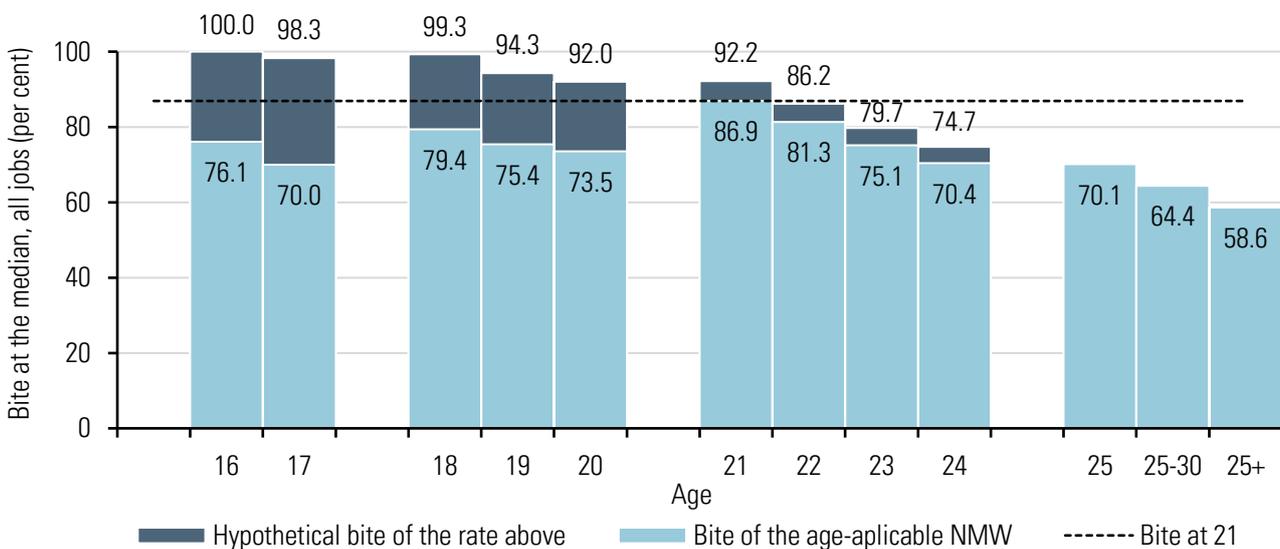
Figure 4.12: Bite of the age-applicable minimum wage, by age and sector, UK, 2018



Source: LPC estimates using ASHE 2010 methodology, standard weights, UK, 2018.

**4.23** While the bite for 16-20 year old workers was below that of their 21 year old counterparts in April 2018, Figure 4.13 shows that raising their wage floor to the level above would have implied steep increases in their bite (around 20 percentage points in most cases). Theoretically, raising the pay floor for 16-17 year olds to the level of the 18-20 Year Old Rate in April 2018 would have implied bites at or close to 100 per cent (covering around half the workforce). Raising the pay floor for 18-20 year olds to the level of the 21-24 Year Old Rate in April 2018 would have implied bites of over 90 per cent, including a bite of 99 per cent for 18 year olds. In contrast, raising the pay floor for 21-24 year olds to the level of the NLW in April 2018 would have implied a relatively small increase in their bites; and the bites for 22-24 year olds would have remained no higher than the current bite of the 21-24 Year Old Rate for 21 year olds.

Figure 4.13: Hypothetical bite of the next level minimum wage, by age, UK, 2018



Source: LPC estimates using ASHE 2010 methodology, standard weights, UK, 2018.

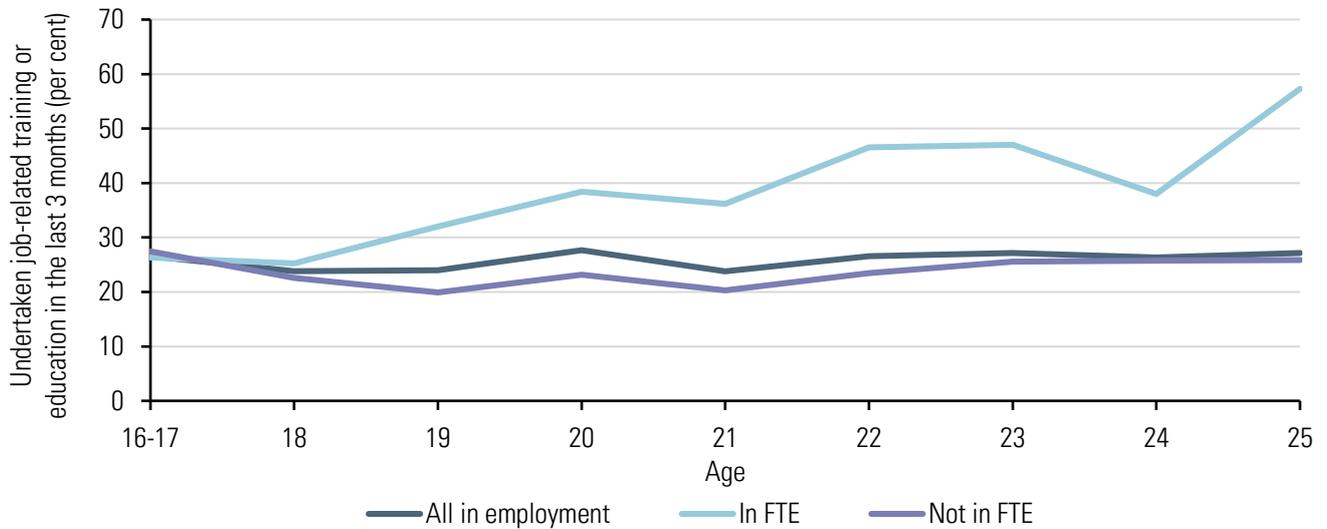
## Use of the youth rates for training and induction

**4.24** In addition to considering the potential risks of raising the wage floor for young workers' jobs, we also reviewed the main rationales for the existence of youth rates. As already set out, the main argument for having youth rates is the greater risk of unemployment and the long-term damage any unemployment spells do. Exposing young people to the risk of unemployment is inconsistent with the remit for the youth rates, to raise pay without harming job prospects.

**4.25** Another argument for youth rates is that young people enter the labour market with relatively limited experience and few skills, and so have lower productivity while they learn the job. In addition, employers may need to provide additional training. Any minimum wage structure needs to recognise the lower productivity and higher training costs of less experienced workers. Failure to do so could mean that some employers are unwilling to give young people those critical first opportunities.

**4.26** When the NMW was introduced, Commissioners at the time hoped that the Youth Development Rate (for 18-21 year olds) would encourage employers to provide accredited training, helping young people to progress to higher-skilled, higher-paid, employment. Labour Force Survey (LFS) data on the training undertaken by workers offer only weak evidence that young workers receive any additional training. Figure 4.14 shows that over the year to the first quarter of 2019, around a quarter of young workers said that they had undertaken job-related education or training connected with 'your job or a job might you might be able to do in the future'. Workers in full-time education were most likely to say that they had undertaken such training, and it is plausible that this included educational study related to a future career. Among workers not in FTE, there was little evidence that the youngest workers had received more training than their older counterparts. However, it is hard to get accurate measures of the quantity and quality of training. This is particularly so of on-the-job training, where workers may regard that as work rather than training.

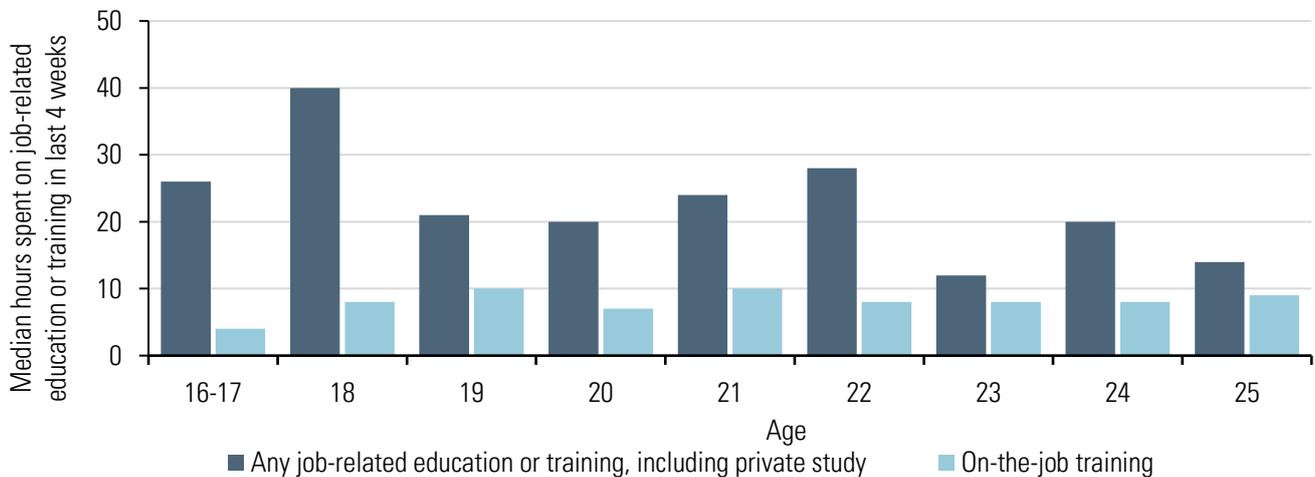
Figure 4.14: Job-related training or education undertaken in the last 3 months, by age and educational status, UK, Q1 2019



Source: LPC estimates using LFS microdata, quarterly, four-quarter moving average, UK, Q2 2018-Q1 2019.

4.27 Further analysis finds little evidence that training is a substantial burden for employers. Figure 4.15 shows the average number of hours spent on job-related education or training for those workers who had undertaken training in the last four weeks. When private study is included, workers aged 18 had undertaken the highest number of hours of job-related training – averaging 40 hours over the last 4 weeks. It is plausible that some, if not most, of this time was related to educational studies undertaken by those in full-time education (sample sizes do not allow for further disaggregation by educational status). When job-related training is restricted to on-the-job training, workers had undertaken no more than 10 hours training over the 4-week period, and workers aged 16-17 had undertaken 4 hours training over the last 4 weeks. On balance, the youngest workers are more likely to be new to their jobs, so any on-the-job training received is likely to include induction training provided to all new staff.

Figure 4.15: Median hours spent on job-related education or training in the last 4 weeks, by age and type of training, UK, April-June 2018.



Source: LPC estimates using LFS microdata, Q2 2018 (question is only asked in Q2).

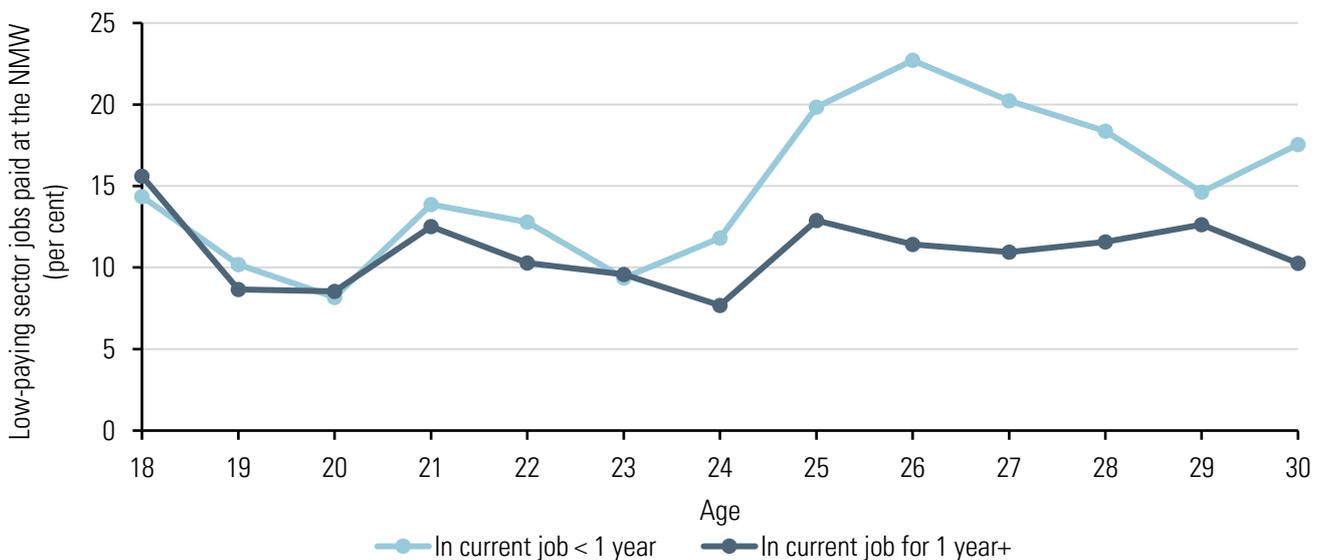
## National Minimum Wage

**4.28** The analysis of in-work training corresponds with the evidence we heard from young workers in retail and hospitality. They told us that they had received minimal training, that the induction training they received was the same for all staff irrespective of age, and that very little training was required to undertake the low-skilled jobs in these sectors.

**4.29** Despite limited evidence that young workers receive much additional in-work training, it is still plausible that young workers are less productive initially, until they have learned the job; on balance, older workers are more likely to arrive at a new job with some work experience. Employers told us the youth rates were often used for the induction of young workers, with pay rising once they had learned their job. Figure 4.8, discussed previously, offered some tentative evidence of this, with use of the age rates peaking for the youngest part of each minimum wage cohort, and falling thereafter.

**4.30** To explore this further, we looked at the use of the minimum wage by whether the jobholder was new to the job. ASHE data identify whether the jobholder has been in their current job for less than, or more than, one year. Figure 4.16 shows that in April 2018, young workers that had been in their current job for one year or longer were only slightly less likely to be paid at their age-applicable minimum wage; and sometimes more likely to be paid at their age-applicable minimum wage than their counterparts who had been in their current job for less than one year. The pattern is different from age 24 upwards, where workers in their current job for more than one year were clearly less likely to be paid at their age-applicable minimum wage than their counterparts who were new to their jobs. These data provide little evidence that the youth rates are used for induction, with pay rising thereafter, although there is more evidence that employers may be using the NLW in this way.

**Figure 4.16: Low-paying sector jobs paid at the age-applicable minimum wage, by age and time in current job, UK, 2018**



Source: LPC estimates using ASHE standard methodology, UK, 2018.

Note: Data for 16 and 17 year olds not shown due to small numbers in their job for 1 year or more.

## Conclusion

**4.31** In this chapter we have examined the relationship between age and several key measures which should inform decisions on the appropriate minimum wage structure. These include educational participation, labour market participation, earnings, use and bite of the minimum wage, and the provision of in-work training. Many measures demonstrated a relationship with age, and there were some consistent patterns.

**4.32** On many measures, 16 and 17 year olds occupied a distinct position, with the highest rates of educational participation, the lowest rates of employment, and very high reliance on part-time jobs, primarily in hospitality and retail. They also had the lowest hourly pay. To a degree, the current minimum wage structure contributes to this – particularly as they often work in sectors that set pay in line with the minimum wage. But within low-paying sectors, they were less likely than older workers to be paid exactly at their age-applicable rate. Many employers set pay for 16-17 year olds above their age-applicable rate – and in evidence to us many low-paying employers also told us they felt that the 16-17 Year Old Rate was low. But where employers chose to pay above the minimum wage, they often set pay between the 16-17 Year Old Rate and the next level, the 18-20 Year Old Rate. Analysis of coverage suggests that raising the 16-17 Year Old Rate to the level of the 18-20 Year Old Rate would affect a large proportion of jobs occupied by these young workers, with potentially harmful effects.

**4.33** From age 18-20, most young people transition from education into the labour market. The greatest change occurs between the ages of 18 and 19. Between these ages we see relatively large falls in full-time educational participation, unemployment, and levels of part-time working; alongside relatively large increases in employment, including in non-low-paying jobs. By age 20, approaching half of jobs are full-time, and almost 3 in 10 jobs are in the non-low-paying sectors. It is possible that low-paying, part-time jobs accessed at age 18 provide the basis for subsequent transition into higher-skilled, higher-paid work. Analysis of the minimum wage bite suggests that raising the pay floor for 18-20 year olds to the level of the 21-24 Year Old Rate could bring the bite for 18 year olds close to 100 per cent, implying almost half of jobs held by 18 year olds would be affected by such a change. While the impacts of the raised wage floor would be smaller for 19 and 20 year olds, it is plausible that the transition from full-time education to employment that occurs at age 18 is a vital launch pad for later transitions into higher-paid work.

## National Minimum Wage

**4.34** There was weaker evidence for another rationale for lower youth pay – the expectation that young workers require, and receive, more in-work training. Our analysis of the level, and extent, of in-work training corresponds with evidence we received from young workers; they told us that they received the same training as other workers, usually limited to induction training, and that very little training was required for low-paying jobs in retail and hospitality.

**4.35** Moving to older workers, the evidence supports extending the NLW to 23 and 24 year olds. On most measures, including educational participation, employment, unemployment, where – and how – young people worked, we observed that estimates for 23, 24 and 25 year olds were closely clustered. There is, on these measures, little basis for treating them differently in the minimum wage structure. Further analysis suggested that raising their pay floor to the level of the NLW would affect around 1 in 10 jobs held by 23 and 24 year olds; and their bite would remain below the current bite for 21 year olds.

**4.36** The evidence for 21 and 22 year olds was less clear cut in that they were, on many measures, more different to 25 year olds than alike. Had the pay floor for 21 and 22 year olds been set at the level of the NLW in April 2018, one in four jobs held by these workers would have been affected. However, the impact on the bite would have been relatively small. In addition, it is likely that raising the wage floor for 23 and 24 year olds would have a positive effect on pay for 21 and 22 year olds; many employers would likely see little justification for treating 22 and 23 year olds differently, so the actual number of jobs affected would be much smaller by the time any policy was implemented.

# Chapter 5

## Research evidence on the impact of the minimum wage on young workers

### Key findings

**5.1** An important focus of this review has been to consider the impact of previous minimum wage increases on young workers, to understand the potential effects of any changes to the current youth rate structure. The past two decades have seen extensive research into the impact of minimum wages on employment, both in the UK and internationally. The general consensus is that minimum wage increases have significant positive effects on earnings without having significant negative effects on employment; but any negative effects may be greater for the youngest workers (particularly where they are subject to an adult minimum wage); and the risks to young workers are greater during recession.

**5.2** This chapter reviews the research on the impact of minimum wage increases, focusing particularly on the impact of large minimum wage increases on youth employment in the UK and selected international research. There are a number of important messages from the research, which have implications for any changes to the current National Minimum Wage (NMW) structure.

- The international evidence suggests that the younger the worker the more at risk they are from minimum wage increases and minimum wages being set too high, which is why the strongest adverse effects are generally found for those aged under 20, especially those aged under 18.
- The international research also shows that the effects of minimum wages are greater in countries that have a uniform minimum wage compared with those that use sub-minima youth rates. It further shows that any employment effects are stronger in periods of economic downturn.

## National Minimum Wage

- The majority of studies suggest that previous large increases in the UK minimum wage have not resulted in significant negative effects for young people, or have had negative effects no worse than those for other age groups. However, there is evidence that suggests that the employment prospects of young people were harmed during the recession but that the smaller increases in the youth rates in the aftermath of the recession protected them from further detriment. In contrast, outside of the economic downturn, there is some evidence to suggest that past upratings may even have had positive employment effects by attracting young people into work.
- The detrimental findings for young people may be related to their working patterns. Other evidence suggests that (mainly female) part-time workers had been adversely affected by the introduction of the NMW and its increases during the recession. Young people are more likely to work part-time (sometimes combined with full-time education) than older workers. Conversely very few 25-26 year olds work part-time, which may explain why there has not been much of an effect on employment from the National Living Wage (NLW) for workers in this age group.
- This issue is particularly pertinent for younger workers, such as 16-17 year olds. There are examples of upratings that have increased the employment rate for this group by making part-time work more attractive; but also examples internationally (such as in New Zealand) of higher youth rates leading to reduced employment. However, research we have commissioned indicates that wage rates are not a primary factor when 16-17 year olds are choosing between education and employment.
- The age of eligibility for the NLW was successfully lowered to 21 without harming employment chances. This was during the tail end of a recession when unemployment was close to its peak.
- Large jumps in minimum wages can cause problems for some groups.
- International comparisons are difficult to make; but a study of several increases in the USA suggest sectoral differences, with young people in non-internationally tradable sectors such as retail and hospitality less likely to lose jobs as the minimum wage goes up.

**5.3** The remaining chapter is organised as follows. First, we look at cross-country studies of the minimum wage before focusing on the evidence from the UK, particularly on the impact of substantial changes to the wage floor for young workers. This includes research commissioned specifically for this review that looks at how minimum wages influence young people's decisions to enter the labour market and findings that shed new light on how employers might respond to substantial changes to the youth

rate structure. We then consider a selection of international research which may be particularly relevant for the UK.

## **The impact on youth employment of increases in the minimum wage**

**5.4** The past two decades have seen extensive research into the impact of minimum wages on employment, both in the UK and internationally. The general consensus is that minimum wage increases have significant positive effects on earnings without having significant negative effects on employment; but any negative effects may be greater for the youngest workers (particularly where they are subject to an adult minimum wage); and the risks to young workers are greater during recession.

**5.5** Although this research has generally focused on the effect of increases in the adult rate of the minimum wage, many studies have also looked at the impact on younger workers. Research specifically on the impacts of sub-minima wages is scarcer, as many countries do not have age-related rates. That research (much of it from the UK) generally finds little evidence of negative employment effects but there are studies that have found evidence of negative employment effects for the youngest workers (16-17 year olds), and evidence of more general negative effects among youths during recession. But, as with older workers, other research has also found positive effects of minimum wage increases on employment, with higher minimum wage rates improving retention and incentivising young people to seek employment.

**5.6** In a wide-ranging and comprehensive review of the international literature, Croucher and White (2011) assessed the impact of the minimum wage on young workers, focusing on employment, education participation and training. This work built on and extended the literature survey of Neumark and Wascher (2008), who had found the strongest evidence of negative effects of minimum wages among teenage and youth employment in countries without a separate youth rate. Croucher and White (2011) found that recent evidence had tended to be more mixed with smaller negative effects, but they also found that the impact was more likely to be negative in countries and states that had a single unified minimum wage for all workers. For those countries with lower youth rates, such as the UK, the adverse effects of the minimum wage were mitigated to some extent. Overall, they concluded that the negative effects on employment from the introduction of a minimum wage, or increases in existing minimum wages for young people, were small and tended to disappear as young workers aged. However, the general weight of evidence suggested that increases in the minimum wage did adversely affect employment for the youngest group, those aged 16–17.

## National Minimum Wage

**5.7** Using similar methodology to Neumark and Wascher (2004 and 2007) but focusing on minimum wage impacts in a recession, Dolton and Bondibene (2011) used OECD data from 33 countries covering the period from 1971-2009. They found little evidence that minimum wages had a significant negative impact on employment of those aged 25 and over, however they did find negative impacts on employment of 16-24 year olds and that these impacts were much greater in a recession. They also found that the impact on youth employment was lower in countries that had sub-minima youth rates. Building on those studies, Koning and Marimpi (2018) looked at 30 OECD countries over the period 2000-2014 and came to similar conclusions. They found that the relative employment of those aged under 25 compared with those aged 25-34 was similar in countries with sub-minima youth minimum wages and those without statutory minimum wages. However, in countries with uniform minimum wages, the relative employment rates for younger workers were substantially lower.

**5.8** The latter two studies were not able to disaggregate the 16-24 age group. However, Neumark and Wascher (2004 and 2007) investigated the 16-19 age group separately to those aged 16-24. They found much stronger negative effects for teens than for young people as a whole, suggesting that the effects on employment for 20-24 year olds were smaller.

## The impact of the minimum wage on young workers in the UK

**5.9** Although the cross-country studies can give important insights, our main interest in the review of youth rates is in the impact of minimum wage increases on young workers in the UK context. In particular, we have looked at the research findings from the introduction of the minimum wage in 1999; the introduction of the 16-17 Year Old Rate in 2004; the 23 per cent increase in the wage floor for 21 year olds in 2010 (when this age cohort became eligible for the adult rate of the NMW); the 21 per cent increase in the Apprentice Rate in 2015; and the 11 per cent annual increase in the wage floor for 25-30 year olds with the introduction of the NLW.

## The introduction of the National Minimum Wage and its subsequent upratings

**5.10** RAND Europe (2016) conducted a meta-analysis of 22 previous UK econometric studies published up to 2016 that had investigated the impact of the NMW on employment, hours and employment retention (many of them we had commissioned). The aim was to establish whether there was evidence of publication bias, and to determine econometrically the impact of the NMW to date, drawing on all previous studies. The study found no evidence that certain findings were more likely to

be published, and no evidence of any significant overall effect of the NMW on employment, hours or employment retention.

**5.11** There were, however, some negative employment effects for sub-groups, including young people and part-time workers. In general, the hours and employment of young employees had not been affected by increases in the NMW, but there was evidence of a negative impact during the recession and its immediate aftermath. It found significantly lower employment retention probabilities for younger workers in that period; but there were no significant negative findings on employment retention for young people outside of years affected by the recession.

**5.12** London Economics (2015) also investigated the period immediately after the recession and concluded that the relatively small increases in the youth rates of the NMW between 2011 and 2014 had protected the employment prospects of young people.

**5.13** Among those previous studies used in the meta-analysis, Stewart (2002, 2004a and 2004b) used a variety of data sources to look at the impact of the introduction of the minimum wage on individual employment probabilities. In all three of these studies, he found no significant effects from the introduction of the minimum wage in 1999 or its initial upratings on employment for men, women, adults or young workers. Dickens and Draca (2005) also found no employment effects when they investigated the 2003 minimum wage upratings.

## **The introduction of the 16-17 Year Old Rate**

**5.14** Prior to the introduction of the 16-17 Year Old Rate, Dickerson and Jones (2004) estimated the impact of a hypothetical minimum wage on the labour market behaviour of 16-17 year olds. The main concern was that the introduction of a minimum wage would encourage young people to leave full-time education prematurely. For their analysis they modelled the impact of introducing a minimum wage of between £2.50 and £4.00 an hour. They found that a minimum wage introduced at that level would have negligible effects on education participation. More broadly, they found that there were two distinct groups of young people: those seeking work and those remaining in education at the end of compulsory education. The largest single influence on young people's decision-making was GCSE grades, followed by family characteristics. Compared to these factors, wages had very little influence on young people's decision-making. They concluded that a minimum wage – of between £2.50 and £4.00 an hour – would have little effect on educational participation while affording a basic minimum level of protection for those in employment. The research contributed to the decision to introduce the 16-17 Year Old Rate at £3.00 an hour.

## National Minimum Wage

**5.15** Following its introduction, Crawford, Graves, Jin, Swaffield and Vignoles (2011) investigated the impact of the 16-17 Year Old Rate 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.

**5.16** Building on this work, Bowyer, Cerqua, Pietro, Gorman and Urwin (2019) used LEO data to examine the impact of the minimum wage on the educational and labour market participation of young people. Their findings did not suggest that minimum wage rates (and their effects on local earnings or unemployment rates) were economically significant in determining the choices of 16 and 17 year olds over whether to remain in education or enter employment; but do have some positive effect on whether young people in education enter part-time work.

## The impact of lowering the age of entitlement to the adult rate

**5.17** 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 (18-21) to the adult rate (22 and over). They found a positive employment effect of turning 22 and becoming eligible for the adult rate, suggesting that the big jump in the minimum wage at age 22 stimulated movements into employment. The research strengthened the case for extending the adult rate of the NMW to 21 year olds. They also found no effect on becoming 18, when the minimum wage entitlement increased by over 35 per cent.

**5.18** Firdrmuc and Tena (2011 and 2013) twice revisited the work carried out by Dickens, Riley and Wilkinson (2010) to explore the impact of turning 22 and becoming entitled to the adult rate. In both pieces of research, Firdrmuc and Tena (2011 and 2013) found no negative effect on employment at age 22, despite the large increase in NMW entitlement from age 21 to 22, but they found a significant but small negative impact for men aged 21, a year prior to their entitlement to the adult rate. Their findings suggested that firms would lay off workers around twelve months before they were entitled to a significant increase in their minimum wage. They interpreted this as a possible anticipation effect of entitlement to a higher NMW. However, one question mark over this research is that it was hard to see why the employment prospects of 22 year olds were not also negatively affected. In contrast to the earlier study, they also found larger effects of the minimum wage for those who turned 18.

**5.19** In October 2010, 21 year olds became eligible for the adult rate. This meant an increase from £4.83 (the Youth Development Rate) in September 2010 to £5.93 (the adult rate of the NMW) in October 2010, raising their pay floor by £1.10 an hour, or 23 per cent. The change to the policy was announced in March 2009, giving employers 18 months to prepare.

**5.20** London Economics (2015) explored the impact of lowering the age of entitlement to the adult rate from 22 to 21. They 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. The findings suggested that the increase in the wage floor incentivised 21 year olds to enter the labour market, but not all were able to enter employment (at least in the short term). 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.

## The increase in the Apprentice Rate

**5.21** In October 2015, the Government raised the Apprentice Rate from £2.73 to £3.30, an increase of 57 pence an hour, equivalent to an annual increase of 20.9 per cent. The increase was much higher than the increase we had recommended (2.6 per cent).

**5.22** Frontier Economics (2017) investigated the impact of the increase on apprentice numbers and their characteristics. Overall, it found no statistically significant evidence of a negative impact on apprentice numbers, starts or completions. Indeed, it found some positive effects on apprentice numbers, although generally in frameworks where relatively few apprentices were paid at the Apprentice Rate. However, they did find a negative effect on hairdressing apprenticeships – the sector where pay is lowest (and non-compliance highest).

**5.23** The raising of the Apprentice Rate may have incentivised some young people to consider an apprenticeship, but equally the observed increase in apprentices could have been affected by other factors, including the introduction of the NLW (6 months later) and/or increased promotion of apprenticeships.

## The introduction of the NLW

**5.24** The introduction of the NLW in April 2016 raised pay for workers aged 25 and over by 7.5 per cent. Coming six months after an increase of 3.1 per cent in the adult rate, this meant an annual increase in the wage floor of 10.8 per cent. Some early research has found negative employment

## National Minimum Wage

effects, particularly for women working part-time, but there is not yet any evidence that the increase in the wage floor has harmed the employment prospects of the youngest NLW workers.

**5.25** Aitken, Dolton and Riley (2018) used data from the Annual Survey of Hours and Earnings (ASHE) and Labour Force Survey (LFS) to explore the impact of the NLW on employment retention, including the impact on the youngest part of the NLW cohort. Using ASHE, they found small negative impacts for women working part-time but no negative impacts for young workers. Using LFS, they found no significant employment retention differences for part-time women, and no differences between 22-23 year olds and 25-26 year olds. The results suggested that wages increased for both 22-23 and 25-26 year olds at the time of the introduction of the NLW, with little differential change in employment retention between the two age groups.

**5.26** Dickens and Lind (2018) explored the impact of the NLW by distinguishing between high and low wage areas and then looking for geographic variation on a range of labour market indicators, including employment, before and after the introduction of the NLW. They found some evidence of job loss, particularly for women, but no evidence of job loss for young workers (but noted that the findings for young people were not robust due to small sample sizes).

**5.27** While no effects have been detected for young NLW workers, there may be an effect for women, which could be related to part-time working. This may reflect an interaction with Universal Credit, but it could also suggest that short-hour jobs may be negatively affected by the NLW. To this end, it is worth noting that 25 and 26 year olds have the lowest incidence of part-time working of all ages (around 20 per cent), while 21 year olds are twice as likely to work part-time (43 per cent).

**5.28** For the youth rates review we commissioned Westminster University to undertake research into the impact of the NLW on young workers. Bowyer, Cerqua, Pietro, Gorman and Urwin (2019) found some negative employment effects for workers aged 25 and over; coupled with a boost in the employment prospects of those aged 23 and under.

## Research on how employers set pay for young workers

**5.29** There was a significant gap in our understanding of how employers set pay for young people – and therefore how they might respond to an increasing wage floor. To address this, as part of this review we commissioned the National Institute for Economic and Social Research (NIESR) to undertake qualitative research with employers in low-paying sectors. Hudson-Sharp, Manzoni, Rolfe and Runge (2019) developed case studies with 19 employers across four low-paying sectors.

**5.30** The main findings of their research were that employers' decisions over setting pay were principally informed by their competitors' rates and affordability, rather than a worker's age. The main reason given for use of youth rates was to reduce costs; using the youth rates offers a degree of flexibility in dealing with wage costs, even if it is not employers' first response and is influenced by other labour market conditions. Employers in lower-skilled sectors reported that they valued young workers for their flexibility; as potential future managers and supervisors; and in some cases for their ability to cope with physically demanding jobs. Few employers reported significant differences in productivity and behaviour among younger workers, but there could be sector-specific factors restricting their employment (for example, in the sale of alcohol or tobacco).

**5.31** Among the companies included in the sample, the youth rates were used in varying ways, often partially (for example, during an initial period of training or induction) rather than in full. This varied by sector, in response to specific pressures: in childcare, the rates were used extensively to offset downward pressures on pay resulting from Government policies; whereas in cleaning, they were rarely used because most sub-contracting arrangements use the NLW as a default rate. Employers could be reluctant to use the rates for reasons of fairness, particularly in low-skilled jobs; and some reported finding it difficult to recruit and retain staff when using the youth rates. Complexity was also a factor, with employers perceiving a greater likelihood of making mistakes when dealing with more rates of pay.

## **International evidence**

**5.32** From an international perspective, the UK is fairly unusual in two important respects: first, in having three age-related sub-minima rates; and second, in having relatively large differentials between the youth rates and the adult rate – for example, the 16-17 Year Old Rate was set at £4.35 in April 2019, which was around 53 per cent of the NLW. Other countries typically set the youth rate (often for those aged under 18) at 70-80 per cent of the adult rate (although the comparative value of the NLW is higher (in exchange rate terms and in purchasing parity terms) than the adult rate in many countries). This means that findings from other countries may not be directly relevant for the UK. In addition, labour markets often operate very differently between countries, so increases in the minimum wage would be expected to have differential impacts. This is also true for the youth labour market, with different patterns of educational and labour market participation.

**5.33** However, findings from other countries may shed some light on the potential impact of large increases in the youth minimum wage. The experience of New Zealand is helpful in this respect. In 2001, the minimum wage for 16-17 year olds was increased by 40 per cent. Seven years later, in 2008, New Zealand replaced the youth minimum wage for 16 and 17 year old workers (set at 80 percent of the adult minimum wage) with a New Entrants (NE) minimum wage (also set at 80 percent of the adult

## National Minimum Wage

minimum), applicable for the first three months or 200 hours of employment. This was equivalent to an increase of 28 per cent in their wage floor (adjusted for inflation).

**5.34** Hyslop and Stillman (2004 and 2011) studied the impact of both these very large increases. Their study of the 2001 increase in the wage floor found only weak evidence of employment loss two years after the reform, alongside a decline in educational enrolment and an increase in unemployment, inactivity, and benefit receipt. By comparison, their study of the 2008 reform found larger impacts on jobs, despite the increase in the wage floor being smaller (28 per cent compared with 40 per cent). They found that the 2008 minimum wage increase of 28 per cent lowered the proportion of 16 and 17 year olds in employment by between 3 and 6 percentage points in the subsequent two years. However, the reduction in employment occurred entirely among 16 and 17 year olds who were combining study with part-time employment (this group accounting for 80 per cent of working 16-17 year olds). Among non-students, the employment rate increased by 3-4 percentage points in 2008 and 2009. More broadly, there was no evidence of an increase in unemployment or inactivity (an initial increase of 1.4–2.6 percentage points in the proportion of 16 and 17 year olds unemployed was not evident a year later). However, both the 2001 and 2008 reforms resulted in a reduction in hours worked by 16-17 year olds; and, in 2008, this was sufficient to reduce total weekly pay. The 2008 study also found evidence of employment substitution towards 18-19 year olds, largely among students.

**5.35** The authors suggested three reasons why the 2008 reform may have had greater employment and hours impacts than the 2001 reform. First, a greater proportion of 16 and 17 year olds were affected by the 2008 minimum wage increase (60–70 per cent, compared with 10–20 per cent in 2001). Second, the 2008 reform occurred immediately prior to a downturn in the economy. And third, the 2008 reform moved 16 and 17 year olds onto the same minimum wage as adults, which could have encouraged employers to replace them with older workers (including 18-19 year olds).

**5.36** In recent years, a number of U.S. states and cities have implemented or are in the process of implementing relatively large increases in the minimum wage. Evidence from these changes in the U.S. may shed further light on the impact of large minimum wage increases on employment.

**5.37** Gopalan, Hamilton, Kalda and Sovich (2018) used administrative data to explore the impact of these increases on employment. They used detailed wage data on one million hourly wage employees from over 300 firms spread across 23 industries to estimate the effect of six state minimum wage changes on employment. They focused on six states implementing large increases, of 75 cents or more, during 2014 and 2015. They found that the effect of the minimum wage on employment was nuanced. While the overall number of low-wage employees within firms in states that increased the minimum wage declined, existing minimum wage employees were no less likely to remain employed. Firms were

more likely to reduce hiring rather than increase turnover, reduce hours, or close locations in order to rebalance their workforce.

**5.38** While a reduction in hiring would be expected to affect younger workers, who are trying to access the labour market, they found significant differences by industry, which may offer young workers some protection. While firms in the tradable and other goods industries reduced employment and partially substituted lower wage employees with higher-skilled labour, firms in the non-tradable goods industries, such as retail and hospitality, showed no reduction in employment or hours. Furthermore, on examination of which types of workers lost employment (in the tradable goods firms) they found no evidence that young workers aged under 25 were more likely than older workers to lose their jobs, and concluded that there was no evidence of upwards substitution towards older workers.

**5.39** Research from the US is not directly applicable to the UK setting, but the finding that non-tradable industries – such as retail and hospitality – showed no reduction in jobs, may have relevance, as these are the sectors in the UK where young people are most likely to be employed.

**5.40** In the European context, recent changes to the youth rates in Belgium may offer some insights into the impact of increases to the wage floor for young workers. Between April 2013 and January 2015, national youth sub-minima were repealed (it should be noted that the minimum wage system is very different to the UK, with sectoral minimum wages covering most workers and a smaller number of workers covered by the national wage floor). Lopez Novella (2018), in research undertaken at the Federal Planning Bureau, found that the changed policy increased the probability of remaining employed, but reduced accession rates. They found that these two separate effects – reduced job separations alongside reduced hiring – meant that, overall, the increase in the minimum wage had no significant negative or positive effect on employment.

**5.41** The research noted two additional factors which contributed to the absence of net employment effects, and these may be relevant for UK policy. First, the gradual implementation of the policy; and second, the fact that relatively few young workers were bound by the national minimum wage.

## **Conclusion**

**5.42** For the purposes of the youth rates review, our main interest is in the impact of minimum wage increases on young workers in the UK context. In general, research has found the following:

- Very little evidence that increases in the youth rates so far have been harmful to young people's employment – although the risk is greater during recession.

## National Minimum Wage

- 16-17 year olds are more vulnerable in the labour market than 18-20 year olds, who in turn are more sensitive than 21-24 year olds; risks reduce with age (so there is less risk from a high minimum wage for 21-24 year olds than for those aged under 20).
- Some evidence that higher wages may increase employment/job entry: the introduction of the 16-17 Year Old Rate increased the part-time work of 16-17 year olds in deprived areas; eligibility for the adult rate at 22 increased employment for 22 year olds; eligibility to adult rate at 21 increased employment for women.

# Chapter 6

## Stakeholder views on the minimum wage structure

**6.1** Evidence from stakeholders has always played a significant part in our decision-making. Our recommendations on the youth rates take into account the range of evidence we have heard on the structure of the minimum wage and its effects on young people's employment.

**6.2** Because of the long-term nature of this work, we have collected evidence over an extended period spanning our 2018 and 2019 consultations, and spoken to a number of stakeholders at various points as our proposals for reform developed. In this section, we summarise the views we heard from employers, trade unions and organisations which work with young people, all of which helped shape our thinking on this issue.

### Views in favour of retaining the current structure

**6.3** Some employer organisations argued for the retention of the current age structure to reflect productivity differences, particularly when staff were learning the job, although they did not articulate any views on the appropriate relativities with the adult rate. These included six employer organisations: the British Independent Retailers Association; the British Retail Consortium (BRC); the Federation of Wholesale Distributors; Food and Drink Federation (FDF); the UK Hospitality (UKH); and the Universities and Colleges Employers Association (UCEA).

**6.4** Four employer bodies in our 2018 consultation wanted to retain both the current structure and current rates relativities. These included the Association of Convenience Stores (ACS); the British Beer and Pub Association (BBPA); the National Hairdressers Federation (NHF); and the Federation of Small Businesses (FSB). NHF explained that hairdressers used the youth rates to help manage the rising costs of the NLW, and were employing more young people (including apprentices) as part of this strategy. FSB argued that, while favouring 'gradual rises for each NMW rate in recent years, at the same time, we believe caution needs to be exercised with regards to youth rates', noting that we should 'reflect on the

## National Minimum Wage

wider issues behind youth unemployment'. However, stakeholders working with young people that were furthest from the labour market, including those not in education, employment or training (NEET), suggested that low youth rates may deter some young people from entering the labour market.

**6.5** In responding to our 2019 consultation, UK Hospitality argued that 'the NLW should continue to apply from the age of 25', noting in particular that 'smaller/regionally based companies...are very concerned at the potential increase in costs associated with a move to 21'. The British Retail Consortium (BRC) stated that its members wished to retain flexibility: 'retailers see value in the 21-24 Year Old Rate as it provides flexibility when taking on younger staff with no experience.'

**6.6** In some cases, organisations' positions on the structure of the rates softened between our 2018 and 2019 consultations. ACS in their 2019 response indicated that they would be in favour of some simplification of the structure of the rates. Similarly, the FSB in 2019 recommended the removal of the 21-24 Year Old Rate, albeit while taking a cautious, phased approach which gave adequate notice to businesses.

## Views in favour of reforming the minimum wage structure

**6.7** In their responses, a number of stakeholders from either side of the employer/worker divide argued for reforms to the existing arrangements. The most common proposal, advocated by 11 organisations, was to lower the age of eligibility for the National Living Wage (NLW). The threshold most frequently advocated was that the NLW should cover workers aged 21 and over. This view was uniformly shared by worker representatives (TUC, Unison, Usdaw, GMB) and campaigning organisations (Young Women's Trust, Intergenerational Foundation and Resolution Foundation). They argued that there were no training requirements or productivity differences between 21-24 year olds and older workers; that the differential was divisive; that it failed to recognise younger workers' living costs; and that 21-24 year olds were in a strong position in the labour market. Some saw this as the first step towards extending the NLW to younger workers over time (TUC, Unison, Usdaw, GMB, Resolution Foundation). The Intergenerational Foundation noted, 'in some of the lowest paid jobs, such as retail and hospitality, a young person under 25 may already have worked for many years in the same job, thus challenging the generalisation that young workers lack experience', adding, 'ultimately, there other tools at the Government's disposal for addressing the problem of youth unemployment'.

**6.8** This view was shared by social care providers. Of the six organisations that responded to our 2018 consultation, three stated that there was no use of the 21-24 Year Old Rate in social care (care providers HFT, Mencap, Dimension); the remaining three argued that there was little use of the rate,

that it was difficult to attract staff to social care paying below the NLW, and that there was no justification for doing so (Care England, UKHCA, Housing and Care 21). Housing and Care 21 argued that 'the lowest paid jobs [in social care] are care workers and cleaners. These jobs typically do not require employees to have past experience in this field and as a result we believe pay rates should be applied fairly and consistently for all employees irrespective of age'. They added: 'we do not believe age has a measurable impact on the productivity differences between younger and older workers within our sector'.

**6.9** Perhaps more surprisingly, this view was articulated by employers in other low-paying sectors, who argued for lowering the NLW threshold on grounds of both fairness and reduced complexity. In its 2018 submission to us, Whitbread argued that 'there remains a sense of unfairness that our team members feel towards having an age-related rate imposed on people who are under 25 and yet doing the same job as their over 25 year old colleagues...we can see no reference point in society that makes 25 years a useful age at which to demarcate rates of pay'. Similarly, while the Association of Convenience Stores (ACS) in 2018 wanted the youth rates retained for new staff, they noted that 'retailers tend to pay employees the NLW once they are over the age of 18. Most retailers do not use the youth rates as they struggle to justify paying colleagues in the same role at different rates according to their age, especially considering these colleagues often work in small working environments'.

**6.10** Several employers advocated lowering the NLW threshold, but taking a cautious approach and doing so in stages. In its 2019 response, the CBI stated that 'business is open to cautiously extending the National Living Wage to those aged 21+, perhaps starting with those aged 23+ to test if there is a noticeable impact on this group's opportunities'. Similarly, the FSB advocated the abandonment of the 21-24 Year Old Rate 'over a gradual period, with an initial move to 23, after which the LPC should assess the impact on the labour market and on employment levels for young people before a move to 21 is made. This will enable small businesses, especially those businesses with a higher proportion of young workers, to adjust to the change.'

**6.11** In responses to both the 2018 and 2019 consultations, the view of most trade unions was that the full NLW rate should ultimately apply to all workers (TUC, Unison, Unite, Usdaw), with varying levels of ambition about how quickly this should be achieved. The principle of fairness, and equal pay for equal work, was the main consideration in this argument; as well as the need for the minimum wage to adequately reflect the cost of living. Many argued that strong youth employment rates and the lack of negative effects from previous upratings showed that such increases could be achieved without significant damage. In the interim before full alignment, there was a widespread desire to see the 16-17 and 18-20 Year Old Rates increase at a rate that narrowed the differentials with the NLW.

## National Minimum Wage

**6.12** There were fewer views from employers on the rates structure for the youngest workers. In its 2018 response, the British Chambers of Commerce (BCC) advocated raising the pay floor for 18-20 year olds to the level of the 21-24 Year Old Rate, thereby creating an 18-24 Year Old Rate. BCC argued that this would simplify the structure, with fewer rates, and would narrow the differential between younger and older workers. This option was also articulated by a roundtable panel of Association of Convenience Stores (ACS) members (although it was not the official position of the ACS, who wanted to retain the current structure and rate relativities).

## Interactions with the post-2020 National Living Wage

**6.13** In the 2018 Autumn statement, the then-Chancellor Philip Hammond set out his ambition to end low pay in the UK, via an ambitious new target for the NLW after it had reached its current target of 60 per cent of median earnings in 2020. The most common interpretation of that ambition was a new NLW target of two-thirds of median earnings.

**6.14** As we were reaching conclusions on our recommendations for the youth rates in spring 2019, it became apparent that any change to the threshold age for the NLW would have an effect on the rate's future pathway, by expanding the group for which the median income is calculated. The current NLW is calculated with reference to the median hourly earnings of all workers aged 25 and over; the same calculation for all workers aged 23 and over or 21 and over would result in a lower nominal figure, because it takes into account a new group whose average earnings are significantly lower.

**6.15** This means there is an effective trade-off when making decisions about the NLW threshold: extending eligibility to the NLW to younger workers lowers the value of the NLW for older workers. In both cases, whether the NLW threshold age remains the same or is lowered, we assume the bite (the ratio of the NLW to the median wage) continues to increase each year; but in the latter case, the trajectory of its increase is lower than it otherwise would have been, because younger workers are included in the median calculation.

**6.16** We submitted advice on the future of the NLW in September 2019, separately from this report. We have prepared this review of the youth rates and its recommendations in advance of, and independently from, that advice. We did not make any assumptions as to the future level or trajectory of the NLW. Nevertheless, we did raise this trade-off with a number of stakeholders in the final stages of this review, to understand whether it altered their views on the structure of the youth rates.

**6.17** In the case of trade unions, the implications of extending the NLW to younger workers did not affect their positions. They continued to argue in their 2019 consultation responses for the NLW to apply

to workers of all ages as soon as possible. In the context of the TUC's goal for the NLW to reach £10 per hour as soon as possible, this did not mean abandoning their ask for a higher NLW. Several trade unions nevertheless noted the potential difficulties in communicating this point effectively to those affected by it; and the interdependence with continued growth in the NLW. In its response to our 2019 consultation, Unite noted that it 'accepts these trade-offs solely in the context of a rising target'.

**6.18** Responses from employers' organisations were more varied, but understanding the trade-off did not tend to alter their positions. Organisations and sectors which typically employ greater numbers of young people still tended to recommend caution in lowering the NLW threshold, while those who already thought there was scope to extend the NLW did not change their minds about doing so. Employers' views were not driven exclusively by whether or not they used the youth rates: some employers who did not currently use the rates nevertheless wanted them retained to allow for future flexibility.

# Chapter 7

## Conclusions and recommendations

### Lowering the age of eligibility for the National Living Wage

7.1 Our main recommendation focuses on the threshold between the NLW and the 21-24 Year Old Rate. The latter rate was a consequence of the introduction of the NLW, rather than a feature we had recommended, and it has not sat entirely comfortably within the overall structure. To begin with, the coverage of the rate is low: the number of 21-24 year old workers paid at the minimum rate for their age fell substantially with the introduction of the NLW, as many employers chose to pay the new higher rate to all workers aged 21 and over. Many stakeholders perceive the rate as adding complexity and unfairness to the NMW structure.

7.2 Our analysis shows there is a strong case for extending the NLW to 23 and 24 year olds. On most measures, including educational participation, employment, unemployment, and where and how young people worked, we observed that 23, 24 and 25 year olds were closely clustered. There is, on these measures, little basis for treating them differently in the minimum wage structure. Further analysis suggested that raising their pay floor to the level of the NLW in April 2018 would have affected around 1 in 10 jobs held by 23 and 24 year olds; and that their bite would have remained below the current bite for 21 year olds. We consider it unlikely that raising the pay floor for workers aged 23 and 24 would damage their employment prospects.

7.3 The evidence for 21 and 22 year olds is less clear cut, in that they are, on many measures, more different to 25 year olds than alike. Analysis suggests that, had the pay floor for 21 and 22 year olds been set at the level of the NLW in April 2018, 1 in 4 jobs held by these workers would have been affected. It is important to note, however, that, if employers are provided with sufficient advance notice, and have time to prepare, the actual proportion of jobs affected would likely be much smaller by the time any policy was implemented.

**7.4** We also reflected on the findings from research on the impact of previous increases in the wage floor for 21 year olds. In particular, the 20 per cent increase in the wage floor for 21 year olds when they became entitled to the adult rate of the minimum wage in 2010. Despite the magnitude of the increase – and the implementation of the change two years into the 2008 recession – research showed no negative effects on employment for 21 year olds; indeed, there was some evidence that the higher wage floor stimulated movements into employment for some young people. We considered that the current economic conditions, of record high employment and a tightening labour market in the low-paying sectors, likely offered protection. Furthermore, population projections suggesting that the number of 21-24 year olds in the population will fall over the next five years would be expected to provide further employment protection for this group.

**7.5** We also considered the views of employers and other stakeholders. Many employers in low-paying sectors told us that they welcomed reduced complexity, and would support lowering the NLW to 21, provided that there was sufficient notice, so that small firms and others with tight margins could prepare.

**7.6** Overall, we think the evidence supports extending the NLW to workers aged 21-24. We believe this can be achieved without harming their employment prospects, provided that employers are given sufficient advance notice so that they can prepare. But because the evidence indicates a difference in the labour market position of 21 to 22 year olds and those aged 23 and over, we recommend a two-step approach. Under this approach the Government would announce this autumn that the age of eligibility for the NLW will be 23 from April 2021, along with a commitment to reduce the threshold to 21 at a later date. The LPC will then review the evidence and advise the Government in October 2022 on the appropriate timetable for the next step.

**7.7** This will give employers 18 months' notice in which to prepare for the initial change. By October 2022, the LPC will have sufficient evidence to initially assess the impact of this change and the economic circumstances of 21 and 22 year olds, and we will be in a better position to make a recommendation on the appropriate timetable for lowering the eligibility age further to 21.

## **Retaining the age structure for younger workers**

**7.8** We have also looked carefully at the positions of younger workers within the NMW structure. We are not proposing any changes to the structure of the rates for workers aged between 16 and 20, but will consider the differentials between these rates and the NLW as part of our usual process of making rate recommendations. In coming to this conclusion, we have been mindful of the need to safeguard the employment prospects of younger workers; and to limit the complexity of the NMW structure for employers and workers alike.

**7.9** On many measures, 16 and 17 year olds occupy a distinct position, in having the highest rates of educational participation, the lowest rates of employment, and very high reliance on part-time jobs, primarily in hospitality and retail. They also have the lowest hourly pay. To a degree, the current minimum wage structure contributes to this – particularly as the majority work in sectors that set pay in line with the minimum wage. But within low-paying sectors, they are less likely than older workers to be paid exactly at their age-applicable rate. Many employers set pay for 16-17 year olds above their age-applicable rate – and in evidence to us many low-paying employers also told us they felt that the 16-17 Year Old Rate was low. But where employers choose to pay above the minimum wage, they often set pay between the 16-17 Year Old Rate and the 18-20 Year Old Rate, effectively making use of the discount offered by 16-17 Year Old Rate.

**7.10** Analysis of coverage suggested that raising the 16-17 Year Old Rate to the level of the 18-20 Year Old Rate would affect a large proportion of jobs occupied by these young workers, with potentially harmful effects. We considered this in light of research evidence from New Zealand (Hyslop and Stillman, 2011), which suggested that the negative impacts of minimum wage increases for 16 and 17 year olds were much greater where a larger number of jobs were bound by the minimum wage. While young people of this age are primarily in full-time education, work experience is important in enabling them to transition into employment when they leave education. The risk to part-time jobs, which provide valuable work experience for this group, remains the key concern when deciding the appropriate level of the minimum wage for the youngest workers.

**7.11** Between the ages of 18 and 20, most young people transition from education into the labour market. Within this age group, there are relatively large falls in full-time educational participation, unemployment, and levels of part-time working; alongside relatively large increases in employment, including increased movements into non-low paying jobs. Analysis suggests that the greatest change occurs between the ages of 18 and 19. By age 20, approaching half of jobs are full-time, and almost 3 in 10 jobs are in non low-paying sectors. These low-paying, part-time jobs, entered at age 18, provide the basis for subsequent transition into higher-skilled, higher-paid work.

**7.12** Analysis of the minimum wage bite suggested that raising the pay floor for 18-20 year olds to the level of the 21-24 Year Old Rate could bring the bite for 18 year olds close to 100 per cent, with almost half of jobs held by 18 year olds affected by the wage increase. While the impacts of the higher wage floor would be smaller for 19 and 20 year olds, they would still be substantial. In addition, we have to be mindful of the complexity of the NMW structure; a single NMW rate for 18 year olds only (or for 20 year olds only, in the case of an 18-19 Year Old Rate) would increase complexity and go against most feedback we have received from employers arguing for simplification. In addition, the transition from full-time education to employment that occurs at age 18 is a vital launch pad for later transitions into higher-paid work. Any changes to the minimum wage structure at this critical juncture could have longer-term negative effects, beyond age 18. This concern is strengthened by evidence that a period of unemployment early in a young person's career can reduce both their future employment prospects and future earnings well into their adult life. Ensuring young peoples' successful transition from education into employment is the key rationale for determining the appropriate level of the minimum wage for this group.

**7.13** There was weaker evidence for another of the original rationales for lower youth rates – the expectation that young workers require, and receive, more in-work training. Our analysis of the level, and extent, of in-work training corresponds with evidence we received from young workers; they told us that they received the same training as other workers, usually limited to induction training, and that very little training was required for low-paying jobs in retail and hospitality. This is something that we will continue to reflect upon when we determine the appropriate level of the minimum wage for young workers.

**7.14** For younger workers, our advice on the 16-17 Year Old and 18-20 Year Old Rates will take into account the latest economic evidence on the strength of the labour market and the position of the young people affected by our recommendations. Our principle objective is to ensure that the minimum wage structure – and level of the youth rates – enables young people to transition successfully from education into employment. We want to ensure that they can access employment which provides them with the work experience valued by employers, then, building on that experience, progress into higher-skilled and higher-paid employment. We judge that we can best achieve this by retaining the current youth rate structure for 16-17 and 18-20 year olds, and retaining the flexibility to decide the appropriate wage floor each year.

# Appendix 1

## Historic minimum wage rates

Table A1.1: Path of the minimum wage, UK, 1999-2019

	NLW (25 and over)			Adult rate (21-24)			Youth Development Rate			16-17 Year Old Rate			
	Rate	Increase		Rate	Increase		Rate	Increase		Rate	Increase		
	£	P	%	£	p	%	£	p	%	£	p	%	
Post-NLW	April 2019-	8.21	38	4.9	7.70	32	4.3	6.15	25	4.2	4.35	15	3.6
	April 2018-March 2019	7.83	33	4.4	7.38	33	4.7	5.90	30	5.4	4.20	15	3.7
	April 2017-March 2018	7.50	30	4.2	7.05	10	1.4	5.60	5	0.9	4.05	5	1.3
	Oct 2016-March 2017	7.20	-	-	6.95	25	3.7	5.55	25	4.7	4.00	13	3.4
	April 2016-Sept 2016	7.20	50	7.5	6.70	-	-	5.30	-	-	3.87	-	-
Pre-NLW	Oct 2015-March 2016	6.70	20	3.1	6.70	20	3.1	5.30	17	3.3	3.87	8	2.1
	Oct 2014-Sept 2015	6.50	19	3.0	6.50	19	3.0	5.13	10	2.0	3.79	7	1.9
	Oct 2013-Sept 2014	6.31	12	1.9	6.31	12	1.9	5.03	5	1.0	3.72	4	1.0
	Oct 2012-Sept 2013	6.19	11	1.8	6.19	11	1.8	4.98	0	0.0	3.68	0	0.0
	Oct 2011-Sept 2012	6.08	15	2.5	6.08	15	2.5	4.98	6	1.2	3.68	4	1.1
	Oct 2010-Sept 2011	5.93	13	2.2	5.93	13	2.2	4.92	9	1.9	3.64	7	2.0
	Oct 2009-Sept 2010	5.80	7	1.2	5.80	7	1.2	4.83	6	1.3	3.57	4	1.1
	Oct 2008-Sept 2009	5.73	21	3.8	5.73	21	3.8	4.77	17	3.7	3.53	13	3.8
	Oct 2007-Sept 2008	5.52	17	3.2	5.52	17	3.2	4.60	15	3.4	3.40	10	3.0
	Oct 2006-Sept 2007	5.35	30	5.9	5.35	30	5.9	4.45	20	4.7	3.30	30	10.0
	Oct 2005-Sept 2006	5.05	20	4.1	5.05	20	4.1	4.25	15	3.7	3.00	-	-
	Oct 2004-Sept 2005	4.85	35	7.8	4.85	35	7.8	4.10	30	7.9	3.00		
	Oct 2003-Sept 2004	4.50	30	7.1	4.50	30	7.1	3.80	20	5.6			
	Oct 2002-Sept 2003	4.20	10	2.4	4.20	10	2.4	3.60	10	2.9			
	Oct 2001-Sept 2002	4.10	40	10.8	4.10	40	10.8	3.50	30	9.4			
	Oct 2000-Sept 2001	3.70	10	2.8	3.70	10	2.8	3.20	-	-			
	June 2000-Sept 2000	3.60	-	-	3.60	-	-	3.20	20	6.7			
	April 1999-May 2000	3.60			3.60			3.00					

Source: Low Pay Commission

## Appendix 2

# International approaches to setting youth minimum wages

**A2.1** This Appendix looks at how other countries treat young workers within their minimum wage systems. Eurofound (2018) provided a detailed summary of various practices across EU countries, while OECD (2015) and ILO (2014) give a more global dimension. Information from these reports has been supplemented with updated information from our international contacts and official websites in individual countries.

**A2.2** The first part of this Appendix considers the types of minimum wage systems with sub-minima rates for younger workers that countries could adopt and provides a global overview of various systems. We then look at various systems in individual countries in more detail, covering the EU, English-speaking countries, and other advanced nations respectively.

**A2.3** Although minimum wage systems are diverse and many approaches are possible, we have categorised countries that take two broad approaches to youth rates. The majority of countries considered here broadly treat all workers aged 18 and over as adults and entitled to the full (adult rate of the) minimum wage. There are usually special conditions covering workers aged under 18 and young people in training or doing apprenticeships. Thus, in many countries with adult rates starting from age 16 or 18, there are exemptions that de facto give them a youth rate of sorts. There are a few countries that have a more complex approach to youth rates, similar to the UK.

**A2.4** There is wide variation in international approaches, but comparatively little research into differing employment effects. The UK is unusual in having conducted extensive research into the impact of its minimum wage structure on young people's employment. The UK is unusual too in having a remit to protect jobs; and, linked to this, setting the level – and relativities – of the various minimum wage rates according to economic evidence (rather than having fixed percentage differentials, as is common in many countries).

## National Minimum Wage

**A2.5** As ILO (2014) concluded in its review of job quality, there is no ‘one size fits all’ approach. It emphasised the importance of understanding the links between different labour market and minimum wage policies to achieve the best outcomes for young people’s employment and purchasing power. More broadly, there was compelling evidence that youth employment was protected by sub-minimum rates.

## Minimum wage regimes including sub-minimum rates for young people

**A2.6** Across the world, minimum wage systems are diverse and many approaches are possible, depending on the needs and choices of individual countries. Some countries have only one minimum wage applied to all employees in the country; others have multiple minimum wage rates by age, sector of activity, occupation, or geographical region.

**A2.7** Simple systems are easier to operate, communicate and enforce, but offer less scope to reflect the particular circumstances of different regions or sectors within a country. More complex systems can be better tailored to the circumstances of different sectors or regions but require more institutional capacity. Systems that are overly complex tend to lose their effectiveness and may, in some instances, interfere with collective bargaining between workers and employers.

**A2.8** A number of countries have adopted reduced minimum wages applicable to young workers below a certain age, or multiple sub-minimum wage rates for young people of differing ages. Such lower rates are generally set with a view to facilitate young people’s entry into the labour market.

**A2.9** Critics of sub-minimum wages have been mainly concerned about the potential for discrimination against young people, who are not systematically of lower productivity. This may explain why a significant number of countries have recently removed, or restricted in scope, provisions fixing lower minimum wages for young workers. In Slovenia, for example, this reform was adopted as part of legislation on equality of treatment and protection against discrimination.

**A2.10** In attempting to address issues of age discrimination, various countries have established a reduced minimum wage for a probationary period following a worker’s recruitment. This can be done in place of differentiated minimum wage rates for young workers, to account for the potentially lower productivity of new workers in a job. The lower minimum wage applies for a limited period of time, most often for all workers, irrespective of age. In some cases, the probationary period is linked to age.

**A2.11** In addition, many countries set sub-minimum wages for apprentices and trainees. The justification here is linked to both lack of experience – and hence lower productivity – and a discount for time spent in training. In such schemes, workers covered by apprenticeship or traineeship contracts can generally only be paid at a differentiated rate when they receive actual training during working hours. The use of such rates varies by country. In some cases, apprentices have the right to earn the full minimum wage after a certain period. In many countries however, national legislation provides for apprentices to be paid a specific remuneration or indemnity. This is often expressed as a percentage of the applicable minimum wage, such as 90 per cent in Bulgaria, 60 per cent in Paraguay and 75 per cent in the Philippines.

## Overview of international comparisons

**A2.12** Minimum wage systems are diverse and it is difficult to group them into distinct categories. However, we here divide countries into two broad groups: those in which the adult rate begins between 16 and 18 (including those with exemptions or special rules for those aged under 18); and those with sub-minima above age 18. Table A2.1 shows selected OECD countries by age at which the full adult minimum wage applies. It covers minimum wage rates up to 2018. Since then, substantial increases in France, Spain and Greece have been announced or enacted, with Greece also extending the full minimum wage to all workers.

## National Minimum Wage

Table A2.1: Comparison of adult minimum wages, by selected country, 2017-18

	In national currency expressed as hourly rate <sup>a</sup>	In UK £, using:		Date of last uprating	% Increase in national currency from 2017-18	Age full minimum wage usually applies <sup>b</sup>
		Exchange rates	PPPs			
Japan <sup>c</sup>	JPY874	5.96	6.77	Oct-18	3.1	15 <sup>d</sup>
Belgium	€9.02	8.00	8.24	Jun-18	2.0	18
Canada <sup>e</sup>	C\$10.96	6.99	6.44	Oct-17	0.9	16
Portugal <sup>f</sup>	€3.35	2.97	4.07	Jan-18	4.1	16
Spain <sup>f</sup>	€4.25	3.77	4.65	Jan-18	4.0	16
New Zealand	NZ\$16.50	8.50	8.17	Apr-18	4.8	16 <sup>g</sup>
France	€9.88	8.77	9.33	Jan-18	1.2	18
Germany	€8.84	7.84	8.62	Jan-17	0.0	18
Ireland	€9.55	8.47	7.92	Jan-18	3.2	20
US	US\$7.25 <sup>h</sup>	5.50	5.79	Jul-09	0.0	20
Australia	AU\$18.93	10.64	9.50	Jul-17	3.5	21
Netherlands	€9.11 <sup>i</sup>	8.16	8.33	Jan-18	1.7	22
Greece <sup>k</sup>	€3.52 <sup>j</sup>	3.46	4.81	Feb-12	0.0	25
UK	£7.83	7.83	7.83	Apr-18	4.4	25

Source: British Embassies and High Commissions. Low Pay Commission (LPC) calculations of country minimum wage rates in pounds sterling using exchange rates and PPPs. PPPs derived from Comparative Price Levels (CPLs), OECD Main Economic Indicators, July 2018. Exchange rates, Bank of England monthly average spot exchange rate, July 2018.

Notes:

- For countries where the minimum wage is not expressed as an hourly rate, the rate has been converted to an hourly basis assuming a working time of 8 hours per day, 40 hours per week and 173.3 hours per month.
- Exemptions and special rules apply in many cases. For example, in France and the US the full adult rate applies to young workers with a tenure of more than six months and more than three months respectively.
- Weighted average of prefectural rates.
- Those aged 15-17 are entitled to the regional minimum wage. Those aged 18 and over are entitled to the sectoral minimum wage.
- Rates vary across provinces and territories. Lowest rate given is that for Saskatchewan. Date of last uprating varies between provinces. Date given is for Saskatchewan.
- Not including annual supplementary pay of two additional months of salary for full-time workers.
- For all employees aged 16 and over, who are not either on the training minimum wage or the starting out minimum wage.
- Federal minimum wage. States, cities and local municipal authorities have discretion to set higher rates if they wish.
- Excludes 8 per cent supplement for holiday pay. Minimum wage based on a 40 hour working week. There are different minimum wage rates for those working a 36 or 38 hour week.
- Minimum hourly rate for 'employees'. Different hourly rate operates for 'blue collar' workers.
- Greece's minimum wage increased in January 2019 for the first time since 2012, but this is outside the time period covered in the table. The Greek government also extended the full minimum wage to under 25 year olds.

## **Appendix 2:** International approaches to setting youth minimum wages

**A2.13** The first group of countries in Table A2.1 includes the six countries where adult rates start at 16 (or 15 in the case of Japan), along with the two countries – France and Germany – where adult rates start from 18. In many of the countries where the adult rate starts from 16, special rules apply to students, trainees and apprentices – establishing a de facto youth rate, albeit one not necessarily directly linked to age. France has lower rates for those aged under 18 and in Germany many young workers are specifically exempt.

**A2.14** The second group in Table A2.1 – with more complex youth minimum wage structures – consists of six countries. In Ireland and the United States, the adult rate starts at age 20 and the youth rate for those aged 18-19 is dependent on duration of employment. In Greece, there was a single youth rate for all those aged under 25 until January 2019. The recent change to 21 has left the UK as the country with the oldest qualifying age for the main rate of the minimum wage (the NLW). However, the UK structure is more complex and is not dissimilar to those in Australia and the Netherlands.

**A2.15** Table A2.2 shows more systematically how countries change their minimum wages as age increases. They are ordered by percentage of the adult rate from those that give the lowest proportion of the adult rate to those that do not differentiate by age.

**A2.16** The Netherlands, Australia and the UK have the most differentiated age systems. The Netherlands and Australia have set percentages of the minimum wage up to ages 22 and 20 respectively. Reforms are under way in the Netherlands to simplify its age structures by July 2019. UK youth rates tend to be higher than those in the Netherlands as a proportion of the adult rate but are generally lower than those in Australia. The US federal minimum wage has provision for differentiation by age, with a reduced rate for those aged under 20 and in the first 90 days of employment.

**A2.17** Six of the countries in Table A2.2 have no youth rates for those aged 16 and over, while three countries have an adult rate starting from age 18. The reduced rates for those aged under 18 in Luxemburg and France tend to be higher than those in countries with more differentiated age systems. The exception is Germany where those aged under 18 are exempt. The rules in New Zealand are such that most 16-17 year olds are covered by reduced rates, albeit not specific youth rates.

## National Minimum Wage

**Table A2.2: Youth minimum wage rates as a percentage of adult minimum wage rates, by selected country, 2018**

Country	Percentage at age								
	16	17	18	19	20	21	22	23	24
Netherlands <sup>a</sup>	34.5	39.5	47.5	55.0	70.0	85.0	100.0	100.0	100.0
Australia <sup>b</sup>	47.3	57.8	68.3	82.5	97.7	100.0	100.0	100.0	100.0
UK	54.0	54.0	75.0	75.0	75.0	94.0	94.0	94.0	94.0
US <sup>c</sup>	59.0	59.0	59.0	59.0	100.0	100.0	100.0	100.0	100.0
Ireland <sup>d</sup>	70.0	70.0	80.0	90.0	100.0	100.0	100.0	100.0	100.0
Belgium	70.0	76.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Luxembourg <sup>e</sup>	75.0	80.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
New Zealand <sup>f</sup>	80.0	80.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
France <sup>c</sup>	80.0	90.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Greece <sup>g</sup>	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
Germany <sup>h</sup>	na	na	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Canada <sup>i</sup>	100.0 <sup>b</sup>	100.0 <sup>b</sup>	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Japan	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Portugal	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
South Korea	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Spain	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Eurofound (2018), individual country data, and LPC estimates.

Notes:

- a. Based on a working week of 40 hours. Different percentages apply for a 38 or 36 hour week. The Netherlands was also moving towards an adult minimum wage that starts at age 21 (in July 2019)
- b. These percentages apply to juniors only. Apprentices and trainees have different rates.
- c. For France and the US, the reduced rates apply to young workers with a tenure of fewer than six months and three months, respectively.
- d. In Ireland, there are also separate rates for apprentices.
- e. In Luxembourg there is a rate of 120 per cent for those who are qualified.
- f. All employees aged 16 and over are entitled to the adult minimum wage. Except for new entrants and employees to whom the training minimum wage applies. The Starting Out minimum wage applies to employees aged 16-17, who have not completed six months' continuous employment with their current employer. Employees aged 18-19, who have received unemployment benefit for more than six months, receive the training minimum wage until they have completed six months work for a single employer, after which they are paid the adult minimum wage. The training minimum wage also applies to apprentices.
- g. Greece has since reduced the starting age for the main rate of the minimum wage to 21.
- h. In Germany, those aged under 18, apprentices, trainees and interns are exempt.
- i. All provinces except Ontario. Ontario's youth minimum wage is 94 per cent of the adult minimum wage.

## European Union

**A2.18** Across the EU, 22 countries apply a generally binding statutory minimum wage. In Cyprus, a statutory minimum exists but is limited to specific occupations. Although there is no statutory minimum wage in the remaining five EU countries (Austria, Denmark, Finland, Italy and Sweden), there are de facto minimum wage levels set by collective bargaining.

## **Appendix 2:** International approaches to setting youth minimum wages

**A2.19** Of those 22 EU countries, a number have different rates of the minimum wage for specific groups. Minimum wages are adjusted for young workers in France, Germany, Ireland, Luxembourg, Malta, the Netherlands and the UK. There are also adjustments for young workers in ongoing education, training and apprenticeships in Belgium, France, Ireland and the UK. Different minimum wage levels can also apply according to the length of work experience or the period from the beginning of employment, as in France, Ireland and Malta.

**A2.20** There are also a few other groups in some countries, such as France, Hungary and Luxembourg, that have specific minimum wages. France has specific rates for disabled persons, while in Hungary rates apply for specific occupations. In Luxembourg, a special rate applies to qualified people, while in Hungary there is a special rate for workers in jobs that require certain qualifications.

**A2.21** In Belgium, the sub-minima for 18-20-year olds were increased to the level of the adult minimum wage between April 2013 and January 2015. There are still lower rates for 16-17 year olds. There are also specific minimum wages for working students and those in a system of alternate learning (part student/part employee) who receive a percentage increase based upon the minimum wage. This percentage increases according to the number of years they have been in employment or their year in school/college. As there is no general minimum wage for students, wage levels are determined by the social partners for each sector. If no minimum wage is specified for the sector, the statutory minimum wage applies. There are also minimum wages for apprentices. Thus, in practice given that full-time education participation is high, there is effectively a separate minimum wage for those aged under 18, albeit not defined by age.

**A2.22** In France, a reduced minimum wage rate covers specific groups of young workers who meet certain criteria:

- Less than six months of experience in the sector: 80 per cent of the statutory minimum wage for workers aged 15 and 16, and 90 per cent for those aged 17.
- Under 16 years of age working during summer holidays: 80 per cent of the statutory minimum wage.
- Professionalisation contract: 55-100 per cent of the statutory minimum wage, depending on age and previous qualifications.
- Apprentices: 25–78 per cent of the minimum wage depending on age, seniority and the applicable sectoral agreement.

## National Minimum Wage

- Other exceptions: trainees who may not be paid if they work less than two months per year (otherwise the minimum wage is €3.70 per hour based on 15 per cent of the social security ceiling).

**A2.23** In Germany, the minimum wage is paid to all workers over the age of 18. Youths under the age of 18, apprentices, trainees, interns and the long-term unemployed in the first sixth months of starting a new job are all exempt from the minimum wage.

**A2.24** In Greece, the full minimum wage applied from age 25 until January 2019, when the minimum wage was raised for the first time in 7 years and the sub-minimum rate was abolished. Until then, those aged under 25 had received a rate around 13 per cent lower than the adult rate. Greek minimum wage law also allows for incremental minimum wage increases after 3, 6 and 9 years of service (10 per cent after each 3 years), but this has been suspended until unemployment falls below 10 per cent.

**A2.25** In Hungary, the minimum wage is legally binding for all workers in all sectors of the economy, with two exceptions: jobs requiring at least a secondary level of education have a guaranteed minimum wage higher than the statutory minimum; and workers employed in public works programmes get a wage that is determined separately and only by the Government. It is lower than the national minimum wage but is boosted if workers in public works programmes are employed in jobs that require secondary educational attainment.

**A2.26** In Ireland, from 1 January 2018, special rates of the minimum wage are applicable for young workers: under 18 year olds are entitled to 70 per cent of the adult minimum wage; employees in their first year of employment since turning 18 are entitled to 80 per cent of the adult minimum wage; and employees in their second year of employment and aged 19 or over are entitled to 90 per cent. Young workers, over 18 on a training course or in study, are entitled to 75 per cent of the minimum wage in their first trimester, 80 per cent in the second, and 90 per cent in the third, with each trimester at least one month and no more than one year.

**A2.27** In Luxembourg, employees aged 15 and 16 receive 75 per cent of the statutory minimum wage rate, while those aged 17 receive 80 per cent. 'Skilled workers' aged 18 and over receive 120 per cent of the national minimum wage.

**A2.28** In Malta, the minimum wage for employees aged 16 is 94 per cent of the statutory rate, and for those aged 17 it is 96 per cent. Moreover, the rate is increased by 1.8 per cent and 3.5 per cent for those who have been employed by the same employer for one or two years respectively, and who were paid the minimum wage.

**A2.29** In the Netherlands, there is a more complicated system of specific minimum wage rates for young employees. In 2017, rates were raised for some categories of younger worker and the full rate became applicable for employees aged 22 (down from 23). Further change has been implemented in 2019. The recent history of changes is shown in Table A2.3.

**Table A2.3: Proportion of the full minimum wage for young workers in the Netherlands**

Age	Proportion of adult minimum wage rate applicable (%):		
	Before 1 July 2017	After 1 July 2017	After 1 July 2019
15	30.0	30.0	30.0
16	34.5	34.5	34.5
17	39.5	39.5	39.5
18	45.5	47.5	50.0
19	52.5	55.0	60.0
20	61.5	70.0	80.0
21	72.5	85.0	100.0
22	85.0	100.0	100.0
23 and over	100.0	100.0	100.0

Source: Network of Eurofound Correspondents. Table 9 in Eurofound (2018).

**A2.30** There are no specific statutory minimum wages for young people in Bulgaria, Croatia, the Czech Republic, Estonia, Latvia, Lithuania, Poland, Portugal, Romania, Slovakia, Slovenia and Spain.

### English-speaking countries outside the EU

**A2.30** In Australia, the minimum wage is set by the Australian Fair Wage Commission. There are sub-minima rates for young people determined as a percentage of the relevant adult minimum wage. These are: 36.8 per cent for those aged under 16; 47.3 per cent for 16 year olds; 57.8 per cent for 17 year olds; 68.3 per cent 18 year olds; 82.5 per cent for 19 year olds; and 97.7 per cent for 20 year olds. There are separate rates for apprentices, also set as a percentage of the standard rate: 55 per cent for apprentices in their first year; 65 per cent in their second year; 80 per cent in their third year; and 95 per cent in their fourth year.

## National Minimum Wage

**A2.31** In Canada, responsibility for enacting and enforcing labour laws rests with the ten provinces and three territories. This means that each province and territory has its own minimum wage. Minimum wage rates for adults range from C\$10.96 in Saskatchewan to C\$15.00 in Alberta. There is no differentiation by age for the minimum wage, but some provinces allow lower wages to be paid to liquor servers and other tip-earners, and/or to inexperienced employees. For example, in Nova Scotia, the minimum wage is C\$11 per hour, but C\$10.50 for inexperienced employees (who have not been employed for more than three months by any employer to do the work for which he/she is presently employed). In Ontario, where the minimum wage is C\$14 per hour, the rate is C\$13.15 for students aged under 18 employed up to 28 hours in a week, or during a school holiday.

**A2.32** In the United States, the minimum wage is set by US labour law and a range of state and local laws. Employers generally have to pay workers the highest minimum wage prescribed by federal, state, and local law. Since July 24, 2009, the federal government has mandated a nationwide minimum wage of \$7.25 per hour. As of January 2018, there were 29 states with a minimum wage higher than the federal minimum.

**A2.33** Under the federal law, workers who receive a portion of their salary from tips, such as waiters, are required only to have their total compensation, including tips, meet the minimum wage. The current federal rate for tipping staff is \$2.13 per hour with the expectation that wages plus tips total no less than \$7.25 per hour. Employers must pay the difference if total income does not add up to the federal minimum wage. Seven states, and Guam, do not allow for a tip credit. Additional exemptions to the minimum wage include many seasonal employees, student employees, and certain disabled employees as specified by the Fair Labor Standards Act (FLSA).

**A2.34** The Youth Minimum Wage Program allows young workers under the age of 20 to be paid a special minimum wage of \$4.25 per hour for the first 90 days of employment with any employer. After the first 90 days have passed (or when the employee turns 20, whichever comes first) the employee must be given a raise to the full minimum wage. This exemption is designed to serve as a training program for young workers, although many workers and organizations see it as unnecessary and unfair. It only applies in states without a minimum wage higher than the federal minimum.

## **Appendix 2:** International approaches to setting youth minimum wages

**A2.35** Many exemptions apply to student workers, both from high school and college. Certain employers, including retail or service stores, agriculture, or colleges and universities, are permitted to pay full-time students as little as 85 per cent of the minimum wage as long as they are registered students (the business must get a certificate allowing them to do so from the Department of Labor (DOL) under the Full-Time Student Program). Furthermore, the Student-Learner Program allows any student aged 16 or over and enrolled in a vocational school to be hired for as little as 75 per cent of the regular minimum wage (employers must also have a certificate from the DOL). These exceptions are designed to allow businesses to hire inexperienced workers at a reduced rate, and are meant to be an 'educational program' for the student workers.

**A2.36** Of the 29 states with a minimum wage higher than the federal minimum, most do not have separate youth rates. The six exceptions are:

- Illinois (\$8.25), where employers may pay anyone under the age of 18, or anyone in the first 90 days of employment, fifty cents less (\$7.75).
- Michigan (\$9.25), where a training wage of \$4.25 per hour may be paid to employees aged 16-19 for the first 90 days of their employment. Minors aged 16-17 may be paid 85 per cent of the minimum hourly wage rate (\$7.86).
- Minnesota (\$9.65), where a lower rate of \$7.87 applies to small employers (whose annual receipts are less than \$500,000 and who do not engage in interstate commerce); employees 16-19 years of age for the first 90 days of their employment; and those aged under 18.
- Ohio (\$8.30), where a lower rate applies for those aged under 16 (\$7.25).
- Washington DC (\$13.25), where a minimum wage of \$7.25 per hour may be paid to: newly hired individuals during their first 90 calendar days of employment; students employed by colleges and universities; and individuals aged under 18.
- Washington State (\$11.50), where a lower rate applies for those aged under 16 (\$9.78).

**A2.37** There are also city and county minimum wages in the United States but these seldom adopt separate youth rates.

**A2.38** In New Zealand, the minimum wage (NZ\$17.70 in 2019) applies to all those aged 16 and over unless they are a starting-out worker or a trainee (NZ\$14.16). A starting-out worker means:

- a worker aged 16 or 17 to whom the Act applies and who has not completed six months' continuous employment with his or her current employer; and is not involved in supervising or training other workers.

## National Minimum Wage

- a worker aged 18 or 19 to whom the Act applies and who: has been continuously paid one or more specified social security benefits for not less than six months; and has not completed six months' continuous employment with any employer (excluding any employment undertaken before the worker started to be paid any one or more specified social security benefits); and is not involved in supervising or training other workers.
- a worker aged 16-19 to whom the Act applies and who: is required by his or her contract of service to undertake at least 40 credits a year of an industry training programme for the purpose of becoming qualified for the occupation to which the contract of service relates; and is not involved in supervising or training other workers.
- trainee means a worker who is aged 20 or older to whom the Act applies and who: is required by his or her contract of service to undertake at least 60 credits a year of an industry training programme for the purpose of becoming qualified for the occupation to which the contract of service relates; and is not involved in supervising or training other workers.

**A2.39** In New Zealand, the minimum wage framework has changed over the last twenty years or so. Prior to March 1994, there was no minimum wage for those aged under 20. In March 1994, a minimum youth rate was introduced and applied to those aged 16-19 with the adult minimum wage applying to persons aged 20 and over. From 5 March 2001, the framework was changed with the minimum youth rate limited to workers aged 16 or 17, and the adult rate applying to those aged 18 and over. On 1 May 2013, the youth rate became known as the Starting Out rate, applying to those aged 16 or 17, who have not worked for six continuous months for that employer.

**A2.40** In some other English-speaking countries and territories, youth rates are also used. In Guernsey, the minimum wage now covers those aged 18 and over with those aged 16 and 17 entitled to £7.50, about 93 per cent of the adult minimum wage (£8.10). In the Isle of Man, the minimum wage structure now differs from that of the UK with the adult rate starting at age 18 (£8.25 from October 2018), with those under 18 but over compulsory schooling age entitled to £5.85 (around about 71 per cent of the adult rate). There is also a training rate (Development Worker Rate) for those aged 18 and over in the first sixth months of a job and have entered into an agreement with an employer requiring the worker to take part in accredited training for at least 26 days (currently £6.95 – around 84 per cent of the adult rate). In Jersey, there are no youth minimum wage rates but employers can pay a trainee rate to those doing approved training in a new job, where approved training has to be agreed in writing by both the employer and employee before the employee starts their new job; and the training must have structure and objectives that relate to the employee's performance and training outcomes must be assessed and documented. Trainees can be paid £5.91 (about 75 per cent of the adult rate – £7.85) in the first year of training, and then £6.90 (around 87 per cent of the adult rate) in the second year.

# References

- Aitken, A., Dolton, P., & Riley, R. (2018). *The Impact of the Introduction of the National Living Wage on Employment, Hours and Wages*. National Institute of Economic and Social Research.
- Bell, D., & Blanchflower, D. (2011). Young people and the Great Recession. *Oxford Review of Economic Policy*, 241-267.
- Bondibene, R., & Dolton, P. (2011). An evaluation of international experience of minimum wages in an economic downturn. *Research report, Low Pay Commission*.
- Bowyer, A., Cerqua, A., Pietro, G. D., & Urwin, E. G. (2019). *Assessing Factors that affect the labour market decisions of young people aged 16 to 24: research informing LPC review of youth rates*. Centre for Employment Research, University of Westminster, London.
- Bowyer, A., Cerqua, A., Pietro, G. D., Gorman, E., & Urwin, P. (2019). *Assessing Factors that Affect the Labour Market Decisions of Young People aged 16 to 24: Research Informing LPC Review of Youth Rates*. Research report for the Low Pay Commission.
- Crawford, J., Graves, E., Jin, W., Swaffield, J., & Vignoles, A. (2011). *The Impact of the Minimum Wage Regime on the Labour Market Choices of Young People*. Institute for Fiscal Studies; University of York; Institute of Education.
- Croucher, R., & White, G. (2011). *The impact of minimum wages on the youth labour market: an international literature review for the Low Pay Commission*.
- Department for Business, Innovation and Skills. (2015). *Impact Assessment: Amendment to the National Minimum Wage regulations 2015 - introducing the National Living Wage*.
- Dickens, R., & Draca, M. (2005). *The Employment Effects of the October 2003 Increase in the National Minimum Wage*. Centre for Economic Performance, London School of Economics.
- Dickens, R., & Lind, K. (2018). *The Impact of the Recent Increases in the Minimum Wage on the UK Labour Market: An Area-based Analysis*. University of Sussex.
- Dickens, R., Riley, R., & Wilkinson, D. (2010). *The Impact on Employment of the Age Related Increases in the National Minimum Wage*. University of Sussex; National Institute of Economic and Social Research.
- Dickerson, A., & Jones, P. (2004). *Estimating the Impact of a Minimum Wage on the Labour Market Behaviour of 16 and 17 Year Olds*. Research report for the Low Pay Commission.
- Dolton, P., & Bondibene, R. (2011). *An evaluation of the international experience of minimum wages in an economic downturn*. Research report for the Low Pay Commission.
- Eurofound. (2017). *Long-term unemployed youth: Characteristics and policy responses*. Dublin: Eurofound.
- Eurofound. (2018). *Statutory minimum wages 2018*. Luxembourg: Publications Office of the European Union.
- Fidrmuc, J., & Tena, J. D. (2013). National Minimum Wage and Employment of Young Workers in the UK. *CESifo Working Paper Series, (4286)*.

## National Minimum Wage

- Firdmuc, J., & Tena, J. D. (2011). *The impact of the national minimum wage on the labor market outcomes of young workers*. Research report for the Low Pay Commission.
- Frontier Economics. (2017). *Estimating the Impact of the October 2015 Increase in the Apprentices Rate*. Frontier Economics.
- Gopalan, R., Hamilton, B., Kalda, A., & Sovich, D. (2018). State Minimum Wage Changes and Employment: Evidence from One Million Hourly Wage Workers. *SSRN*.
- Gregg, P. (2005). The Wage Scar from Male Youth Unemployment. *Labour economics*.
- Gregg, P., & Tominey, E. (2004). The Wage Scar from Youth Unemployment. *CMP Working Paper*.
- Gregg, P., & Tominey, E. (2005). The Wage Scare from Male Youth Unemployment. *Labour economics*, 487-509.
- Hudson-Sharp, N., Manzoni, C., Rolfe, H., & Runge, J. (2019). *Understanding employers' use of the National Minimum Wage Youth Rates*. London: National Institute of Economic and Social Research.
- Hyslop, D., & Stillman, S. (2004). Youth Minimum Wage Reform and the Labour Market. *IZA Discussion Paper Series (1091)*.
- Hyslop, D., & Stillman, S. (2011). *The Impact of the 2008 Youth Minimum Wage Reform*. Wellington: Labour and Immigration Research Centre, Department of Labour.
- ILO. (2014). *Minimum Wage Systems*. Geneva: International Labour Office.
- Koning, P., & Marimpi, M. (2018). Youth minimum wages and youth employment. *IZA Journal of Labour Policy*. 7 (5).
- London Economics. (2015). *The impact of minimum wages on young people: final report*. London Economics.
- Lopez Novella, A. (2018). *Minimum wages and youth employment in Belgium*. Brussels: Federal Planning Bureau.
- Low Pay Commission. (1998). *The National Minimum Wage: First Report of the Low Pay Commission*.
- Low Pay Commission. (2001). *The National Minimum Wage, Third Report of the Low Pay Commission, Volume 2*.
- Low Pay Commission. (2004). *Low Pay Commission Report: 2004*.
- Low Pay Commission. (2009). *Low Pay Commission Report: 2009*.
- Low Pay Commission. (2018). *LPC Response to the Government on 'one-sided flexibility'*.
- Low Pay Commission. (2019a, August 6). *Letter from Bryan Sanderson to BEIS SoS*. Retrieved from Low Pay Commission:  
[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/835516/Letter\\_to\\_BEIS\\_SoS\\_-\\_NMW\\_Youth\\_Rates.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/835516/Letter_to_BEIS_SoS_-_NMW_Youth_Rates.pdf)
- Low Pay Commission. (2019b). *The National Living Wage Beyond 2020*.
- Manning, A. (2003). *Monopsony in Motion*. Princeton and Oxford: Princeton University Press.
- McQuaid, R. (2015). Multiple scarring effects of youth unemployment.

- Neumark, D., & Wascher, W. (2004). Minimum Wages, Labor Market Institutions, and Youth Employment: A Cross-National Analysis. *ILR Review*, 57(2), 223-248.
- Neumark, D., & Wascher, W. (2007). Minimum Wages and Employment: A Review of Evidence from the New Minimum Wage Research. *NBER Working Papers*.
- Neumark, D., & Wascher, W. (2008). *Minimum wages*. Cambridge MIT Press.
- OECD. (2015). *Employment Outlook 2015*. Paris: OECD Publications.
- Office for Budget Responsibility. (2015, July 8). Economic and fiscal outlook – July 2015.
- Office for National Statistics. (2016, May 14). *Labour market overview, UK: May 2019*.
- Office for National Statistics. (2017, October 26). *National Population Projections: 2016-based statistical bulletin*.
- Office for National Statistics. (2018, October 25). *Earnings and hours worked in the UK: 2018*.
- Organisation for Economic Co-Operation and Development. (2018). *OECD Employment Outlook 2018*. Paris: Organisation for Economic Co-Operation and Development.
- Organisation for Economic Co-Operation and Development. (2019, August). *Real minimum wages*. Retrieved from <https://stats.oecd.org/Index.aspx?DataSetCode=RMW>
- RAND Europe. (2016). *The impact of the National Minimum Wage on Employment: a meta-analysis*. RAND Europe.
- Stewart, M. (2002). Estimating the impact of the minimum wage using geographical wage variation. *Oxford Bulletin of Economics and Statistics*. 64 (1), 583-605.
- Stewart, M. (2004a). The employment effects of the National Minimum Wage. *The Economic Journal*. 114.
- Stewart, M. (2004b). The impact of the introduction of the UK Minimum Wage on the employment probabilities of low wage workers. *Journal of the European Economic Association*. 2 (1), 67-97.
- UK Commission for Employment and Skills. (2015).
- Wascher, D. N. (2007). Minimum Wages and Employment: A Review of Evidence from the New Minimum Wage Research. *NBER Working Paper*.