National Minimum Wage

Low Pay Commission
Report 2013

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Low Pay Commission Report 2013

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Business, Innovation and Skills
by Command of Her Majesty
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Introduction

A year ago we noted that although the National Minimum Wage (NMW) continued to be widely accepted, the range of beliefs about appropriate rates had, if anything, widened. Falling real incomes had reinforced the opinions of many who favoured substantial increases. Difficult trading conditions and squeezed public sector budgets had strengthened the views of those calling for caution.

This has continued to be the case in the subsequent twelve months. The economy has experienced another recession, and we have heard from many employers and employees in low-paying sectors about the acute financial pressures on them.

We have again taken care to develop our recommendations from a thorough investigation of the evidence, which we believe to be more vital than ever in times when, in important respects, the performance of the economy and the labour market have no parallel in recent history. As well as consulting directly with those affected by low pay we have conducted a programme of commissioned external research and extensive analysis of labour market and other economic data to inform our recommendations.

Remit

This is the fourteenth Low Pay Commission report. Our remit from Government asked us to monitor, evaluate and review the National Minimum Wage and to report to the Prime Minister, Deputy Prime Minister and the Secretary of State for Business, Innovation and Skills by the end of February 2013. It also asked us to take into account the state of the economy; employment and unemployment levels; and the wider policy context including pensions reform, universal credit, raising of the personal tax allowance and the proposed abolition of the Agricultural Wages Board for England and Wales, and to:

- recommend the level of each of the different rates of the NMW which we believe should apply from October 2013;
- review the contribution the NMW could make to the labour market position of young people, including those in apprenticeships, taking account of the introduction of the raising of the participation age in England;
- review the accommodation offset; and
- evaluate the regulations for salaried-hours workers, and identify measures which would enable employers and workers to see as easily as possible what is needed to comply with the NMW.

Evidence

We have again been greatly helped by the provision of evidence about the NMW from many organisations and individuals. We received 80 written responses to our consultation, 18 of which came via the online survey we introduced this year. We also conducted two online surveys and a stakeholder workshop about the accommodation offset. Nine organisations presented to us at our meetings, and 34 came to our two days of oral evidence sessions in November 2012. Our Secretariat held over 50 meetings with stakeholders. This is a vital contribution to our work and we would like to record our gratitude to all those who have supplied evidence to us. A list of those who responded to our call for evidence can be found in Appendix 1.

We commissioned 10 external research projects to assist us and these are outlined in Appendix 2 together with a summary of the projects' findings. We have again drawn on the Government's survey of apprentice pay, and on the best available economic evidence. We have also again worked closely with the Office for National Statistics to obtain a comprehensive and consistent database on earnings and employment.

In order to ascertain the impact of the NMW at first hand we have visited employers, workers and others affected by low pay in the four countries of the United Kingdom. We had 46 meetings during our visits, which took us to Anglesey, Bangor, Belfast, Blackburn, Cambridge, Harlow, London, Preston, Ramsgate, the Scottish Borders, and Sheffield. These visits give us a valuable insight into the effects of the NMW and the issues associated with it that other forms of evidence cannot provide, and we are very grateful to everyone who gave up their time to share their views and experiences with us.

We met formally as the Low Pay Commission seven times since our previous report, including an all-day meeting in December to take presentations from a number of Government and other bodies on economic and labour market issues. We also participated in a research workshop at which the research commissioned for this report was presented and discussed. We met in January for two days to review and assess the evidence relevant to our remit and to agree all of the recommendations contained in this report.

Conclusion

We have examined the evidence, issues and arguments very carefully in preparing our report. We have endeavoured to produce a report which sets these out sufficiently fully to make clear the reasons for the conclusions and recommendations that we have reached, while also producing a report of manageable length. Our conclusions and recommendations represent the unanimous view of all Commissioners.

The Commissioners

David Norgrove (Chair)
Chair, PensionsFirst, the Family Justice Board and Amnesty International Charitable Trust

Susan Anderson
Consultant to the CBI on Employment Issues

Kay Carberry (from November 2012)
Assistant General Secretary, TUC

Peter Donaldson
Managing Director, D5 Consulting Limited

Professor Bob Elliott
Professor of Economics, University of Aberdeen

Neil Goulden
Director, Neil Goulden Consulting Limited

John Hannett
General Secretary, Usdaw

Professor Stephen Machin FBA
Professor of Economics at University College London and Research Director, Centre for Economic Performance, London School of Economics

Heather Wakefield
National Secretary for UNISON's Local Government Service Group

Frances O'Grady resigned from the Commission in October 2012

The Secretariat
Robin Webb, Secretary
Carrie Aitken (to December 2012)
Marc Altenburg (September to December 2012)
Jay Arjan
James Brennan
Tim Butcher
Gerry Franks
Jennifer Oxley (to July 2012)
Tony Studd
Yi Zhang (from October 2012)

Executive Summary

1 This is the fourteenth Low Pay Commission report. We again set out the detailed evidence upon which we have based our recommendations for the different rates of the National Minimum Wage (NMW) and their operation. Our remit from the Government asked us to monitor, evaluate and review each of the rates. It also asked us to take into account the state of the economy; employment and unemployment levels; and the wider policy context including pensions reform, Universal Credit, raising of the personal tax allowance and the proposed abolition of the Agricultural Wages Board for England and Wales. Further, we were asked to review the contribution the NMW could make to the labour market position of young people, including those in apprenticeships, taking account of the introduction of the Raising of the Participation Age in England; to review the accommodation offset; and to evaluate the regulations for salaried-hours workers, and identify measures which would enable employers and workers to see as easily as possible what is needed to comply with the NMW.

Chapter 1: The Economic Context to the 2012 Rates

2 Since we discussed and agreed our previous recommendations in January 2012 the Office for National Statistics (ONS) has again revised the data for UK economic output, indicating that output fell by 6.3 per cent between the first quarter of 2008 and the second quarter of 2009, the biggest reduction in the size of the UK economy since the 1930s.

3 Since our last report the performance of the economy has been weak. After recording growth of 0.9 per cent in 2011 as a whole, the economy fell back into recession in the fourth quarter of 2011: its first double dip recession since the 1970s. Recovery in the third quarter of 2012 appears to have offset the falls from the previous quarters. Real gross domestic product in the third quarter of 2012 was marginally up on the third quarter of 2011 but remains 3 per cent below its pre-recession peak. The UK economy has essentially been flat since the third quarter of 2010.

4 Despite the double dip and overall sluggishness in growth, most key indicators of the labour market continued to show remarkable resilience. Employment grew strongly, particularly in the private sector, reaching a record high in October 2012. The total number of hours worked has also nearly recovered to its pre-recession level. Since November 2011, unemployment has fallen on both the ILO and claimant count measures. The level of redundancies has also fallen back to its pre-recession level. It should be noted, however, that the working age employment rate in October 2012 was still 1.8 percentage points below its rate in May 2008;

and much of the increase in the employment level has been in self-employment, part-time employment, and temporary employment.

5 Many economic commentators have been puzzled by the fact that the labour market has performed substantially better than past experience of a stagnating economy would suggest. Employment and hours have more or less recovered fully even though output is 3 per cent below its pre-recession level. Several reasons have been put forward to explain this ‘puzzle’, including mismeasurement of output and employment; labour hoarding; reallocation of resources away from high productivity sectors; dislocation of finance; the substitution of labour for capital; supply side changes in the labour market; and the changing composition of employment. The period has also been characterised by falling real wages. Labour is now relatively much cheaper than it was at the start of the recession.

6 In our 2012 Report, we recommended that the adult rate of the minimum wage be increased by 1.8 per cent to £6.19 an hour. Although the economy has been weaker than forecast, and inflation higher, employment grew strongly in 2012. Despite higher than forecast inflation and strong jobs growth, pay settlements and average wage growth continued to be muted. Median pay settlements by award were around 2.0-2.5 per cent but the median when weighted by employee numbers was lower at 1.5-2.0 per cent. Average earnings (basic pay) growth was never higher than 2.0 per cent throughout 2012, while total pay growth was generally weaker. Inflation, on the other hand, was never below 2.2 per cent. Thus, our recommendation for the adult rate was approximately in line with the growth in many measures of wages but was below the increase in prices.

Chapter 2: The Impact of the National Minimum Wage

7 The adult rate of the National Minimum Wage increased by 2.5 per cent in October 2011 from £5.93 to £6.08 and by 1.8 per cent in October 2012 to £6.19 an hour. The adult rate of the NMW has increased by around 72 per cent since its introduction at £3.60 an hour in April 1999. That means that the NMW has increased by more than the increase in average earnings or prices.

8 However, the real value of the NMW has fallen in recent years as the increase in the NMW has been lower than the increase in both Consumer Prices Index (CPI) and Retail Prices Index (RPI) inflation. In real terms using CPI, the value of the NMW in October 2012 was similar to its value in 2004 and much less than it was worth in 2009, while using RPI the real value of the NMW in October 2012 was less than it was in October 2004. In contrast, the value of the NMW relative to average earnings has never been higher than it was in October 2012. As a consequence, the bite of the NMW (its value relative to the median) – broadly stable in the economy as a whole between 2007 and 2010 – is also at its highest since the NMW was introduced.

9 Since 2007 the context of NMW increases has varied with firm size. Small firms have seen lower employee earnings growth than large firms, and the smaller the firm the lower the growth in employee earnings. Similarly, the smaller the firm, the larger is the bite of the NMW.

10 Despite the increase in the bite of the NMW, total employment has continued to grow. Moreover, although the bite in the low-paying sectors has grown even more than in the economy as a whole since 2007, in 2012 the number of jobs in the low-paying sectors increased faster than the number in the whole economy. Further, generally the employment performance of those groups of workers most affected by the minimum wage – women, older workers, disabled workers, ethnic minorities, and migrants – has been better, since the onset of the recession, than their less affected counterparts. However, there are two groups whose experience has been worse: young people and those with no qualifications.

11 Our research programme for this report has further extended the literature on the impact of the NMW on earnings, employment and hours. Our overall conclusions from this work are that as a result of the NMW the lowest paid have received higher pay rises than their peers, and that there remains little evidence of a significant adverse effect of the minimum wage on employment. Our most recent research has not altered these findings although it has refined our understanding, for example of the propensity of some employers to set wage rates at round numbers.

Chapter 3: Young People and Apprentices

12 The earnings of young people saw relatively strong growth in 2012, and the bites of the youth rates of the minimum wage fell for both 16-17 year olds and 18-20 year olds, for the first time in a number of years. However, earnings growth continued to be below inflation, and so the real value of young people's earnings fell again in 2012, although the fall was much smaller than in 2010 or 2011.

13 More employers are making use of both the youth rates and the adult rate of the minimum wage to pay young people. This continues the trend seen from 2010 where use of the youth rates and the adult rate has steadily increased for young people.

14 As we noted in our 2012 Report the labour market position of young people had been deteriorating for some time, worsening in the 2008-09 recession and subsequent recovery. An increasing proportion of young people had remained in full-time education and fewer had entered the labour market. The proportion of young people in employment had continued to fall and the proportion unemployed had continued to rise, even as the economy came out of the 2008-09 recession.

15 However, there are some signs that the labour market position of young people has stabilised over the last year, with employment and unemployment rates of those young people entering the labour market flattening off. Although youth employment is significantly below its pre-recession level, this is in large part due to the increased number of 16-17 and 18-20 year olds staying in full-time education.

16 The number of people starting an apprenticeship increased in 2011/12. This rise was in part due to large increases across the UK in the number of apprenticeship starts on non-traditional apprenticeship frameworks such as hospitality and customer service. In England there was another large increase in the number of people aged 25 and over starting an apprenticeship, although the number of 16-18 year old apprenticeship starts fell slightly in 2011/12.

17 For this report we were able to draw on new data from the 2012 Apprentice Pay Survey, as well as the findings of our commissioned research on the impact of the Apprentice Rate. Evidence from the research suggested that to date the overall impact of the Apprentice Rate appeared minimal. However, there was evidence that the rate had more of an effect on certain groups of apprentices, most notably younger apprentices, and in the hairdressing sector. Moreover, data from the Pay Survey suggest a significant proportion of younger apprentices were being paid less than their minimum wage entitlement, and in Chapter 4 we have recommended to the Government that they improve awareness of, and compliance with, the Apprentice Rate. The evidence that the Apprentice Rate was often not in practice the floor under apprentice wages also influenced our recommendation on its level, made in Chapter 5.

Chapter 4: Compliance and Operation of the National Minimum Wage

18 Our remit asked us to review two separate aspects of the NMW Regulations: salaried-hours workers and the accommodation offset. The regulations concerning salaried-hours are complex in some respects but we found this to be necessary and so we have recommended that the regulations should continue in their current form. We did, however, identify scope to adapt the on-line guidance to assist those wishing to calculate their or their employees' entitlement to the NMW. The evidence we were able to gather for our review of the accommodation offset did not lead us to conclude that changes to the existing framework were necessary. There was widespread support for an offset, and although we have accepted that a distinction in principle exists between accommodation provided as a free choice and that as a condition of employment, we continue to believe that there is no simple test of a genuinely free choice for the worker. We have concluded that the existing framework should continue. Through this review we did develop our thinking on the level of the offset, and we report this in Chapter 5.

19 We have detailed extensively in previous reports why compliance remains the cornerstone of the NMW regime. We take a close interest in non-compliance because the minimum wage is the wage floor in practice, as well as statute, only if it is widely observed by employers.

20 Research we commissioned for this report suggested that around 6 per cent of the bottom decile of adult earners in the UK were not receiving their entitlement to the NMW. Some caution is necessary as the data have some limitations, but if non-compliance is at this level then there is a significant problem. The evidence we have gathered for this report suggests that there continue to be particular areas of non-compliance, in relation to apprentices; interns, those on work experience or volunteers; in social care (especially domiciliary social care); and among hotel cleaners and homeworkers.

21 We believe that the Government continues to make progress in adapting the enforcement regime to be flexible and responsive and makes good use of the available resources. But there is more that needs to be done to ensure all available tools are fully utilised. In particular, we are disappointed that after two years, only one non-compliant business has been publicly named.

22 The Government accepted a recommendation in our last report to put in place, and maintain, effective, clear and accessible guidance on all aspects of the minimum wage. However, the NMW information on the new single government website (GOV.UK) lacks the depth and breadth of that which appeared on the previous government sites and on which we were looking to build. Stakeholders told us that it did not meet their needs. We are disappointed that acceptance of our recommendation has not been accompanied by implementation. However, we remain keen to assist with a review of the guidance and hope that in the near future the Government will achieve the improvement in the NMW guidance which we recommended and it accepted.

23 We continue to receive evidence of abuse of the NMW through unpaid work, often labelled as internships. This is a problem we would like to see the Government tackle with improved guidance, together with vigorous and targeted enforcement action. If this does not reduce the problem then we would expect the Government to consider other measures to secure NMW compliance, not excluding changes to the law.

24 We have made two recommendations for action to improve compliance. We have recommended that contracts issued by public bodies which commission the provision of social care should contain a clause requiring at least the NMW to be paid. Providers who do not comply with the NMW should put their contracts at risk, and commissioners of care need to be focused on the costs statute imposes on providers. Non-compliance among employers of young apprentices is so widespread as to jeopardise the credibility of the Apprentice Rate. We have recommended a combination of a communications campaign and a targeted enforcement initiative to ensure that the Apprentice Rate is known to employers and apprentices, and that infringers are caught, punished, and wherever appropriate, named.

Chapter 5: The Rates

25 The recovery of the UK economy has been much slower than forecast, and recent movements in forecasts have been downwards. Like others we expect that growth will pick up in 2013 and 2014, but it is likely to be weaker than previously thought. The consensus among forecasters is that 2013 will see growth of around 1.0 per cent.

26 In our last report we noted a strong expectation that CPI inflation would fall to or below 2 per cent by the end of 2012. At 2.7 per cent it remained above its expected level, as did RPI inflation. There is a clear consensus among forecasters for a small fall in inflation over 2013, putting CPI inflation at 2.3 per cent by the end of the year, and RPI inflation around 2.5-2.7 per cent. Recent survey data have underlined the pre-eminence of organisational financial performance in influencing pay levels. Monitors of pay settlements expect medians around 2.5 per cent in 2013, and forecasts for average earnings are a little lower, around 2.2 per cent. In the recent past these forecasts have generally exceeded outturns.

27 Employment and unemployment levels are not expected to move far from their current levels in 2013. The Office for Budget Responsibility and the median of independent forecasters expect an increase in employment, albeit by only 0.3-0.5 per cent, but claimant unemployment is also expected to increase from 1.57 million at the end of 2012 to 1.62

million by the end of 2013. The expected upturn in growth in 2014 should lead to further increases in employment but this may not be sufficient to prevent unemployment rising slightly.

28 We again reviewed the NMW against minimum wages in a group of comparator countries. In terms of purchasing power, adjusting for inflation as well as exchange rates, the NMW remains middle-ranking, a similar position to previous years. When we considered the value of each country's minimum wage relative to full-time median earnings, averaged over the year to allow for the timing and number of upratings, we again found that the bite of the UK minimum wage had remained in a broadly similar lower middle-ranking position.

29 In arriving at our recommendations to Government we examined the evidence very thoroughly, paying particular attention to matters which our remit asked us to consider.

30 Among stakeholders, those representing employers highlighted the continued fragility of the economic recovery and stressed that now was not the time to be increasing costs. The evidence from employer groups generally called for a freeze or restraint in the light of the current economic conditions. On the other hand, those organisations representing workers pointed out that low-paid workers had continued to see a fall in their real wages and that this position should be reversed. They pointed to the strength of employment in the low-paying sectors, compared with the economy as a whole, and the financial reserves of many (large) companies.

31 During the economic downturn we have taken a cautious approach to the NMW rates in order to avoid jeopardising the gains the minimum wage has brought to the lowest paid and because of the pressures on business, particularly small businesses. In practice our recommendations have approximated very closely to what has proved to be the path of average earnings – since 2009 the two series have diverged by only one penny. Over that period forecasts of average earnings have turned out to be too optimistic, and this experience suggests that our recommended rate for 2013-14, when we have again been cautious, may be closer to actual average earnings than forecasts available at the time of our meeting.

32 In 2012 we recommended an increase in the NMW which we expected to maintain the relative incomes of the lowest paid, while recognising that, like other workers, they would be likely to see some reduction in their real incomes. The economic environment is not markedly different this year, and our recommendation is similar to the one we made a year ago. We recommend that the adult rate of the National Minimum Wage be increased by 1.9 per cent, or 12 pence, to £6.31 an hour, from 1 October 2013.

33 We report our review of the accommodation offset in Chapter 4. The evidence indicates that the provision of accommodation by employers has decreased. Although this is the result of several factors, we believe a higher offset would help to encourage mutually beneficial provision of accommodation. On the other hand we do not favour reducing the take-home pay of the lowest earners at a time when, like other workers, they are experiencing erosion in the real value of their wages. It is therefore our intention to recommend staged increases in the accommodation offset towards the value of the hourly adult rate of the NMW when economic circumstances mean that the real value of the NMW is tending to rise. This year, we recommend maintaining the value of the offset relative to the minimum wage, and we recommend it increase by 1.9 per cent to £4.91 a day from 1 October 2013.

34 The labour market position of young people has stopped deteriorating since our last report, and there are one or two signs of improvement although it is too early to know if these will become a trend. Rises in their median pay mean that the bites of the young people's minimum wage rates have fallen; on the other hand employers are paying more young workers the youth rates. There continues to be debate about the role of pay in the labour market outcomes of young people. In these circumstances, we do not believe another freeze in these rates is necessary, but we remain mindful that employment of young people is more sensitive than that of adults to the economic cycle, and we recommend smaller increases in these rates than in the adult rate, which we believe should add to the relative attractiveness of young people to employers. We again note that because of the sensitivity to the economic cycle we would expect to be able to recommend larger increases for young people when economic conditions have eased. We recommend an increase of 1 per cent in the Youth Development Rate to £5.03 an hour and in the 16-17 Year Old Rate to £3.72 an hour from 1 October 2013.

35 The Apprentice Rate has risen significantly since it was introduced and this year, for the first time, there has been a fall in apprenticeship starts among 16-18 year olds in England. However we have also heard evidence that pay is not the decisive factor in employers' decisions to take on apprentices.

36 But it is another piece of evidence that has influenced our recommendation for the Apprentice Rate. The most recent Apprentice Pay Survey indicates that 30-40 per cent of 16-17 year old apprentices are paid below the Apprentice Rate. In these circumstances we are, reluctantly, unable to recommend an increase: there is no point in raising the legal floor under apprentice pay if it is not in practice observed. We recommend that the Apprentice Rate should remain at £2.65 an hour from 1 October 2013.

Recommendations

National Minimum Wage Rates

We recommend that the adult rate of the National Minimum Wage be increased by 1.9 per cent, or 12 pence, to £6.31 an hour, from 1 October 2013 (paragraph 5.101).

We recommend an increase of 1 per cent in the Youth Development Rate to £5.03 an hour and in the 16-17 Year Old Rate to £3.72 an hour from 1 October 2013 (paragraph 5.103).

We recommend that the Apprentice Rate should remain at £2.65 an hour from 1 October 2013 (paragraph 5.105).

Accommodation Offset

We recommend that the accommodation offset should remain the only permitted benefit-in-kind that can count towards payment of the National Minimum Wage and there should be only one rate. It should apply irrespective of whether the worker has a choice over taking the accommodation (paragraph 4.78).

We recommend that the accommodation offset be increased by 1.9 per cent, to £4.91 a day, from 1 October 2013 (paragraph 5.102).

Salaried-hours Workers

We recommend that the regulations for salaried-hours workers continue to be required in all their essentials. In order to make it as simple and easy as possible to achieve National Minimum Wage compliance the Government should adapt its guidance to include examples and an on-line means of determining what payment is required (paragraph 4.29).

Compliance

We recommend that the Government should combine a communications campaign and a targeted enforcement initiative to ensure that the Apprentice Rate is known to employers and apprentices, and that infringers are caught, punished, and wherever appropriate, named (paragraph 4.93).

We recommend that contracts issued by public bodies which commission the provision of social care should contain a clause requiring at least the National Minimum Wage to be paid, just as they may require compliance with other aspects of the law, such as health and safety legislation. The Government should take responsibility for bringing this about (paragraph 4.116).

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Chapter 1
The Economic Context to the October 2012 Rates

Introduction

1.1 Our last recommendations for changes to the National Minimum Wage (NMW) came into effect on 1 October 2012. We again recommended an increase in the adult rate, but for the first time we recommended a freeze in both of the youth rates. In this chapter we consider what has happened to the economy in 2012 and compare it with the forecasts available when we made those recommendations. In Chapter 2 we assess the impact of the minimum wage on pay and the pay distribution; employment and hours; and business competitiveness. It is too early to assess the minimum wage rates that came into effect on 1 October 2012, and therefore we focus on the upratings that came into effect in October 2011. We review the position of young people in the labour market in Chapter 3, in which we also consider developments in apprenticeships. In Chapter 4, we report the reviews of the accommodation offset and the salaried-hours worker rules that the Government asked us to conduct this year, and consider the operation of the NMW, highlighting areas where there is evidence suggesting non-compliance. We conclude our analysis in Chapter 5 with an overview of the prospects for the economy going forward; a summary of stakeholder views; an assessment of the impact of government legislation, including the introduction of pension auto-enrolment; and a comparison of international minimum wages. We then detail and explain our main recommendations for the rates of the NMW from October 2013. In this report, we draw on information available up to 23 January 2013, when we met to agree our recommendations.

2012 National Minimum Wage Upratings

1.2 We first summarise the reasoning behind our recommendations for the rates of the NMW that we set out in our 2012 Report. We recognised that a sustained period of inflation, especially price rises for many necessities, had led to a reduction in the real incomes of the lowest paid. Employment had also grown more strongly in the low-paying sectors. These factors were counterbalanced by the continued weakness in output and productivity, and the difficult trading conditions faced by many small firms. The resilience of employment was probably related to falling real wages. We noted that the uncertain economic environment had made it particularly difficult to judge the likely accuracy of the forecasts available to us. When we met, the forecasts for gross domestic product (GDP) growth in both 2011 and 2012 had been revised sharply downwards from the late summer of 2011 with growth expected to remain weak until 2013. We also noted the uncertainty among economic commentators about the timing and strength of any upturn, as well as the potential for further difficulties in the eurozone.

1.3 Though the bite (the NMW relative to median earnings) was at its highest ever (in April 2011) the weight of the evidence suggested that this had not led to adverse effects on employment. However, we judged a further significant increase might jeopardise those gains, especially as the recent October 2011 uprating was likely to have further increased the bite. We recommended a minimum wage that we expected would maintain the relative position of the lowest paid while being affordable to business: an increase of 1.8 per cent in the adult rate, a rise of 11 pence to £6.19 an hour, as shown in Table 1.1.

Table 1.1: National Minimum Wage Hourly Rates, UK, 1999-2013

	Adult rate		Youth Development Rate		16-17 Year Old Rate		Apprentice Rate	
	Rate	Change	Rate	Change	Rate	Change	Rate	Change
	£	%	£	%	£	%	£	%
Oct 2012-	**6.19**	**1.8**	**4.98**	**0.0**	**3.68**	**0.0**	**2.65**	**1.9**
Oct 2011-Sept 2012	6.08	2.5	4.98	1.2	3.68	1.1	2.60	4.0
Oct 2010-Sept 2011	5.93	2.2	4.92	1.9	3.64	2.0	2.50	-
Oct 2009-Sept 2010	5.80	1.2	4.83	1.3	3.57	1.1		
Oct 2008-Sept 2009	5.73	3.8	4.77	3.7	3.53	3.8		
Oct 2007-Sept 2008	5.52	3.2	4.60	3.4	3.40	3.0		
Oct 2006-Sept 2007	5.35	5.9	4.45	4.7	3.30	10.0		
Oct 2005-Sept 2006	5.05	4.1	4.25	3.7	3.00	0.0		
Oct 2004-Sept 2005	4.85	7.8	4.10	7.9	3.00	-		
Oct 2003-Sept 2004	4.50	7.1	3.80	5.6				
Oct 2002-Sept 2003	4.20	2.4	3.60	2.9				
Oct 2001-Sept 2002	4.10	10.8	3.50	9.4				
Oct 2000-Sept 2001	3.70	2.8	3.20	-				
Jun 2000-Sept 2000	3.60	-	3.20	6.7				
Apr 1999-May 2000	3.60	-	3.00	-				

Source: Low Pay Commission (LPC).
Note: From October 2010, those aged 21 have been covered by the adult rate. Previously they had been covered by the Youth Development Rate.

1.4 We further noted that the minimum wages of young people had risen much faster than the average earnings of all young people since the onset of the recession. As a result the bites of the youth rates were higher than ever, and much higher than the bite of the adult rate. Further, the labour market for young people had continued to deteriorate throughout 2011 and some, but by no means all, of our commissioned research had found evidence of statistically significant negative effects of the minimum wage on the employment and hours of young people. We therefore reluctantly recommended freezing both of the youth rates. In contrast, the employment of apprentices had continued to increase substantially and our analysis and commissioned research had found no evidence of a negative impact from the introduction of the Apprentice Rate. We therefore recommended a percentage increase in line with that of the adult rate, 1.9 per cent (or 5 pence), to £2.65 an hour.

1.5 The adult rate of the NMW has now grown by 71.9 per cent since its introduction in April 1999, from £3.60 to £6.19 an hour, slightly more than the 66.0 per cent increase in the Youth Development Rate over the same period, from £3.00 to £4.98 an hour. The 16-17 Year Old Rate has grown by 22.7 per cent, from £3.00 to £3.68 an hour, since it was introduced in October 2004. Over the same period, October 2004 to October 2012, the adult rate of the NMW rose by 27.6 per cent and the Youth Development Rate increased by 21.5 per cent. In contrast, the Apprentice Rate has increased more than the adult rate since its introduction in October 2010, by 6.0 per cent compared with 4.4 per cent.

The UK Economy in 2012

1.6 Our recommendation for the increase in the adult rate of the minimum wage in October 2012 was 1.8 per cent. As shown in Table 1.2, the Office for Budgetary Responsibility (OBR) had forecast average earnings growth in 2012 of 2.0 per cent, while the median of the HM Treasury Panel of Independent Forecasts was for average earnings growth of 2.4 per cent.[1] We judged our recommendation would turn out to be below inflation: both the OBR and the consensus forecasts for the end of 2012 expected Consumer Prices Index (CPI) inflation to remain above 2.0 per cent, and forecast Retail Prices Index (RPI) inflation at 2.8 per cent.

1.7 At the time of our deliberations in January 2012, the independent forecasts for GDP growth in 2012 revealed little consensus. The median of these forecasts had been revised down sharply from the end of summer 2011, to 0.4 per cent, while the OBR forecast of November 2011 had put growth at 0.7 per cent. However, both sources forecast growth of over 2.0 per cent in 2013. Both expected this below-trend growth to lead to a worsening performance in the labour market, with employment falling and unemployment rising in 2012. We next consider what actually happened to growth, inflation, average earnings, employment and unemployment.

Table 1.2: Economic Forecasts Available in January 2012, UK, 2012-2013

Per cent	Forecasts for 2012		Forecasts for 2013	
	Median of independent forecasts (January 2012)	**OBR forecasts (November 2011)**	**Median of independent forecasts (November 2011)**	**OBR forecasts (November 2011)**
GDP growth (whole year)	**0.4**	**0.7**	2.1	2.1
Average earnings growth (whole year)	**2.4**	**2.0**	-	3.1
Inflation RPI (Q4)	**2.8**	**2.8**	2.6	3.0
Inflation CPI (Q4)	**2.1**	**2.4**	2.0	2.0
Employment growth (whole year)	**-0.5**	**-0.2**	-	0.3
Claimant count (millions, Q4)	**1.79**	**1.79**	1.76	1.74

Source: HM Treasury Panel of Independent Forecasts (November 2011 and January 2012) and OBR forecasts (2011) based on ONS data, GDP growth (ABMI), total employment measured by workforce jobs (DYDC) and claimant unemployment (BCJD), quarterly, AWE total pay (KAB9), monthly, seasonally adjusted; RPI (CZBH) and CPI (D7G7), quarterly, not seasonally adjusted, UK (GB for AWE); 2012-2013.

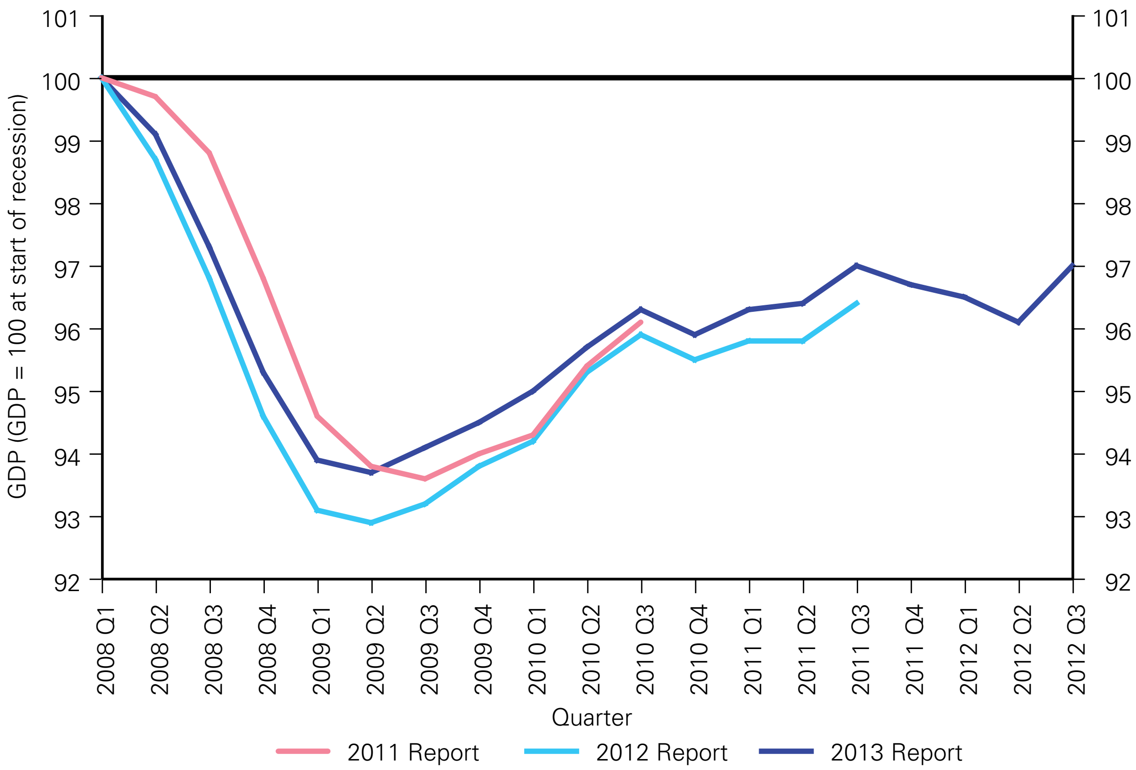
1 The HM Treasury Panel of Independent Forecasts uses Whole Economy Average Weekly Earnings (Total Pay) as its measure of wage growth (ONS code KAB9), while the OBR's measure is derived from wages and salaries from the National Accounts (ROYJ) divided by the total number of employees (MGRN).

Gross Domestic Product Growth

1.8 When we wrote our 2012 Report, official data suggested that the UK was struggling to recover from its deepest recession since the 1930s. The data indicated that between the first quarter of 2008 and the second quarter of 2009, output had fallen by 7.1 per cent. Output then started to recover before abruptly falling back in the last quarter of 2010. This weakening in the recovery continued throughout 2011 with GDP only a quarter of a percentage point higher in the third quarter of 2011 than in the third quarter of 2010, and still nearly 4.0 per cent below its pre-recession peak.

1.9 Since January 2012, ONS has again revised the data for GDP. Figure 1.1 shows that the level of GDP has been revised up for the whole period from the start of the recession to the third quarter of 2011. The revisions to quarterly growth rates have been less stark. The latest data now show that the recession was not as deep as had previously been thought, a loss in output of 6.3 per cent, but that it was still the deepest recession since the 1930s. The revisions also suggested that in the third quarter of 2011, output was about 3.0 per cent below its pre-recession peak.

Figure 1.1: Effect of Recent Revisions to Gross Domestic Product, UK, 2008-2012

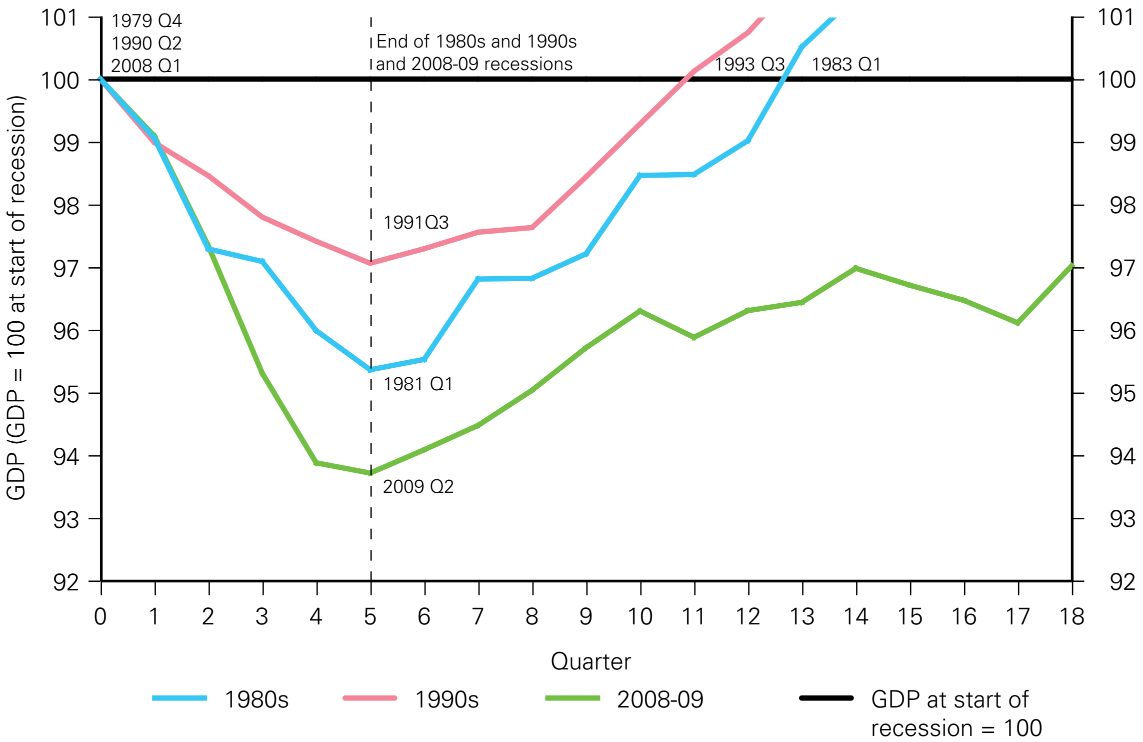


Source: ONS, quarterly change in GDP (IHYQ), quarterly, seasonally adjusted, UK, Q1 2008-Q3 2012.
Note: The data have been revised over time.

1.10 The revised data also suggested that the recovery had weakened further: in the third quarter of 2012 output was barely higher than it had been a year earlier. The UK has experienced a double dip recession, the second dip beginning in the fourth quarter of 2011 and ending with an Olympics-inspired rebound in the third quarter of 2012. However, economic indicators of growth have again weakened since September.

1.11 The revisions to the data have also affected the length of the 1980s and 1990s recessions. Previously, we had thought that both of those recessions, like the 2008-09 recession, had lasted for five quarters and that recovery to pre-recession output had occurred within a further eight quarters. The revised data again suggest that the three most recent recessions were of similar length but that recovery was quicker after the milder 1990s recession than after the deeper recession of the 1980s. Figure 1.2 shows that recovery from the recent recession has taken much longer. Indeed, the UK economy is still 3.0 per cent below its pre-recession output, more than five quarters after the point when output lost in the previous two recessions had been fully recovered.

Figure 1.2: Gross Domestic Product in Recession and Recovery, UK, 1979-2012



Source: LPC estimates based on ONS data, GDP (ABMI), quarterly, seasonally adjusted, UK, Q4 1979-Q3 2012.
Note: Quarter 1 is the first quarter of the recession (1980 Q1 for the 1980s, 1990 Q3 for the 1990s, and 2008 Q2 for the 2008-09 recessions).

1.12 It is highly unlikely that growth in the UK for the whole of 2012 will match the forecast rates available to us in January 2012. The latest GDP forecasts and data, those from December 2012 and January 2013, suggest that growth will, at best, have been flat in 2012. In December 2012, the OBR forecast real GDP to have fallen by 0.1 per cent in 2012 and the median of independent forecasts was for zero growth (these were made prior to the release of the first estimate of GDP for the fourth quarter of 2012). Growth in the fourth quarter of 2012 of between -0.3 and 0.0 per cent would mean zero growth in the economy for the whole of 2012. (On 25 January 2013, in its first estimate of GDP growth for the fourth quarter of 2012, ONS announced that GDP had fallen by 0.3 per cent over the quarter and that growth was flat over the whole of 2012.)

Prices, Settlements and Earnings

1.13 The latest inflation data available to us at the time of our 2012 Report related to December 2011. They showed CPI inflation at 4.2 per cent, and RPI inflation at 4.8 per cent. CPI inflation had fallen from 5.2 per cent in September 2011, while RPI inflation had fallen from a 20-year high of 5.6 per cent at the same time. Inflation was expected to continue falling as short-term pressures fell away, notably the January 2011 VAT increase, commodity prices and domestic energy prices. The Governor of the Bank of England said that these 'were unlikely to be repeated in 2012'. Consequently, he expected CPI inflation to fall to its 2 per cent target by the end of 2012. Other forecasters concurred: the January 2012 median of independent forecasts put CPI inflation at 2.1 per cent in the fourth quarter of 2012, while the OBR forecast a slightly higher rate of CPI inflation of 2.4 per cent. RPI inflation was thought to be subject to the same downward pressures, and so was expected to follow the same path. Both the January 2012 median of independent forecasts and the OBR expected RPI inflation of 2.8 per cent in the fourth quarter of 2012.

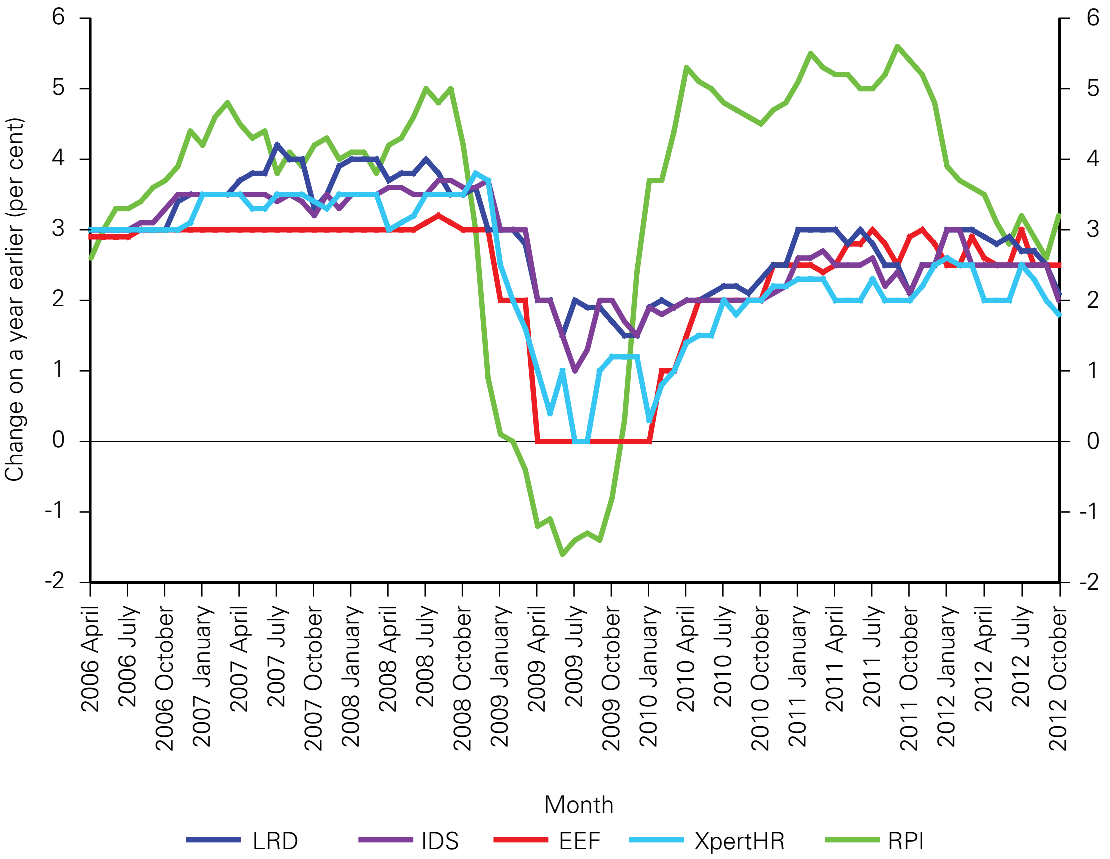
1.14 The inflation forecasts were reasonably accurate for the first three quarters of 2012, which saw CPI inflation fall from 4.2 per cent in December 2011 to 2.2 per cent in September 2012. CPI inflation then took an unforeseen jump, to 2.7 per cent in October, pushed up by the rise in undergraduate tuition fees, rising food prices and increases in domestic fuel bills. Figure 1.3 shows that CPI inflation remained at 2.7 per cent to the end of 2012, with the RPI rate ending the year at 3.1 per cent.

Figure 1.3: Price Inflation, UK, 2006-2012

Source: ONS, annual change in CPI (D7G7) and RPI (CZBH), monthly, not seasonally adjusted, UK, 2006-2012.

1.15 Inflation, RPI in particular, has historically had a strong influence on pay settlements and determined the rate of real pay growth. Since late 2009, however, there has been a marked change in this relationship, as shown in Figure 1.4. Pay settlements failed to keep up with the inflation rate through 2010 and 2011. At the time of writing our last report, the forecasts were for inflation and settlements to move back into line, as pay awards were expected to centre in the 2 to 3 per cent range, and inflation was expected to fall through this range.

Figure 1.4: Median Pay Settlements and Price Inflation, UK, 2006-2012



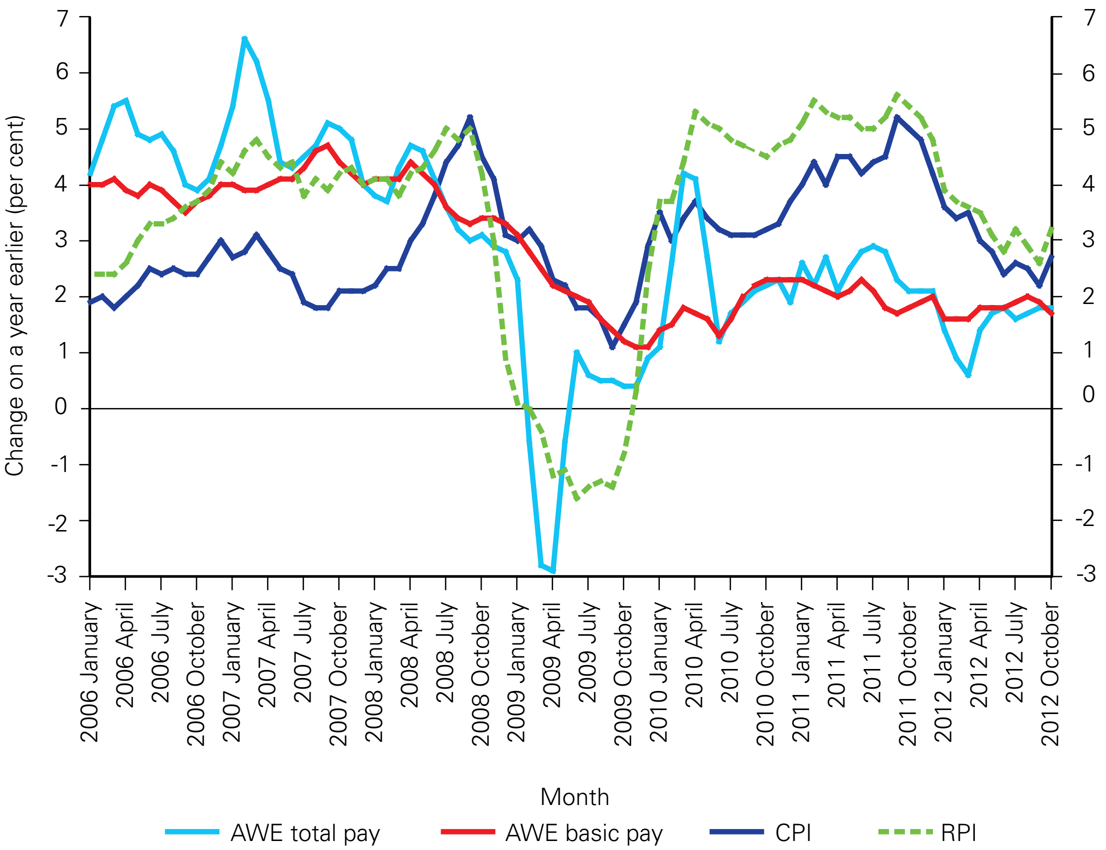
Source: XpertHR (previously Industrial Relations Services), Incomes Data Services (IDS), Labour Research Department (LRD), and EEF, the manufacturers' organisation (EEF), pay databank records, three-month medians; ONS, annual change in RPI (CZBH), monthly, not seasonally adjusted, UK, 2006-2012.
Notes:
a. EEF covers manufacturing only.
b. Pay settlement medians for the three months to the end of month shown.

1.16 The forecast for pay settlements turned out to be reasonably close, with the leading providers of pay settlement data reporting median pay awards of 2.3 to 2.7 per cent for 2012. Pay settlement medians fell gradually from the start of the year, when a number of deals linked to the autumn 2011 inflation rate had pushed the median close to 3 per cent. By the end of 2012 falling inflation and the absence of pay pressures put pay medians at around 2 per cent. There was a degree of variation by sector, with pay awards in the manufacturing sector ahead of the services sector throughout 2012, and public sector pay awards held at zero or capped at 1 per cent. These low settlements in the public sector were reflected in median pay settlements when weighted by employee numbers. These were 1.5-2.0 per cent, compared with 2.0-2.5 per cent by award.

1.17 Average earnings growth, measured by Average Weekly Earnings (AWE), was subdued throughout 2011 and, at the time of our last report, was forecast to remain so. The January 2012 median of independent forecasts for average earnings growth was 2.4 per cent for the year, and the OBR forecast was for just 2.0 per cent. The Bank of England was not expecting a pick-up in pay growth until 2013.

1.18 The modest forecasts for average earnings growth turned out to be over-estimates. As shown in Figure 1.5, whole economy average earnings (total pay) growth was below 2 per cent throughout 2012, and falls in bonus payments took it below 1 per cent in February and March. Similarly whole economy average earnings basic pay growth was never higher than 2 per cent throughout 2012.

Figure 1.5: Growth in Average Weekly Earnings, GB, and Price Inflation, UK, 2006-2012



Source: ONS, AWE basic pay (KAI9) and total pay (KAC3), annual three-month average change for the whole economy (KAI9), monthly, seasonally adjusted, GB, 2006-2012; and annual change in RPI (CZBH) and CPI (D7G7), monthly, not seasonally adjusted, UK, 2006-2012.

1.19 While none of the broad AWE sectors have shown pay buoyancy, average earnings growth has been notably higher in the wholesale, retail, hotels and restaurants sector, which covers a large proportion of low-paid employees, at 2 to 3 per cent throughout 2012.

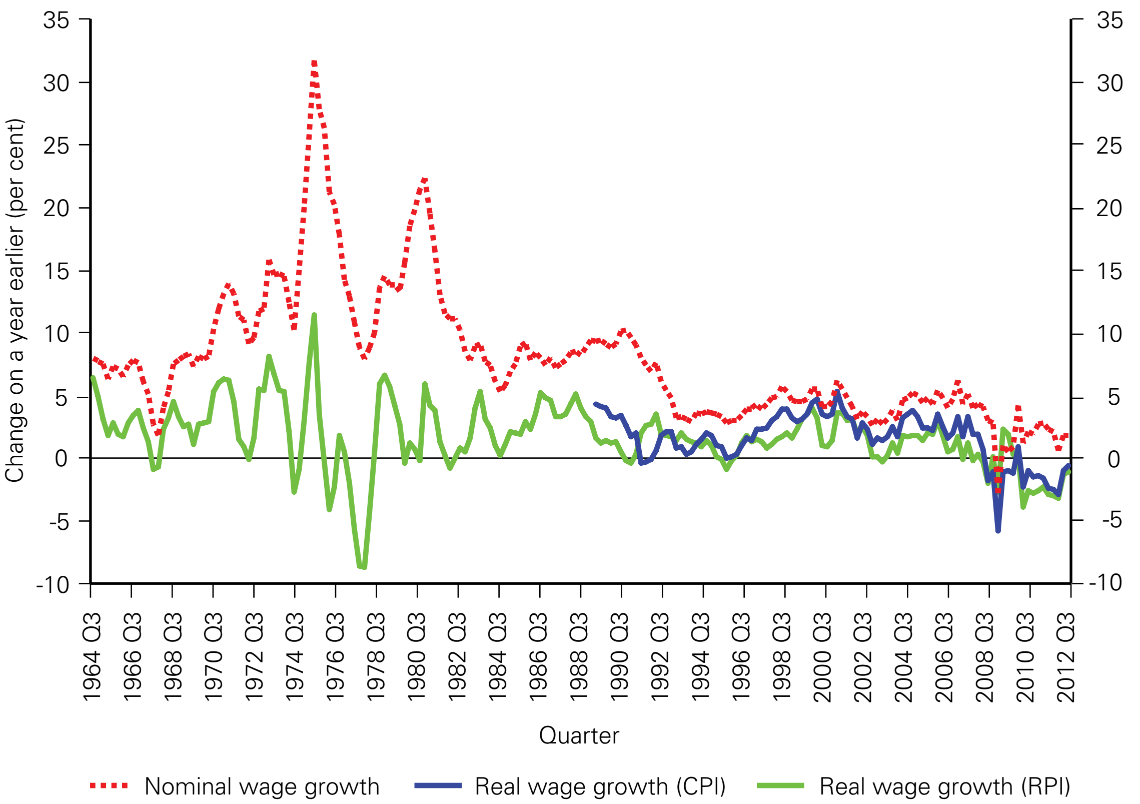
1.20 There may have been a number of structural factors holding down average earnings, such as the growth of part-time work; and the shift in the finance sector from cash bonuses to other financial incentives not recorded in the earnings data such as shares and pensions. However, decomposition of the AWE whole economy figures by the Office for National Statistics (ONS) indicated that wage growth was muted, even after allowing for broad changes in the composition of employment.

1.21 Evidence from the Annual Survey of Hours and Earnings (ASHE) confirmed that earnings growth had been low. According to ASHE, median annual growth in weekly earnings was 1.3 per cent in the year to April 2012, close to the growth in weekly earnings for the same period according to AWE, at 1.4 per cent. Further evidence from ASHE suggested that the low earnings growth was not a result of employment restructuring: the growth in median annual earnings for full-time employees who had been in the same job for more than a year was 1.4 per cent. We examine earnings growth at different points of the earnings distribution in Chapter 2.

Real Wages

1.22 RPI inflation has generally been the same or higher than average wage growth since the beginning of 2007 and higher than pay settlements since mid-2006, other than in 2009 when RPI measured falls in prices (i.e. inflation was negative). Average wage increases have also generally lagged CPI inflation since mid-2008. This fall in real wages, using either measure of inflation, has been steepest since the beginning of 2010. Figure 1.6 shows that real wage decreases did not occur to any significant extent in the 1980s and 1990s recessions. It also shows that the recent sustained period of real wage decreases is unprecedented in modern UK economic history. Although substantial falls in real wages occurred in the mid-1970s, as a result of inflation shocks, with inflation over 20 per cent and nominal wages growing by around 10 per cent, these periods of falling real wages were short-lived and sandwiched between periods of fast earnings growth. The loss in real wages was soon recovered with the sharp rise in nominal wages in 1979 and 1980 as the Incomes Policy ended in May 1979.

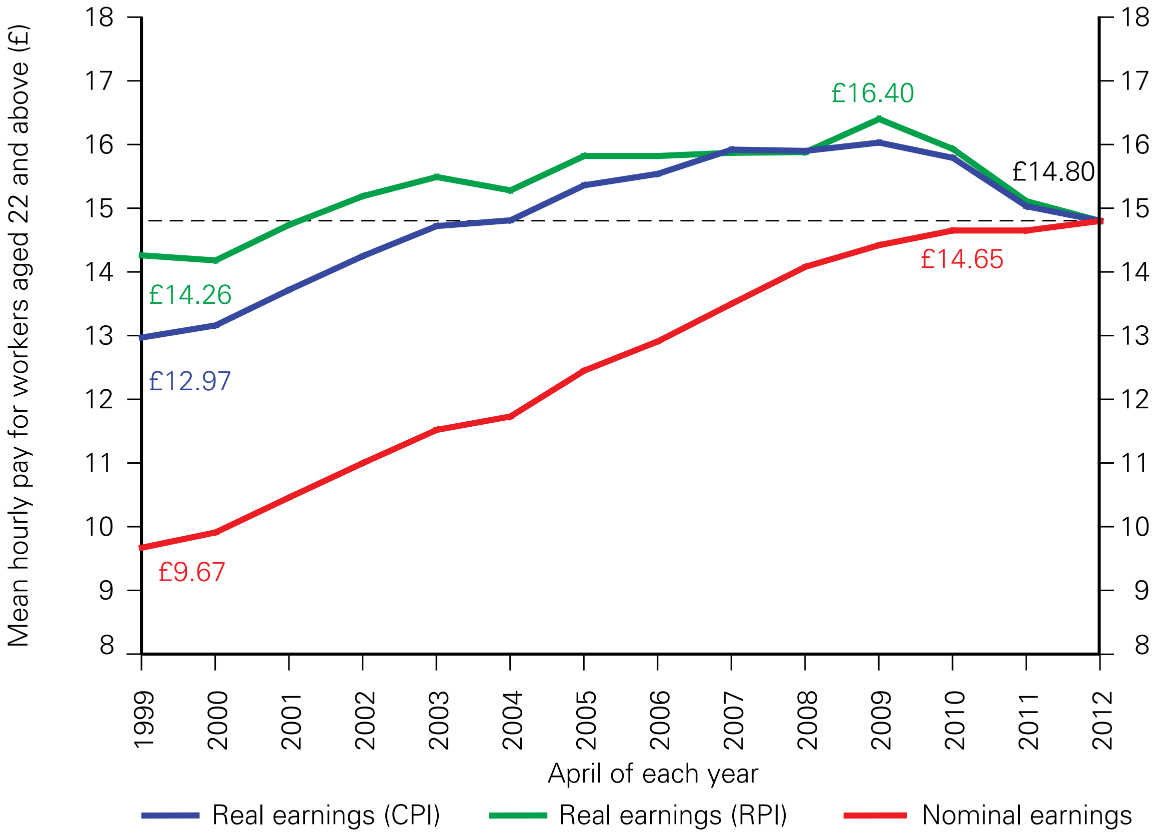
Figure 1.6: Growth in Nominal and Real Wages, UK, 1964-2012



Source: LPC estimates based on ONS data, annual change in CPI (D7G7), Q1 1989-Q3 2012, and RPI (CBZH), Q1 1964-Q3 2012, quarterly, not seasonally adjusted, UK; annual change in AEI inc bonuses (LNNC), Q1 1964-Q4 2000, and AWE total pay (KAC3), Q1 2001-Q3 2012, monthly, seasonally adjusted, GB.

1.23 It is revealing to chart the value of the average hourly wage over the period since 1999. Figure 1.7 shows that when the National Minimum Wage was introduced in April 1999, the average hourly wage (excluding overtime) in the UK was £9.67 an hour. The average hourly wage increased at a similar rate each year between 1999 and 2009, before slowing in the aftermath of the 2008-09 recession. By April 2012, the average hourly wage had increased to £14.80 an hour. For much of the period 1999-2009 the real average wage (taking account of inflation) also increased. Deflating by CPI, the real average wage increased by 23.6 per cent from £12.97 an hour in 1999 to £16.03 an hour in 2009. The growth in real wages was not as strong when deflating by RPI. Between 1999 and 2009, using RPI, the real average hourly wage rose by 15.0 per cent though there was barely any growth between 2005 and 2008. On both inflation measures, the real average wage peaked in 2009. Since then, increases in average wages have failed to keep pace with inflation. Between 2009 and 2012, the real average wage fell by 7.7 per cent, using CPI, and by 9.8 per cent using RPI. These recent falls take the real value of the average wage in 2012 (£14.80 an hour) back to its level in 2003 and 2004, using CPI, and even further back to its level in 2001 using RPI. In other words the losses in real wages in the last three years have wiped out the gains made in the previous 8-11 years.

Figure 1.7: Growth in Nominal and Real Average Hourly Wages, UK, 1999-2012



Source: LPC calculations based on ONS data: RPI (CZBH) and CPI (D7G7), monthly, not seasonally adjusted, UK, 1989-2012. ASHE mean hourly pay: without supplementary information, April 1997-2004; with supplementary information, April 2004-2006; 2007 methodology, April 2006-2011; and 2010 methodology April 2011-2012, standard weights, UK.

1.24 Real wages peaked in 2009 as retail prices fell, a very unusual event. Throughout the period from 1999-2009, nominal wages continued to rise at about the same rate, though they did not rise as fast as inflation between 2007 and 2009, and nominal wages have risen more slowly since 2009, again lagging inflation.

Employment and Unemployment

1.25 This absence of real wage growth appears to have aided the remarkable resilience of employment. The consensus of forecasts was that, with weak GDP growth expected, employment would fall in 2012. As GDP growth has turned out even weaker than projected, one might have expected employment to fall further than those forecasts envisaged; however, employment increased. Although output is still 3 per cent below its pre-recession level, the total employment level is now higher than it was before the recession. This is in marked contrast to the two previous recessions. As Figure 1.8 shows, it took about 7.5 years for employment to fully recover after the 1980s recession and around 8.5 years to recover in the 1990s. It has taken just over four years to recover this time. Further, total hours worked are now only marginally below their pre-recession level but took even longer than employment to recover in the previous two recessions. It took nearly 9 years for the total hours worked to reach their pre-recession level after the 1980s recession, and over 14 years after the 1990s recession.

Figure 1.8: Hours and Employment in Recession and Recovery, UK, 1979-2012

Source: LPC estimates based on ONS data, total employment (MGRZ), and total weekly hours (YBUS), monthly, seasonally adjusted, UK, 1979-2012.
Note: Month 0 is the pre-recession peak for each measure (December 1979, July 1990 and May 2008 for employment; and August 1979, December 1989, and March 2008 for hours).

1.26 Total employment rose to 29.57 million in May 2008 prior to the onset of recession which then saw it fall to 28.81 million in March 2010. It has since recovered, as shown in Table 1.3, reaching a record high of 29.6 million in October 2012. The potential employment pool became larger through population growth and an increase in the number of older, post-State Pension Age, workers. Consequently, the working age employment rate has not recovered as quickly. It reached its peak in May 2008 at 73.0 per cent, and then fell throughout the recession and the start of the recovery to 70.2 per cent in September 2011. In the three months to October 2012, it stood at 71.2 per cent, still substantially below its pre-recession peak.

1.27 Table 1.3 also shows that increases in the employment level since the end of the recession have mainly been in self-employment, part-time employment and temporary work. Between the start of the recession (May 2008) and October 2012, self-employment increased by 364,000 (9.5 per cent), part-time employment increased by 625,000 (8.3 per cent) and the number of temporary employees increased by 200,000 (14.1 per cent). In contrast, the number of full-time and permanent employees fell.

Table 1.3: Change in Employment and Jobs, UK, 2008-2012

	(October 2012)	Change (Oct 2011-Oct 2012)		Change (May 2008-Oct 2012)	
	000s	000s	%	000s	%
LFS Employment					
Employment	**29,601**	**499**	**1.7**	**29**	**0.1**
Full-time employment	21,482	210	1.0	-596	-2.7
Part-time employment	8,119	288	3.7	625	8.3
Number of employees	**25,118**	**346**	**1.4**	**-385**	**-1.5**
Full-time employees	18,376	163	0.9	-709	-3.7
Part-time employees	6,743	182	2.8	324	5.0
Self-employment	**4,200**	**74**	**1.8**	**364**	**9.5**
Full-time self-employment	3,010	5	0.2	85	2.9
Part-time self-employment	1,191	69	6.2	279	30.6
Permanent employees	23,498	248	1.0	-585	-2.4
Temporary employees	1,620	97	6.3	200	14.1
ONS Workforce Jobs[a]					
Workforce jobs	31,946	532	1.7	-137	-0.4
Employee jobs	27,150	479	1.8	-523	-1.9

Source: LPC estimates based on ONS data, workforce jobs (DYDC) and employee jobs (BCAJ), quarterly; total employment (MGRZ), full-time employment (YCBE), part-time employment (YCBH), employees (MGRN), full-time employees (YCBK), part-time employees (YCBN), self-employment (MGRQ), full-time self-employment (YCBQ), part-time self-employment (YCBT), monthly, seasonally adjusted, UK, 2008-2012.

Note:

a. ONS workforce jobs data are for September 2012, change on September 2011 and change between June 2008 and September 2012.

1.28 Self-employment rose by 10 per cent between May 2008 and July 2012 to reach a record of 4.2 million people, and has remained at that level. Despite the recession, the numbers in part-time employment continued to increase albeit with much of that increase among those who would have preferred to have a full-time job. In 2012 part-time employment also reached a new record of 8.13 million people in August, up by 8.4 per cent since May 2008, before falling back slightly to 8.12 million in October 2012. However, the number of part-time workers wanting full-time work more than doubled from 670,000 in May 2008 to 1.42 million in July 2012. By contrast, full-time employment fell by 2.7 per cent between May 2008 and October 2012.

1.29 Between May 2008 and October 2012, the number of permanent employees fell by 585,000 (2.4 per cent), while the number of temporary employees increased by 14.1 per cent. The number of temporary workers had fallen more or less continuously from 1.79 million in December 1997 to 1.36 million in October 2008. However, during the economic downturn, employers made increasing use of temporary workers and their numbers picked up to reach 1.63 million in July 2012. The increase in those who would have preferred a permanent job (0.31 million) was greater than the total increase in temporary jobs (0.27 million).

1.30 Although the total numbers employed have now surpassed the previous record set in May 2008, Table 1.3 also shows that the number of employees and the number of employee jobs were still 1.5-1.9 per cent below their pre-recession levels. Indeed, the number of full-time employees was 3.7 per cent lower than it was in May 2008. Despite this substantial fall in full-time employment, the total number of hours worked per week had more or less returned to its pre-recession peak. In October 2012, the total number of hours worked was just 0.3 million below its March 2008 peak of 49.3 million.

1.31 The numbers of vacancies and redundancies were clearly affected by the recession and their behaviours were mirror images of each other. The stock of vacancies fell from 700,000 in April 2008 to 430,000 in June 2009, while redundancies rose from around 120,000 in the three months to April 2008 to peak around 310,000 in the three months to April 2009. Since the 2008-09 recession, redundancies have generally fallen back, albeit with a further brief blip upwards as a result of public sector cutbacks in 2011, and had fallen to around 147,000 in the three months to October 2012. In contrast, vacancies have not recovered as quickly and have remained below 500,000 throughout 2011 and 2012.

1.32 In line with the forecasts for employment growth, the consensus of forecasters expected claimant count unemployment to rise from 1.6 million at the end of 2011 towards 1.8 million in 2012 before falling back slightly in 2013. But unemployment has fallen as the labour market has picked up. The claimant count fell from 1.60 million in December 2011 to 1.58 million in October 2012. The headline ILO unemployment measure fell more strongly from 2.61 million in October 2011 to 2.49 million in October 2012. These falls in unemployment were not as large as the increase in employment, as the rise in employment came from declining economic inactivity and a growing population. Although unemployment on both measures has fallen, there has been an increase in long-term unemployment, particularly among those unemployed for more than twelve months.

1.33 In summary, the labour market has coped better in the aftermath of this recession than it did after the two previous recessions (in the 1980s and 1990s). In light of the continued stagnation in growth, this is an even more remarkable performance.

Productivity

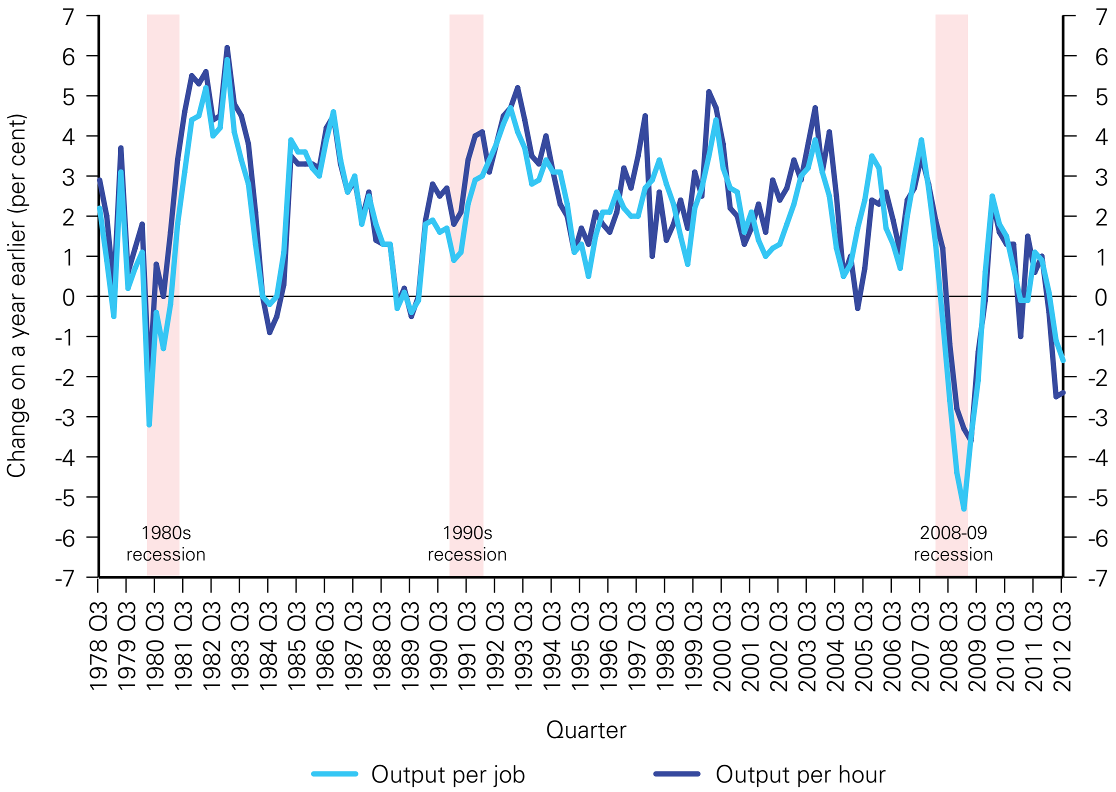
1.34 This remarkable performance of employment has puzzled many commentators. Employment has continued to rise while output has stagnated, with associated weak or negative labour productivity growth. As shown in Figure 1.9, this did not occur during the recession and subsequent recovery in the early 1990s, nor indeed in the aftermath of the 1980s recession. As noted above, in both of the previous recessions, employment and hours fell by more than the fall in output. Further, the recoveries in output were stronger after the previous recessions. Since mid-2010, the level of productivity has been around 10 per cent below its pre-recession trend.

1.35 Among others, ONS (2012b and 2012c) has attempted to suggest some possible explanations for this outcome. Various members of the Monetary Policy Committee (for example, Broadbent (2012) and Weale (2012)) have also addressed this issue. The Bank of England set out some of the factors that may account for the 10 per cent shortfall in measured productivity in its Inflation Report (November 2012b). It grouped them into three main factors: data issues; those related to weakness in demand; and those related to weakness in underlying productivity.

1.36 Many City commentators (such as Ben Broadbent (2009) and Jim O'Neill (2012) of Goldman Sachs) have questioned the accuracy of the output data but others (Britton and Gabay, 2009 and ONS, 2009, 2012a, 2012b and 2012c) have noted that ONS revisions tend to be small and could not possibly account for much of this discrepancy. Business and industrial surveys have generally supported the ONS data. The Bank of England suggested that this might explain at most 1 percentage point of the 10 percentage points shortfall. Others have suggested that the strength of employment growth may have been over-estimated. Indeed, much of the increase in employment has been among the self-employed and part-time or temporary employment. However, the Bank argues that even under extreme assumptions these factors might account for only another 1 percentage point of the shortfall.

1.37 Blanchflower (2012) has noted that the size of the workforce may not have been accurately measured prior to the recession and that actual productivity per worker might have been lower as migrant workers were under-recorded. Again this is probably a factor but it seems unlikely that the workforce jobs data supplied by businesses omitted most of the migrant workforce.

Figure 1.9: Growth in Productivity per Job and per Hour, UK, 1978-2012



Source: ONS, annual change in output per job (LNNP), output per hour (LZVD), unit labour costs (DMWN) and unit wage cost (LOJE) for the whole economy, quarterly, seasonally adjusted, UK, Q3 1978-Q3 2012.

1.38 Labour hoarding, through choice or necessity, has also been suggested as an important factor. While it might explain why workers did not lose their jobs in the initial downturn, and employment (and hours) fell by less than output, it does not explain the strong pick-up in hiring since mid-2010. Others see this pick-up as indicative of a secular change in the way the UK labour market works, and emphasise supply side changes such as welfare-to-work policies in increasing employment.

1.39 In the service sector, the weakness in demand may have also affected productivity by altering the effort required to generate new custom (for example, estate agents may now spend much of their time leafleting and marketing in order to identify potential customers, whereas previously, they may not have needed to leave their desks as customers came to them). These businesses may report little spare capacity but have room to expand if demand picks up. In a service-oriented economy, this may be an important factor that might also be consistent with survey indicators suggesting little spare capacity in many companies. This might explain why productivity is falling or why it makes sense to sustain employment, but it does not provide an explanation for the increase in employment, unless more workers are required to drum up business.

1.40 The Bank of England concluded its analysis by looking at those factors that relate to weaker underlying productivity growth going forward. It noted that prior to the recession, productivity growth was strong in both the financial services and energy extraction sectors. However, the North Sea energy sector appears to be in structural decline and the output of financial services is likely to be constrained in future. Together, this might explain 1-2 percentage points of the shortfall.

1.41 The increased cost, and reduced availability, of working capital and funds for business investment may have adversely affected output; the efficiency of production; the pace of innovation; and the adoption of new technology. Forbearance by the banks may have also enabled less productive businesses to continue. The reduction in start-ups may also reflect the unwillingness of banks to lend to new, but riskier, and potentially higher productivity companies. Those companies that have been established may have been more reliant on labour as the uncertain economic outlook and higher cost of finance weighed against capital investment. These factors are difficult to quantify but may explain some of the weakness in productivity. Less significantly, firms may also have been devoting more effort to activities that, although essential, are less productive such as handling increased regulatory requirements in financial services.

1.42 Finally, the Bank of England noted that there may have been a mis-allocation of labour and skills. Indeed, it found evidence that recent occupational changes had been associated with smaller wage rises than previously, suggesting some diminution of career progression into higher productivity jobs.

1.43 It is unclear whether the shortfall in measured productivity is a result of weak demand or whether underlying productivity growth is weak. There is evidence to support both accounts. Crawford, Jin and Simpson (2013) and Field and Franklin (2013) use company data to show that the weakness in productivity growth has predominantly been among small and medium-sized firms. These firms may also be prone to labour hoarding as they may be less able to reduce staffing levels. Alternatively, it could be that small firms are more reliant on banks for finance. In conclusion, the Bank of England judged that much of the shortfall reflected weak underlying productivity growth.

1.44 The role of real wages should not be forgotten in this story. Firms can afford to employ more labour than expected as the real price of labour has fallen. Indeed, that looks the most likely explanation for much of the job growth that has occurred. In the short-term the resilience of employment may be beneficial to the economy. However, the lack of productivity growth has led to an increase in unit wage and labour costs. In the long-run, this will be detrimental to employment growth unless productivity grows.

Revised Forecasts for 2012 and 2013

1.45 As we noted above, since the end of summer 2011 forecasters have been revising their growth forecasts for 2012 downwards. As shown in Table 1.4, even these weaker forecasts are proving too optimistic and downward revisions are continuing. OBR and the median of independent forecasts are now expecting a slight fall or zero growth in GDP in 2012. For 2013 significant downward revisions have also been made, to around 1 per cent growth, half that forecast at this time last year. Thus, the economic outturn has been much poorer than had been expected in January 2012. However, the resilience of the labour market has enabled employment to grow more strongly and unemployment to fall.

1.46 Inflation has again turned out higher than forecast by the OBR, the consensus of independent forecasters or the Bank of England. Inflation was expected to fall back sharply towards target but it has fallen less rapidly than had been hoped. Indeed, CPI inflation ended 2012 at 2.7 per cent and RPI inflation stood at 3.1 per cent. CPI inflation is forecast to remain above target at the end of 2013. In contrast, average earnings growth remains subdued. Pay settlements picked up at the start of 2012, following high inflation in the autumn of 2011, but this has not continued. OBR is still expecting robust earnings growth but other forecasters have revised their earnings growth downwards in line with the modest AWE growth observed in the autumn of 2012.

Table 1.4: Revised Economic Forecasts, UK, 2012-2013

Per cent	Forecasts used in 2012 Report (January 2012)				Latest forecasts available (January 2013)			
	Median of independent forecasts (November 2011 and January 2012)		OBR forecasts (November 2011)		Median of independent forecasts (January 2013)		OBR forecasts (December 2012)	
	2012	2013	2012	2013	2012	2013	2012	2013
GDP growth (whole year)	**0.4**	2.1	**0.7**	2.1	**-0.0**	1.0	**-0.1**	1.2
Average earnings growth (whole year)	**2.4**	-	**2.0**	3.1	**1.5**	2.2	**2.7**	2.2
Inflation RPI (Q4)	**2.8**	2.6	**2.8**	3.0	**3.1**	2.7	**3.2**	2.5
Inflation CPI (Q4)	**2.1**	2.0	**2.4**	2.0	**2.7**	2.4	**2.6**	2.3
Employment growth (whole year)	**-0.5**	-	**-0.2**	0.3	**1.1**	0.5	**1.0**	0.3
Claimant count (millions, Q4)	**1.79**	1.76	**1.79**	1.74	**1.58**	1.62	**1.58**	1.69

Source: HM Treasury Panel of Independent Forecasts (November 2011, January 2012 and January 2013) and OBR forecasts (November 2011 and December 2012) based on ONS data, GDP growth (ABMI), total employment measured by workforce jobs (DYDC) and claimant unemployment (BCJD), quarterly, AWE total pay (KAB9), monthly, seasonally adjusted; RPI (CZBH) and CPI (D7G7), quarterly, not seasonally adjusted, UK (GB for AWE); 2012-2013.

Conclusion

1.47 Since we discussed and agreed our recommendations in January 2012, ONS has again revised the data for UK economic output. This time they were revised generally upwards, implying that the recession was not quite as deep as had previously been thought. However, output had still fallen by 6.3 per cent between the first quarter of 2008 and the second quarter of 2009, the biggest reduction in the size of the UK economy since the 1930s.

1.48 After recording growth of 0.9 per cent in 2011 as a whole, the economy fell back into recession in the fourth quarter of 2011: its first double dip recession since the 1970s. In 2012 poor weather in the spring and the additional Bank Holiday for the Diamond Jubilee in June compounded the situation. Recovery in the third quarter of 2012 appears to have offset the falls from those three previous quarters. Real GDP in the third quarter of 2012 was marginally up on the third quarter of 2011 but remains 3 per cent below its pre-recession peak. The UK economy has essentially been flat since the third quarter of 2010.

1.49 Despite the double dip and overall sluggishness in growth, most key indicators of the labour market continued to show remarkable resilience. Employment grew strongly, particularly in the private sector, reaching a record high in October 2012. The total number of hours worked has also nearly recovered to its pre-recession level. Over the last year, since November 2011, unemployment has fallen on both the ILO and claimant count measures. The level of redundancies has also fallen back to its pre-recession level.

1.50 It should be noted, however, that the working age employment rate in October 2012 was still 1.8 percentage points below its level in May 2008; and much of the increase in the employment level has been in self-employment, part-time employment, and temporary employment. The number of full-time employees was still over 0.7 million lower in October 2012 than in May 2008. In addition, the stock of unfilled vacancies was well below the levels observed prior to the onset of recession in 2008.

1.51 Many economic commentators have been puzzled by the fact that the labour market has performed substantially better than past experience of a stagnating economy would suggest. Employment and hours have more or less recovered fully even though output is still 3 per cent below its pre-recession level. Several reasons have been put forward to explain the 'puzzle' including: mismeasurement of output and employment; labour hoarding; reallocation of resources away from high productivity sectors; dislocation of finance; the substitution of labour for capital; supply side changes in the labour market; and the changing composition of employment. None of these, on its own, seems to explain much of the difference but taken together they provide a more convincing argument. The period has also been characterised by falling real wages. Labour is now relatively much cheaper than it was at the start of the recession.

1.52 Since the start of the financial crisis in 2007 average earnings growth, whether measured using ASHE or AWE, and median pay settlements have generally been below price inflation. This has resulted in a fall in real wages of around 8 per cent since the beginning of 2007: the largest and most sustained fall in real wages in peacetime since the 1930s.

1.53 In our 2012 Report, we recommended that the adult rate of the minimum wage be increased by 1.8 per cent to £6.19 an hour. Although the economy has been weaker than forecast and inflation higher, employment grew strongly in 2012. Despite higher than forecast inflation and strong jobs growth, pay settlements and average wage growth continued to be muted. Median pay settlements by award were around 2.0-2.5 per cent but the median when weighted by employee numbers was lower at 1.5-2.0 per cent. Average earnings (basic pay) growth was never higher than 2.0 per cent throughout 2012, while total pay was even weaker. Inflation, on the other hand, was never below 2.2 per cent. Thus, our recommendation for the adult rate was approximately in line with the growth in many measures of wages but was below the increase in prices. We now consider the impact of the adult rate of the National Minimum Wage in Chapter 2.

Chapter 2

The Impact of the National Minimum Wage

Introduction

2.1 The macroeconomic context to our most recent recommendations was considered in Chapter 1. We now examine the impact of the minimum wage so far. Since its introduction in April 1999, we have monitored and assessed the impact of the National Minimum Wage (NMW). We have undertaken in-depth, in-house analysis; commissioned research; conducted surveys of affected businesses; and accumulated much evidence from our stakeholders. This evidence has been used as the basis to inform our deliberations and make our recommendations for the rates of the NMW. In this chapter, we review that evidence.

2.2 It is still too early to assess the impact of the October 2012 NMW rates. However, we have sufficient information to make an initial evaluation of the impact of the upratings implemented on 1 October 2011. In our 2011 Report we recommended that the adult rate of the NMW should increase by 2.5 per cent from £5.93 to £6.08 an hour. Our recommendations for the youth rates were slightly lower. We recommended that the Youth Development Rate increase by 1.2 per cent from £4.92 to £4.98 an hour and that the 16-17 Year Old Rate should increase by 1.1 per cent from £3.64 to £3.68 an hour. We also recommended that the recently introduced Apprentice Rate should increase from £2.50 to £2.60 an hour. This chapter focuses on the impact of the adult rate of the NMW. Youth rates and the Apprentice Rate are considered in more detail in Chapter 3.

2.3 In this chapter we investigate the impact of the NMW on individual earnings; pay structures; and labour costs; and whether any impacts on these had affected employment or hours; and competitiveness. In so doing we look at the NMW since its introduction but focus our analyses on recent upratings. As well as examining the consequences of the NMW in aggregate, we also explore the impact on particular groups of workers and firms that are most likely to be affected by low pay. Before starting this review of the evidence, we therefore define what we mean by minimum wage jobs, investigating the types of jobs and the people that are employed to do them.

National Minimum Wage Jobs

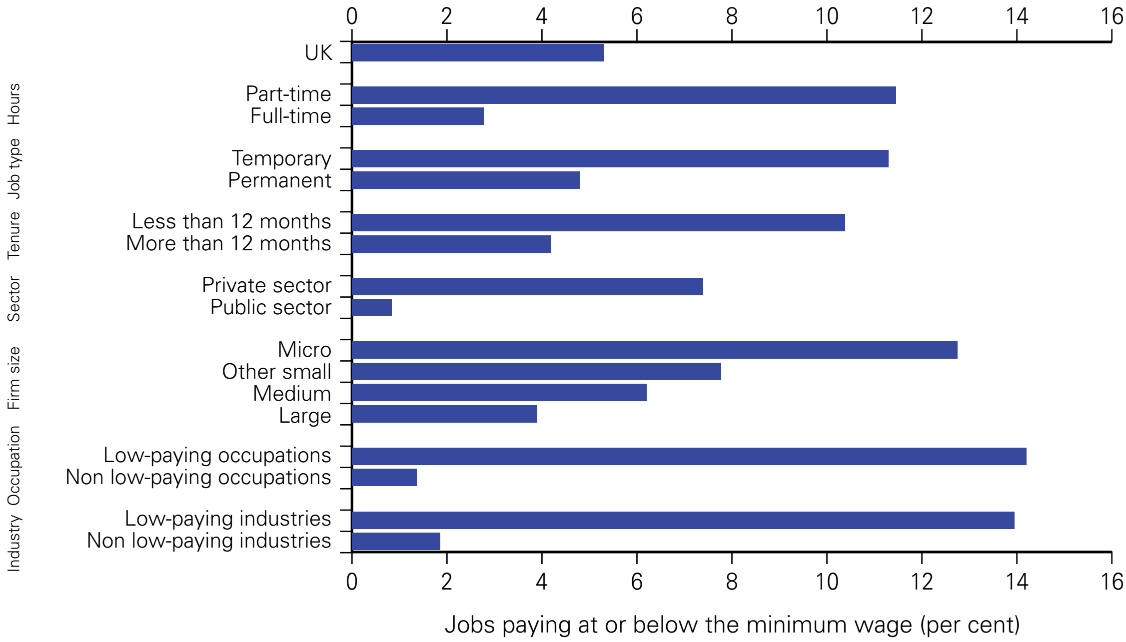
2.4 Our main source of information on hourly earnings comes from the Annual Survey of Hours and Earnings (ASHE). This is an annual survey of employee jobs based on a 1 per cent sample of all employees on HM Revenue & Customs' Pay-As-You-Earn register. The earnings and hours information collected in the ASHE survey are reported by employers from their records. The Office for National Statistics (ONS) regards ASHE as the best source of information on individual earnings in the UK. ASHE survey data also cover the individual's gender, age, industry, occupation, home postcode, work postcode and size of firm. More information on the ASHE survey is available in Appendix 5. The latest available ASHE data were collected in April 2012, when the adult minimum wage was £6.08 an hour (2.5 per cent higher than in April 2011). We use hourly pay excluding overtime as our basic measure of earnings, as that is the available wage measure closest to the legal definition of the minimum wage. Some employers may have pre-empted the increase in the minimum wage in October 2011, which was announced in March, and so the earnings distribution from the ASHE data in April 2012 may, to some extent, reflect the then forthcoming changes to the minimum wage.

2.5 In this section we have defined a minimum wage job as one that, in April 2012, paid below, at, or up to five pence above the minimum wage. Using this definition, we estimate that 5.3 per cent of all jobs were minimum wage jobs. Figure 2.1 shows that a higher proportion of part-time jobs, temporary jobs, jobs held for less than a year, jobs in the private sector, jobs in smaller firms and jobs in certain low-paying occupations and industries were minimum wage jobs.

2.6 Over 11 per cent of part-time jobs were paid at or below the minimum wage compared with about 3 per cent of full-time jobs. Over 10 per cent of temporary jobs and those held for less than a year were minimum wage jobs compared with 4-5 per cent of permanent jobs or those held for over a year. There was also a clear relationship between the proportion of minimum wage jobs and size of firm. Minimum wage jobs accounted for fewer than 4 per cent of jobs in large firms (with 250 or more employees), about 6 per cent of jobs in medium-sized firms (those with 50-249 employees), 8 per cent of jobs in other small firms (10-49 employees), and 13 per cent of jobs in micro firms (1-9 employees).

2.7 Unsurprisingly, Figure 2.1 also shows that a much higher proportion of jobs in the low-paying occupations or industries are minimum wage jobs. As in previous reports, we define low-paying sectors as those with a large number or high proportion of minimum wage workers. We have recently reviewed our occupation-based low-paying sectors, following ONS's move from Standard Occupational Classification (SOC) 2000 codes to SOC 2010 codes. More information on our review of the low-paying occupations can be found in Appendix 6, as well as full definitions of each low-paying occupation and industry. Following this review, our low-paying occupations include: retail; hospitality; social care; food processing; leisure, travel and sport; cleaning; agriculture; childcare; textiles and clothing; hairdressing; office work; transport; non-food processing; and storage.

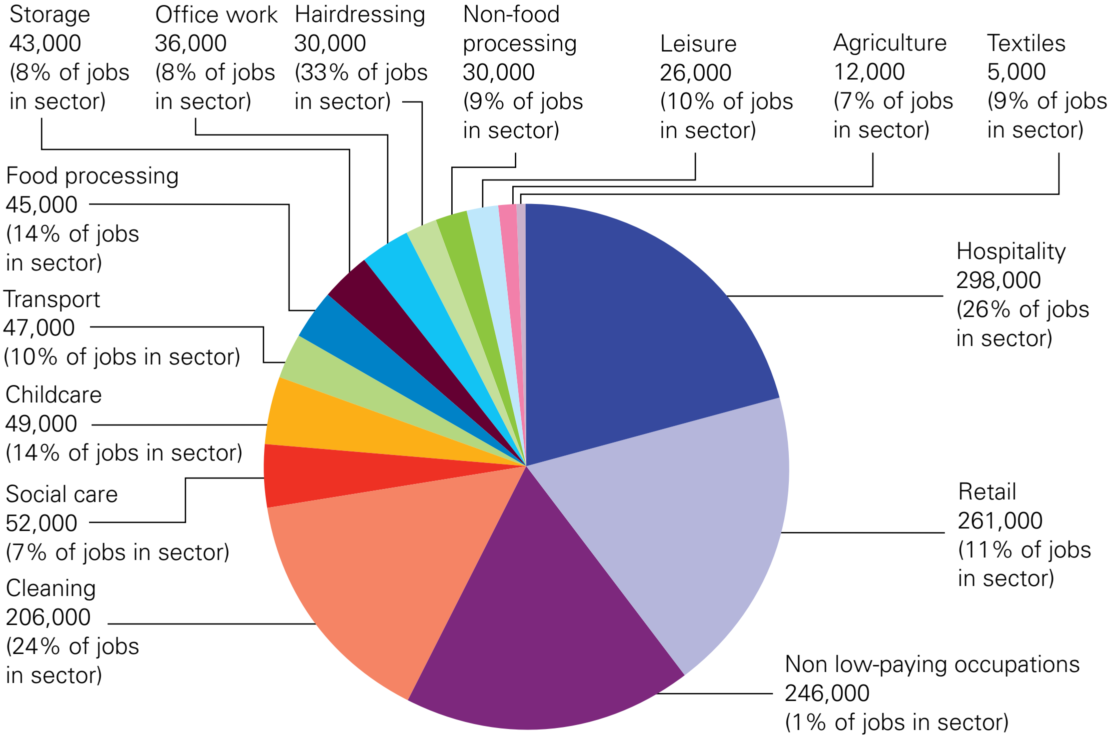
Figure 2.1: Characteristics of Minimum Wage Jobs, UK, 2012



Source: Low Pay Commission (LPC) estimates based on ASHE, 2010 methodology, low-pay weights, including those not on adult rates of pay, UK, April 2012.
Note: Minimum wage jobs defined as adults (aged 21 and over) earning less than £6.13, youths (aged 18-20) earning less than £5.03, and 16-17 year olds earning less than £3.73 in April 2012.

2.8 Figure 2.2 shows that the low-paying occupations with the most minimum wage jobs were hospitality, retail and cleaning, which between them accounted for over three quarters of a million minimum wage jobs. Around 246,000 minimum wage jobs (just under a fifth) were not in our low-paying occupations. Social care, childcare, transport, food processing and storage each accounted for between 3 and 4 per cent of minimum wage jobs. The remaining 10 per cent of minimum wage jobs were in the other low-paying occupations. A third of all jobs in hairdressing, and about a quarter of jobs in hospitality and cleaning were paid at or below the minimum wage. Of our low-paying occupations, agriculture and social care had the lowest proportions of minimum wage jobs, at about 1 in 14 jobs in each sector.

Figure 2.2: Number and Proportion of Minimum Wage Jobs, by Low-paying Occupation, UK, 2012

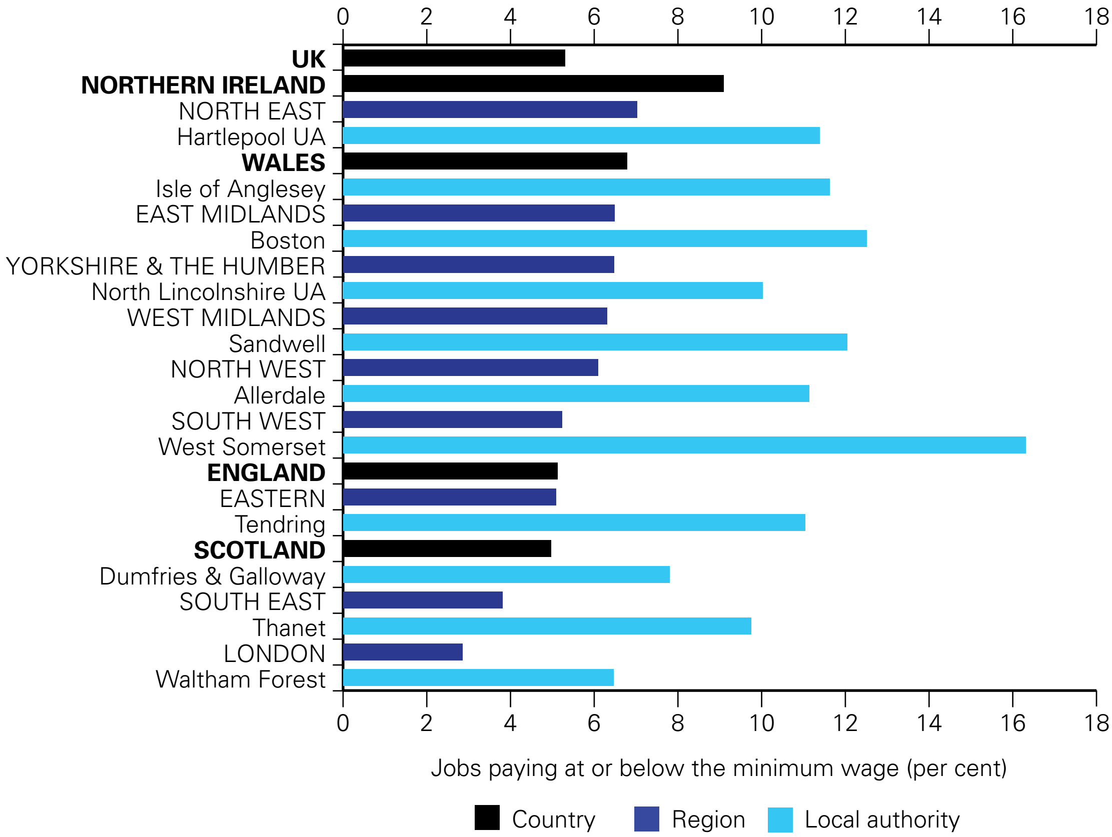


Source: LPC estimates based on ASHE, 2010 methodology, low-pay weights, including those not on adult rates of pay, UK, April 2012.
Notes:
a. Minimum wage jobs defined as adults (aged 21 and over) earning less than £6.13, youths (aged 18-20) earning less than £5.03, and 16-17 year olds earning less than £3.73 in April 2012.
b. Percentages in parentheses are the proportion of jobs in each occupation that are minimum wage jobs.

2.9 Unfortunately, timely and robust data on employment by occupation are not available but such information is accessible for employment by industry. We therefore make greater use of our low-paying sector definitions based on industries when analysing employment. Using ASHE, we found that the largest numbers of minimum wage jobs in our low-paying industries are in hospitality, retail and cleaning. Together these accounted for about 54 per cent of the 1.4 million minimum wage jobs in the UK using this definition. The other low-paying industries accounted for about 21 per cent of minimum wage jobs, and the remaining 25 per cent of minimum wage jobs were in non low-paying industries**.**

2.10 Figure 2.3 shows that there is significant variation in the proportion of minimum wage workers across the UK and within countries and regions. Minimum wage jobs accounted for over 9 per cent of jobs in Northern Ireland, close to 7 per cent of jobs in Wales, and about 5 per cent of jobs in England and Scotland. There was significant variation within the English regions, where the proportion of minimum wage jobs ranged from 2.9 per cent in London to 7.0 per cent in the North East.

Figure 2.3: Minimum Wage Jobs, by Country, Region, and Highest Local Authority Within Each Area, 2012



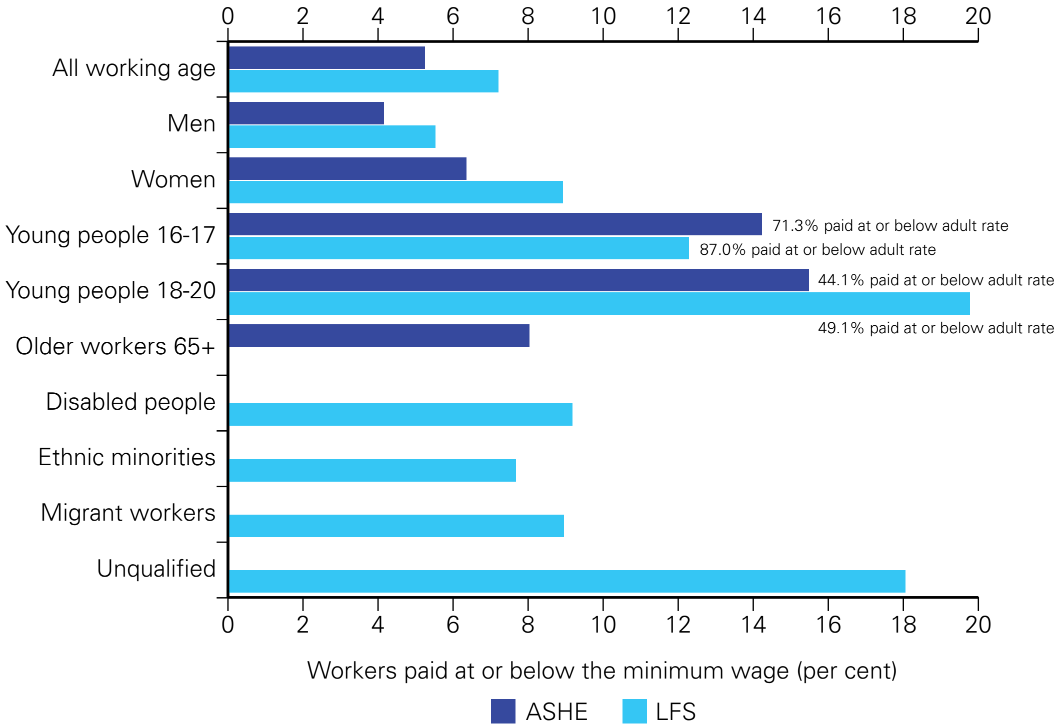
Source: LPC estimates based on ASHE 2010 methodology, low-pay weights, including those not on adult rates of pay, UK, April 2012.
Notes:
a. Minimum wage jobs defined as adults (aged 21 and over) earning less than £6.13, youths (aged 18-20) earning less than £5.03, and 16-17 year olds earning less than £3.73 in April 2012.
b. The geographic areas are work-based. No regional breakdown is available for Northern Ireland.

2.11 The highest numbers of minimum wage jobs were in the North West (171,000), the West Midlands (145,000) and Yorkshire and the Humber (139,000). Although London had the highest proportion of all employees (14.1 per cent in April 2012) it had only 7.6 per cent of all minimum wage jobs.

National Minimum Wage Workers

2.12 In the previous section we looked at the characteristics and locations of minimum wage jobs. In this section we examine the characteristics of those people who work in these jobs. We focus on previously identified groups that contain high proportions of minimum wage workers. These include women, young workers, older workers, disabled people, ethnic minorities, migrant workers and those with no qualifications. Earnings data from ASHE are only available by age and gender, so we use information from the Labour Force Survey (LFS) for the other groups. LFS data on earnings are regarded as less reliable than ASHE data because ASHE is based on employer records whereas the LFS is self-reported and based on smaller sample sizes. Figure 2.4 shows an estimate of the proportion of minimum wage workers in each identified group. Other than for young people aged 16-17 years old, LFS estimates of minimum wage workers tend to be higher than those from ASHE.

Figure 2.4: Minimum Wage Workers, UK, 2012



Source: LPC estimates based on ASHE 2010 methodology, low-pay weights, including those not on adult rates of pay, UK, April 2012 and LFS Microdata, income weights, quarterly, not seasonally adjusted, UK, Q2 2012.
Note: Minimum wage jobs defined as adults (aged 21 and over) earning less than £6.13, youths (aged 18-20) earning less than £5.03, and 16-17 year olds earning less than £3.73 in April 2012.

2.13 Figure 2.4 shows that in 2012 the highest proportions of minimum wage workers were among young people (over 14 per cent, according to ASHE) and those with no qualifications (over 18 per cent, according to LFS). It should be noted that, according to ASHE, over 71 per cent of 16-17 year olds and 44 per cent of 18-20 year olds were paid at or below the adult rate of the minimum wage. Using LFS, the proportions were even higher (87 per cent and 49 per cent respectively).

2.14 The ethnic minority and migrant worker categories in Figure 2.4 are made up of many different ethnicities and countries of birth, and presenting them in this form hides large variations between the constituent groups. For example, the proportions of black workers and Indian workers in minimum wage jobs (5.1 per cent and 6.7 per cent respectively) were lower than that of white workers (7.2 per cent). In contrast, 12.3 per cent of Pakistani and Bangladeshi workers earned the minimum wage.

2.15 We have shown that a higher proportion of minimum wage jobs are part-time, temporary, in small firms, in the private sector and in the low-paying occupations and industries. Further, this section has shown that a higher proportion of women, young workers, older workers, ethnic minorities, migrant workers, disabled people and those with no qualifications are minimum wage workers. We now assess the impact of the minimum wage at the aggregate level, and on these types of jobs and groups of workers in particular.

Impact on Earnings and Pay

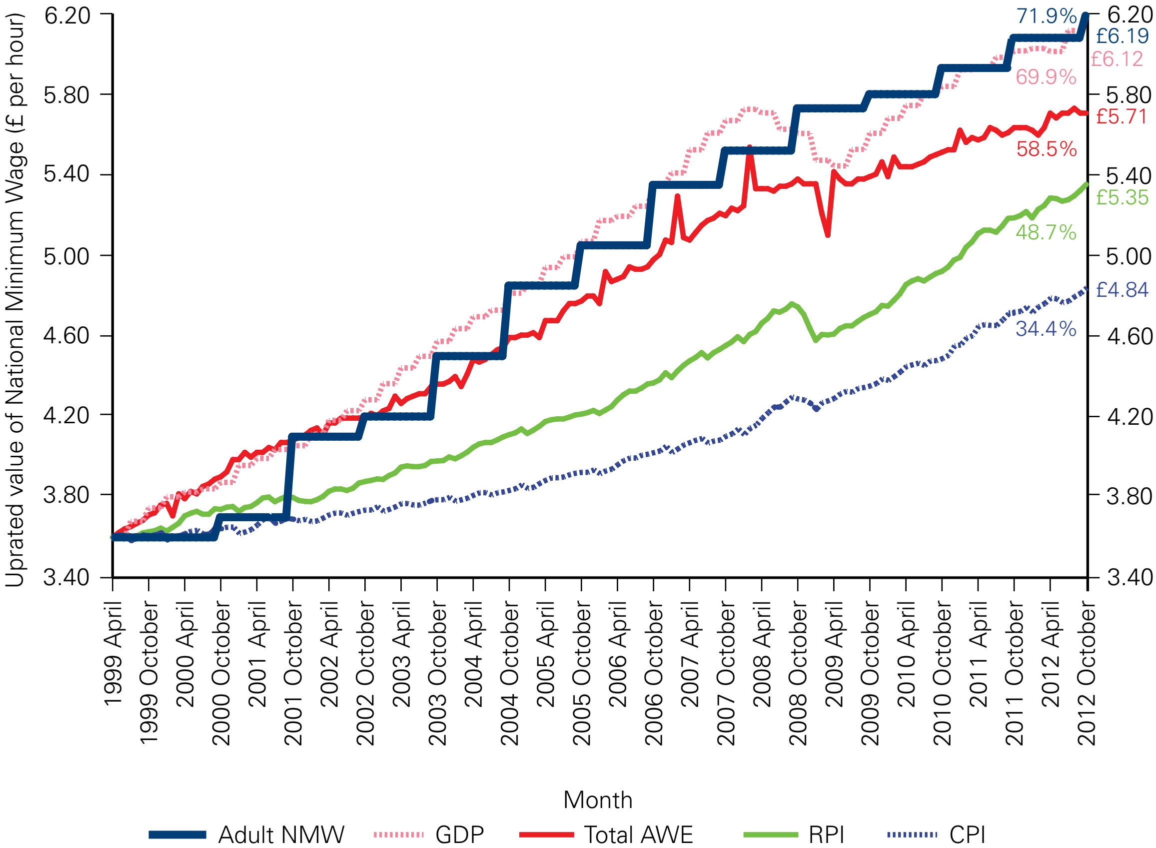
2.16 We begin our investigation of the impact of the minimum wage on the UK economy by looking at what has happened to earnings; pay settlements; and pay structures since the NMW was introduced. In this section, we focus on our analysis of official data from ASHE and LFS, but also consider information from various pay research organisations as well as the findings from our commissioned research and that of others.

National Minimum Wage Relative to Prices and Earnings

2.17 Since its introduction in 1999, the adult rate of the NMW has increased much faster than average earnings or prices but only slightly more than nominal output. Between April 1999 and October 2012, as noted in Chapter 1 and shown in Figure 2.5, the adult rate of the NMW increased by about 72 per cent from £3.60 an hour to £6.19 an hour. If, instead, the adult rate had been uprated by the growth in average earnings, it would have increased by 58.5 per cent to £5.71 an hour in October 2012, 48 pence lower than its actual increase. If the adult rate had tracked price inflation, it would have grown by about 49 per cent to £5.35 an hour, using Retail Prices Index (RPI) inflation, and by about 34 per cent to £4.84 an hour, using Consumer Prices Index (CPI) inflation. That is, it would have been between 84 pence and £1.35 an hour lower than the actual increase in the NMW. Uprating in line with nominal gross domestic product (GDP) growth would have increased the minimum wage by about 70 per cent to £6.12 an hour in October 2012, just 7 pence lower than its actual value.

2.18 There have been at least three distinct phases in the path followed by the adult rate of the minimum wage. From 1999 to 2001 the introductory minimum wage was set at what might, in hindsight, be considered a cautious level and was then raised in line with price inflation, while the Commission awaited the outcome of research investigating the impact on employment and wages. Those early research studies suggested that the minimum wage had raised the wages of many workers but that it had not greatly affected differentials nor led to an adverse impact on employment or hours worked. Between 2001 and 2007 the Commission recommended a series of increases that were above average earnings growth. The end of this second period coincided with more uncertain economic circumstances. Since then, increases in the adult rate of the NMW have roughly kept pace with average earnings growth. These periods can also clearly be seen in Figure 2.6 which presents the level of the minimum wage in real and relative terms since its introduction.

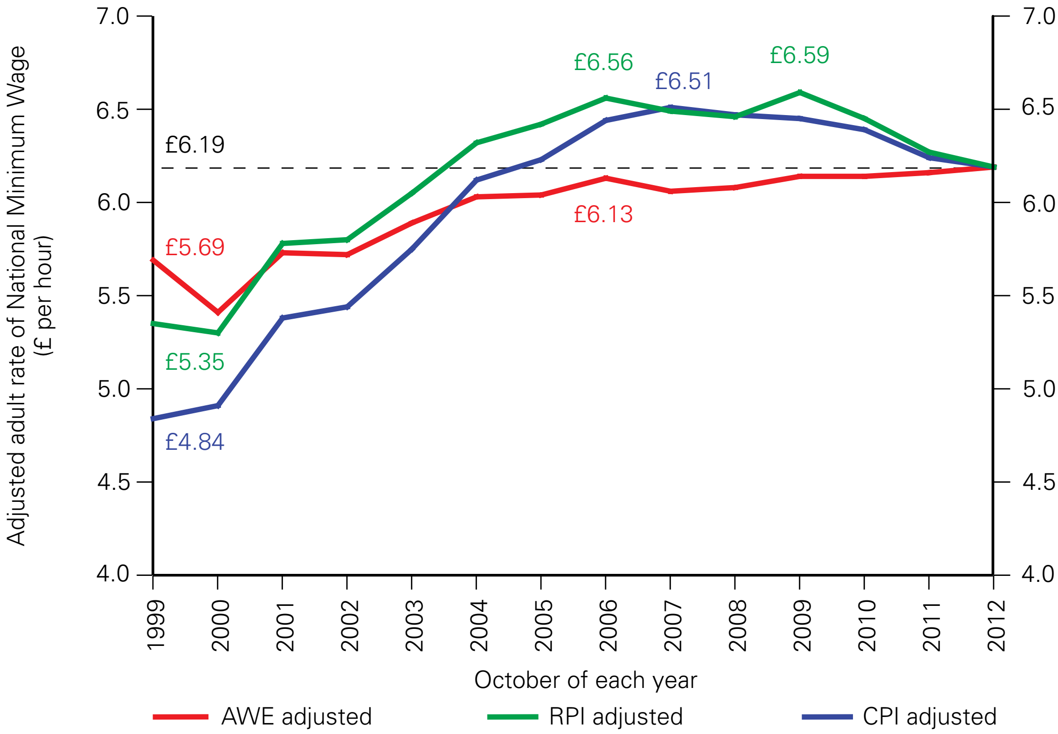
Figure 2.5: Increases in the Real and Relative Value of the Adult National Minimum Wage, UK, 1999-2012



Source: LPC estimates based on ONS data, AEI including bonuses (LNMQ), 1999, AWE total pay (KAB9), 2000-2012, CPI (D7BT), 1999-2012, and RPI (CHAW), 1999-2012, monthly; and nominal GDP (YBHA), 1999-2012, quarterly, seasonally adjusted (AWE, AEI and GDP only), UK (GB for AWE and AEI).
Note: The AWE series began in January 2000 and the AEI series ended in July 2010. Our earnings series is estimated using AEI (including bonuses) from April 1999-January 2000 and AWE (total pay) from January 2000-October 2012.

2.19 Figure 2.6 shows the real value of the adult rate in each year by adjusting earlier minimum wage rates to take into account inflation (both RPI and CPI) or the growth in average earnings. When taking into account RPI the adult minimum wage of £6.19 in October 2012 was lower in real terms than at any point since 2003. Between 2006 and 2010 the RPI-adjusted adult rate was worth about £6.50-£6.60 an hour at October 2012 prices, before falling sharply in 2010 and 2011. Adjusting for CPI shows a similar trend, with the adult rate in 2012 the lowest in real terms since 2004, although significantly higher than the CPI adjusted rate in 1999 of £4.84 an hour. If we adjust for the growth in Average Weekly Earnings (AWE), then in August 2012 the minimum wage reached its highest ever value, with sharp increases between 1999 and 2004, and increases broadly in line with average earnings since 2006.

Figure 2.6: Real and Relative Value of the Adult National Minimum Wage, UK, 1999-2012

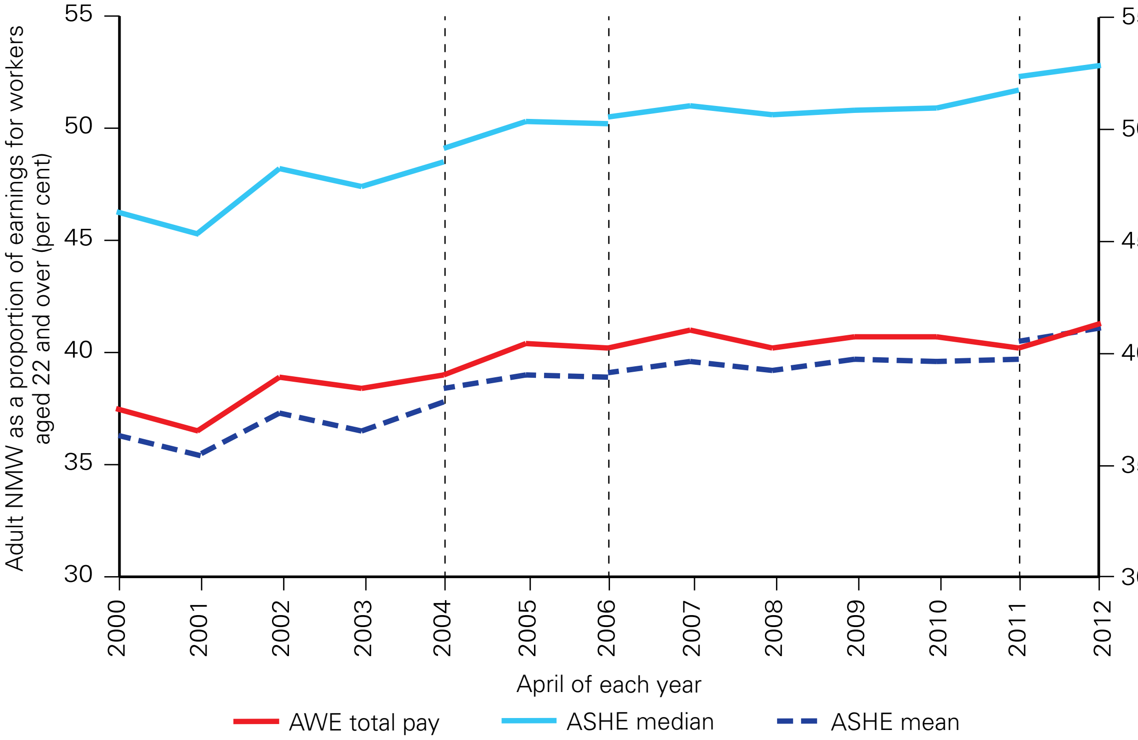


Source: LPC estimates based on ONS data, AEI including bonuses (LNMQ), 1999, AWE total pay (KAB9), 2000-2012, CPI (D7BT), 1999-2012, and RPI (CHAW), 1999-2012, monthly; and nominal GDP (YBHA), 1999-2012, quarterly, seasonally adjusted (AWE, AEI and GDP only), UK (GB for AWE and AEI).

Note: The AWE series began in January 2000 and the AEI series ended in July 2010. Our earnings series is estimated using AEI (including bonuses) from April 1999-January 2000 and AWE (total pay) from January 2000-October 2012.

2.20 Figure 2.7 shows how changes in average earnings have affected the bite of the minimum wage (its value relative to median or mean earnings) using AWE and ASHE data. Both ASHE and AWE data show that between its introduction in 1999 and 2007, the bite of the minimum wage at mean and median earnings rose steadily. Between 2007 and 2010 the bite of the minimum wage was broadly flat before rising in 2011 and 2012 for both mean and median earnings (based on ASHE data). In 2012 the bite of the adult minimum wage at the median was 52.8 per cent for workers aged 22 and over, whereas at the mean it was just over 41 per cent for both AWE and ASHE. These were the highest bites observed since the introduction of the NMW in 1999.

Figure 2.7: Bite of the Adult National Minimum Wage Using Different Earnings Measures, GB and UK, 2000-2012



Source: LPC estimates based on ONS data, AWE total pay (KAB9), GB, average actual weekly hours of work (YBUV), UK, monthly, seasonally adjusted, 2000-2012, and ASHE: without supplementary information, April 2000-2004; with supplementary information, April 2004-2006; 2007 methodology, April 2006-2011; and 2010 methodology, April 2011-April 2012, standard weights, including those not on adult rates of pay, UK.

2.21 Table 2.1 shows in more detail the bite of the minimum wage at key points across the earnings distribution, including for median earnings, which is the measure we tend to focus on, because the mean may be moved by changes in the pay of small numbers of high earners. As mentioned above, the bite at the median rose from 46 per cent in 1999 to 51 per cent in 2007. Between 2007 and 2010 the bite was broadly flat at around 51 per cent, before rising by 0.8 percentage points in 2011 and a further 0.5 percentage points in 2012 to 52.8 per cent, its highest level since the introduction of the minimum wage in 1999.

Table 2.1: Bite of the Adult National Minimum Wage at Various Points on the Earnings Distribution for Those Aged 22 and Over, UK, 1999-2012

	Data year (April)	Adult NMW (£)	Adult minimum wage as % of					
			Lowest decile	Lowest quartile	Median	Mean	Upper quartile	Upper decile
ASHE without supplementary information	1999	3.60	83.9	65.1	45.7	36.6	30.4	21.1
	2000	3.60	81.3	64.2	45.3	35.7	29.8	20.6
	2001	3.70	80.3	63.0	44.3	34.6	29.0	19.9
	2002	4.10	85.2	67.5	47.2	36.5	30.8	21.0
	2003	4.20	82.4	65.8	46.5	35.9	30.5	20.8
	2004	4.50	84.9	67.6	47.5	37.2	31.3	21.4
ASHE with supplementary information	2004	4.50	85.6	68.3	48.1	37.7	31.6	21.7
	2005	4.85	88.0	69.9	49.4	38.5	32.4	22.1
	2006	5.05	87.5	69.9	49.4	38.3	32.3	22.1
ASHE 2007 methodology	2006	5.05	87.5	70.0	49.7	38.5	32.5	22.3
	2007	5.35	89.2	71.6	51.0	39.6	33.6	22.9
	2008	5.52	89.6	71.6	50.6	39.2	33.2	22.8
	2009	5.73	89.7	71.7	50.8	39.7	33.3	22.9
	2010	5.80	89.6	72.0	50.9	39.6	33.2	22.9
	2011	5.93	91.2	73.4	51.7	39.7	33.9	23.2
ASHE 2010 methodology	2011	5.93	91.2	74.1	52.3	40.5	34.0	23.3
	2012	6.08	91.8	74.7	52.8	41.1	34.7	24.0

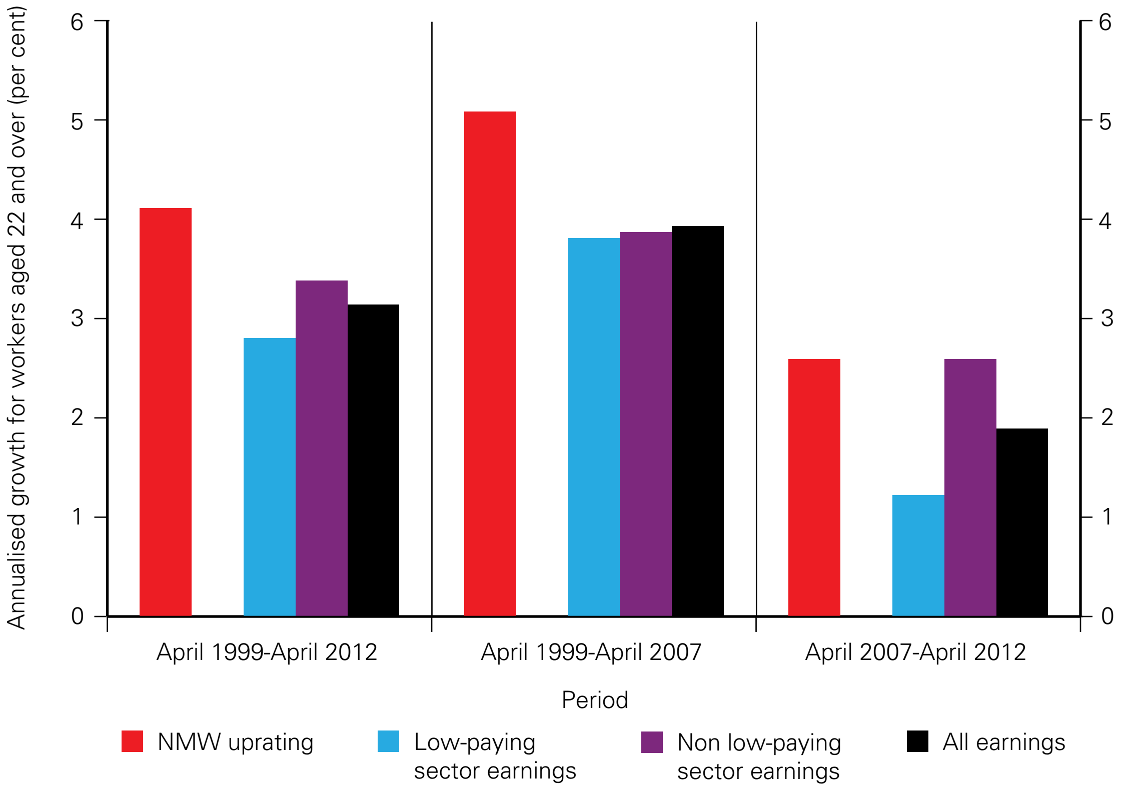
Source: LPC estimates based on ASHE: without supplementary information, April 1997-2004; with supplementary information, April 2004-2006; 2007 methodology, April 2006-2011; and 2010 methodology April 2011-2012, standard weights, including those not on adult rates of pay, UK.
Note: Direct comparisons before and after 2004, before and after 2006, and before and after 2011 should be made with care due to changes in the data series.

2.22 The bites at other points on the earnings distribution, including the mean, have followed a similar trend to the bite at the median: rising steadily between 1999 and 2007; remaining broadly flat between 2007 and 2010; and rising again in 2011 and 2012. Unlike earlier years, where rises in the bite have been focused at the bottom of the earnings distribution, the rise in the bite of the minimum wage in 2012 has been observed evenly across the earnings distribution, with the bites at the lowest and highest decile rising by 0.6-0.7 percentage points.

2.23 As shown at the start of this chapter, a higher proportion of jobs in small firms (micro and other small firms), and in the low-paying occupations and industries are minimum wage jobs. The minimum wage now has a higher bite in smaller firms and the low-paying sectors than elsewhere in the economy. Although, as Table 2.1 has shown, the bite was broadly flat in the economy as a whole between 2007 and 2010, in the low-paying sectors and in small firms it continued to rise, and has increased further in 2011 and 2012.

2.24 Figure 2.8 shows that earnings growth in the low-paying industries has diverged from the rest of the economy since 2007. Over the whole period of the minimum wage earnings growth in the low-paying industries (2.8 per cent a year) has been a little lower than that in other industries (3.4 per cent a year). Between 1999 and 2007 both low-paying industries and non low-paying industries experienced earnings growth of around 3.8 per cent a year. However, since 2007 annual earnings growth in the low-paying industries has been 1.2 per cent a year, compared with 2.6 per cent a year in the non low-paying industries.

Figure 2.8: Annualised Growth in the Adult National Minimum Wage and Median Earnings for Those Aged 22 and Over, by Sector, UK, 1999-2012

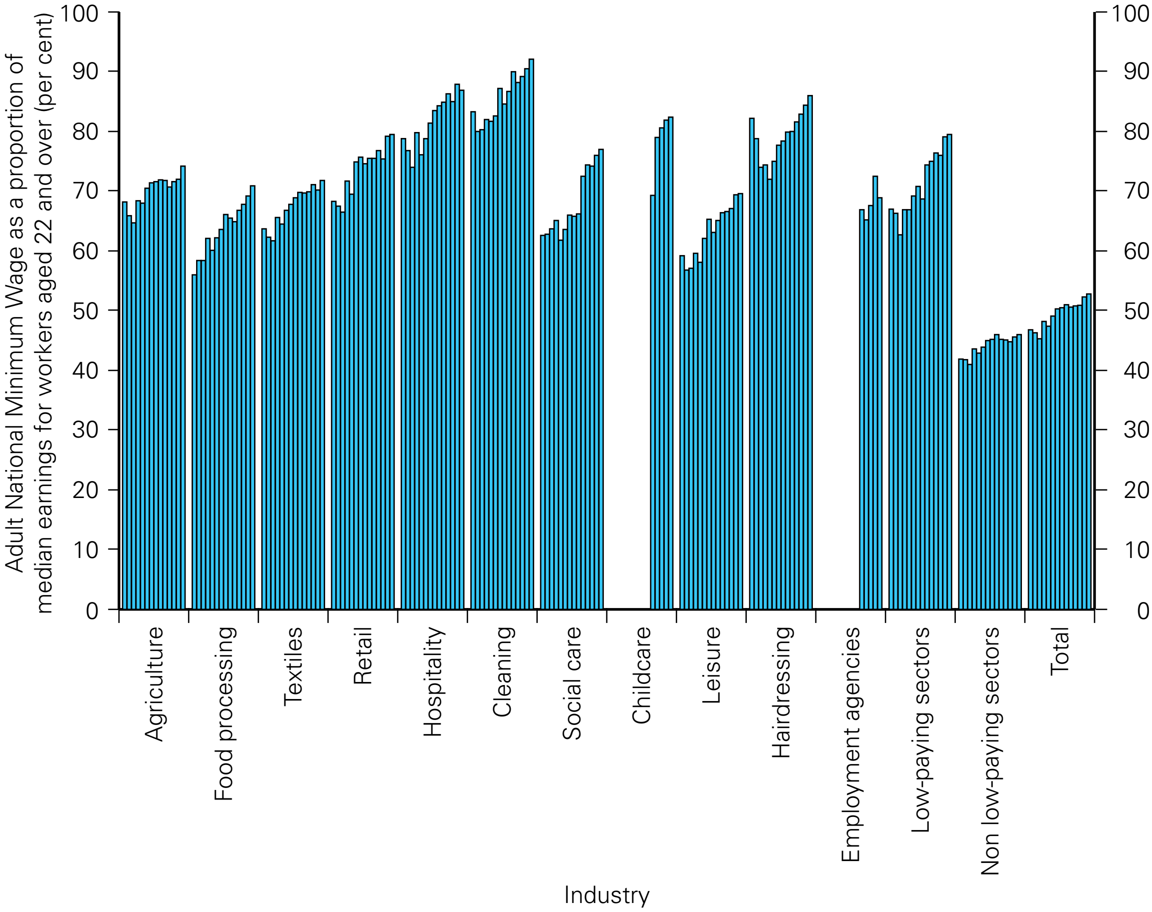


Source: LPC estimates based on ASHE: without supplementary information, April 1997-2004; with supplementary information, April 2004-2006; 2007 methodology, April 2006-2011; and 2010 methodology April 2011-2012, standard weights, including those not on adult rates of pay, UK.

2.25 The lower earnings growth since 2007 in the low-paying industries resulted in the bites of the minimum wage in the low-paying industries and the other industries diverging. Since 2007, earnings growth in the low-paying industries has been, on average, 1.4 percentage points lower than the uprating in the NMW, which has increased the bite from 74.3 per cent in 2007 to 79.5 per cent in 2012. In contrast, earnings growth in the non low-paying industries has matched annual upratings in the NMW since 2007, and so the bite has remained at around 46.0 per cent.

2.26 Figure 2.9 shows that the bite has been steadily rising for adult workers in the low-paying industries, from 67.4 per cent in 1999 to 79.5 per cent in 2012. The bite for the non low-paying industries increased from 41.9 per cent to 46.0 per cent over the same period.

Figure 2.9: Bite of the Adult National Minimum Wage for Workers Aged 22 and Over, by Low-paying Industry, UK, 1999-2012



Source: LPC estimates based on ASHE: without supplementary information, April 1997-2003; with supplementary information, April 2004-2005; 2007 methodology, April 2006-2010; and 2010 methodology April 2011-2012, standard weights, including those not on adult rates of pay, UK.

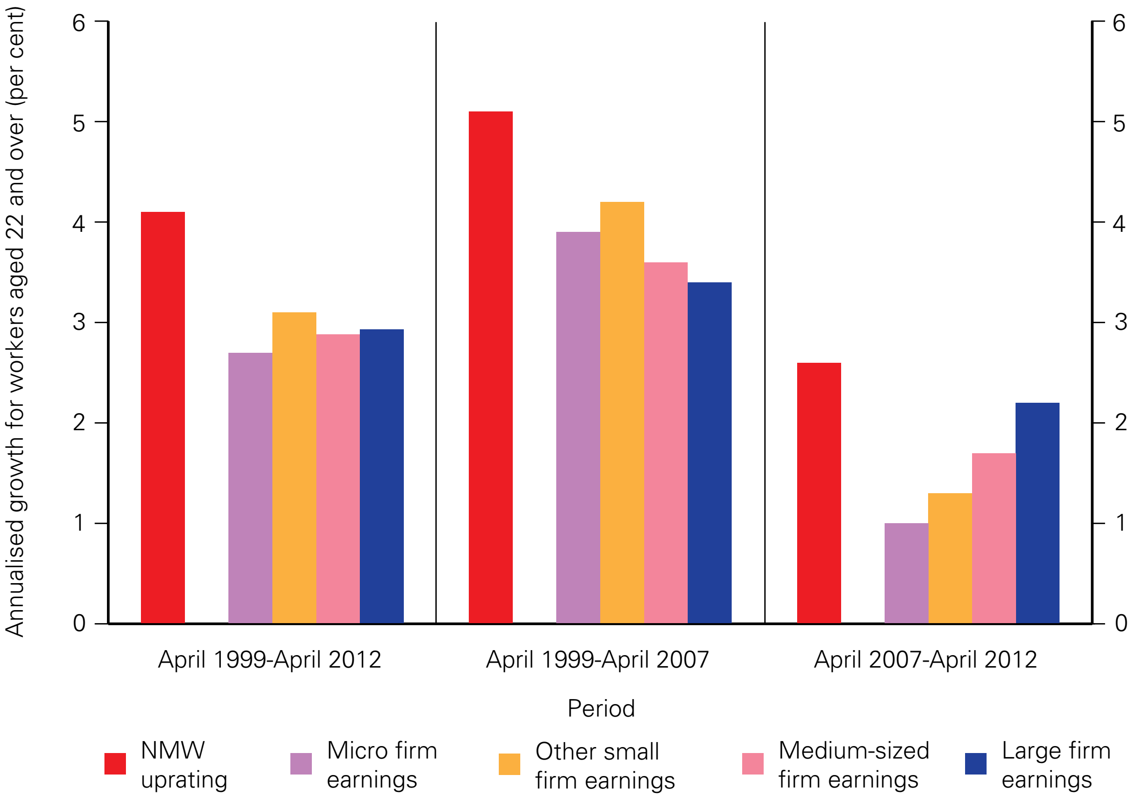
Notes:

a. Definitions for the low-paying industries are based on Standard Industrial Classification (SIC) codes. Data from 1999-2007 are based on SIC 2003 codes. Data from 2008-2012 are based on SIC 2007 codes. Because of this change in methodology direct comparisons before and after 2007 should be made with care.
b. Data on childcare and employment agencies industries were not available before 2008.

2.27 The cleaning industry has the highest bite (92.1 per cent in 2012), followed by hospitality (86.9 per cent), hairdressing (86.0 per cent) and childcare (82.4 per cent). All low-paying industries other than hospitality and employment agencies saw an increase in the bite of the minimum wage in 2012.

2.28 Figure 2.10 shows that, like those in the low-paying industries, employees in smaller firms have also experienced lower earnings growth since 2007. The positive relationship between size of firm and average annual earnings growth is clear. Over the whole period from 1999 to 2012 earnings growth across firms of different sizes was similar, highest in other small firms at 3.1 per cent, at around 3.0 per cent in medium-sized and large firms, and lowest in micro firms at 2.7 per cent. But this disguises two distinct periods.

Figure 2.10: Annualised Growth in the Adult National Minimum Wage and Median Earnings for Those Aged 22 and Over, by Firm Size, UK, 1999-2012

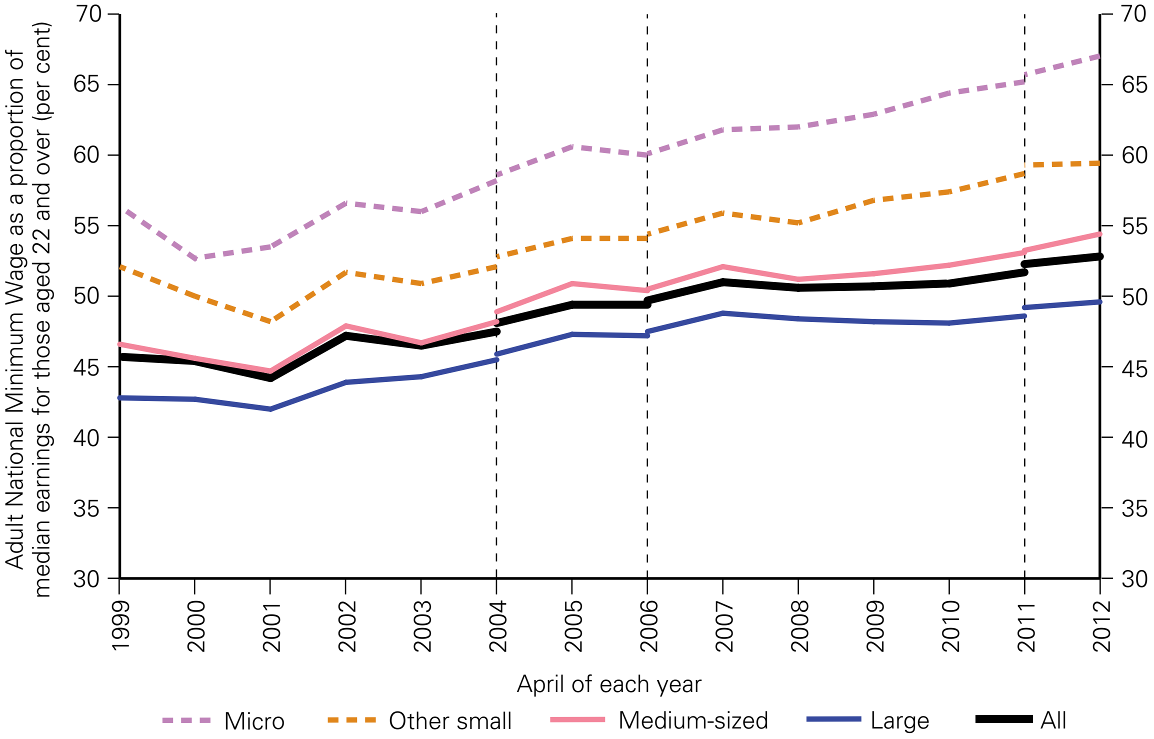


Source: LPC estimates based on ASHE: without supplementary information, April 1997-2004; with supplementary information, April 2004-2006; 2007 methodology, April 2006-2011; and 2010 methodology April 2011-2012, standard weights, including those not on adult rates of pay, UK.

2.29 Between 1999 and 2007, employees in micro and other small firms saw higher earnings growth than medium-sized and large firms, although still below the average upratings in the NMW of 5.1 per cent. However, since 2007, smaller firms have seen lower earnings growth than larger firms, and the smaller the firm, the lower the growth in employee earnings. Between 2007 and 2012 workers saw an average growth in median earnings of just 1.0 per cent a year in micro firms, 1.3 per cent in other small firms, 1.7 per cent in medium-sized firms, and 2.2 per cent in large firms. The minimum wage increased by an average of 2.6 per cent a year over the same period.

2.30 This pattern of lower earnings growth in small firms has increased the bite of the NMW in these firms since 2000-01. Figure 2.11 shows that the bite in micro firms increased more or less continuously since 2000 from 52.7 per cent to 67.0 per cent in 2012. Similarly, other small firms experienced an increase in the bite from 48.2 per cent in 2001 to 59.4 per cent in 2012. Although the bites for medium-sized and large firms increased at a similar pace to that for small firms between 2001 and 2007, there has been a noticeable difference since then.

Figure 2.11: Bite of the Adult National Minimum Wage at the Median for Those Aged 22 and Over, by Firm Size, UK, 1999-2012



Source: LPC estimates based on ASHE: without supplementary information, April 1997-2004; with supplementary information, April 2004-2006; 2007 methodology, April 2006-2011; and 2010 methodology April 2011-2012, standard weights, including those not on adult rates of pay, UK.

Notes:

a. Direct comparisons before and after 2004, before and after 2006, and before and after 2011 should be made with care due to changes in the data series.

b. There were fewer responses to the question on size of firm in the 2002 ASHE than in other years.

2.31 From 2007 to 2010, median wage growth in medium-sized and large firms was similar to that of the minimum wage, and hence the bite remained at around 52 per cent for medium-sized firms and 48 per cent for large firms. Since then wage growth in these larger firms has not matched increases in the NMW and the bite has again risen. In April 2012, the bite for large firms had risen to 49.6 per cent and for medium-sized firms to 54.4 per cent. These were, however, considerably below those for micro firms (67.0 per cent) and for other small firms (59.4 per cent).

2.32 Turning next to low-paid workers, we again observe a rise in the bite in recent years as the increase in the minimum wage has outpaced the growth in wages. Unfortunately, there are no ASHE data available for many characteristics of workers, so we are obliged to use LFS data to consider the impact of the minimum wage on certain groups of workers. For those aged 22 and over the bite at the median was 58.5 per cent and the bite at the lowest decile was 93.5 per cent. These are a little higher than those estimated using ASHE (52.8 per cent and 91.8 per cent respectively). Figure 2.12 shows that the bites at the median for the groups of workers considered here are much higher than those for the working population as a whole and that these bites have generally increased between 2007/08 and 2011/12. Those with no qualifications have the highest bite (86.4 per cent), then women (64.0 per cent), disabled people (63.2 per cent), migrants (61.7 per cent) and ethnic minorities (60.8 per cent).

Figure 2.12: Bite of the Adult National Minimum Wage at the Median for Those Aged 22 and Over, by Groups of Workers, UK, 2007/08-2011/12

Source: LPC estimates based on LFS Microdata, income weights, quarterly, four-quarter averages, UK, Q4 2007-Q3 2012.
Note: Due to changes in the data series, the estimates for 2011/12 are not directly comparable with estimates for earlier years.

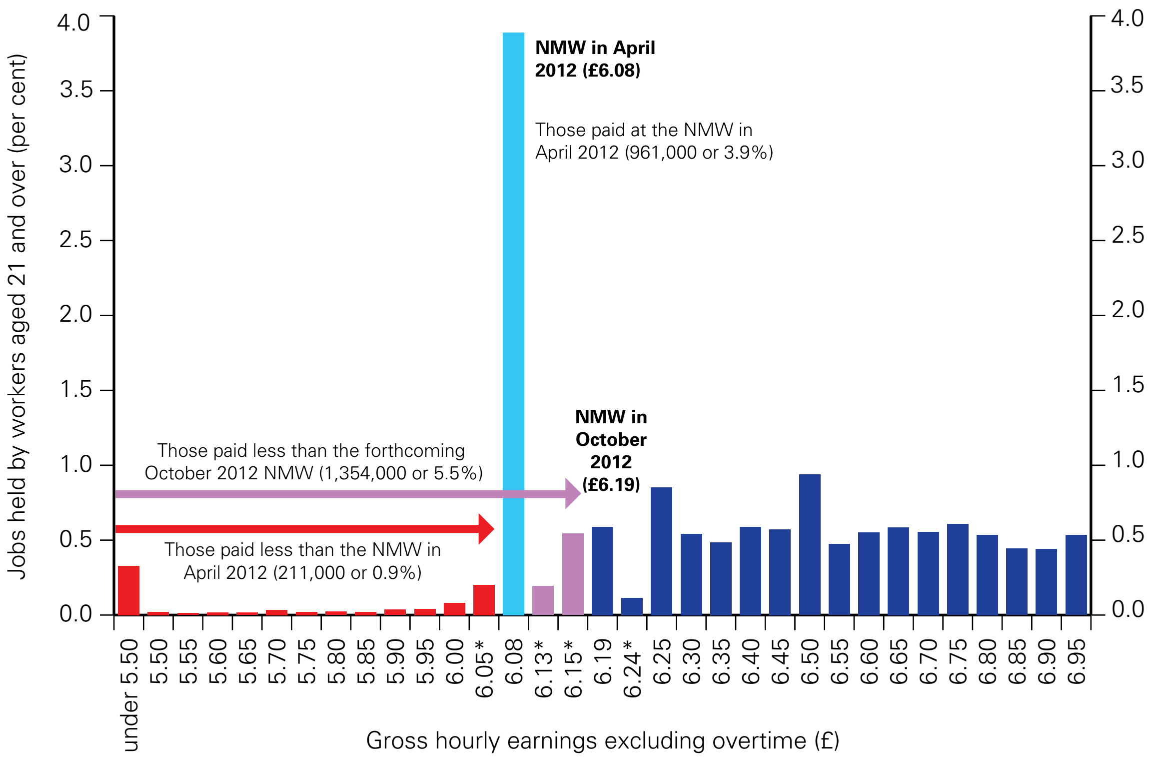
2.33 Since the onset of recession in 2008, the bite has generally increased for whites (from 55.7 per cent to 58.3 per cent) and those from ethnic minorities as a whole (from 57.9 per cent to 60.8 per cent). But the bite for ethnic minorities disguises variations among different ethnic groups. The bite at the median for Indians is lower than that for whites, and has increased from 50.3 per cent in 2007/08 to 51.8 per cent in 2011/12. The increase in the bite for Bangladeshis was similar albeit at a much higher level (from 74.0 to 76.0 per cent). The increase in the bite for black workers over the same period, from 56.9 per cent to 63.7 per cent, was much larger. In contrast, the bite has fallen considerably for Pakistanis from 73.5 per cent to 65.0 per cent. Over the last year, there was a fall in the bite for all three Asian ethnicities but increases in the bite for other ethnic groups, including whites.

Earnings Distributions

2.34 We now turn to the impact of the minimum wage across the earnings distribution. The impact of the minimum wage can clearly be seen in Figure 2.13 which shows a spike in the hourly earnings distribution at £6.08 in April 2012, the adult rate at that time. Around 960,000 employees (nearly 4 per cent) were paid at the minimum wage. Although not necessarily evidence of non-compliance, a further 211,000 employees (about 0.9 per cent) were paid less than the minimum wage. Those who may legitimately be paid less than the adult rate of the minimum wage include apprentices; those living in accommodation provided by their employer; and those on Fair Piece Rates. We consider the extent of non-compliance in Chapter 4.

2.35 Figure 2.13 also shows that in April 2012 there were about 1.35 million employees aged 21 and over (around 5.5 per cent) paid less than the then forthcoming minimum wage rate of £6.19 an hour, which was implemented in October 2012. The number paid at the minimum wage had risen from around 737,000 (3.0 per cent) in April 2011 (when the NMW was £5.93) to around 961,000 in April 2012. In 2011 there were over 1.40 million workers (5.8 per cent) paid less than the forthcoming rate of the minimum wage and the number paid less than the minimum wage was similar (about 233,000 or 1.0 per cent) to that observed in 2012.

Figure 2.13: Hourly Earnings Distribution for Employees Aged 21 and Over, by Five Pence Band, UK, 2012



Source: LPC estimates based on ASHE, 2010 methodology, low-pay weights, including those not on adult rates of pay, UK, April 2012.
Note: * Five pence bands except where stated otherwise (bands labelled by minimum pay amount).

2.36 Table 2.2 shows the trends in these numbers since the minimum wage was introduced. For consistency, the numbers are given in ten pence pay bands. There are concerns about the quality of the data for smaller pay bands prior to 2004. Further, the table covers just those aged 22 and over. Those aged 21 were not entitled to the adult rate of the minimum wage until October 2010. Around 191,000 jobs (0.8 per cent) were paid less than the NMW in April 2012. This was similar to the previous year. Indeed, since 2002, the numbers paid less than the minimum wage have fluctuated narrowly around 200,000 (or 0.9-1.0 per cent) each year. There was a considerable increase (to 290,000) after the large (10.8 per cent) uprating in October 2001, and a higher figure still at the introduction of the NMW.

2.37 When the ten pence pay band includes a focal point on the earnings distribution (such as £6.00 in April 2011) or when the band passes above it (as in April 2012) the effect is clear. The numbers paid at the minimum wage rose from around 700,000 (3.0 per cent) between

2007 and 2010 to about 1 million (around 4.0 per cent) in 2011 and 2012. These are the highest numbers recorded over the lifetime of the NMW. However, only 1.23 million (about 5.1 per cent) were paid below the then forthcoming October 2012 rate of £6.19, about 85,000 fewer than those paid below the then forthcoming October 2011 rate.

Table 2.2: Jobs Held by Those Aged 22 and Over, Paid At and Below the Existing National Minimum Wage and the Forthcoming National Minimum Wage, UK, 1999-2012

	Data year (April)	Adult minimum wage rate in April	Jobs held by adults paying less than the adult rate in April		Jobs held by adults paying the adult rate (ten pence band) in April		Forthcoming October adult minimum wage rate	Jobs held by adults in April paying less than the forthcoming October rate	
		£	000s	%	000s	%	£	000s	%
ASHE without supplementary information	**1999**	3.60	460	2.1	723	3.3	3.60	458	2.1
	2000	3.60	190	0.9	551	2.5	3.70	746	3.3
	2001	3.70	210	0.9	394	1.8	4.10	1,326	5.9
	2002	4.10	290	1.3	630	2.8	4.20	920	4.1
	2003	4.20	210	0.9	445	2.0	4.50	1,022	4.5
	2004	4.50	230	1.0	558	2.5	4.85	1,399	6.2
ASHE with supplementary information	**2004**	4.50	233	1.0	408	1.8	4.85	1,209	5.3
	2005	4.85	233	1.0	484	2.1	5.05	1,147	5.0
	2006	5.05	239	1.0	544	2.4	5.35	1,289	5.6
ASHE 2007 methodology	**2006**	5.05	238	1.0	544	2.4	5.35	1,289	5.6
	2007	5.35	231	1.0	696	2.9	5.52	1,215	5.1
	2008	5.52	212	0.9	731	3.1	5.73	1,245	5.2
	2009	5.73	181	0.8	726	3.1	5.80	846	3.6
	2010	5.80	203	0.9	698	2.9	5.93	981	4.1
	2011	5.93	208	0.9	971	4.0	6.08	1,297	5.4
ASHE 2010 methodology	**2011**	5.93	187	0.8	1,007	4.2	6.08	1,315	5.5
	2012	**6.08**	**191**	**0.8**	**1,013**	**4.2**	**6.19**	**1,230**	**5.1**

Source: ONS central estimates using ASHE without supplementary information and LFS, UK, 1999-2004; LPC estimates based on ASHE: with supplementary information, April 2004-2006; 2007 methodology, April 2006-2011; 2010 methodology, April 2011-2012, low-pay weights, including those not on adult rates of pay, UK.

Notes:

a. Prior to 2004, all our analyses were conducted in ten pence pay bands using the ONS central estimate methodology. In contrast to elsewhere in this report, where five pence pay bands are used, we use ten pence pay bands in this table.

b. Direct comparisons before and after 2004; those before and after 2006; and those before and after 2011, should be made with care due to changes in the data series.

2.38 There are differences in the proportion of jobs paid at or below the existing NMW and those paid below the forthcoming NMW by low-paying sector and firm size. Table 2.3 shows that, in April 2012, about 4.4 per cent of all employees were paid at or below the NMW of £6.08 an hour. This proportion was higher in the low-paying sectors (12.9 per cent) and ranged from 6.5 per cent in food processing, through 8.7 per cent for retail, 21.7 per cent for hairdressing, and 24.9 per cent for hospitality, to 32.2 per cent in cleaning. There was a marked increase from the year before when 10.9 per cent of workers in the low-paying sectors were paid at or below the NMW of £5.93. Nearly every low-paying sector experienced an increase between

2011 and 2012. This effect is likely to have been the result, in part at least, of the NMW going above a significant threshold (£6.00 an hour) when it increased to £6.08 an hour. Most had a similar 2 percentage point increase (such as childcare, transport, and textiles and clothing) but some had larger increases (such as 5 percentage points for hairdressing and over 10 percentage points for cleaning) while storage and employment agencies had falls.

Table 2.3: Proportion of Jobs Held by Those Aged 22 and Over, Paid At or Below the Adult National Minimum Wage, by Sector and Firm Size, UK, 2011-2012

Per cent	April 2011			April 2012		
Industry/Occupation/Size of firm	**Paid at or below £5.93[a]**	**Paid below £6.08**	**Paid below £6.50**	**Paid at or below £6.08[a]**	**Paid below £6.19**	**Paid below £6.50**
Retail	7.2	11.7	28.1	**8.7**	10.6	20.9
Hospitality	21.8	30.0	42.3	**24.9**	27.4	38.0
Leisure, travel & sport	7.0	12.6	21.5	**10.0**	11.8	19.0
Cleaning	21.6	32.8	46.2	**32.2**	34.7	44.9
Social care	7.9	11.9	23.0	**8.2**	10.1	19.5
Childcare	10.2	17.3	32.9	**12.4**	14.7	27.3
Agriculture	5.3	7.6	14.1	**8.3**	8.8	14.8
Textiles & clothing	8.9	12.8	20.9	**10.9**	13.1	18.7
Hairdressing	16.6	26.5	35.8	**21.7**	23.9	33.0
Employment agencies	14.4	19.0	25.5	**13.3**	14.6	20.0
Food processing	5.1	6.8	17.0	**6.5**	8.4	16.7
Office work[b]	5.4	8.3	16.1	**6.9**	7.7	13.6
Non-food processing[b]	7.0	9.9	18.0	**8.6**	9.8	15.6
Storage[b]	8.0	11.0	19.1	**7.5**	8.6	15.0
Transport[b]	6.3	9.8	16.1	**8.4**	9.3	14.9
All low-paying industries	**10.9**	**16.2**	**29.2**	**12.9**	**14.8**	**24.3**
Micro	**8.5**	13.3	19.6	**10.8**	11.9	17.2
Other small	**4.9**	7.8	12.9	**6.1**	7.0	11.1
Medium	**4.2**	6.1	10.5	**5.1**	5.9	9.5
Large	**2.9**	4.2	8.9	**3.3**	3.9	7.2
Whole economy	**3.7**	**5.5**	**10.3**	**4.4**	**5.1**	**8.6**

Source: LPC estimates based on ASHE, 2010 methodology, low-pay weights, including those not on adult rates of pay, UK, April 2011-2012.
Notes:
a. Based on a five pence band.
b. This sector is defined using Standard Occupational Classifications (SOC) 2010. The other sectors are based on SIC 2007.

2.39 In contrast, the proportions in the low-paying sectors paid below the forthcoming NMW fell from 16.2 per cent in April 2011 to 14.8 per cent in April 2012. In 2012, the group paid above the NMW five pence band but below the then forthcoming rate comprised relatively few workers (1.9 per cent). This compares with 5.3 per cent in 2011. This pattern was similar across the low-paying sectors.

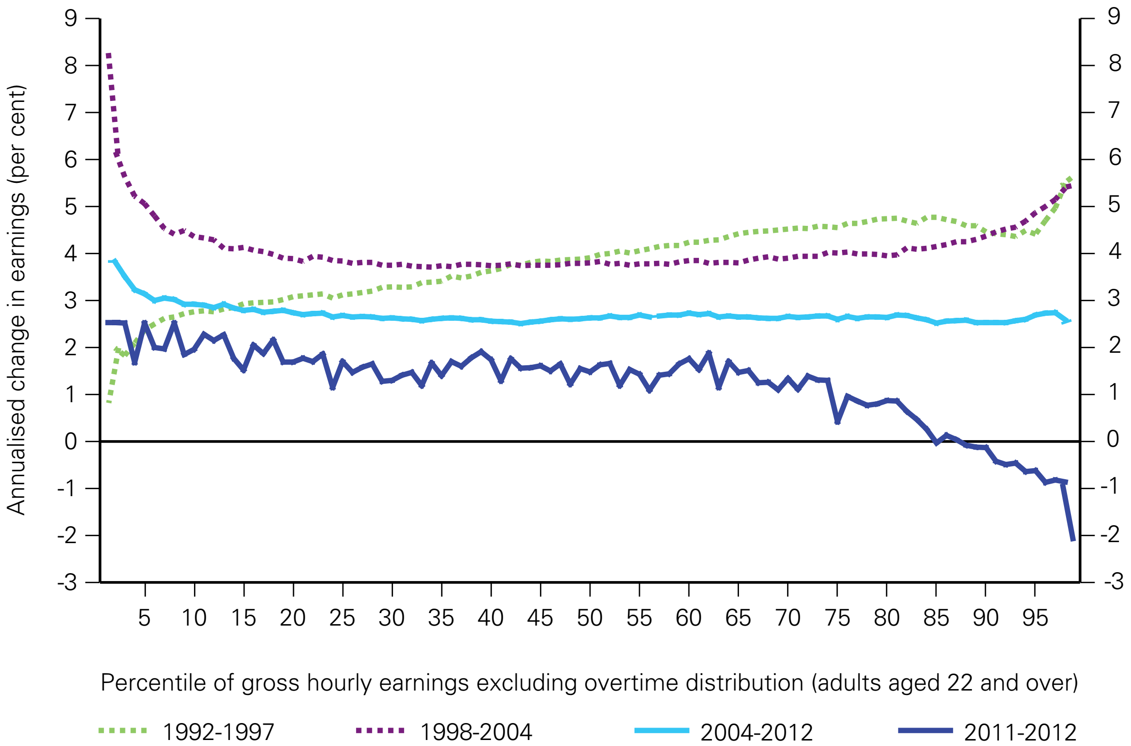
2.40 By size of firm, a similar picture emerges with regards to the proportions paid at or below the NMW and those paid below the then forthcoming NMW. In April 2012, the proportions paid at or below the NMW ranged from 3.3 per cent in large firms, through 5.1 per cent in medium-sized firms to 10.8 per cent in micro firms. These were all increases on the year before, with the increases being greater for smaller firms. In contrast, the proportions paid less than the then forthcoming rate fell for all firm sizes compared with the previous year (influenced by the '£6.00 effect' mentioned above).

2.41 The proportion of employees paid less than £6.50 fell across all firm sizes and all the low-paying sectors with the exception of agriculture (where it rose from 14.1 per cent to 14.8 per cent). We will continue to monitor this development in case it is the beginning of a trend, possibly related in some way to the proposed abolition of the Agricultural Wages Board for England and Wales. However, it should be noted that among the low-paying sectors only office work (13.6 per cent) has a smaller proportion than agriculture paid less than £6.50 an hour. There are several other low-paying sectors with around one in seven paid less than £6.50 (such as transport; storage; non-food processing; and food processing); and a few more with around one in five (such as social care; employment agencies; and retail). Those with the highest proportions and thus the tightest differentials at the bottom of the earnings distribution are childcare (27.3 per cent); hairdressing (33.0 per cent); hospitality (38 per cent) and cleaning (44.9 per cent). It is stakeholders from these latter four industries who most often emphasise to us that the NMW has squeezed differentials.

2.42 We can rank employees by their earnings, by splitting them into 100 equally sized groups (percentiles), and ordering them from the lowest paid to the highest paid. We can then track how the wages of each percentile change over time. Figure 2.14 shows that, before the introduction of the minimum wage, those at the lowest end of the hourly earnings distribution had the lowest wage rises. Between 1992 and 1997, those in the bottom decile had increases in line with price inflation (between 1 and 2 per cent), whereas those in the upper part of the distribution had wage rises greater than those at the median (and above average wage increases, at 5-6 per cent). Those in the middle received pay rises around 4 per cent. Since 1998, that picture has changed. Those at the bottom of the earnings distribution have had much higher increases than those in the middle of the distribution. Between 1998 and 2004, increases for all of the bottom decile were above 4 per cent a year, as were those for the top two deciles. For the rest, pay growth was just below 4 per cent a year. However, the increases at the bottom have moderated significantly since 2004 (and especially since 2007), growing on average by 3-4 per cent a year, although this is greater than for the rest of the distribution which has experienced annual average wage growth of less than 3 per cent.

2.43 Figure 2.14 also shows a remarkable outcome over the last year. The earnings of the bottom half of the distribution grew by around 2 per cent (and 2.5 per cent for the lowest paid) but pay fell for those in the top 15 percentiles. In other words while real wages fell right across the earnings distribution as inflation, whether measured using CPI or RPI, was above 3 per cent, the top end, very unusually, also fell in nominal terms and this fall was even more stark in real terms.

Figure 2.14: Annualised Growth in Hourly Earnings for Employees Aged 22 and Over, by Percentile, UK, 1992-2012



Source: LPC estimates based on New Earnings Survey (NES), April 1992-1997, and ASHE: without supplementary information, April 1997-2004; with supplementary information, April 2004-2006; 2007 methodology, April 2006-2011; and 2010 methodology April 2011-2012, standard weights, including those not on adult rates of pay, UK.
Note: Direct comparisons before and after 1997, before and after 2004, before and after 2006 and before and after 2011, should be made with care due to changes in the data series.

Pay Gaps

2.44 As we showed earlier (and highlighted in Figure 2.4), particular groups of workers are more likely to be in minimum wage jobs. We can use pay gaps (the proportional difference between the earnings of one group and those of a comparator group) to measure the extent of the difference in pay between these groups and their counterparts who are less likely to be in minimum wage jobs. In order to avoid picking up differences due to hours worked, official statistics tend to focus comparisons on hourly earnings of full-time employees.

2.45 In 2011, there was a change in the methodology and weighting used to take account of ONS's new SOC 2010 occupational classifications. Table 2.4 shows that this led to a larger downward revision of female than male earnings, thus increasing the measured gender pay gap in 2011 from 8.3 per cent to 9.6 per cent.

2.46 However, the median gender pay gap has again fallen over the last year from 9.6 per cent to 8.6 per cent, as the increase in median female full-time hourly earnings (2.1 per cent) was greater than for men (1.0 per cent). This continues a trend that began at the same time as the introduction of the minimum wage. The gender pay gap has nearly halved over this period from 15.9 per cent in 1998 to 8.6 per cent in 2012.

2.47 Similarly, the gender pay gap at the lowest decile had more than halved from 12.9 per cent in 1998 to 4.7 per cent in 2011. However, in 2012 at the lowest decile men's wages grew faster than those of women, leading to an increase in the gender pay gap from 5.0 per cent to 5.6 per cent, using the revised data. In contrast, the gender pay gap at the upper decile had remained around 20 per cent between 1998 and 2011. The revisions to the data had led to this increasing in 2011 to 21.1 per cent. However, the upper decile gender pay gap fell sharply in 2012 to 18.9 per cent as the earnings of men at the upper decile fell by 1.1 per cent but those of women rose by 1.6 per cent.

Table 2.4: Hourly Gender Pay Gap of Full-time Workers Aged 22 and Over, UK, 1997-2012

	Data year (April)	£ per hour						Per cent		
		Men			Women			Gender pay gap		
		Lowest decile	Median	Upper decile	Lowest decile	Median	Upper decile	Lowest decile	Median	Upper decile
ASHE without supplementary information	1997	4.71	8.51	17.62	4.10	7.17	14.16	13.1	15.8	19.6
	1998	4.91	8.84	18.45	4.28	7.43	14.68	12.9	15.9	20.5
	1999	5.10	9.15	19.19	4.50	7.78	15.42	11.8	15.0	19.7
	2000	5.20	9.21	19.85	4.64	7.97	15.93	10.7	13.4	19.7
	2001	5.46	9.65	21.38	4.86	8.38	16.95	11.1	13.2	20.7
	2002	5.68	10.07	22.48	5.06	8.76	17.85	11.1	13.0	20.6
	2003	5.90	10.41	23.03	5.31	9.09	18.41	10.0	12.7	20.1
	2004	6.12	10.89	23.99	5.57	9.64	19.25	8.9	11.5	19.8
ASHE with supplementary information	2004	6.03	10.75	23.52	5.53	9.51	19.09	8.3	11.5	18.8
	2005	6.31	11.22	24.77	5.82	9.98	20.16	7.8	11.1	18.6
	2006	6.55	11.65	25.94	6.07	10.42	20.70	7.3	10.6	20.2
ASHE 2007 methodology	2006	6.50	11.56	25.76	6.00	10.26	20.49	7.7	11.2	20.5
	2007	6.80	12.02	26.75	6.27	10.72	21.26	7.8	10.8	20.5
	2008	7.00	12.56	27.93	6.49	11.13	21.91	7.3	11.4	21.6
	2009	7.28	13.01	28.72	6.75	11.59	22.84	7.3	10.9	20.5
	2010	7.32	13.00	28.89	6.88	11.89	23.32	6.0	8.6	19.3
	2011	7.31	13.13	29.39	6.96	12.04	23.57	4.7	8.3	19.8
ASHE 2010 methodology	2011	7.29	13.13	29.35	6.92	11.87	23.16	5.0	9.6	21.1
	2012	**7.46**	**13.26**	**29.01**	**7.05**	**12.12**	**23.53**	**5.6**	**8.6**	**18.9**

Source: ONS central estimates using ASHE without supplementary information and LFS, UK, 1999-2004; LPC estimates based on ASHE: with supplementary information, April 2004-2006; 2007 methodology, April 2006-2011; 2010 methodology, April 2011-2012, low-pay weights, including those not on adult rates of pay, UK.

Notes:

a. Prior to 2004, all our analyses were conducted in ten pence pay bands using the ONS central estimate methodology. In contrast to elsewhere in this report, where five pence pay bands are used, we use ten pence pay bands in this table.

b. Direct comparisons before and after 2004; those before and after 2006; and those before and after 2011, should be made with care due to changes in the data series.

2.48 Table 2.5 uses LFS data in order to present the pay gaps for other groups of workers at the median. It suggests that the gender pay gap is greater than estimated using ASHE, because the LFS analysis used here includes part-time workers. The gender pay gap fell to 17.4 per cent in 2011/12 and is smaller than it was before the 2008-09 recession (19.5 per cent in 2007/08).

Table 2.5: Hourly Pay Gaps for Particular Groups of Workers Aged 22 and Over, UK, 2007/08-2011/12

Per cent	Median				
	2007/08	**2008/09**	**2009/10**	**2010/11**	**2011/12**
Unqualified	34.4	35.3	34.9	34.6	**34.3**
Women	19.5	19.5	17.6	19.1	**17.4**
Disabled people	11.1	11.7	9.9	9.5	**8.9**
Migrant workers	3.9	5.5	8.2	7.8	**6.1**
Ethnic minorities	3.9	5.3	5.0	3.4	**4.0**
of which					
Indian	-10.6	-13.2	-6.7	-8.1	**-12.6**
Other non-white	4.4	5.3	5.5	2.9	**3.3**
Black	2.2	8.9	3.3	4.3	**8.4**
Pakistani	24.3	22.1	26.8	18.0	**10.2**
Bangladeshi	24.8	24.3	31.8	26.6	**23.2**

Source: LPC estimates based on LFS Microdata, income weights, quarterly, not seasonally adjusted, UK, Q4 2007-Q3 2012.
Note: Comparators for the groups are respectively those with qualifications, men, those not disabled, non-migrants, and whites. Individual ethnic groups are all compared with whites.

2.49 Table 2.5 also shows that these pay gaps for other groups of workers are generally smaller than those for women, with the exception of those with no qualifications. The pay gap between those with and without qualifications has remained at around 34 per cent throughout the period from 2007/08 to 2011/12. The pay gap for those with disabilities fell from over 11 per cent before the 2008-09 recession to less than 9 per cent in 2011/12. In contrast, the pay gaps for migrants and ethnic minorities increased during that recession but have shrunk in the last year or so. The pay gap for migrants is higher now (2011/12) than it was in 2008/09, while that for ethnic minorities as a whole is back to what it was in 2007/08, at around 4 per cent. But this disguises large differences among the ethnic minorities, with Indians earning more than whites but black, Pakistani or Bangladeshi workers earning much less than whites. There have been substantial reductions in the pay gaps between Pakistanis and whites, and to a lesser extent Bangladeshis and whites in recent years but the pay gap still remains above 10 per cent for Pakistanis and over 23 per cent for Bangladeshis.

Pay Settlements and Pay Structures

2.50 As well as investigating the impact of the minimum wage on individual earnings, we can also look at its effects on pay-setting and pay structures. We start by looking at pay settlements. In two surveys of employers, Workplace Employment Relations Study (2013) found that 31 per cent of private sector employers considered the NMW as an influence on pay settlements, while CIPD (2012a) found that 7 per cent regarded the NMW as the most important influence on increasing salaries. There are no official data sources on pay settlements, so it is necessary to use data from various pay organisations. As discussed in

Chapter 1, we use four such organisations – EEF, the manufacturers' organisation (EEF), the Labour Research Department (LRD), Incomes Data Services (IDS) and XpertHR. These data sources tend to under-represent smaller firms. All four generally gave a similar picture on pay awards across the economy over the last year (as shown in Figure 1.4). The median of pay settlements for all four organisations began the year in the range 2.5-3.0 per cent but weakened through 2012 to finish the year at around 2.0 per cent (although it was 2.5 per cent for EEF).

2.51 Using IDS data, we are able to break down pay settlements by low-paying sector. In general, as shown in Table 2.6, pay settlements in the low-paying sectors have tended to broadly track pay settlements in the whole economy. However, pay settlements have been lower in the low-paying sectors than in the whole economy in 2011 and 2012.

Table 2.6: Annual Median Pay Settlement, by Sector, UK, 2000-2012[a]

Per cent	Whole economy	Low-paying sectors	Care services & housing	Children's nurseries	Hotels, restaurants, pubs & leisure	Retail
2000	3.0	3.0				
2001	3.2	3.0				
2002	3.0	2.8				
2003	3.0	3.0				
2004	3.0	3.0				
2005	3.2	3.0				
2006	3.0	3.0				
2007	3.5	3.0				
2008	3.5	3.0	3.0	3.0	3.2	3.0
2009	2.0	2.0	2.0	3.0	2.3	1.5
2010	2.0	2.0	1.0	2.5	2.0	2.0
2011	2.5	2.2	2.0	-	2.6	2.0
2012	2.5	2.0	1.5	-	2.3	2.0

Source: IDS.
Notes:
a. The annual data is for the calendar year from 1 January to 31 December. IDS had not disaggregated pay settlement by individual sector prior to 2008.
b. Where the sample size is too small to produce an estimate it is denoted by '-'.

2.52 There have, however, been some differences across low-paying sectors, with firms in hospitality (hotels, restaurants, pubs and leisure) awarding higher pay settlements than those in retail or care services since 2008. Pay settlements in care services and housing were lower than the other sectors in 2012, perhaps reflecting public sector expenditure constraints.

2.53 IDS (2012b) looked in detail at 83 pay settlements covering over 1.4 million employees in the retail sector. It reported that, in the year to the end of October 2012, the median pay settlement in retail was 2.0 per cent, below the 2.6 per cent observed for the economy as a whole, and slightly below the level of settlements, 2.1 per cent, observed in retail in the year to the end of October 2011. Nearly two-thirds of the pay awards in the retail sector in 2012 were 2.0-2.5 per cent. Fewer pay freezes were observed in the retail sector than in the economy as a whole. In a matched sample of 64 retailers, just over a third paid higher rises than last year, a similar fraction paid lower rises, and just under a third paid the same rise as in the previous year. The uncertainty of the economic outlook and the double dip recession had also played a role in the modest pay awards observed over the last year.

2.54 The median pay settlement in retail (2.0 per cent) was above the minimum wage increase in October 2012 (1.8 per cent), enabling some firms to widen the gaps between the NMW and their starter rates. Only 6 per cent of the retail organisations monitored awarded a settlement exactly in line with the NMW increase, and just 9 per cent of firms bottom-loaded their settlements to take account of the NMW rise. With the recent increases in the NMW lower than previously, the merging of lower pay grades had also become less common. But the impact of the minimum wage was still felt. Nearly 60 per cent of pay reviews for retail staff now took place in September or October, leading to fewer companies needing to make additional payments to comply with the NMW. There had been little change in use of the NMW by retailers over the last year, with just under a third of employers using the NMW in both 2011 and 2012.

2.55 For several years, pay settlements in food retail had been higher than in non-food retail. Median pay settlements in both sectors were the same in the year to the end of October 2012 but the range of pay settlements was wider in non-food than in food. This reflected a greater number of pay freezes and many higher settlements in non-food retail. As with the year to October 2011, pay settlements were slightly stronger in the fast food, pubs and restaurants sector, at 2.4 per cent over the year to October 2012. The NMW was more widely used by companies in the fast food, pubs and restaurants sector (44 per cent), compared with 36 per cent of firms in non-food retail and 10 per cent of food retailers.

Research on Earnings and Pay

2.56 We have previously commissioned research that looked at pay settlements and how firms have attempted to manage increases in the minimum wage within their pay structures. IDS (2011c) showed that in the period to 2010 the median of pay settlements since the introduction of the minimum wage had followed similar trends in the low-paying sectors compared with the economy as a whole, albeit slightly weaker. Indeed, the only notable difference appeared to be the use of pay freezes since the onset of the recent recession. Pay freezes have been far more common in the whole economy than in the low-paying sectors, although this may result from the minimum wage continuing to increase throughout this period, thus allowing little opportunity for low-paying sector employers to freeze pay at the bottom of the distribution.

2.57 There is clear evidence that the minimum wage has affected the timing of pay reviews in the low-paying sectors. IDS (2011a and 2011c) showed that there had been a notable change among low-paying sector employers with October becoming more common as a settlement date. In 1999, fewer than 5 per cent of pay settlements in both the whole economy and the low-paying sectors were in October. However, by 2010, that proportion had increased to nearly 20 per cent of pay reviews in the low-paying sectors, while in the whole economy it had risen to just 6 per cent. In addition, it also presented evidence that other employers had introduced a two-stage process whereby the majority of the workforce continued to have its normal review date but the lowest paid received a supplementary award in October if necessary to comply with the NMW. This factor had lessened in 2012 as more companies had moved to an annual pay review in September or October.

2.58 The LPC has commissioned several studies to investigate how firms have attempted to cope with the minimum wage. IDS (2011a) summarised much of their previous work when analysing pay-setting since 1994. They found that many companies had expected the Labour Party to be elected in 1997 and had prepared to some extent for the introduction of the minimum wage beforehand. Its introduction thus had little impact. However, the subsequent large upratings between October 2001 and October 2006 had led to further adjustments. Pay differentials had narrowed, as those paid above the minimum wage received smaller pay increases than those on the minimum wage. Further, pay structures were changed with the number of hierarchies or geographic pay zones reduced. For example, in the retail sector the three separate grades for trolley-collecting, shelf-stacking and cashier were commonly merged over time into one grade. Although prompted by NMW increases, many firms came to see this development as beneficial as it led to more flexible and multi-skilled staff deployed across these roles. In addition, firms also looked at ways to reduce labour costs by reducing pay premia for overtime and unsocial hours; and by restricting non-wage benefits such as subsidised meals and transport, annual leave, pensions, and staff discounts. Grimshaw and Caroll (2002); Cronin and Thewlis (2004); Denvir and Loukas (2006); and various LPC surveys of employers and stakeholder evidence found similar effects on the remuneration package and pay structures.

2.59 IDS (2011a), in common with some of the recent econometric studies (such as Dickens, Riley and Wilkinson (2012)), also found that there had been some slight restoration of differentials between 2008-2010, when minimum wage increases were much smaller than in the years of the large upratings.

2.60 Using data up to 2007, Stewart (2009) investigated the impact of the minimum wage on the wages of those paid just above it. He noted that his findings were sensitive to the methodology used and the definition of counterfactual earnings (what happened to earnings in the absence of a minimum wage (or its uprating)) but concluded that his results suggested that spill-over effects were generally small and limited to the 5th percentile of the hourly earnings distribution. Butcher, Dickens and Manning (2012) found that the NMW did affect wage inequality. They also found modest direct spill-over effects but were also able to show some more significant indirect spill-over effects, reaching up to 40 per cent above the NMW, corresponding to the 25th percentile. These spill-over effects were larger for women than men and in areas where the bite of the minimum wage was greatest. Other research has generally found modest spill-over effects. In spite of concerns raised at the introduction of the minimum wage, none of these studies has suggested that increases in the minimum wage have led to significant upward pressure on earnings growth in the whole economy.

2.61 It has been argued that the minimum wage is not particularly well-targeted at the lowest income households. It is true that NMW workers tend to be in the 3rd to 6th deciles of the household income distribution. However, the households in the lowest deciles have few people in work and the minimum wage cannot benefit households in which no-one works. IFS (2003), Bryan and Taylor (2004 and 2006), and Brewer, May and Phillips (2009) among others, showed that if the sample was restricted to working age households, removing pensioner households, then NMW workers were concentrated in the second to fourth deciles. Further, if workless households were also excluded, the NMW was targeted on those households in the bottom two deciles.

2.62 These findings were confirmed in research commissioned for this report. Brewer and De Agostini (2013) looked at the income distribution of families. They found that families where NMW jobs were the main source of earnings tended to be in the bottom half of the income distribution of all working age families, peaking in the third and fourth decile. In contrast, where NMW jobs were a secondary source of income, NMW families tended to be found higher up the income distribution, peaking in the sixth and seventh decile. Excluding non-working families suggested that the NMW was even better targeted. The families for whom the NMW was the main source of income were concentrated in the bottom two deciles of the income distribution for working families.

Views on Earnings and Pay

2.63 Employers and those organisations representing business emphasised to us how increases in the minimum wage since 1999 had led to a compression in pay structures and limited employers' ability to reward those staff with higher skills.

2.64 The CBI said that in the current economic situation firms were often looking to respond to individual pay pressures without a general increase in labour costs. The rigidity of the NMW prevented this kind of pay flexibility and differentiation at the bottom of the pay scale. It said this posed particular difficulty for lower-paying sectors where a NMW increase created an across-the-board pressure at the bottom of the pay scale. In both 2010 and 2012 the median rise in earnings in the low-paying sectors was lower than the rise in the NMW. It said there were a growing number of pay freezes adding to this pressure, with resultant erosion of differentials and incentives.

2.65 In the retail sector business organisations stressed how differentials had narrowed over the past year. The British Retail Consortium's (BRC) data in 2012 indicated that the proportion of non-food retail employees earning within 20 pence of the NMW had almost trebled to 9.0 per cent, compared with 2011. The Association of Convenience Stores (ACS) reported that in 2012 the average wage paid by convenience retailers to staff over 21 was £6.18, 1.6 per cent above the NMW. In 2011, the average wage was 2.2 per cent above the NMW.

2.66 The message was similar in the care sectors. The National Care Association (NCA) and National Care Forum (NCF) told our Secretariat that the upratings in the NMW did not take account of the current economic situation in adult social care, which included low or no increases, and in some cases reductions, in care fees paid by local authorities. One knock-on effect of this was that pay differentials were being eroded, with care providers not always able to reward the achievement of higher qualifications. In childcare,

> *"The proportion of workers being paid at the minimum wage has increased year on year from 57.7 per cent in 2011 to 62.2 per cent in 2012."*
>
> **Cleaning and Support Services Association**

59 per cent of respondents to the National Day Nurseries Association's expert panel survey said the NMW had meant they had reduced differentials so there was now less reward for more qualified staff. White Horse Childcare also said that the NMW had eroded differentials.

2.67 Business also told us about the pressures the NMW had created within the workforce. The Food and Drink Federation reported that its members were under pressure to maintain differentials. It wanted the NMW to be called a "Standard Pay Rate" moving away from what some employees saw as the stigma of a minimum level. At a meeting with Scottish Enterprise during our visit to Scotland a number of local companies told us they had not given pay increases every year for the last four years (except for those on the NMW), which had caused some resentment from those paid just above.

"This year's pay award was 1.75 per cent. Previously it was 2 per cent over two years. Those on the NMW received more, which had eroded differentials. Overall, since the introduction of the NMW, skilled workers' pay had not gone up as much as NMW workers."

Hawick Knitwear, Commission visit to Scotland

2.68 In South Yorkshire, a hotelier told us that differentials had narrowed in sectors such as hospitality where the NMW was paid. They said that the minimum wage had also had an unintended effect in promoting a sense of worthlessness ("I'm only worth the minimum wage"), which worsened the higher the NMW went and the more people it covered.

2.69 The Association of Licensed Multiple Retailers reported that its latest survey confirmed the trend for the NMW to become the average wage for the bars sector. Although the number paying at or around this rate (£6.08 to £6.19) was lower than in the previous two years there was evidence of a shift towards greater use of the youth rates of the NMW. The number of workers benefiting from the NMW increase had risen dramatically: in 2008 47 per cent of staff benefited, rising to 52 per cent in 2011, and to 79 per cent in 2012.

"NMW increases have made employing staff increasingly difficult for many of our members. The area where it has had the most impact has been in wage differentials, with businesses now having to pay those with more senior jobs the same or just slightly more than workers with little responsibility or experience."

The Federation of Wholesale Distributors evidence

2.70 Trade unions, however, told us how the NMW provided an even more important protection for the low paid in difficult economic times. In oral evidence the Trades Union Congress (TUC) told us that the NMW has been one of the most effective measures to improve the position of the low paid. As well as increasing their incomes it had relieved some of the burden falling on the exchequer. Unions also pointed to evidence which suggested to them businesses were able to cope with the NMW increases. The Union of Shop Distributive and Allied Workers (Usdaw) told us that retailers had generally agreed pay settlements in the 2.0-2.5 per cent range this year. By not keeping pace with settlements in the private sector, last year's NMW increases will have widened differentials between workers on the NMW, and those above this.

2.71 Unions were concerned that the recent NMW upratings had not been sufficient to retain its value. The Communication Workers Union said the gap between the growth in the NMW and inflation had been most pronounced in the past three years, with RPI increasing by 12.1 per cent since October 2009, compared with a 6.7 per cent rise in the NMW (including the then forthcoming change for 2012). It stated that for those on the NMW the squeeze in living standards was likely to have been even greater than these figures suggested, however, with recent inflation hitting those with the lowest incomes hardest, given the greater share of income they spent on certain costs. Unite welcomed the NMW increase in 2012 but also noted that it would fail to keep pace with inflation and therefore reduced the spending power of the lowest-paid workers. However, it did highlight that since the minimum wage was introduced it had helped to close the gender pay gap.

2.72 A number of unions were concerned about increasing the value of the minimum wage to help address poverty. UNISON said that the gap between the NMW and the wage level necessary to reach a minimum income standard had widened in recent years. It referred to Joseph Rowntree analysis which found that "… the NMW rises more slowly than headline inflation, but minimum living costs rise more quickly. The gap has widened especially fast for families with children in the past two years … Various factors have contributed to this, including the fact that the NMW is rising more slowly than inflation, cuts in tax credits and the increase in family transport needs."

"Research undertaken by the Institute of Fiscal Studies released in June 2011 showed that since 2008 the poorest fifth of households faced an average inflation rate of 1.6 per cent higher than that of the official figure. When you take this into account, and compare it with the increases in the National Minimum Wage over the last two years, there is no doubt that the lowest paid workers have failed to get increases that have matched their real rate of inflation. In fact, it is no under-estimation, based on RPI index figures and the actual increases in the adult National Minimum Wage, to point out that they have received increases running at half of what they would have needed to keep pace with their inflation rate."

Usdaw evidence

Summary on Earnings and Pay

2.73 The evidence set out above clearly demonstrates that the minimum wage has had a significant effect on the distribution of earnings; pay structures; pay gaps by gender, ethnicity and disability at the bottom end of the earnings distribution; the timing of some pay reviews; the composition of reward; and labour costs. It also appears that many of these effects may have strengthened through the recession, particularly among low-paying sectors and small firms. Further, we have shown that there have been substantial real wage reductions in recent years for nearly all employees in the UK. The minimum wage has also fallen in real terms but it has slightly increased its value relative to the median and average wages. We now investigate how firms have coped with these changes.

Impact on the Labour Market

2.74 If the minimum wage is set above the competitive, market-clearing wage, traditional, neo-classical economic theory tells us that employment will fall. Firms can reduce employment through either reducing the number of workers employed, the extensive margin, or through reducing the number of hours worked, the intensive margin. Other economic theories, such as efficiency wages (where higher wages induce greater productivity) or monopsony (where employers are able to extract some rents and pay workers below the market-clearing level), allow the possibility that an increase in the wage floor might actually lead to a rise in employment. In this section, we look at aggregate employment and hours as well as analysing the employment outcomes of those workers and in those sectors that are most likely to be affected by the minimum wage. We then investigate the impact on vacancies, redundancies, unemployment and inactivity, before summarising the research evidence and considering the views of stakeholders.

"The NMW has become a vital tool in trying to reduce the gender pay gap due to the high concentration of women in low-paid jobs and particularly those women in part-time jobs. Over the lifetime of the NMW the gender pay gap has been reduced from 16.4 per cent in 1999 to 9.2 per cent in 2011. This cannot all be attributed to the NMW, but there is no doubt that the NMW has been a positive influence in helping to close the gender pay gap."

Unite evidence

Employment and Employee Jobs

2.75 As we noted in Chapter 1, the labour market has been remarkably resilient considering the depth of the recession and the subsequent stagnation in growth since the end of 2010. Output (in the third quarter of 2012) is still 3 per cent below its pre-recession level (the first quarter of 2008) but total employment has fully recovered. Total hours worked have also made a recovery although they remain slightly below their pre-recession level. In light of what happened to employment and hours in previous recessions, this seems remarkable.

2.76 In assessing employment, we can consider two main official data sources: the ONS Workforce Jobs series (WFJ) and the Labour Force Survey (LFS). The WFJ series surveys businesses and counts the number of jobs in the economy. The LFS, on the other hand, surveys households and estimates employment by counting the number of people in employment. LFS can also be used to estimate the numbers in second jobs but it does not ask about those with more than two jobs. These employment counts differ as they are derived from different samples and a person can have more than one or two jobs. Further, the LFS is less likely to pick up jobs performed by migrant workers who are in the UK for less than a year. ONS (2012f) gives a more detailed explanation of the differences between the two data sources.

2.77 Table 2.7 shows that there were 2.8 million more workforce jobs in the UK in September 2012 than before the minimum wage was introduced. There were also 2.0 million more people in work, an increase of 9.4 per cent. Ignoring those unlikely to be entitled to the minimum wage (the self-employed, unpaid family workers and those on government training schemes), employment growth among employees was not quite as strong but still considerable. At 6.4 per cent the increase in total hours worked was a little bit weaker.

2.78 In our last report, we noted the weakness in the labour market between September 2010 and September 2011. Self-employment had picked up leading to an increase in workforce jobs but employee jobs, LFS employment and the number of employees had all fallen over the year. Since then, despite the continued sluggishness of output growth, the labour market has strengthened considerably with employment, workforce jobs and employee jobs growing by around 1.7-1.8 per cent. The growth in hours has been even stronger at 2.6 per cent.

Table 2.7: Change in Employment, Jobs and Hours, UK, 1999-2012

	September 2011-September 2012		September 2010-September 2011		September 2009-September 2010		September 2008-September 2009		March 1999-September 2012	
	000s	%	000s	%	000s	%	000s	%	000s	%
Workforce jobs	532	1.7	109	0.3	-110	-0.4	-647	-2.0	2,828	9.7
Employee jobs	479	1.8	-28	-0.1	-220	-0.8	-754	-2.7	2,049	8.2
Employment	513	1.8	-110	-0.4	306	1.1	-519	-1.8	2,540	9.4
Employees	319	1.3	-132	-0.5	92	0.4	-563	-2.2	1,634	7.0
Hours worked	23,800	2.6	800	0.1	11,700	1.3	-29,800	-3.2	57,000	6.4

Source: ONS, workforce jobs (DYDC) and employee jobs (BCAJ), quarterly; total employment (MGRZ), employees (MGRN) and total weekly hours (YBUS), monthly, seasonally adjusted, UK, 1999-2012.

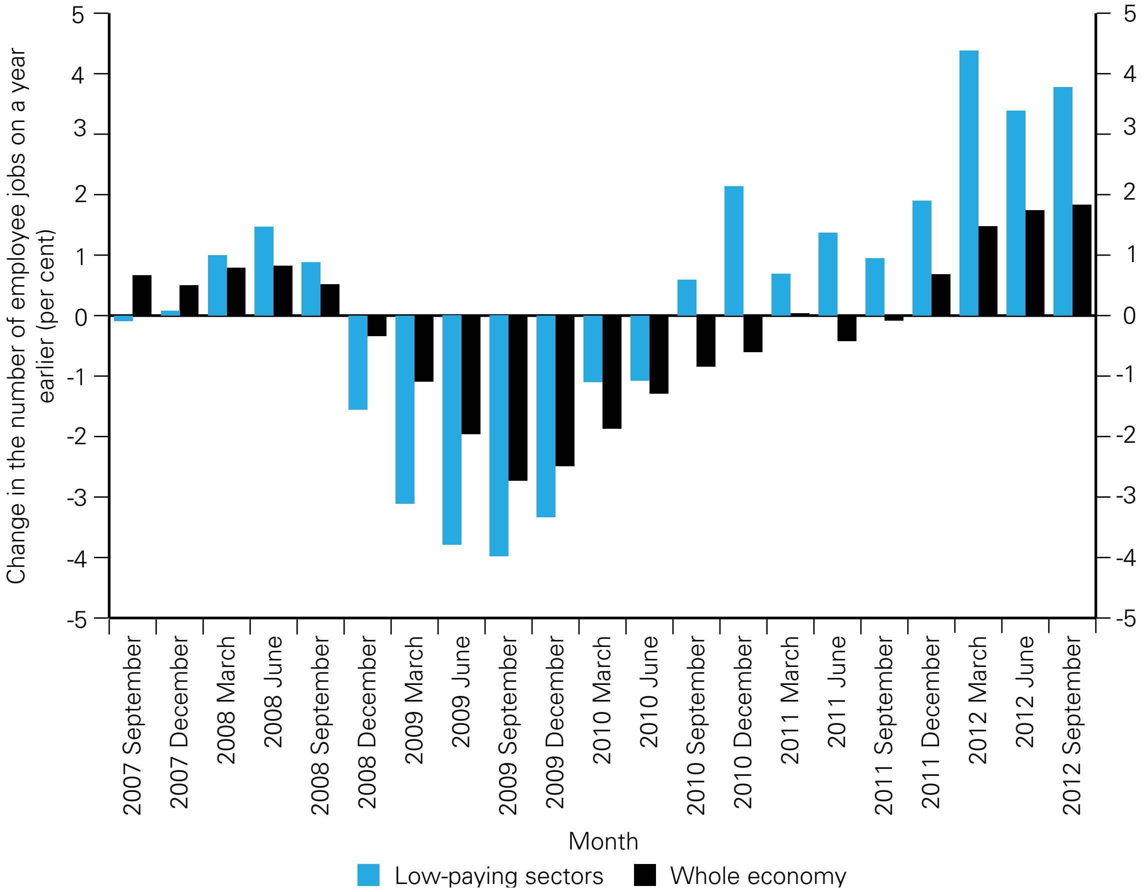
2.79 The above average earnings increase in the adult rate of 2.5 per cent in October 2011 from £5.93 to £6.08 an hour would be expected to have most effect on firms in the low-paying sectors. Although this was a relative increase, it was still a real fall in the value of the NMW as the uprating in October 2011 was again less than both CPI and RPI inflation.

2.80 There were around 26.40 million employee jobs in Great Britain in September 2012.[2] About 32 per cent of them, 8.35 million, were in what we define as low-paying industries. Since the introduction of the NMW, the number of employee jobs in the whole economy has increased by 2.14 million, or 8.8 per cent, but the number of employee jobs in the low-paying industries has increased more, by 9.3 per cent.

2.81 Figure 2.15 shows that, despite the onset of recession, between March and September 2008 growth in employee jobs was stronger in the low-paying industries than in the economy as a whole. However, this then quickly reversed with the low-paying industries being more adversely affected as consumption spending fell and world trade collapsed. Between December 2008 and December 2009, the number of employee jobs in the low-paying industries fell by 3.4 per cent from 8.22 million to 7.94 million. This compared with a fall of 2.7 per cent in the whole economy.

2 In this and following paragraphs we use data for GB rather than UK as a detailed sector breakdown of employee jobs is not available for Northern Ireland. Further, the GB data are not seasonally adjusted and therefore comparisons should only be made by comparing a quarter with the same quarter in previous years.

Figure 2.15: Annual Change in Employee Jobs, by Sector, GB, 2007-2012



Source: LPC estimates based on ONS employee jobs series, three-monthly, not seasonally adjusted, GB, 2006-2012.

2.82 But jobs in the low-paying industries have recovered much more quickly in the aftermath of the recession and subsequent stagnation. Between September 2010 and September 2012, the number of jobs in the low-paying industries had increased by 4.8 per cent, compared with just 1.7 per cent in the whole economy. Over the year to September 2012, the number of employee jobs in the low-paying industries increased by 304,000, or 3.8 per cent, accounting for around 64 per cent of the increase in all employee jobs in the whole economy. Jobs in the low-paying industries now exceed their pre-recession level, whereas at September 2012, employee jobs in the economy as a whole were still 2.1 per cent below their pre-recession peak.

2.83 Using the ONS employee jobs series, we can also look in more detail at some of the individual low-paying industries, aggregating them into four main groups: consumer services, such as retail and hospitality; business-to-business services, such as cleaning and employment agencies; international trade-dependent – those that produce goods and face international competition, such as food processing, textile manufacturing and agriculture; and government-dependent services – those that are to some extent dependent on government spending, such as social care and childcare. Unfortunately, the ONS employee jobs series do not allow us to separate childcare from education or some social work activities, so our analysis of government-dependent jobs using employee jobs data is confined here to just those jobs in residential social care.

2.84 Between March 1999, just before the NMW was introduced, and September 2012, there was strong growth in employee jobs across nearly all of the low-paying sectors with the exception of those where international trade is important. Growth was strongest in social care (up 31 per cent), followed by business-to-business services (up 25 per cent), and then those dependent on consumers (up 13 per cent). Those industries facing international competition saw jobs fall by nearly 40 per cent over the same period. However, these industries had experienced a long-term decline in employment well before the minimum wage was introduced.

2.85 The British economy lost around 974,000 employee jobs (3.6 per cent) between September 2008 and September 2011. The low-paying sectors were initially hit harder with 329,000 employee jobs lost (4.0 per cent) between September 2008 and September 2009, but they recovered much more quickly, rising above their pre-recession level by September 2012. Retail was particularly badly hit, losing 159,000 employee jobs (4.8 per cent) between September 2008 and September 2011. Retail jobs were still 87,000 (2.6 per cent) below their level in September 2008. Other sectors, apart from agriculture, have recovered quickly, making up for jobs lost. For example, hospitality has more than made up for the 86,000 jobs lost between September 2008 and September 2010.

2.86 Table 2.8 shows that, over the year to September 2012, employee jobs in the low-paying sectors grew 3.8 per cent, more than twice the figure for the whole economy (1.8 per cent). Growth has been strongest in hospitality (up 121,000 or 6.6 per cent), social care (up 54,000 or 8.9 per cent) and employment agencies (up 46,000 or 7.4 per cent). Retail (excluding the motor industry) has created 82,000 net jobs (up 3.0 per cent). Leisure, travel and sport alone recorded a fall, of only 5,000.

2.87 The figures in Table 2.8 include both full-time and part-time jobs. Of the 2.14 million jobs created in the whole economy between September 1998 and September 2012 around 1.3 million were part-time and the other 840,000 were full-time. In striking contrast, over the same period, nearly all of the net jobs created in the low-paying sectors were full-time.

2.88 Over the year to September 2012 the number of full-time jobs increased faster than the number of part-time jobs in the whole economy. Full-time employee jobs increased by 2.1 per cent (up 359,000) while part-time jobs increased by 1.4 per cent (up 115,000). Job growth in the low-paying sectors was stronger across both job types. Full-time jobs grew by 5.6 per cent (up 235,000) and part-time jobs by 1.7 per cent (up 67,000). This picture was similar across each of the low-paying sectors except retail, where part-time jobs grew at a faster pace than full-time jobs.

Table 2.8: Change in Employee Jobs, by Low-paying Industry, GB, 1998-2012

	2012 September	Change on 2011 September		Change on 2008 September		Change on 1998 September	
	000s	000s	%	000s	%	000s	%
All industries	**26,421**	**474**	**1.8**	**-500**	**-1.9**	**2,143**	**8.8**
All low-paying industries	**8,354**	**304**	**3.8**	**98**	**1.2**	**710**	**9.3**
Consumer services	**5,754**	**191**	**3.4**	**39**	**0.7**	**679**	**13.4**
Retail	3,202	72	2.3	-87	-2.6	113	3.7
Retail (excluding motor)	2,772	82	3.0	-40	-1.4	183	7.1
Hospitality	1,948	121	6.6	117	6.4	379	24.2
Leisure, Travel and Sport	486	-5	-1.0	10	2.1	144	42.1
Hairdressing	118	3	2.6	-1	-0.8	43	57.3
Business-to-business services	**1,336**	**51**	**4.0**	**44**	**3.4**	**269**	**25.2**
Cleaning	667	5	0.8	39	6.2	77	13.1
Employment agencies	669	46	7.4	5	0.8	192	40.3
International trade-dependent	**603**	**8**	**1.3**	**-38**	**-5.9**	**-395**	**-39.6**
Food processing	340	5	1.5	1	0.3	-89	-20.7
Agriculture	173	1	0.6	-39	-18.4	-94	-35.2
Textiles, clothing	90	2	2.3	0	0.0	-212	-70.2
Government-dependent services	**661**	**54**	**8.9**	**53**	**8.7**	**157**	**31.2**
Social care	661	54	8.9	53	8.7	157	31.2

Source: LPC estimates based on ONS employee jobs series, three-monthly, not seasonally adjusted, GB, 1998-2012.
Note: The data in this table have been revised since last year. Security is no longer defined as a low-paying sector.

2.89 Having examined the evidence for any effect of increases in the minimum wage on overall employment in the low-paying sectors, we turn now to the impact on small and medium-sized firms. Over the year to the third quarter of 2012 about one in five employees worked in a micro firm (one with 10 or fewer employees). Just over one in four worked in other small firms (those with 11-49 employees). In other words, around 48 per cent of all employees worked in small firms. A further quarter worked in medium-sized firms (those employing 50-249 employees) and the remaining 27 per cent in large firms (those with 250 or more employees).[3]

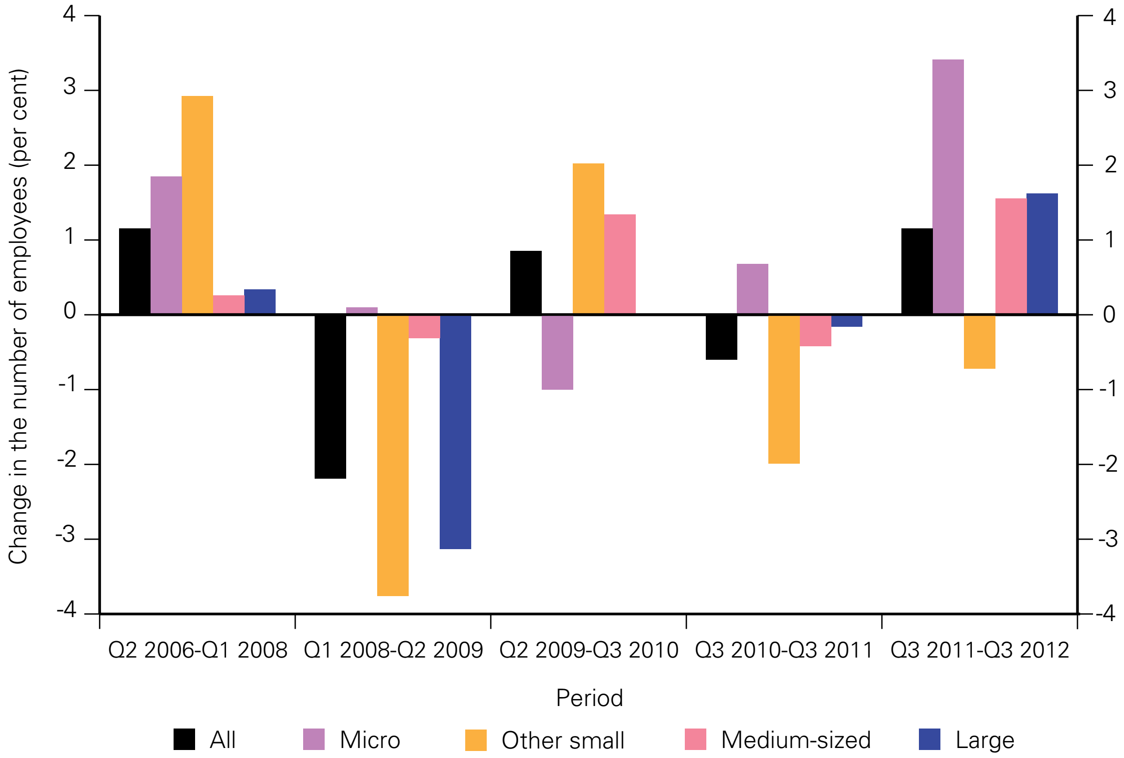
2.90 Figure 2.16 shows that growth in employment by size of firm appears quite volatile. However, certain patterns do emerge. Prior to the onset of recession in 2008, employment was growing across all sizes of firm although the strongest growth was among small firms. During the recession, employment in micro firms held up but employment in other small firms and large firms fell sharply. In the initial period of economic recovery, employment growth was led by other small firms and medium-sized firms with micro firms shedding some workers. The stagnation from the third quarter of 2010 saw a reversal of those trends, as other small firms and medium-sized firms shed jobs while micro firms increased

3 Firm size in the LFS is self-reported. This is likely to underestimate the size of firm as many respondents will give the size of their workplace rather than their firm. These estimates of employment in small firms are in line with the 48 per cent reported in the BIS Business Population Estimates (BPE). The data from ASHE and BPE suggest that more people work in large firms than is estimated from LFS.

employment. Employment in large firms was generally flat in these two periods of recovery. Over the last year the UK has experienced strong employment growth, led by micro firms but also aided by medium-sized and large firms. Other small firms continued to experience falls in employment.

2.91 Our analysis in an earlier section of this chapter suggested that the minimum wage had a greater effect in micro firms than others. These employment data suggest that those micro firms are coping with burdens that may have been placed on them. However, the employment performance of other small firms has not been as strong.

Figure 2.16: Change in Employment, by Firm Size, UK, 2006-2012



Source: LPC estimates based on LFS Microdata, quarterly, not seasonally adjusted, UK, Q2 2006-Q3 2012.

2.92 We can also analyse the impact of the introduction and subsequent increases in the minimum wage on the employment of those groups who were expected to be most affected by it. Table 2.9 shows that generally, taking the period as a whole from 1999-2012, those groups who are most likely to have been minimum wage workers have performed better in terms of employment than others. Employment rates for working age females have increased while those for males fell over the same period. Ethnic minorities as a whole experienced a 3.7 percentage point increase in their employment rates compared with a fall of 0.3 percentage points for whites. Employment rates for disabled people have risen, and fallen for those without disabilities. Similarly, migrants have also experienced higher employment rate growth compared with counterparts born in the UK. Older workers have also seen large increases in their employment rates. However, two groups have not done well – young people and those without qualifications. Employment rates for those without qualifications, admittedly an ageing and shrinking group, have fallen by nine percentage points from 50.8 per cent to just 41.8 per cent. The employment rates for 16-17 year olds have fallen by 24.1 percentage points and for 18-20 year olds by 14.0 percentage points since the first quarter of 1999, although much of this is directly related to the increased participation of young people in full-time education. A more detailed analysis of the impact of the NMW on young people is presented in Chapter 3.

Table 2.9: Employment Rates, by Groups of Workers, UK, 1999-2012

(Rates: per cent; changes: percentage points)	**2012 Q3**	**Change on:**		
		2011 Q3	**2008 Q2**	**1999 Q1**
Working age	**70.8**	**0.3**	**-2.0**	**-0.8**
Men	**76.0**	**0.4**	**-2.9**	**-2.5**
Women	65.7	0.3	-1.1	0.9
16-17 year olds	23.9	0.5	-10.2	-24.1
18-20 year olds	47.1	0.7	-9.5	-14.0
Older workers (65+)	8.9	0.1	1.7	3.8
White	**72.4**	**0.4**	**-2.1**	**-0.3**
All ethnic minorities	59.7	0.0	-0.7	3.7
Black	60.0	0.6	-3.7	-1.1
Indian	69.7	0.0	1.0	6.7
Pakistani/Bangladeshi	50.3	0.6	4.5	11.9
Other non-white	58.2	-1.3	-3.5	1.2
With qualifications	**74.3**	**0.0**	**-3.9**	**-4.1**
No qualifications	41.8	-0.9	-5.8	-9.0
Not disabled (16-59/64)	**78.1**	**0.1**	**-2.5**	**-1.9**
Disabled people (16-59/64)	42.0	0.8	1.7	4.3
UK born	**71.6**	**0.5**	**-2.0**	**-1.0**
Non-UK born	66.8	-0.5	-1.3	4.4

Source: LPC estimates based on LFS Microdata, quarterly, four-quarter moving average, UK, Q2 1998-Q3 2012.
Note: Working age, unless otherwise stated.

2.93 Taking the period since the recession began (the second quarter of 2008), a similar picture emerges with women, ethnic minorities, and migrants suffering smaller than average falls in employment rates while employment rates actually rose for older workers and disabled people. In contrast, employment rates continued to fall sharply for young people and those with no qualifications.

2.94 Over the year to the third quarter of 2012 employment rates for young people have risen faster than for other age groups but there has been no upturn for those with no qualifications. Apart from the disabled, who again experienced an increase in employment rates, most of the other groups have done less well over the last year than those outside of these groups.

Hours

2.95 It is also possible for employers to try to cope with the minimum wage by reducing hours. The number of hours worked in the UK economy as a whole increased by around 7 per cent between the introduction of the minimum wage and the onset of recession (from 888.3 million in March 1999 to 949.3 million in March 2008). It then fell in the recession by over

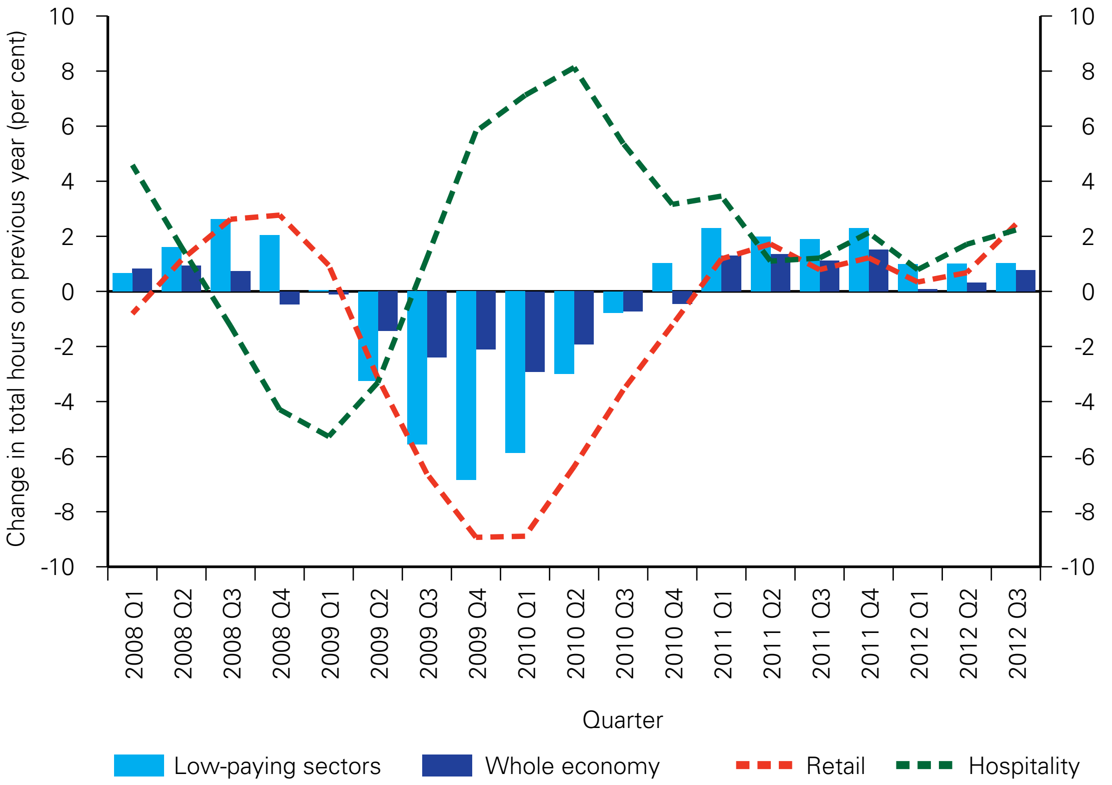
4 per cent, reaching a nadir of 904.5 million in August 2009, before recovering and by the autumn of 2012 it had nearly returned to its previous peak (949.0 million in October 2012). In October 2012 nearly 7 per cent more hours were worked than when the minimum wage was introduced.

2.96 Figure 2.17 shows that during the recession the fall in hours was greater in the low-paying sectors than for the economy as a whole. But it also shows that as the economy began to recover, hours worked picked up faster in the low-paying sectors than in the economy as a whole. Using quarterly data, total hours worked were 0.4 per cent lower in the third quarter of 2012 than in the first quarter of 2008. For the low-paying sectors total hours worked were about 2.0 per cent lower.

2.97 However, since the fourth quarter of 2010 hours have risen 2.9 per cent in the low-paying sectors compared with 2.2 per cent in the whole economy. The low-paying sectors accounted for about 26.5 per cent of all hours in the first quarter of 2008, falling to 25.7 per cent in the fourth quarter of 2009, but rising to 26.2 per cent in the third quarter of 2012, still a little below where it was before the recession.

2.98 There is a noticeable contrast between the hospitality and retail sectors where movements in hours tended to mirror each other before and during the recession. In hospitality hours actually increased during the recession, rising by 3.4 per cent between the first quarter of 2008 and the second quarter of 2010. In retail hours fell by 8.1 per cent over the same period. However, hours have increased by 2.3 per cent in retail and by 2.1 per cent in hospitality since the beginning of 2011. This compares with an increase of 1.0 per cent in the whole economy.

Figure 2.17: Annual Change in Hours Worked, by Sector, UK, 2008-2012



Source: LPC estimates based on LFS Microdata, quarterly, four-quarter moving average, UK, Q2 2006-Q3 2012.

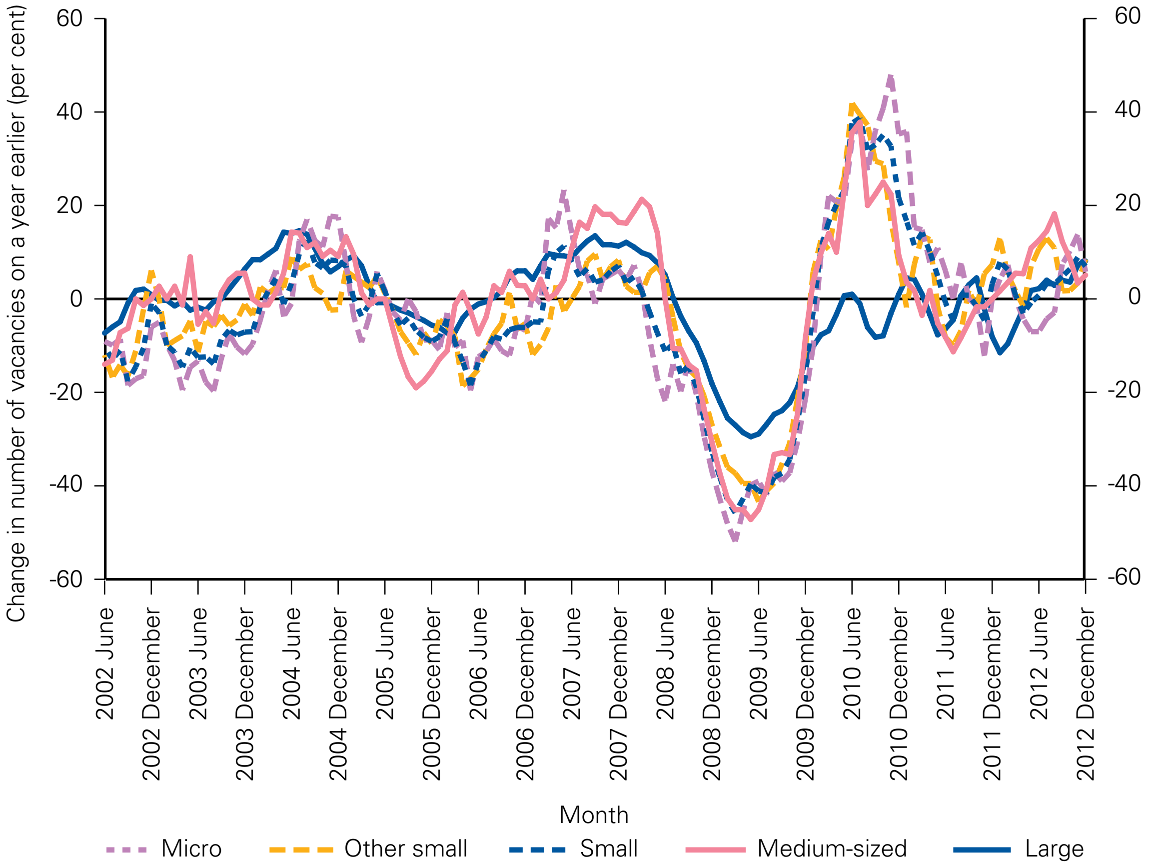
Vacancies and Redundancies

2.99 The strength, or otherwise, of the labour market can also be measured by looking at the number of new jobs created, vacancies, and the number of jobs being lost, redundancies. As we noted in Chapter 1, the stock of unfilled vacancies peaked in March 2008 at 694,000 but then fell sharply before bottoming out at 430,000 in June and July 2009. Since then vacancies have recovered a little to 485,000 in October 2012, up 22,000 on the previous October.

2.100 A similar picture appears for the hospitality and distribution (which comprises the wholesale and retail) sectors. Vacancies in both low-paying sectors peaked in March 2008 (at 134,000 in distribution and 67,000 in hospitality) before falling throughout the recession (to lows of 76,000 in March and April 2009 in distribution, and 39,000 in hospitality in May 2009). Vacancies in both sectors have since grown moderately, reaching 98,000 and 52,000 respectively in October 2012, still well below their pre-recession levels.

2.101 Figure 2.18 shows that numbers of vacancies by size of firm follow a similar general trend albeit that the pattern for large firms differs somewhat from the trends for small and medium-sized firms. During the recession, vacancies fell first among micro firms, then other small and medium-sized firms and last among large firms. The fall in vacancies was of a similar magnitude in micro, other small and medium-sized firms. Large firms were the least affected. However, in 2010 the growth in vacancies among small and medium-sized firms was much stronger than in large firms. Across all sizes of firm the level of vacancies had generally been flat between the end of 2010 and the beginning of 2012, but it has turned upwards since the spring of 2012.

Figure 2.18: Annual Change in Vacancies, by Firm Size, UK, 2002-2012



Source: LPC estimates based on ONS data, vacancies in firms with 1-9 employees (ALY5), 10-49 employees (ALY6), 50-249 employees (ALY7), 250-2,499 employees (ALY8) and 2,500+ employees (ALY9), monthly, seasonally adjusted, UK, 2001-2012.

2.102 Redundancies had fallen gradually from over 207,000 in the three months to February 1999 to around 120,000 in the three months to April 2008. During the recession they rose to 310,000 in the three months to April 2009 then fell to 116,000 in the three months to April 2011. They climbed to 174,000 in the three months to February 2012 partly as a result of redundancies in the banking and public sectors, but have since fallen back to 147,000 in the three months to October 2012. There appeared to be similar trends among hospitality and retail to those observed for the whole economy.

Unemployment and Inactivity

2.103 It might be that the impact of the minimum wage is reflected in increased unemployment or inactivity. We showed earlier in this chapter that employment rates for many of the groups expected to be most affected by the minimum wage have increased since its introduction. Table 2.10 shows that older workers, ethnic minorities, disabled people and migrants have also experienced reductions or less than average increases in their unemployment and inactivity rates since the introduction of the minimum wage. With the exception of some ethnic minorities, these groups have also coped well since the start of the recession. In contrast to the rise in inactivity rates for men, those for women have fallen since 1999, while changes in unemployment rates have been similar for both genders. Again, it is a different story for young workers and those with no qualifications who have generally seen their unemployment and inactivity rates rising.

Table 2.10: Unemployment and Inactivity Rates, by Groups of Workers, UK, 1999-2012

(Rates: per cent; changes: percentage points)	Unemployment				Inactivity			
	2012 Q3	Change on:			2012 Q3	Change on:		
		2011 Q3	2008 Q2	1999 Q1		2011 Q3	2008 Q2	1999 Q1
Working age	**8.3**	**0.1**	**2.9**	**2.0**	**22.8**	**-0.5**	**-0.2**	**-0.8**
Men	**8.8**	**0.0**	**3.1**	**1.8**	**16.7**	**-0.4**	**0.4**	**1.1**
Women	7.6	0.3	2.7	2.2	28.8	-0.5	-0.8	-2.6
16-17 year olds	36.4	-1.3	10.4	16.4	62.4	-0.1	8.5	22.4
18-20 year olds	25.5	0.5	9.4	10.8	36.8	-1.4	4.2	8.5
Older workers (65+)	2.5	0.2	0.8	-0.3	90.9	-0.1	-1.8	-3.9
White	**7.6**	**0.1**	**2.8**	**1.7**	**21.6**	**-0.5**	**-0.1**	**-1.1**
All ethnic minorities	13.6	0.2	3.0	0.3	30.9	-0.2	-1.5	-4.5
Black	17.6	-1.2	4.8	2.8	27.1	0.3	0.2	-1.1
Indian	9.5	0.4	2.5	0.3	23.0	-0.4	-3.2	-7.6
Pakistani/Bangladeshi	16.1	1.3	1.7	-4.1	40.0	-1.6	-6.5	-11.8
Other non-white	12.4	0.6	2.7	0.1	33.6	1.0	1.9	-1.4
With qualifications	**7.6**	**0.2**	**2.9**	**2.1**	**19.6**	**-0.1**	**1.7**	**2.5**
No qualifications	18.8	0.9	7.0	6.3	48.5	0.5	2.5	6.5
Not disabled (16-59/64)	**7.6**	**0.1**	**2.8**	**1.9**	**15.5**	**-0.2**	**0.1**	**0.3**
Disabled people (16-59/64)	15.3	0.7	3.4	2.2	50.5	-1.3	-3.9	-6.2
UK born	**8.0**	**0.1**	**2.9**	**2.0**	**22.2**	**-0.6**	**-0.3**	**-0.6**
Non-UK born	9.5	0.6	2.6	0.9	26.2	0.1	-0.7	-5.6

Source: LPC estimates based on LFS Microdata, quarterly, four-quarter moving average, UK, Q2 1998-Q3 2012.
Note: Working age, unless otherwise stated.

2.104 Over the last year, the picture has reversed a little with unemployment rates increasing for women, older workers, ethnic minorities, disabled people and migrants but falling for the youngest workers. Unemployment rates continued to increase for those with no qualifications and for 18-20 year olds, although the latter did see their inactivity rates fall by more than their unemployment rates rose.

Research on Employment, Hours and Unemployment

2.105 Most of the research that has been conducted on the minimum wage has looked at some aspect of its impact on employment or hours. For this report, we commissioned two studies that specifically investigated the impact of the minimum wage on employment and hours. Using individual data from the LFS supplemented with geographic information from ASHE, Bryan, Salvatori and Taylor (2013) found little evidence that the minimum wage had generally affected employment retention in the period before or during the recession. This finding was in line with previous research. They did however find some evidence of significant effects on men in particular upratings but these were both negative (the 2001 uprating) and positive (the 2006 and 2011 upratings); and they were also sensitive to model specification. No such evidence was found for women.

2.106 In work commissioned for last year's report, Bryan, Salvatori and Taylor (2012) had found tentative evidence that the 2010 uprating had led to a reduction in hours, particularly among young workers. Their latest research (2013) did not confirm that finding and concluded that they could find no systematic effect of the NMW on hours worked by adults across time or even during the recession. In general, they found small but statistically insignificant negative effects on hours worked for men before the recession but small and generally positive effects since the start of the recession. They found no consistent or significant effects for women.

2.107 Using three different methodologies, the researchers found that the minimum wage generally had no effect on the probabilities of unemployed adults entering work. From the geographic analysis, they found evidence that the NMW had increased job entry rates in the mid-2000s with some weak evidence that this had reversed during the recession. The pre-recession results were consistent with previous findings from Dolton, Rosazza Bondibene and Wadsworth (2009 and 2010), and Dickens, Riley and Wilkinson (2012). However, Bryan, Salvatori and Taylor (2013) found no effects when using predicted entry wages or when estimating job entry probabilities, just small positive effects on female entry into minimum wage jobs during the recession. Overall, these findings were not robust to specification and they concluded that there was no empirical support for the NMW adversely affecting job entry.

2.108 In an analysis of job exit and entry, Fidrmuc and Tena (2013) found that minimum wage increases were not only associated with an increase in job loss but also increased job entry. As some workers lost their jobs, others were attracted into employment. This finding appeared stronger in the private sector and in services. They also considered the effects on hours but found no evidence that the minimum wage had affected hours worked.

2.109 In previous research, five general approaches have been adopted by researchers to identify employment and hours effects: the use of aggregate, time series data; the use of individual data; the use of the geographical variation in coverage and bite; the use of industry or firm data; and case studies. We provide a summary of the findings of these various approaches below.

2.110 The international research (OECD 1998, Neumark and Wascher 2004 and 2008) using time series data across countries has generally showed that minimum wages have had a statistically significant negative impact on employment. However, the general consensus of the research conducted in the UK finds no such strong results. Indeed Dolton and Rosazza Bondibene (2011 and 2012) questioned the findings of this international evidence, which they concluded was dependent on specification and definition of the minimum wage. However, they also found strong negative effects on employment for young workers in their study across countries. Using time series analysis of industries, Dickens, Machin and Manning (1999) and Dickens and Dolton (2011) found no evidence of a negative impact of (Wages Council set) minimum wages on employment in the UK in the 1980s or 1990s. Indeed, both studies found some positive employment effects.

2.111 Data on individuals have been used by researchers to assess the impact of the minimum wage on employment and unemployment. In general, these studies have again found little adverse impact of the minimum wage on employment. Stewart (2001, 2003, 2004a and 2004b) investigated the impact of the introduction of the minimum wage; Dickens and Draca (2005) assessed the 2003 and 2004 upratings; Dickens, Riley and Wilkinson (2009) looked at the 2003-2006 minimum wage increases; Mulheirn (2008) also investigated the 2006 upratings; and Bryan, Salvatori and Taylor (2012) and Dolton, Rosazza Bondibene and Stops (2012) looked at the more recent upratings covering the period including and since the 2008-09 recession. All of these studies found no significant adverse effects on employment. In contrast, Dickens, Riley and Wilkinson (2012) found negative effects on the employment of female part-time workers on introduction of the minimum wage and during the recession in some specifications of their econometric modelling.

2.112 Taking advantage of variations in pay across geography, researchers have used spatial analysis to investigate the impact of the minimum wage on employment. They have compared the probability of employment or employment growth in the lowest wage areas with the probability of employment or employment growth in slightly higher wage areas. In general this research has found very little impact of the minimum wage on employment. Stewart (2002) found some weak but not statistically significant evidence of a fall in employment as a result of the introduction of the minimum wage. Dickens, Riley and Wilkinson (2009) found no effect of the upratings between 2001 and 2006. Dolton, Rosazza Bondibene and Wadsworth (2009) found no effect on employment over the period 1997-2007. Indeed those last two studies found evidence that unemployment had fallen in particular as a result of the large upratings between 2003 and 2006. In the two most recent studies covering the entire period from 1999-2011, Dolton, Rosazza Bondibene and Stops (2012) and Dickens, Riley and Wilkinson (2012) also found no adverse effects on employment. In contrast to all these previous findings, and using data on firms and industries rather than individuals, Galinda-Rueda and Pereira (2004) found that the minimum wage had adversely affected employment growth in the lowest-paying areas. Experian (2007), also using industry data, found no adverse employment effects of the 2003 and 2004 upratings of the NMW. Although their research was focused on the impact of the minimum wage on competitiveness, Riley and Rosazza Bondibene (2013) using data on firms found little evidence that the introduction of the NMW had any effect on employment, and this was also the case during the recession.

2.113 As well as employment, researchers have also investigated the impact of the minimum wage on hours. There appears to be more evidence of effects with regards to hours than employment. Stewart and Swaffield (2004) found significant reductions in hours as a result of the introduction of the minimum wage, although an earlier study by Connolly and Gregory (2002) found no such strong effects. Nor did Robinson and Wadsworth (2007) in their study of second jobs and hours worked. Dickens, Riley and Wilkinson (2009 and 2012) and Bryan, Salvatori and Taylor (2012) also found reductions in hours. However, none of these found that the reductions in hours were sufficient to reduce weekly earnings.

Views on Employment and Hours

2.114 A number of business organisations pointed to evidence that the minimum wage had an adverse impact on employment and hours. The BRC told us in oral evidence that according to its survey 10 per cent of its members had reduced hours as a result of the NMW increase in 2011 (these responses were all in non-food retail). A survey by the ACS showed that 80 per cent of retailers had laid off staff in the last twelve months as a result of increased employment costs. It also reported a continued increase in the number of retailers that were cutting working hours. The British Independent Retailers Association (BIRA) told us that 40 per cent of members responding to its survey had reduced the number of employees as a result of the NMW. Members of the National Association of Master Bakers (NAMB) said that wages made up a substantial proportion of their total costs; that increases in the NMW were felt by the sector; and that they were likely to be met by increased prices, a reduction in hours or redundancies.

2.115 White Horse Childcare said that it had removed all trainee posts because of the costs of the NMW. Unqualified job applicants were no longer employable. The owner of a business in the leisure sector told us that if the NMW was not frozen it would continue to reduce its need for staff. It would inevitably employ considerably fewer people in the years to come.

"Firms felt 'bullied' by the NMW, especially in lower wage areas (e.g. the North-East) and we have reduced the numbers we are able to employ there."

Unquoted Companies Group, member company

2.116 The Unquoted Companies Group referred to recent LPC research which it said suggested there had been some adverse employment effects from the NMW during the recession. It claimed that research had shown the NMW had adversely affected employment for vulnerable groups in bad times, and thought that the Commission was far too sanguine in concluding that the general consensus was that the NMW had not significantly affected employment.

2.117 Organisations representing workers have taken a more positive view of the position facing the low-paying sectors, and the ability of businesses to manage increases in the NMW. TUC said it regarded the position of the low-paying sectors, relative to the rest of the economy, as encouraging. It referred to the growth in the number of jobs in the low-paying sectors outstripping jobs growth elsewhere. It said nobody could claim that the NMW had a detrimental impact over the year to March 2012, as 81 per cent of employee jobs growth had been in the quarter of the economy accounted for by the low-paying sectors.

"Our industry is very labour-intensive with each one penny increase costing my business £506 and meaning hours are cut."

NAMB member, LPC Secretariat meeting

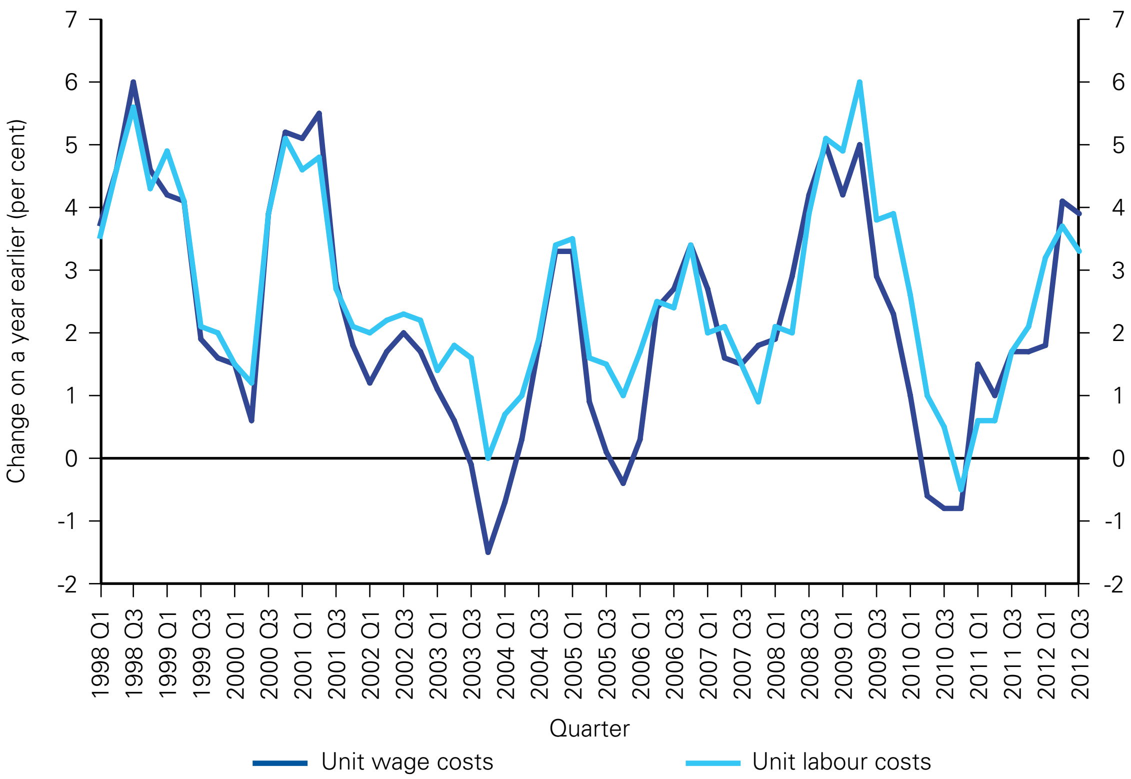
Impact on Competitiveness

2.118 Instead of reducing employment or cutting hours, firms may attempt to cope with minimum wage increases by seeking to absorb them within their costs; pass on increases in prices to customers; absorb them by reductions in profits; or raise the productivity of their workforce. Before considering each of these, we next look at labour costs.

Costs

2.119 As we noted above, pay settlements and average earnings growth have been relatively subdued since the onset of recession in 2008. Real earnings have fallen over this period. However, this was not reflected in the annual change in unit costs of wages and labour. Figure 2.19 shows that during the recession the annual change in unit wage costs increased from about 1-2 per cent (in early 2008) to around 5 per cent (in the middle of 2009), as the fall in employment was less than the loss of output. As output recovered at the end of 2009 and into 2010, growth in unit wage costs slowed, becoming negative through much of 2010. The stagnation in output since the third quarter of 2010, combined with the increase in employment, has led to an increase in unit wage costs, with annual growth reaching around 4 per cent in the third quarter of 2012.

Figure 2.19: Annual Change in Unit Wage and Labour Costs, UK, 1998-2012



Source: ONS, unit wage costs (LOJE) and unit labour costs (DMWN), quarterly, seasonally adjusted, UK, Q1 1998-Q3 2012.

2.120 The annual change in unit labour costs has followed a similar pattern. From the end of 2008 to the end of 2010, annual changes in unit labour costs slightly exceeded those in unit wage costs, suggesting that employers were experiencing increasing non-wage costs, such as higher pension and National Insurance contributions. Since the end of 2010 the increases in unit wage and labour costs have been similar, suggesting no such additional contributions through this period. Official data do not allow detailed sectoral analysis of unit wage and labour costs. As well as labour costs, businesses have experienced increases in other costs in recent years. These have included index-linked business rate rises, above-inflation increases in energy costs and increased import costs (as a result of the depreciation of sterling since 2007). However, increases in the costs of business-to-business services have by and large been smaller than the general increase in prices.

Prices

2.121 Firms affected by increases in their labour costs as a result of the minimum wage might try and pass their costs on to customers in the form of higher prices. There are three main sources of detailed information on consumer and business-to-business prices. The CPI and RPI collate information on prices to consumers, while the Services Producer Price Index (SPPI) collects information on business-to-business transactions. Since the introduction of the minimum wage in April 1999, CPI and SPPI have both increased by 32-34 per cent, while RPI has risen faster at 48.5 per cent. For the most part, it appears that firms may have found it easier to increase the price of minimum wage goods and services (produced by firms in low-paying sectors with a high proportion of minimum wage workers) to consumers rather than to other businesses. Table 2.11 suggests that since the introduction of the minimum wage the prices of selected consumer goods and services had risen much faster than prices in general. Between 1999 and 2011, prices in restaurants and cafes; canteens; hairdressers; and dry cleaners had all increased faster than CPI. Similarly, the prices of restaurant, canteen, and takeaway meals; wine and beer; and personal services had all increased faster than the general level of RPI.

2.122 In contrast, prices for many business-to-business minimum wage goods and services (produced by firms in low-paying sectors with a high proportion of minimum wage workers) had typically increased much less than general price rises. An exception to this was employment agencies, where prices to business had gone up slightly more than the general increase in business-to-business prices. The price rises to businesses for industrial cleaning, dry cleaning and hotels had been much lower than the general increase in prices since 1999.

2.123 Since the onset of recession in 2008, firms appear to have been much less able to pass on price rises. Between 2007 and 2011, the price rises in selected minimum wage goods and services for consumers had been similar to the general increase in prices, and these prices continued to weaken in 2012. Over the last year, only prices in restaurants and cafes; and for beer and wine had increased faster than consumer prices in general. Price rises for business-to-business transactions still appear much more constrained than price rises to consumers. Business-to-business prices were particularly weak in 2012, apart from in canteens and catering, which were affected by an increase in food prices.

Table 2.11: CPI, RPI and SPPI Price Inflation for Selected Goods and Services, UK, 1999-2012

		Percentage change				
		1999 Q1-2004 Q3	2004 Q3-2007 Q3	2007 Q3-2011 Q3	2011 Q3-2012 Q3	1999 Q1-2012 Q3
CPI	**All items**	**7.0**	**6.7**	**14.8**	**2.4**	**34.3**
	Restaurants and cafes	17.2	10.0	16.0	3.2	54.3
	Canteens	28.8	11.6	11.8	2.1	64.3
	Dry cleaning	18.0	13.8	12.5	1.6	53.5
	Domestic and household services	38.5	14.4	10.2	1.8	77.9
	Hairdressing	31.1	12.2	11.8	1.4	66.7
RPI	**All items**	**14.5**	**10.5**	**14.1**	**2.9**	**48.5**
	Restaurant meals	19.1	9.0	15.2	3.3	54.4
	Canteen meals	32.0	11.9	11.7	2.2	68.6
	Take-aways and snacks	18.2	9.2	15.1	2.8	52.7
	Beer on-sales	16.4	11.4	17.7	3.3	57.7
	Wine and spirits on-sales	18.0	9.3	18.1	4.2	58.7
	Domestic services	35.0	15.5	13.5	2.0	80.4
	Personal services	32.7	14.3	17.0	2.9	82.7
SPPI	**Net sector**	**10.6**	**8.7**	**8.5**	**1.1**	**32.4**
	Hotels	9.7	13.1	-6.3	-0.7	15.4
	Canteens and catering	8.1	9.2	6.9	2.1	28.8
	Employment agencies	20.9	7.5	3.5	0.1	34.6
	Industrial cleaning	4.2	8.0	5.2	0.9	19.4
	Commercial washing and dry cleaning	8.3	5.7	3.7	-0.6	18.1

Source: LPC estimates based on ONS data, CPI all items (D7BT); restaurants and cafes (D7EW); canteens (D7EX); dry-cleaning, repair and hire of clothing (D7DM); domestic services and household services (D7E6); hairdressing and personal grooming establishments (D7EY); RPI all items (CHAW); restaurant meals (DOBE); canteen meals (DOBF); take-aways and snacks (DOBG); beer on sales (DOBI); wine and spirits on sales (DOBL); domestic services (DOCI); personal services (DOCR); SPPI aggregate net sector SIC 2003 basis (I5RX) and SIC 2007 basis (K8ZW); hotels (K8TE); canteens and catering (K8TP); employment agencies (K8XZ); security services (K8YH); industrial cleaning (K8YQ); commercial washing and dry cleaning (K8ZM), quarterly, not seasonally adjusted, UK, Q1 1999-Q3 2012.
Note: SPPI net sector (transactions between business services and other sectors excluding business services) data are only available on the SIC 2007 basis from Q1 2003 onwards. On the SIC 2003 basis they are available from Q1 1998 to Q3 2010. Data provided here use the SIC 2003 basis and assume it would have grown at the same rate as the SIC 2007 data between Q2 2010 and Q3 2012. All other SPPI figures are on the SIC 2007 basis.

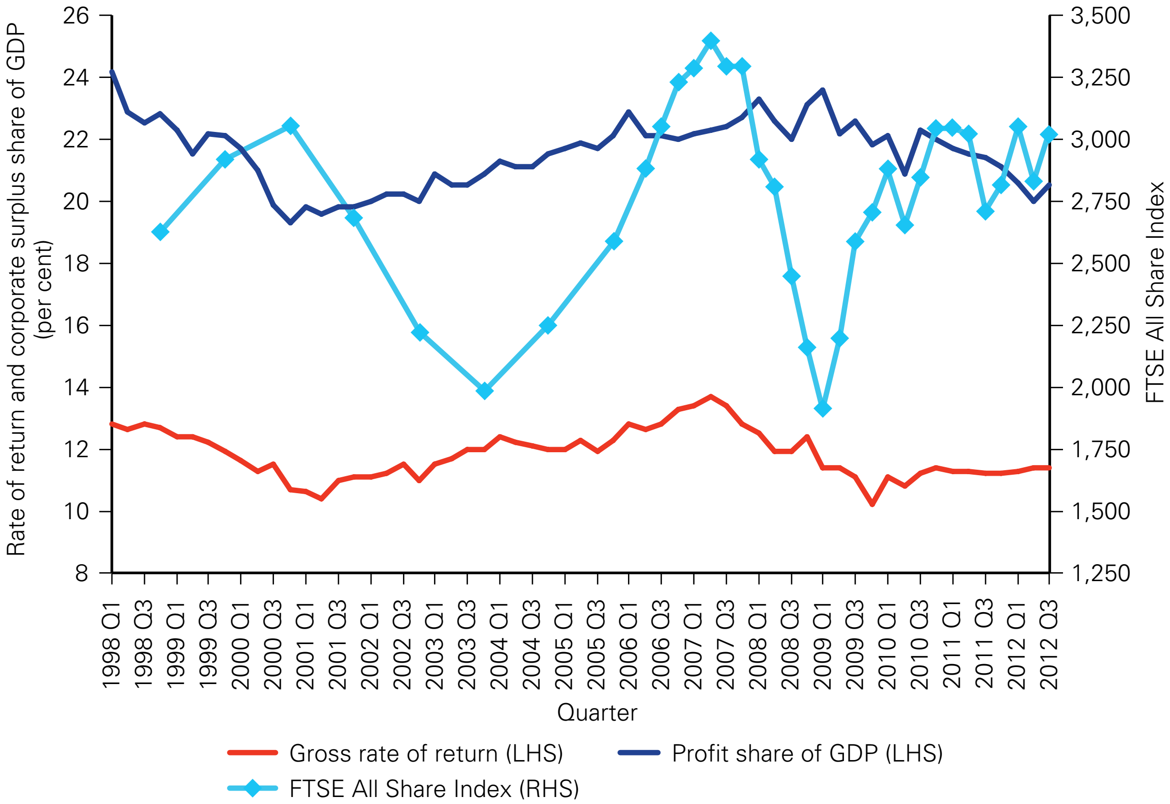
Profits

2.124 If firms are unable to pass increased costs on to their customers in the form of higher prices, they may have to try and absorb those costs by accepting reduced margins. At the aggregate level, we can measure profits in many ways, which generally give similar indications of what is happening to profits in the economy. From the National Accounts, we can measure profits by using gross trading profits or gross operating surplus of corporations. After falling by 4.7 per cent in 2008 and a further 6.5 per cent in 2009, gross trading profits for UK non-oil and non-financial corporations increased by 5.8 per cent in 2010 and 6.4 per cent in 2011.

However, they did fall in the final quarter of 2011 and again in the first quarter of 2012, but have since recovered with gross trading profits 2.6 per cent higher in the third quarter of 2012 than in the third quarter of 2011.

2.125 Gross operating surplus has followed similar trends. When expressed as a proportion of GDP, it is often referred to as 'profit share'. Figure 2.20 shows that the profit share fell at around the time of the introduction of the minimum wage from around 22 per cent of GDP to about 19 per cent at the end of 2000, before embarking on a general upward trend that peaked at 23.6 per cent at the beginning of 2009. It has since fallen back to around 20 per cent in 2012.

Figure 2.20: Selected Profit Measures, UK, 1998-2012



Source: ONS, Gross rate of return (LRXO) and profit share of GDP (IHXM), quarterly, seasonally adjusted and BoE, FTSE All Share Index, UK, Q1 1998-Q3 2012.

2.126 The gross rate of return on capital employed can also be used as a measure of profits. Using this measure, Figure 2.20 suggests that profits have increased since the end of 2009 and have held up in 2012 at around 11.4 per cent. It is however, well below its peak of 13.7 per cent in mid-2007, before the onset of recession. The net rate of return has followed a similar path. Although a detailed sectoral breakdown of these data is not available, ONS does provide figures for manufacturing and services separately. Having fallen from 11.8 per cent to 5.5 per cent between the first quarter of 2008 and the first quarter of 2010, profits in manufacturing recovered to 11.6 per cent in the fourth quarter of 2010, but have since fallen again, dipping below 5.0 per cent in the third quarter of 2011 and remaining there throughout 2012. Profits in services fell by less during the 2008-09 recession (from 17.4 per cent in the first quarter of 2008 to 12.8 per cent in the third quarter of 2009), but have since picked up and stood at 16.9 per cent in the third quarter of 2012.

2.127 Share prices offer an alternative measure of (future) profitability. Figure 2.20 also shows how the FTSE All Share Index has changed over time. Prior to the recession it peaked at about 3,400 in the second quarter of 2007, before falling sharply through the recession and bottoming out in the first quarter of 2009 at around 1,900. A sharp rebound carried it back to 3,000 in the fourth quarter of 2010 where it stood in the third quarter of 2012. In the period preceding our meeting in January 2013 it had again risen, going above 3,200.

2.128 However, we should note that it is difficult to get information on profits at a more disaggregated level. Most of the information set out above relates mainly to the behaviour of large firms. Our anecdotal evidence suggests that profitability varies considerably by sector and by size of firm. Small firms and certain low-paying sectors appear to have faced far smaller profit margins than large firms. This seems to be supported by evidence that is available, including accounts we heard during our visits around the UK. According to the latest BIS survey of small businesses conducted in 2010 (BIS, 2011b), 71 per cent of small and medium-sized enterprise (SME) employers generated a profit or surplus in their last financial year. Medium-sized businesses were more likely to have done so (81 per cent). The survey also found that fewer businesses made a profit than in the previous survey (down 7 percentage points overall) and that this was the case for all sizes of SMEs.

2.129 Business Population Estimates for the UK showed that between the start of 2010 and start of 2011 annual turnover fell for all sizes of firm, on average by about 5 per cent. Annual turnover for micro firms (down 6 per cent) fell more than for other sizes of firm. Turnover was down 4.5 per cent in other small firms and 3 per cent in medium-sized firms. However, annual turnover rebounded a little in 2011. Between the start of 2011 and start of 2012, annual turnover of all firms increased by about 3 per cent. Turnover in micro firms increased by over 3 per cent and nearly 7 per cent for medium-sized firms. However annual turnover continued to fall for other small firms (down over 1 per cent). Between the start of 2010 and the start of 2012, annual turnover fell in both micro and other small firms (as well as large firms) but there had been an increase overall for medium-sized firms.

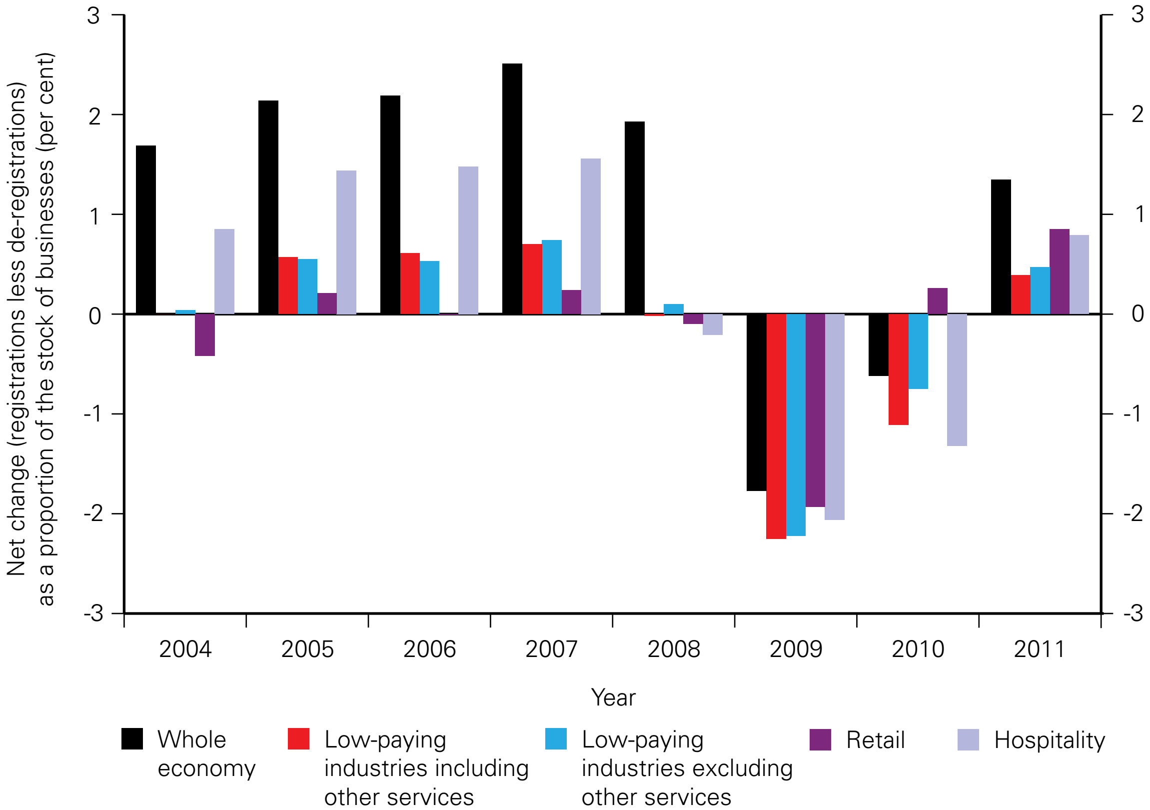
Births and Deaths of Firms

2.130 Another indicator of how well businesses are able to cope with the minimum wage is to look at its impact on the levels and changes in both the creation of new businesses (start-ups) and the death of existing businesses (failures). An increase in wage costs, caused by a rise in the minimum wage, might make it less attractive to start a business. Further, increases in the minimum wage might squeeze profits enough to lead firms to exit the market. In this section, we look at the aggregate and, where possible, sectoral picture of business start-ups and failures, and company insolvencies.

2.131 The stock of enterprises registered for VAT increased in every year from 1995 to 2008 but the recession prompted falls in 2009 and 2010. The latest data, for 2011, suggest that the stock of enterprises increased for the first time since the onset of recession in 2008. The number of births, firms registering for VAT, fell from 281,000 in 2007 to around 235,000 in 2009 and 2010, but bounced back strongly in 2011 to 261,000. The number of firm deaths, businesses de-registering from VAT, rose sharply from 223,000 in 2008 to 277,000 in 2009 but then fell back to 250,000 in 2010 and 230,000 in 2011. This suggests some recovery in 2011, although the number of business births was still lower, and the number of business deaths higher, than their pre-recession levels.

2.132 Although the stock of firms in the whole economy increased by nearly 2 per cent in 2008, Figure 2.21 shows that it fell marginally in the low-paying industries. In 2009, as the economy suffered its worst recession since the 1930s, the percentage reduction in the number of firms was greater in the low-paying industries (2.2 per cent) than in the economy as a whole (1.8 per cent). This pattern, albeit with fewer net firms lost, continued in 2010. Hospitality appeared more affected than retail, which experienced net growth.

Figure 2.21: Net Change in Stock of Firms, by Selected Low-paying Industry, UK, 2004-2011



Source: LPC estimates based on ONS data; business demography, enterprise births, deaths and survivals, annual, not seasonally adjusted, UK, 2004-2011.
Note: From 2008 onwards these data are based on SIC 2007, before 2008 they are based on SIC 2003. Care should be taken in comparisons between 2007 and 2008.

2.133 In 2011 the stock of firms across the whole economy grew by 1.3 per cent, compared with 0.5 per cent in the low-paying industries. The net change in the stock of firms was stronger in retail (up 0.9 per cent) and hospitality (up 0.8 per cent) than in the low-paying industries as a whole. However, the growth in net firm creation in those two largest low-paying industries was still less than in the whole economy. These data on business creation and destruction contrast with our findings on employment. When assessing employment, we found net job growth had been greater in the low-paying industries than in the overall economy.

2.134 We can also analyse the stock of businesses by size of firm. Business Population Estimates suggest that the number of micro firms in the UK economy increased in most years between 2000 and 2012, and over the whole period increased by over 18 per cent, rising to 847,800 firms by 2012. The picture for other small firms has been more mixed, with a large increase in the number of other small firms in 2002 but falls in 2004 and 2010. Over the whole 12 year period, the number of other small firms has increased by 9 per cent to 178,000 firms. The number of medium-sized firms has increased at a similar pace to other small firms, rising by close to 11 per cent over the period, to 29,800 firms by 2012. Finally, and in contrast to the findings for other sizes of firm, the number of large firms in the UK economy has decreased over the period, largely due to significant falls in 2003, 2004 and 2010. Overall, between 2000 and 2012, the number of large firms fell by just over 10 per cent to 6,500.

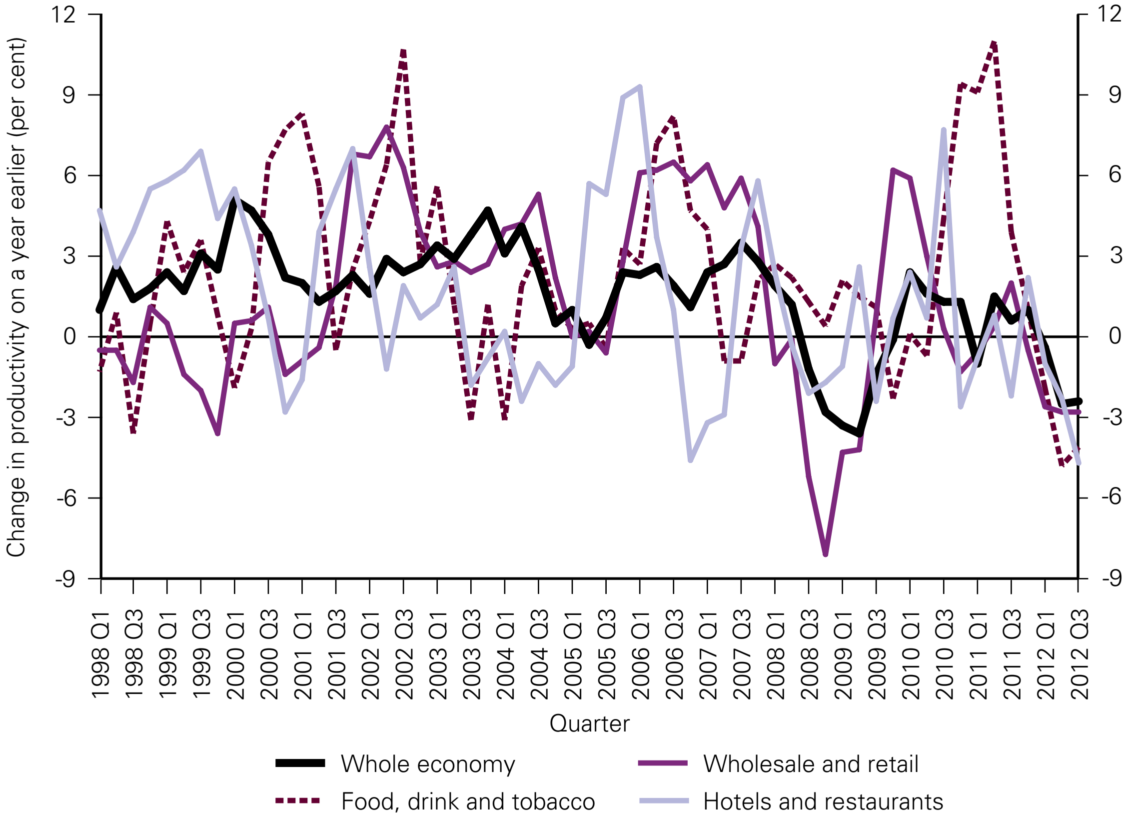
Productivity

2.135 Other than reducing employment and hours; passing on costs in higher prices to customers; or absorbing costs through a squeeze in profits, businesses can look at ways to improve the productivity of their workforces. There are a number of ways that firms can do this. They could monitor or motivate workers to put in extra effort; adjust the work organisation to improve the capital-labour mix; invest in new equipment to replace existing workers; invest in new technology to improve the quality of capital; and/or invest in improving the quality of labour through education and training. Each of these would lead to an increase in labour productivity.

2.136 As noted in Chapter 1, official data showed productivity (whether measured per hour or per job) falling throughout the 2008-09 recession as losses in output were greater than the reductions in hours or employment. Output grew with economic recovery from mid-2009 and into 2010, and productivity per hour and per job also picked up. But since the end of 2010, as output has stagnated and employment and hours have risen, productivity on both measures has weakened. Indeed productivity per job was flat or falling and productivity per hour fell in each of the first three quarters of 2012.

2.137 Figure 2.22 shows that productivity in the food, drink and tobacco manufacturing sector held up reasonably well during the recession, but that productivity in retail and hospitality fell as it did in the economy as a whole. Productivity picked up strongly in retail in 2009 and, with a lag, in hospitality. Figure 2.22 also shows that the general weakness in productivity since 2010 was observed across much of the economy, but particularly in retail and hospitality. Although manufacturing productivity held up well during the recession and markedly improved over 2010 and 2011, reflected in the productivity performance in the food, drink and tobacco manufacturing sector, this has dissipated in 2012 with productivity falling, as in much of the rest of the economy.

Figure 2.22: Productivity per Hour, by Selected Low-paying Industry, UK, 1998-2012



Source: ONS, output per hour for the whole economy (LZVD); wholesale and retail (DJQ6); hotels and restaurants (DJR4); food, drink and tobacco (DJL3); quarterly, seasonally adjusted, UK, Q1 1998-Q3 2012.

Research on Competitiveness (Prices, Profits, Business Start-ups and Failures, and Productivity)

2.138 As we noted above, as well as changing pay structures, employment and hours, employers can attempt to cope with minimum wage changes through raising prices, improving productivity or reducing profit margins. The NMW may also affect the ability of firms to stay in business or to start new businesses. Unfortunately, the data available to investigate these issues are not as comprehensive as that used to investigate employment and hours. However, researchers have used a variety of means to attempt to assess the impact of the minimum wage on these competitiveness variables.

2.139 This year we commissioned two research reports that have investigated issues of competitiveness. Riley and Rosazza Bondibene (2013) investigated the impact of the minimum wage on firm behaviour since the introduction of the NMW and during the recession using data from the Annual Respondents Database (ARD) and Financial Analysis Made Easy (FAME). They explored wage effects for firms in all industries and for firms in low-paying industries as well as by size of firm. They showed that, using either data source (FAME or ARD), average labour costs rose significantly more among low-paying firms than among firms with higher pay when the minimum wage was introduced. They noted no such relationship before its introduction. These effects were also evident among firms of all sizes in the low-paying industries. They concluded that the NMW increased average labour costs for low-paying firms by 3-6 per cent in its initial years and that this increase in average labour costs was then maintained relative to firms with higher pay by subsequent upratings to the NMW.

2.140 In line with previous research using the same data source (FAME), they also found some evidence that the NMW may have reduced firms' profitability. These effects were more evident over the longer term (1999-2007). They found some evidence to suggest that the NMW resulted in productivity improvements among low-paying firms in low-paying industries. These productivity increases occurred in the initial years of the NMW and were apparent using both data sources (FAME and the ARD). The research found no robust evidence to indicate that the NMW changed the investment behaviour of low-paying firms; upon introduction, over the longer term, or during recession. Also, they found no evidence to suggest that the NMW had led to a change in company exit rates. They concluded that the NMW had some effect on profits and productivity but had no effect on investment behaviour or firms' reliance on external finance.

2.141 Crawford, Jin and Simpson (2013) also investigated firm behaviour using firm level data. They conducted research on the impact of the NMW regime on firm investment and labour hoarding during the recent recession. They used ASHE data and two ONS firm surveys (ARD; and the Annual Business Survey (ABS)). Their main findings were that since 2008, there had been a real fall in Gross Value Added (GVA) per employee of 6.1 per cent across their sample of firms compared with the pre-recession trend. The proportion of employees working part-time had increased and average hours (including overtime) had fallen by three hours per week. Wage prospects had worsened, both in real hourly wage growth and in the number of pay freezes. They found small firms (with up to 50 employees) had experienced much greater falls in productivity than larger firms. This, together with the observations of bigger reductions in average hours and in average wage growth within small firms than within large ones, suggested that small firms were more likely to be hoarding labour. These findings are in line with independent research conducted by Field and Franklin (2013). They also concluded that recent productivity performance had been stronger among large firms than small firms. They noted that high productivity firms became more productive while low productivity firms had become less productive. They suggested that a weakening in competitive factors may have reduced the pressures to weed out less productive firms.

2.142 The researchers also looked at the impact of the NMW on investment by firms. They found that since the onset of the recession, firms had decreased investment by 14 per cent compared with the pre-recession trend. There was no strong evidence of differences in investment responses by firms of different sizes, and also little evidence of any differences in investment according to the long-term coverage of the NMW.

2.143 The findings of previous research on prices; profits; business start-ups and failures; and productivity are summarised below. Wadsworth (2007 and 2008) investigated the impact of the minimum wage on prices. He found some evidence that firms had been able to increase prices above the general price rise for those goods and services which were produced by a high proportion of minimum wage workers and were not internationally traded.

2.144 A few studies have investigated profits. These have generally found that the minimum wage has led firms to absorb increases through squeezed profits. Draca, Machin and Van Reenen (2011) found that the minimum wage had significantly reduced profits, particularly those in industries with less competition. A previous study by the same authors (2005) had found that profits had fallen in the low-paying industries as a result of increases in the minimum wage. Forth, Harris, Rincon-Aznar and Robinson (2009) also found significant negative effects of the minimum wage on the return on capital employed. They also found adverse effects on profit margins but these were not robust. Experian (2007) however found no effects on profits resulting from the 2003 and 2004 upratings.

2.145 There may also be some impact of the minimum wage on business failures and start-ups. Any squeeze in profits may restrict investment and affect the long-run viability of a business. Further, a sufficient reduction in profits may lead to an enterprise closing down with subsequent impact on employment. Draca, Machin and Van Reenen (2005 and 2011) found that the reduction in profits had not led to business closure. However, Forth, Harris, Rincon-Aznar and Robinson (2009) found some weak evidence that the minimum wage may have led to higher exit rates of firms.

2.146 The introduction of a minimum wage (and its subsequent increases) may reduce the attractiveness of starting a new business. There is some evidence that the minimum wage may have adversely affected entry rates. Draca, Machin and Van Reenen (2011), Experian (2007) and Galinda-Rueda and Pereira (2004) all found evidence that business creation may have been slower as a result of the minimum wage.

2.147 In general, the research has found a small positive association between productivity and the minimum wage. Galinda-Rueda and Pereira (2004) using plant level data; Forth and O'Mahony (2003) using industry data; Machin, Manning and Rahman (2003) using care home data; and Draca, Machin and Van Reenen (2005) and Croucher and Rizov (2011) using company account data from Financial Analysis Made Easy (FAME) all found evidence of a positive impact of the minimum wage on productivity. In contrast, Forth, Harris, Rincon-Aznar and Robinson (2009) and Georgiadis (2006) found no such effects. Additionally, Arulampalam, Booth and Bryan (2004) found a positive effect of the introduction of the minimum wage on both the incidence and intensity of training but Dickerson (2007) was unable to replicate this finding using a different data set. He found no relationship between training and the minimum wage using data covering the introduction and first two upratings.

Views on Competitiveness

Costs and Prices

2.148 Businesses told us about the effect of the NMW on their costs. The BRC said October 2011's increase was estimated to have cost the sector around £315 million and that non-food retailers in particular were finding it increasingly difficult to manage increases in the minimum wage. White Horse Child Care said that the NMW had forced price rises for child care above inflation so that lower-paid parents were no longer able to afford it.

2.149 However some business organisations told us that the NMW was not their primary cost concern. British Hospitality Association, British Beer and Pub Association and Business In Sport and Leisure reiterated in their 2012 submission that the NMW was no longer the predominant source of concern about rising prices: these were food purchases, other commodity costs (notably energy) and petrol (affecting customer travel). They said the relative impact of the NMW on small and large firms was hard to assess but the industry consisted largely of small establishments and it was easier to have flexibility in wage costs if you were a larger employer.

2.150 The Association of Licensed Multiple Retailers (ALMR) made the point, however, that wages represented perhaps the only cost over which companies had some control. When the NMW increased this flexibility was diminished. The extension of the adult rate to 21 year olds had to some extent reduced the flexibility to apply the youth rates and keep the wage bill the same following an increase in the NMW. ALMR's research indicated that 2012 payroll costs were lower, as a percentage of turnover, than 2011 but still higher than in 2010, which it said highlighted the continued vulnerability of the sector and its inability to absorb additional costs.

"The cost of the NMW staff is the highest single element of expenditure. Salaried staff and directors continue to have salary freezes."

Leisure business evidence

2.151 As in previous years stakeholders in social care have supplied evidence of the difficulties care providers face in meeting increased costs, including the minimum wage. Once again, they referred to the existing inadequate level of local authority and NHS commissioning fees, and to evidence of freezes or reductions in them. This is covered in further detail in Chapter 4.

2.152 EEF, the manufacturers' organisation, said that although the NMW had limited direct impact on manufacturers, it did affect those manufacturers that used outsourced services, such as security, catering and cleaning. These were labour-intensive services affected by the increases to the NMW, whose costs were passed on to their customers.

2.153 The Recruitment and Employment Confederation said that agencies had coped reasonably well with increases to the minimum wage insofar as employers who used recruitment agencies understood and accepted the concept and were generally prepared to pay the NMW. It said, however, that pressure on recruiter margins from clients had increased as the recession continued. End-users were increasingly expecting agencies to absorb NMW increases and this was forcing many agencies to search for ways to reduce the cost of labour.

"Wage costs are now an average 31.9 per cent [of total costs] across hotels in Northern Ireland. There is limited consumer confidence and they are unable to pass costs on. A 2.0 per cent increase in the NMW leads to a 0.8 per cent increase in total wage costs. The cost of employing someone is 25.0 per cent more than the minimum wage (including NICs, annual leave, pensions etc.)."

Northern Ireland Hotels Federation, Commission visit to Belfast

Margins and Profits

2.154 We continued to receive evidence from some business organisations as to how the NMW adversely affected their margins and profits. In Retail, the British Independent Retailers Association said that 63 per cent of its members had reported an impact on their profits as a result of increases to the NMW, climbing to 83 per cent for those with an annual turnover of between £3 million and £10 million. In hospitality, the ALMR told us during oral evidence that its benchmarking survey had found margins had fallen 6 per cent year-on-year.

2.155 We heard on our Commission visits how the lending practices of the banks were affecting small businesses, particularly with respect to their profit status. One hotelier told us that while his hotel continued to make a profit most of the local direct competitors did not and were insolvent, but kept going by banks. We heard that the banks were taking a very tough approach to offering or renewing credit terms to solvent businesses, and were told they were imposing higher charges without any real justification in the business risks faced by the lender.

2.156 The National Day Nurseries Association (NDNA) pointed out that nurseries were labour intensive businesses but must comply with statutory adult:child ratios, so they were limited in any action they could take to reduce staffing costs, although some have reported to NDNA they are introducing short-time working, have held off recruitment and made redundancies. The majority of its members had advised that increases in the NMW had affected the sustainability of their nursery. Of those surveyed, 40 per cent paid a third or more of their staff at or around the NMW, with 86 per cent saying the NMW was a significant or very significant pressure on their business.

2.157 Trade unions were, however, more optimistic about the profit position of those companies most affected by the NMW. The TUC said that the service sector, which had the greatest concentration of NMW workers, continued to enjoy an average rate of profitability of 15.7 per cent in the second quarter of 2012, higher than the 12.1 per cent in the whole economy (excluding the financial sector). It also said that hourly productivity in the service sector showed a return to positive growth. The Union of Shop and Distributive and Allied Workers, while noting the difficult economic circumstances, said that the minimum wage was not regularly cited in commentaries regarding company failures and there was no evidence that it was a significant cause of them.

2.158 Unite said that consolidation by the major supermarkets which now dominated the food retail market was adversely affecting small retailers far more than any additional costs associated with the NMW.

Conclusion

2.159 The adult rate of the National Minimum Wage increased by 2.5 per cent in October 2011 from £5.93 to £6.08 and by 1.8 per cent in October 2012 to £6.19 an hour. The adult rate of the NMW has increased by around 72 per cent since its introduction at £3.60 an hour in April 1999. That means that the NMW has increased by more than the increase in average earnings or prices.

2.160 However, the real value of the NMW has fallen in recent years as the increase in the NMW has been lower than the increase in both Consumer Prices Index (CPI) and Retail Prices Index (RPI) inflation. In real terms using CPI, the value of the NMW in October 2012 was similar to its value in 2004 and much less than it was worth in 2007, while using RPI the real value of the NMW in October 2012 was less than it was in October 2004. In contrast, the value of the NMW relative to average earnings reached its highest ever level in August 2012. As a consequence, the bite of the NMW (its value relative to the median) – broadly stable in the economy as a whole between 2007 and 2010 – is also at its highest since the NMW was introduced.

2.161 Since 2007 the context of NMW increases has varied with firm size. Small firms have seen lower employee earnings growth than large firms, and the smaller the firm the lower the growth in employee earnings. Similarly, the smaller the firm, the larger is the bite of the NMW.

2.162 Despite the increase in the bite of the NMW, total employment has continued to grow. Moreover, although the bite in the low-paying sectors has grown even more than in the economy as a whole since 2007, in 2012 the number of jobs in the low-paying sectors increased faster than the number in the whole economy. Further, the employment performance of most of those groups of workers most affected by the minimum wage – women, older workers, disabled workers, ethnic minorities, and migrants – has been better since the onset of recession than their less affected counterparts. However, there are two groups whose experience has been worse: young people and those with no qualifications.

2.163 In summary, we again conclude that the research in general finds little adverse impact of the minimum wage on employment. We have now commissioned over 100 research projects that have covered various aspects of the impact of the National Minimum Wage on the economy. Since the introduction of the NMW, the low paid had received higher than average wage increases but that the research had, in general, found little adverse effect on aggregate employment; the relative employment shares of the low-paying sectors; individual employment or unemployment probabilities; or regional employment or unemployment differences. The research suggests that employers have coped with the minimum wage by adopting a combination of strategies. Pay structures may have been adjusted or non-wage costs reduced. There may have been small reductions in hours worked and increases in productivity. Some prices may have been increased and profits squeezed but these reductions in profits had not been sufficient to lead to an increase in business failure. Business creation may also have slowed. Our most recent research has not altered these findings although it has refined our understanding, for example of the propensity of some employers to set wage rates at round numbers. We will continue to monitor the impact of the National Minimum Wage and have recently invited tenders for a range of research projects that we hope will enhance further our evidence base. We now go on to discuss the impact of the minimum wage on young people and apprentices in Chapter 3.

Chapter 3
Young People and Apprentices

Introduction

3.1 In our remit this year the Government asked us to review the contribution that the National Minimum Wage (NMW) could make to the employment prospects of young people, including those in apprenticeships. As part of this review we were asked to consider the implications of the introduction of the Raising of the Participation Age in England on both the youth rates of the minimum wage and the Apprentice Rate. We report on this work in this chapter. Our recommendations for the youth and apprentice rates are covered in Chapter 5, and we consider enforcement issues relating to apprentices in Chapter 4.

3.2 This chapter first looks at young people; their earnings; and their labour market position, and how they have fared since the beginning of the double dip recession from 2008. We then explore the change in apprenticeship volumes and pay over recent years, and assess the impact of the introduction of the Apprentice Rate from 1 October 2010.

Young People

3.3 We noted in our 2012 Report that the labour market position of young people had been deteriorating for some time, particularly since the start of the 2008-09 recession. The proportion of young people remaining in education or training had continued to rise, and was at record levels for both 16-17 year olds and 18-20 year olds. Earnings data showed that employers were making greater use of the youth rates of the minimum wage, and more young people were falling within the coverage of the NMW. We reluctantly recommended freezing the youth rates of the minimum wage from 1 October 2012. We added that due to the sensitivity of youth employment to the economic cycle we would expect to be able to recommend increases for young people when economic conditions had eased.

3.4 This section of the chapter looks at the latest stakeholder evidence, data and research on young people. We consider the earnings and labour market position of young people to assess what effect the minimum wage has had. We also look at those young people not in education, employment or training (NEET), and see if the number or proportion has changed over the last year. Finally in this section, we discuss Raising the Participation Age which will be implemented in England from September 2013 and will, by 2015, increase the age to which a young person must continue in education or training from 16 to 18 years old.

Youth Rates

3.5 There are two youth rates of the minimum wage: the Youth Development Rate and the 16-17 Year Old Rate. The Youth Development Rate was introduced in April 1999 at £3.00 an hour and originally covered 18-21 year olds. Between 1999 and 2010 the Youth Development Rate rose broadly in line with the adult rate of the NMW, but since then it has not risen as much due to the relative worsening in the employment prospects of young people. The Youth Development Rate (now applying to 18-20 year olds) was frozen at £4.98 an hour from 1 October 2012, 80 per cent of the new adult rate. The 16-17 Year Old Rate was introduced on 1 October 2004 at £3.00 an hour, and like the Youth Development Rate it rose broadly in line with the adult rate up to 2010. The 16-17 Year Old Rate was frozen at £3.68 an hour from 1 October 2012, 59 per cent of the new adult rate.

3.6 Since the formation of the Commission, we have believed that the minimum wage should be set at a lower level for young people. The evidence continues to show that they are more vulnerable in the labour market, and the threat of unemployment is greater for younger workers. When in employment, young people should of course be protected from exploitation, but we do not want the level of the minimum wage to jeopardise their employment or training opportunities.

Earnings

3.7 We use data from the Annual Survey of Hours and Earnings (ASHE) to look at the level and growth of earnings for employees. The latest ASHE data relate to April 2012, and cover the October 2011 minimum wage rises. These upratings increased the Youth Development Rate by 1.2 per cent to £4.98, and the 16-17 Year Old Rate by 1.1 per cent to £3.68, both of which were below the 2.5 per cent increase in the adult rate.

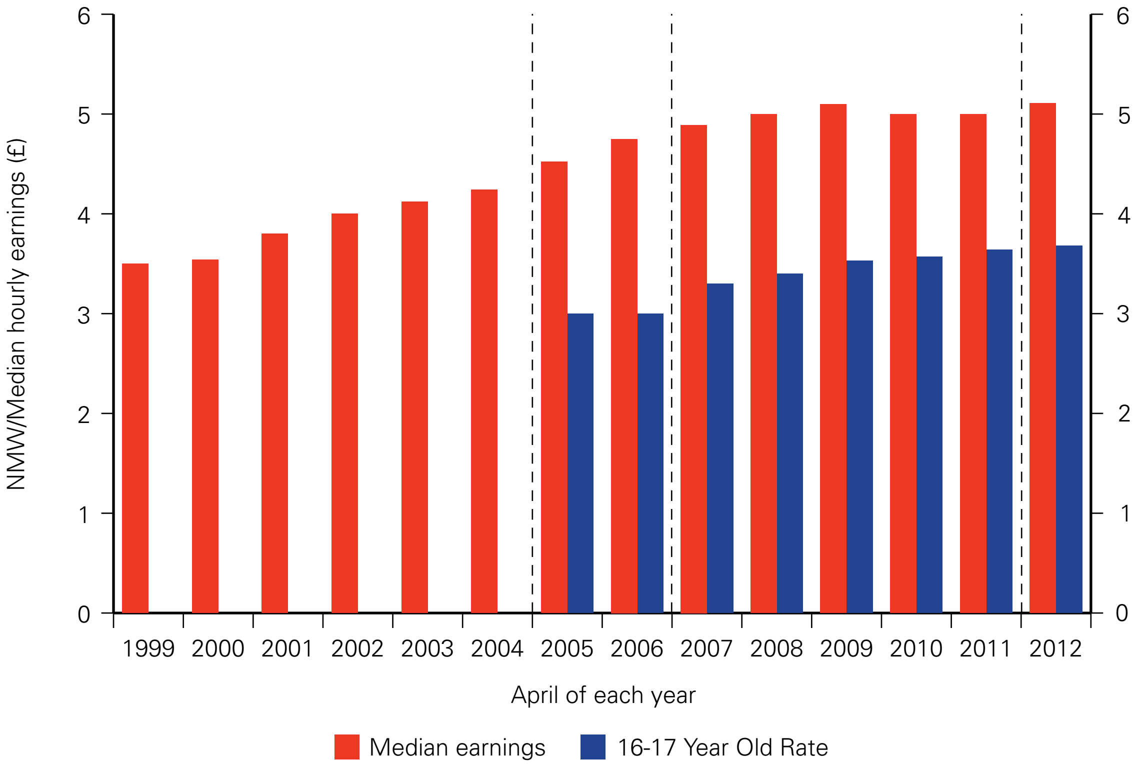
3.8 Figure 3.1 shows that median hourly earnings for 18-20 year olds stood at £6.25 an hour in 2012, an increase of 10 pence (1.6 per cent) from 2011. They have continued to rise year-on-year during and after the 2008-09 recession, although the rate of increase has slowed since 2008.

Figure 3.1: Median Hourly Earnings for 18-20 Year Olds and the Youth Development Rate, UK, 1999-2012

Source: Low Pay Commission (LPC) estimates based on ASHE: without supplementary information, April 1999-2003; with supplementary information, April 2004-2005; 2007 methodology, April 2006-2010; and 2010 methodology, April 2011-2012, standard weights, including those not on adult rates of pay, UK.
Note: Direct comparisons of median earnings between 2003 and 2004, 2005 and 2006 and 2010 and 2011 should be made with care due to changes in the data series.

3.9 Figure 3.2 shows that between 2011 and 2012 16-17 year olds' median hourly earnings increased by 11 pence (2.2 per cent) to £5.11 an hour. This approximately returns to its 2009 level following two years when the median had dropped to around £5.00, in marked contrast to the trend between 2000 and 2009 when median hourly earnings rose steadily each year.

Figure 3.2: Median Hourly Earnings for 16-17 Year Olds and the 16-17 Year Old Rate, UK, 1999-2012

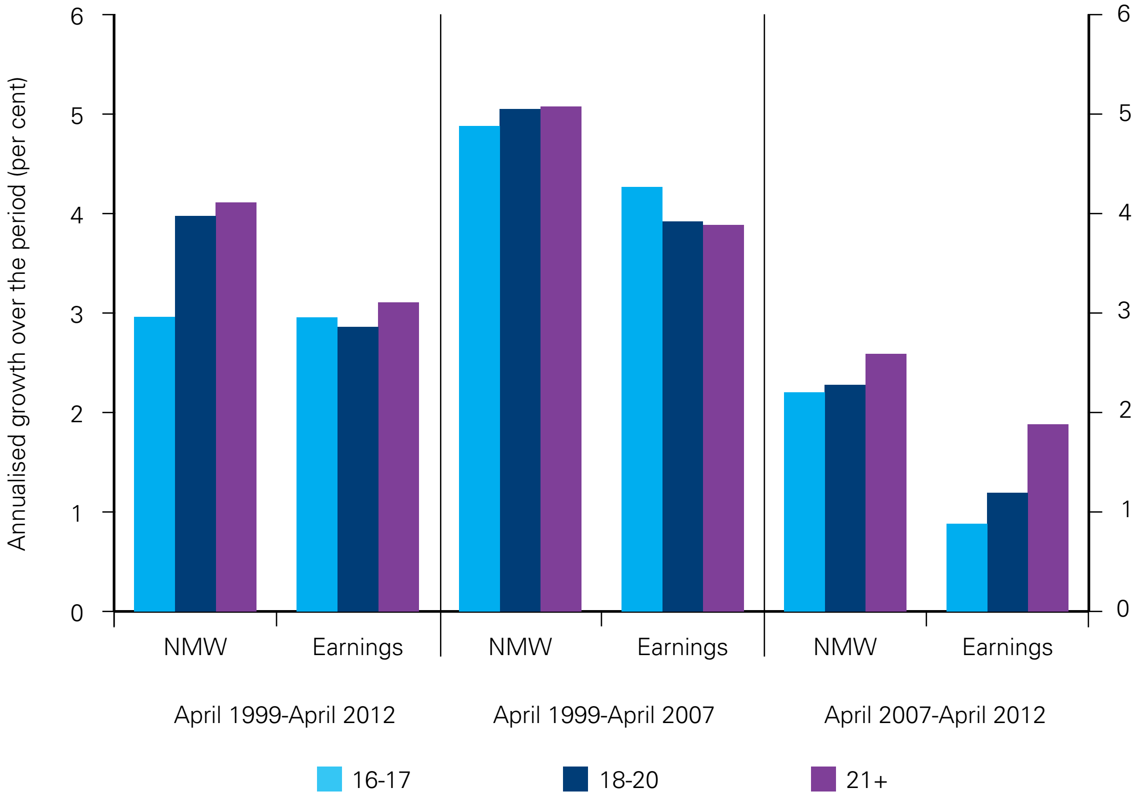


Source: LPC estimates based on ASHE: without supplementary information, April 1999-2003; with supplementary information, April 2004-2005; 2007 methodology, April 2006-2010; and 2010 methodology, April 2011-2012, standard weights, including those not on adult rates of pay, UK.
Note: Direct comparisons of median earnings between 2003 and 2004, 2005 and 2006 and 2010 and 2011 should be made with care due to changes in the data series.

3.10 Despite the stronger earnings growth of young people in 2012, Figure 3.3 shows that since 2007 they have seen, on average, significantly lower median earnings growth than adults. Since the introduction of the NMW in 1999 the Youth Development Rate and the adult rate have both risen on average by about 4 per cent each year. Averaged over the period since 2004, when the 16-17 Year Old Rate was introduced, the adult rate has risen by 3.3 per cent a year, the Youth Development Rate by 2.8 per cent a year, and the 16-17 Year Old Rate by 3.0 per cent a year.

3.11 Between 1999 and 2007 there was little difference in the average annual increase in the NMW for each age group. In this period 16-17 year olds saw slightly higher earnings growth, of 4.3 per cent at the median, compared with 3.9 per cent for older workers. However, since 2007 there has been a clear change in median earnings growth across each age group. Median hourly earnings for 16-17 year olds increased, on average, by 0.9 per cent a year between April 2007 and April 2012, compared with 1.2 per cent for 18-20 year olds and 1.9 per cent for adults. Over the same period, average annual minimum wage upratings have been higher than this, ranging from 2.2 per cent for 16-17 year olds to 2.6 per cent for adults.

Figure 3.3: Growth in the Minimum Wage and Median Earnings, by Age, UK, 1999-2012

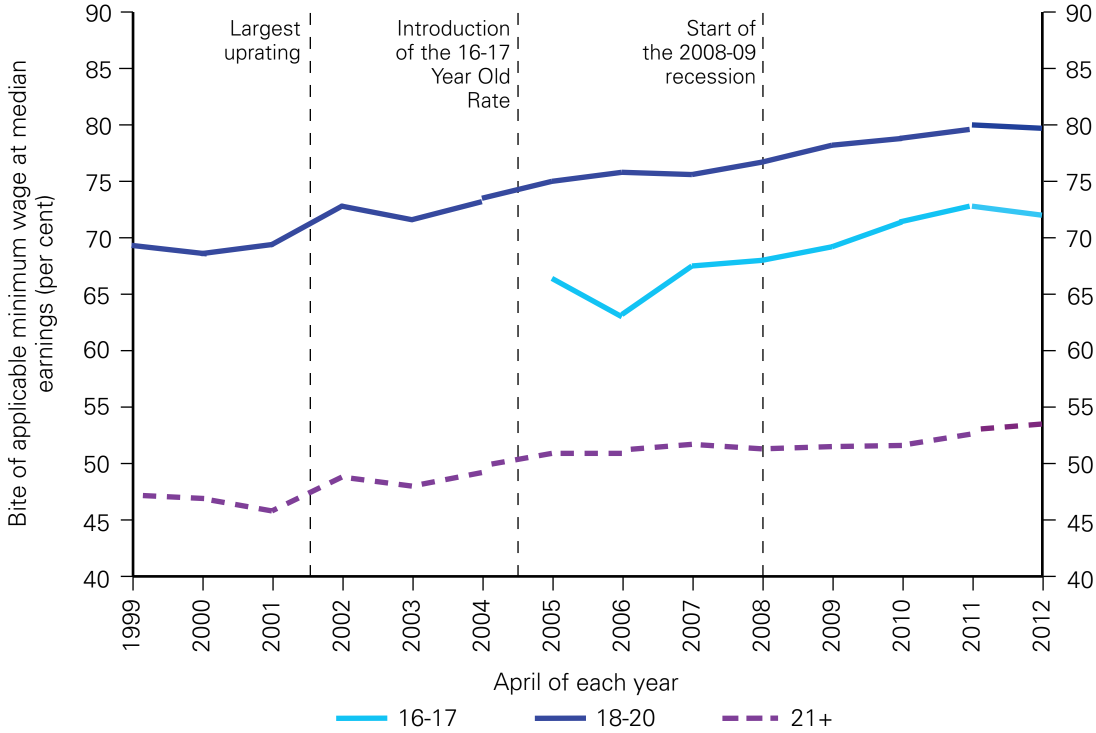


Source: LPC estimates based on ASHE: without supplementary information, April 1999-2003; with supplementary information, April 2004-2005; 2007 methodology, April 2006-2010; and 2010 methodology, April 2011-2012, standard weights, including those not on adult rates of pay, UK.
Notes:
a. The National Minimum Wage growth for 21 year olds and above is based on the adult minimum wage rate, which applied only to those aged 22 and over between 1999 and 2010.
b. The 16-17 Year Old Rate was introduced in October 2004.

3.12 The relatively strong median earnings growth of young people between 2011 and 2012 means that earnings have increased at a faster rate than their applicable minimum wage rates. As mentioned earlier, between April 2011 and April 2012 the 16-17 Year Old Rate increased by 1.1 per cent whereas 16-17 year olds' median earnings grew by 2.2 per cent. Similarly, the 1.2 per cent increase in the Youth Development Rate between April 2011 and April 2012 was less than the 1.6 per cent increase in median hourly earnings for 18-20 year olds. This means that for young people the bites of their applicable NMW rates (their values relative to median earnings) have fallen in 2012, for the first time in a number of years. In contrast, the bite of the adult rate increased as the adult NMW rose by 2.5 per cent between April 2011 and April 2012 while adult median hourly earnings grew by 1.6 per cent.

3.13 Figure 3.4 shows that, as we had intended, in 2012 the bite of the Youth Development Rate fell, by 0.3 percentage points to 79.7 per cent, the first time it had fallen since 2007. The bite of the 16-17 Year Old Rate also fell, by 0.8 percentage points to 72.0 per cent, the first time it had fallen since 2006, when the rate had remained unchanged in October 2005. The bite of the adult minimum wage rose by 0.5 percentage points to 53.5 per cent, its highest level since the introduction of the minimum wage in 1999.

Figure 3.4: Bite of the Minimum Wage at the Median, by Age, UK, 1999-2012



Source: LPC estimates based on ASHE: without supplementary information, April 1999-2004; with supplementary information, April 2004-2006; 2007 methodology, April 2006-2011; and 2010 methodology, April 2011-2012, standard weights, including those not on adult rates of pay, UK.

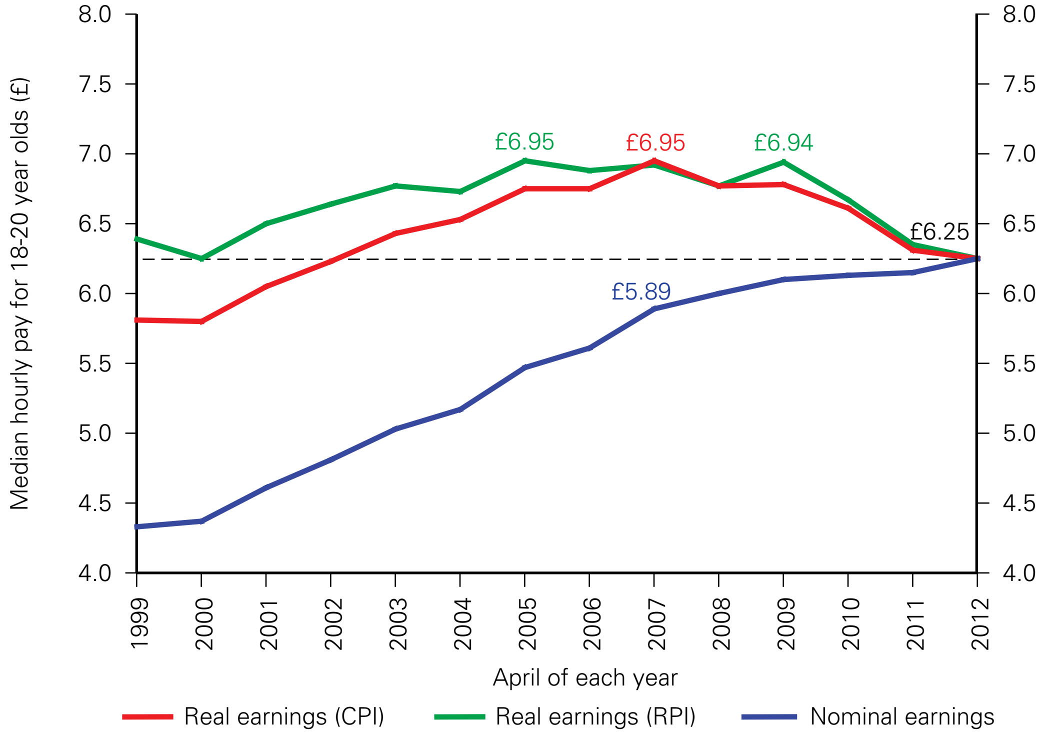
Notes:

a. The median for those aged 21 and over is compared with the adult minimum wage rate, which applied only to those aged 22 and over between 1999 and 2010.

b. Direct comparisons before and after 2004, 2006 and 2011 should be made with care due to changes in the data series.

3.14 Figure 3.5 shows the nominal increase in the median hourly earnings of 18-20 year olds, alongside real hourly earnings, adjusted to take into account either Retail Prices Index (RPI) or Consumer Prices Index (CPI) inflation. Adjusting median earnings to take RPI inflation into account shows that in real terms median hourly earnings for 18-20 year olds are at their lowest level since 2000. Adjusting instead for CPI shows real median hourly earnings in 2012 at about the same level as in 2002, slightly above the real level between 1999 and 2001. The fall in real median earnings between 2011 and 2012 was relatively small compared with that seen in 2010 and 2011, when CPI and RPI were above 3 per cent and 4 per cent respectively for a sustained period.

Figure 3.5: Nominal and Real Level of Median Earnings for 18-20 Year Olds, by Price Index, UK, 1999-2012

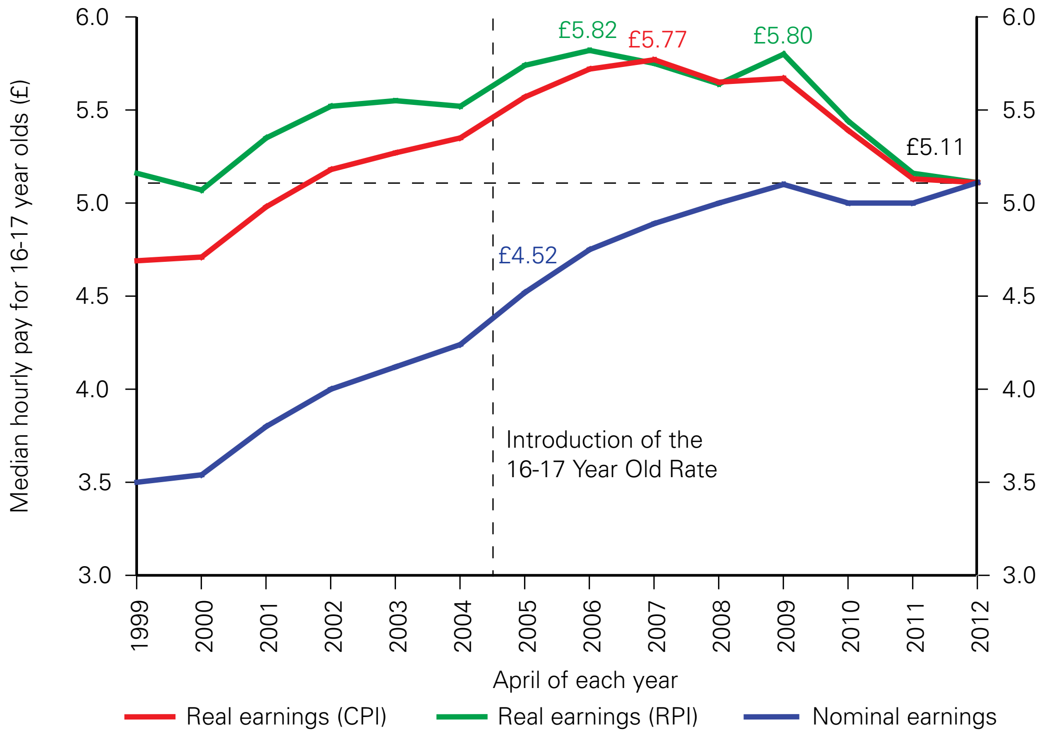


Source: LPC estimates based on ONS data, CPI (D7BT) and RPI (CHAW), 1999-2012, monthly, and ASHE: without supplementary information, April 1999-2003; with supplementary information, April 2004-2005; 2007 methodology, April 2006-2010; and 2010 methodology, April 2011-2012, standard weights, including those not on adult rates of pay, UK.
Note: Direct comparisons before and after 2004, 2006 and 2011 should be made with care due to changes in the data series.

3.15 Figure 3.6 shows that in 2012 the median hourly real wage for 16-17 year olds of £5.11 an hour was at about the same level as in 2002 when earnings are adjusted for CPI inflation, and at broadly the same level as in 1999 and 2000 when adjusted for RPI inflation.

3.16 Figures 3.5 and 3.6 show that real median earnings of young people fell sharply between 2009 and 2012, with a reduction in real median earnings of about 10 per cent for 18-20 year olds and 12 per cent for 16-17 year olds (when deflating by RPI). When inflation is taken into account, young people were no better off in 2012 than their comparable age group in 2000 (adjusting for RPI inflation) or 2002 (adjusting for CPI inflation).

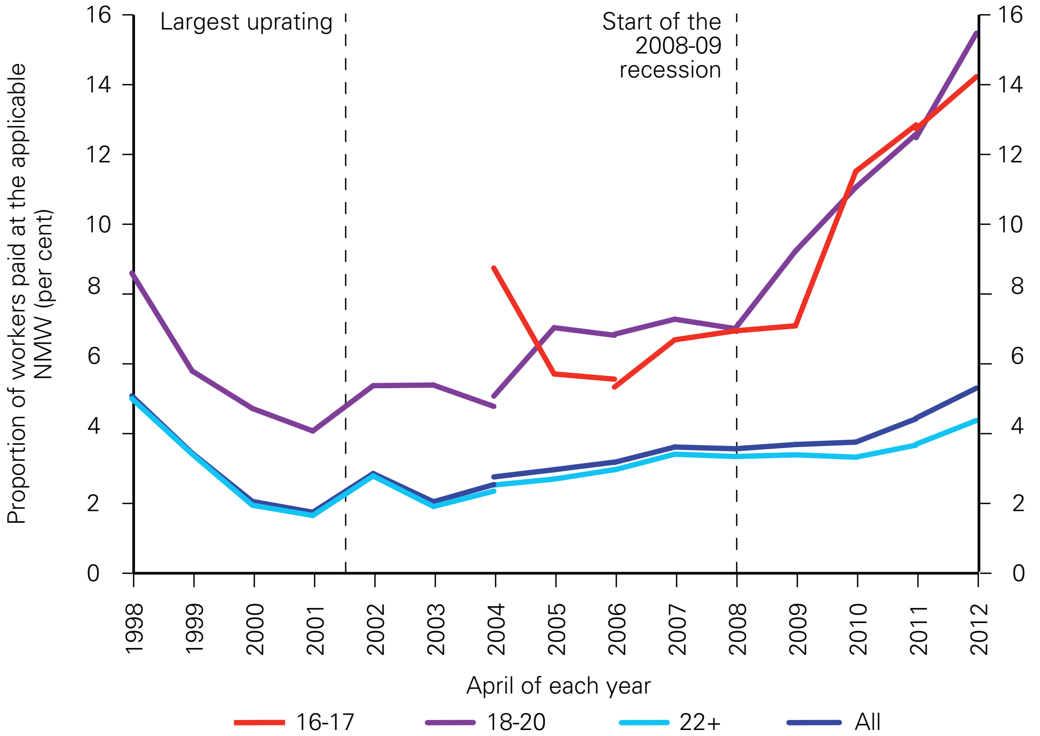
Figure 3.6: Nominal and Real Level of Median Earnings for 16-17 Year Olds, by Price Index, UK, 1999-2012



Source: LPC estimates based on ONS data, CPI (D7BT) and RPI (CHAW), 1999-2012, monthly, and ASHE: without supplementary information, April 1999-2003; with supplementary information, April 2004-2005; 2007 methodology, April 2006-2010; and 2010 methodology, April 2011-2012, standard weights, including those not on adult rates of pay, UK.
Note: Direct comparisons before and after 2004, 2006 and 2011 should be made with care due to changes in the data series.

3.17 The earnings data show a large proportion of young people paid at each of the NMW rates. We noted in the 2012 Report that employers appear to be making increased use of the youth rates of the minimum wage to pay their younger workers, and that more young workers were falling within the coverage of the youth rates of the minimum wage. Figure 3.7 shows that the proportion of young workers paid at their age-related minimum wage rate has again risen sharply in 2012, up to 14.2 per cent for 16-17 year olds, and 15.5 per cent for 18-20 year olds. Although the rise was not as sharp for adults, the proportion paid at the adult rate of the minimum wage also increased, from 3.7 per cent in 2011 to 4.4 per cent in 2012. This is in large part due to the adult rate of the minimum wage crossing the £6.00 threshold in 2012, when it was increased from £5.93 to £6.08 an hour. In 2011 over 250,000 workers were paid at the common focal point of £6.00 an hour, and it is likely that the uprating in the adult rate will have moved many of these workers on to the minimum wage.

Figure 3.7: Coverage of Applicable Minimum Wage Rates, by Age, UK, 1998-2012



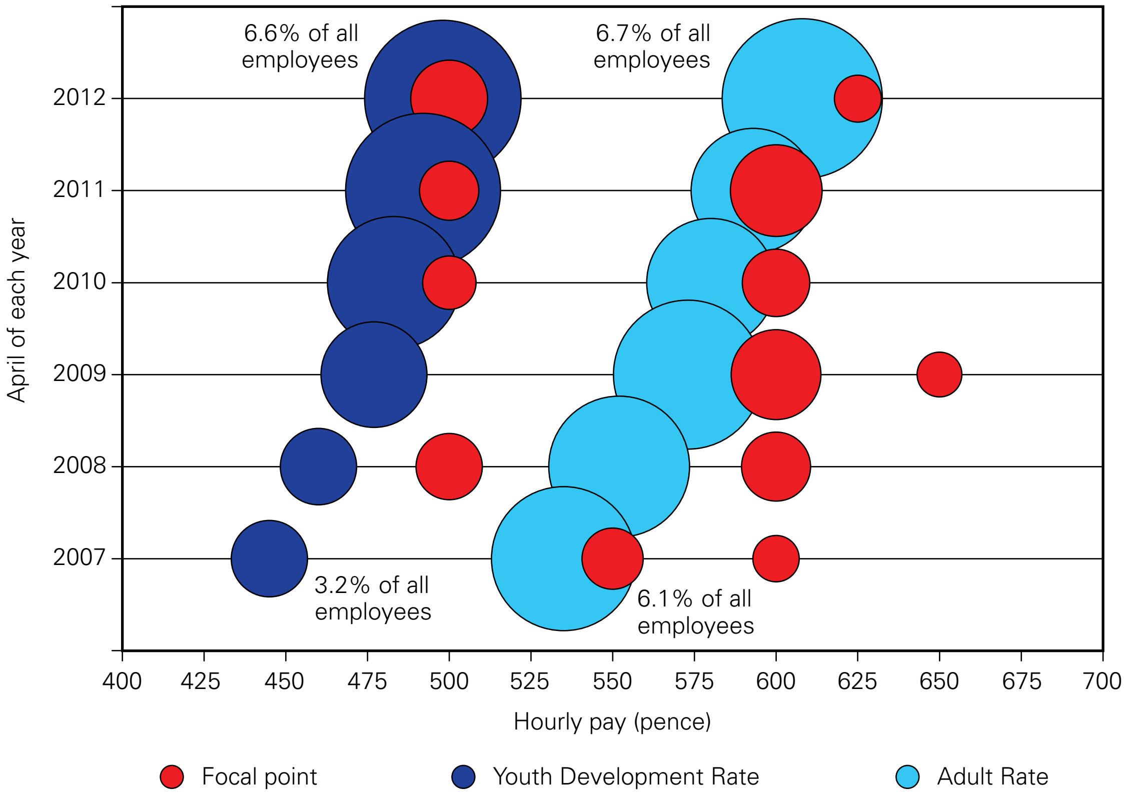
Source: LPC estimates based on ASHE: without supplementary information, April 1998-2004; with supplementary information, April 2004-2006; 2007 methodology, April 2006-2011; and 2010 methodology, April 2011-2012, standard weights, including those not on adult rates of pay, UK.
Notes:
a. Based on a 5 pence band.
b. Direct comparisons before and after 2004, 2006 and 2011 should be made with care due to changes in the data series.

3.18 Figure 3.7 looks at the coverage of the NMW using a 5 pence band. This means we classify those workers paid up to 5 pence above a minimum wage rate as minimum wage workers, to account for the fact that the data are based on a sample, and may reflect some bias or sampling error. We commissioned research this year from Fry and Ritchie (2012b) that looked at behavioural aspects of the minimum wage, and whether employers were more likely to pay wages at round numbers. This research examined the frequency of payment of the exact rate for each of the different minimum wages, and how this varied depending on how close the minimum wage was to a 'focal point' (such as £6.00 an hour) on the earnings distribution. The research found that some employers set wages at focal points, that this was persistent over time, and that this behaviour was most noticeable in small firms in the private sector.

3.19 In relation to this research, Figure 3.8 shows the use of each of the minimum wage rates, and other key 'focal points' in the earnings distribution for 18-20 year olds. In this type of chart, the width of each circle represents the proportion of the population paid at that point on the earnings distribution. In other words a larger circle represents a larger proportion of the 18-20 year old workforce. Only those points on the earnings distribution with a significant proportion of workers have been shown, so that it is easier to compare the key characteristics of the earnings distribution over time.

3.20 Figure 3.8 shows that the use of the Youth Development Rate to pay 18-20 year olds has steadily increased since 2007. The proportion of 18-20 year old workers paid at exactly the Youth Development Rate (the dark blue circles) has increased from 3.2 per cent in 2007 to 6.6 per cent in 2012. Over the same period the use of the adult rate of the minimum wage to pay 18-20 year olds (the light blue circles) has been broadly steady, falling from 6.1 per cent of 18-20 year old workers in 2007 to 5.3 per cent of workers by 2011, but rising in 2012 to 6.7 per cent. For most years between 2007 and 2012 we observe small proportions of employees paid at the focal points of £5.00 and £6.00 an hour. In 2012 the focal point at £6.00 an hour is no longer visible, as these workers appear to have been swept up in the increase in the adult rate from £5.93 to £6.08.

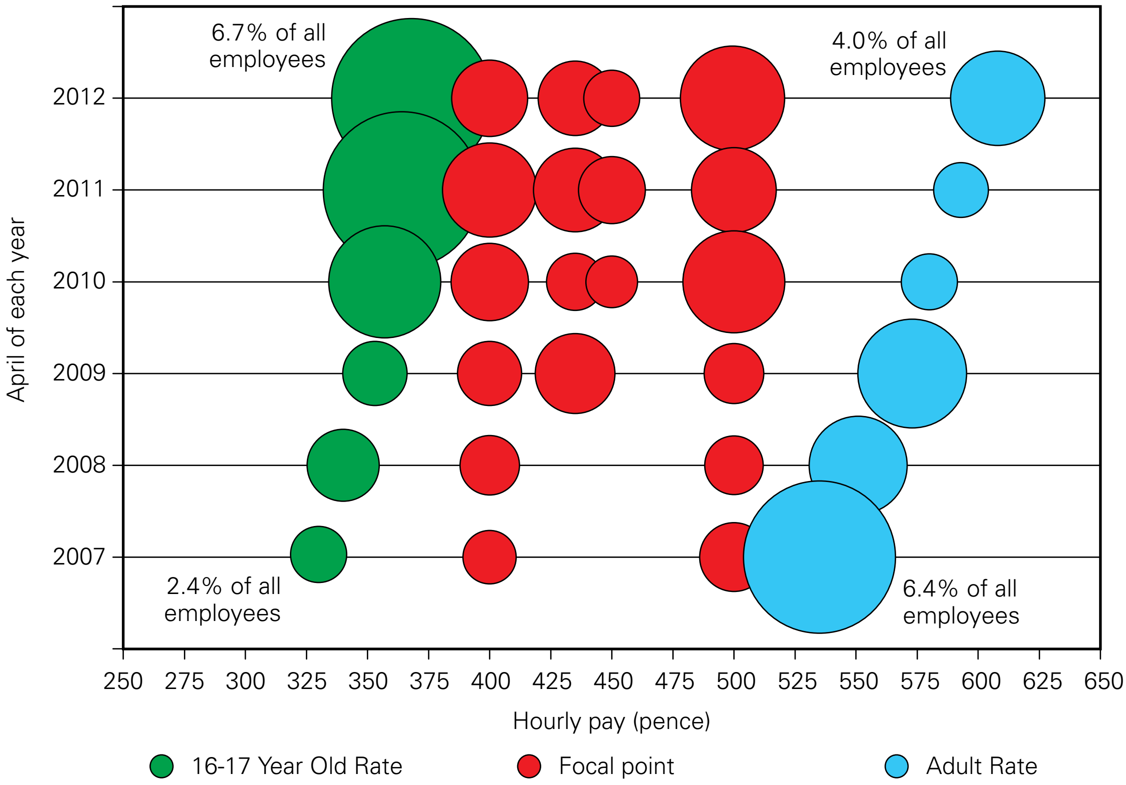
Figure 3.8: 18-20 Year Old Earnings Distribution, by Minimum Wage Rate and Focal Point, UK, 2007-2012



Source: LPC estimates based on ASHE: 2007 methodology, April 2007-2010; and 2010 methodology, April 2011-2012, low pay weights, including those not on adult rates of pay, UK.

3.21 Figure 3.9 shows that the proportion of 16-17 year olds paid exactly at the 16-17 Year Old Rate (the green circles) has increased significantly over the period, from 2.4 per cent in 2007 to 6.7 per cent in 2012. Use of the adult rate of the minimum wage (the light blue circles) has varied for 16-17 year old workers, falling from 6.4 per cent in 2007 to 2.4 per cent in 2010, but rising to 4.0 per cent in 2012. Note that use of the Youth Development Rate to pay 16-17 year old workers is relatively rare, and we do not therefore see any circles in Figure 3.9 that represent the Youth Development Rate.

Figure 3.9: 16-17 Year Old Earnings Distribution, by Minimum Wage Rate and Focal Point, UK, 2007-2012



Source: LPC estimates based on ASHE: 2007 methodology, April 2007-2010; and 2010 methodology, April 2011-2012, low pay weights, including those not on adult rates of pay, UK.

3.22 Taken together, Figures 3.8 and 3.9 show a steady increase in the use of the 16-17 Year Old Rate and the Youth Development Rate to pay young workers since 2007. In addition, there has been a large increase in the use of the adult rate of the minimum wage to pay both 16-17 year olds and 18-20 year olds between 2011 and 2012.

3.23 Having considered the earnings of those young people in work, we now look at the labour market position of young people, and assess the impact of the minimum wage on their labour market activity.

Labour Market Position

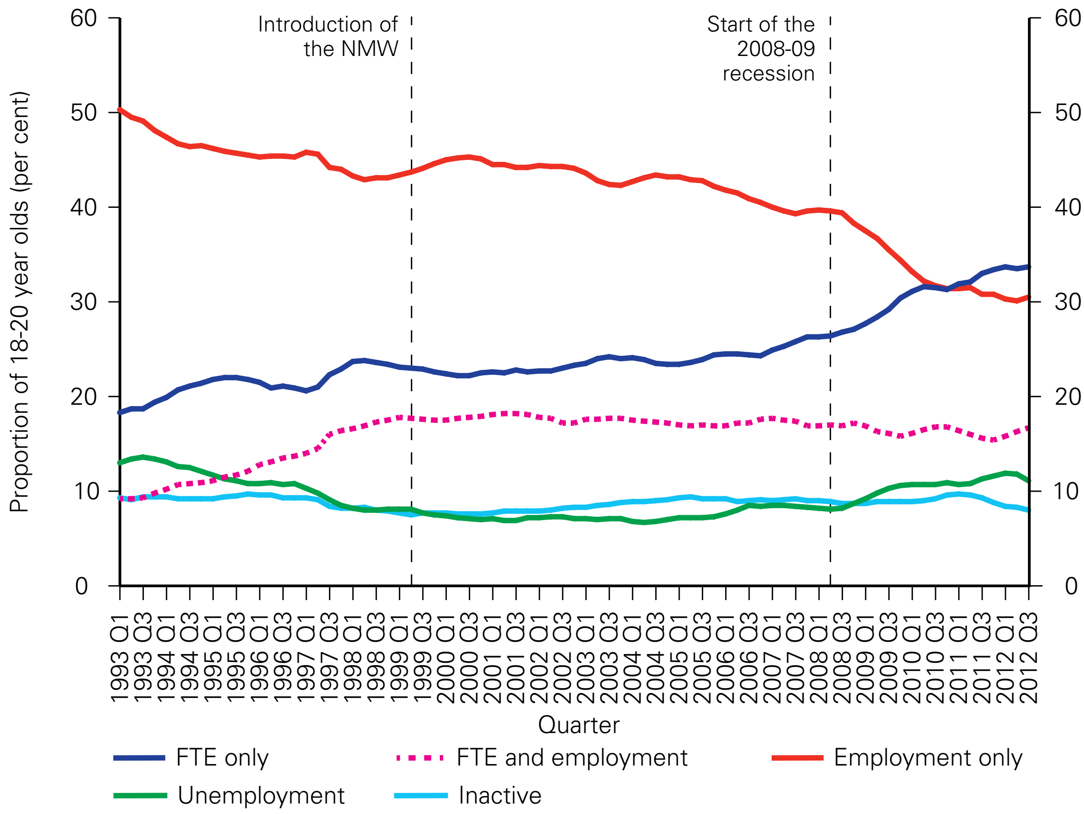
3.24 Young people were hit harder than adults during the 2008-09 recession as youth employment fell and youth unemployment rose by relatively more than that of adults. Since 2008 an increasing proportion of young people have remained in full-time education (FTE), with fewer choosing to enter the labour market. However these trends should be placed in context alongside changes to the population of young people, to provide an accurate overview of how young people are engaging with the labour market. Between 2000 and 2012 the population of young people has grown at a faster rate than the whole working age population, and so both relatively and absolutely there has been an increase in the supply of young people in the labour market. However, the Office for National Statistics (ONS) has forecast that the population of young people will fall relative to the whole working age population between

2013 and 2020, which may improve the job prospects of young people in the labour market, through reduced competition for vacancies.

3.25 In this section we use estimates of economic activity that we have derived from Labour Force Survey (LFS) data. These estimates differ from those published by the ONS due to the way we classify those individuals in FTE. The ONS classify individuals in FTE as unemployed if they are looking for a job, even if it is only part-time employment to supplement their studies. We are less concerned about students' participation in work, and more concerned that young people are not unemployed or NEET. We therefore classify individuals in FTE as either in FTE and employment if they also have a job, or in FTE only if they do not have a job. In our estimates, an individual cannot therefore appear as unemployed if they are in FTE. Because of this, our estimates of the level of unemployment for young people are significantly lower than those of the ONS.

3.26 Figure 3.10 shows that the proportion of 18-20 year olds in FTE only (that is they have no job alongside their education or training), has risen from fewer than one in five 18-20 year olds in 1993 to over one in three by the third quarter of 2012 (representing 791,000 18-20 year olds). The proportion of 18-20 year olds in both FTE and employment has remained broadly flat since the introduction of the NMW in 1999 at between 16 and 17 per cent. In contrast, the proportion of 18-20 year olds in employment only has steadily fallen from about 50 per cent in 1993 (1.09 million 18-20 year olds) to around 30 per cent by the third quarter of 2012 (715,000 18-20 year olds), meaning that for the first time since records began, more 18-20 year olds are in education than in employment. The proportion of inactive 18-20 year olds has fluctuated at just below 10.0 per cent of the population throughout the period, while the proportion unemployed rose from 8.1 per cent at the start of the recession in mid-2008 to 11.9 per cent in the first quarter of 2012, falling slightly by the third quarter of 2012 to 11.1 per cent (261,000 18-20 year olds).

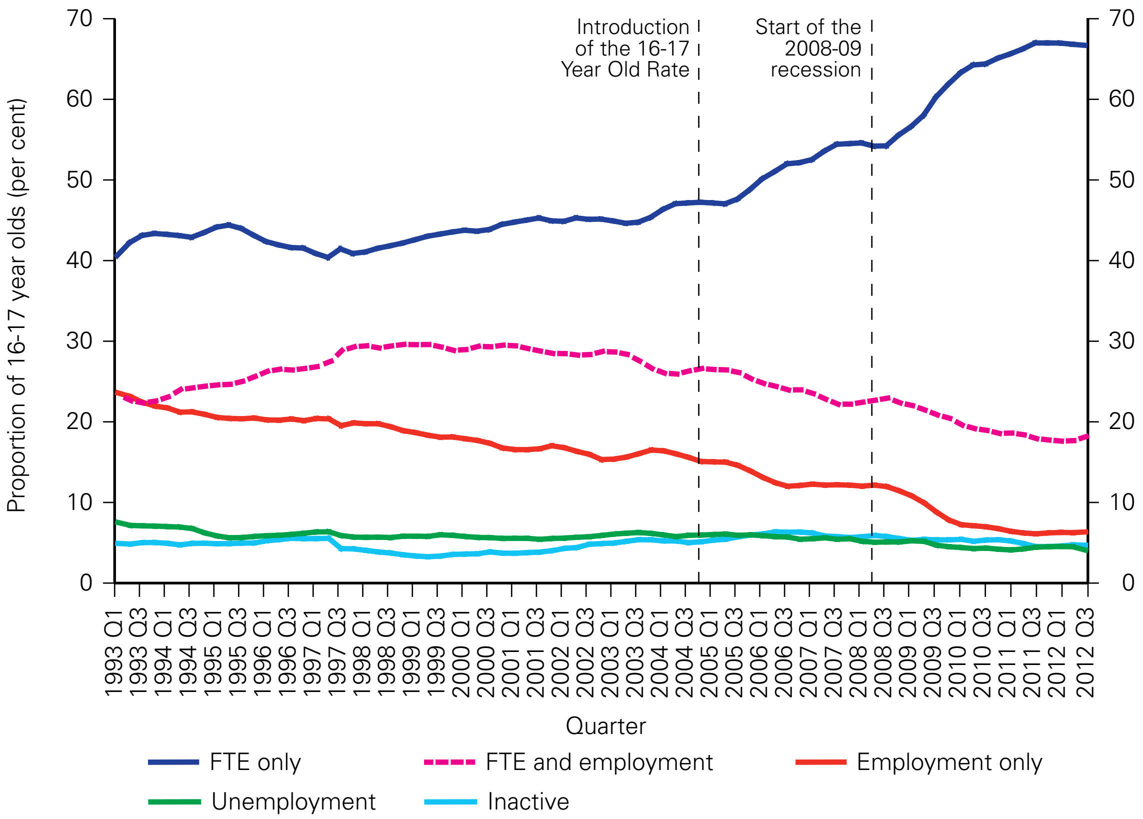
Figure 3.10: Economic Activity of 18-20 Year Olds, UK, 1993-2012



Source: LPC estimates based on LFS Microdata, quarterly, four-quarter moving average, UK, Q2 1992-Q3 2012.

3.27 Figure 3.11 shows that the proportion of 16-17 year olds who are in FTE only has risen from the start of 1998, although there was a particularly sharp increase in the period immediately after the start of the 2008-09 recession. Over the whole period, the number of 16-17 year olds in FTE only has risen from 529,000 to 954,000. In contrast, the proportion of 16-17 year olds in FTE who also have a job has fallen steadily since 1998, and was less than 20 per cent of all 16-17 year olds by the third quarter of 2012 (representing 260,000 16-17 year olds). The proportion of 16-17 year olds in employment only has fallen steadily across the period, from just under 25 per cent at the start of 1993 to just over 6 per cent by the third quarter of 2012 (a fall from 307,000 to 91,000). Finally, the proportion of 16-17 year olds either unemployed or inactive has been fairly static since 1993, appearing largely unaffected by the recent recessions, with 4.1 per cent unemployed and 4.7 per cent inactive in the third quarter of 2012 (between around 60,000 and 70,000 16-17 year olds).

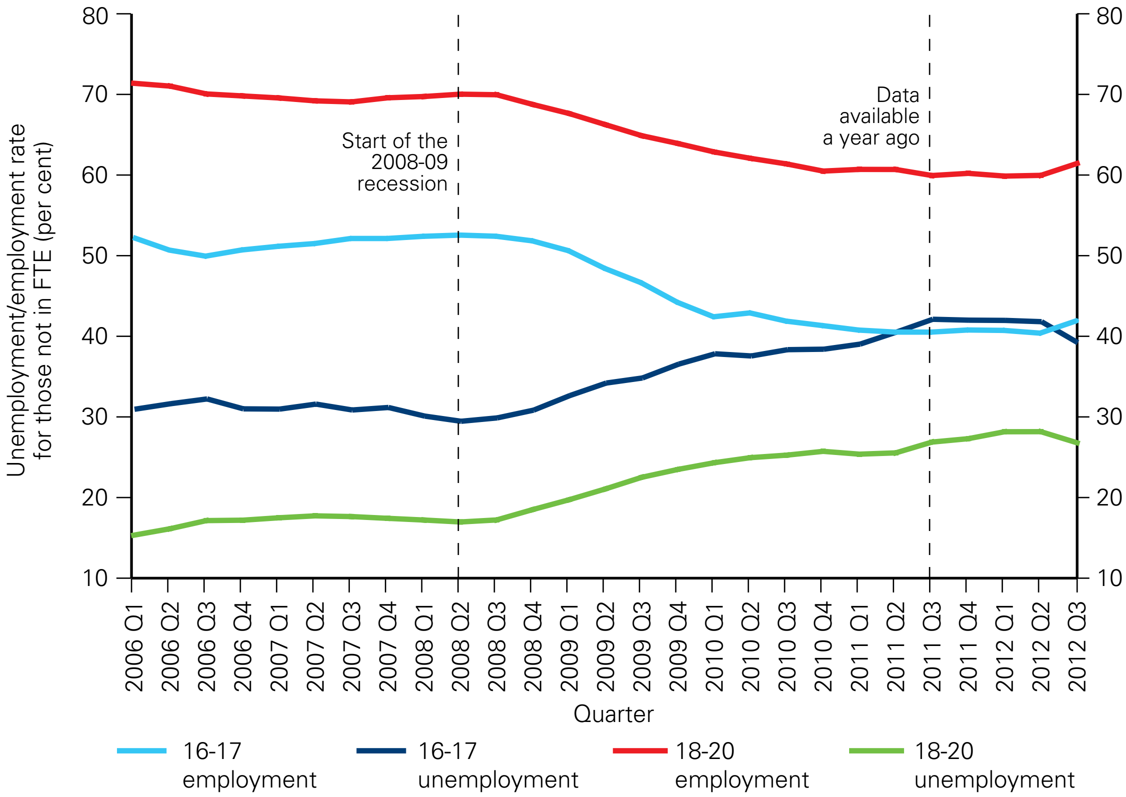
Figure 3.11: Economic Activity of 16-17 Year Olds, UK, 1993-2012



Source: LPC estimates based on LFS Microdata, quarterly, four-quarter moving average, UK, Q2 1992-Q3 2012.

3.28 Figures 3.10 and 3.11 show that an increasing proportion of young people are remaining in FTE, particularly since the start of the 2008-09 recession. However, there is some evidence that the position of those young people who choose to leave education and enter the labour market is no longer deteriorating. Figure 3.12 shows the employment and unemployment rates for those 16-17 and 18-20 year olds who are not in FTE. Between the start of the 2008-09 recession and the third quarter of 2011 the unemployment rates of both 16-17 and 18-20 year olds not in FTE rose sharply, and their employment rates fell. However, over the year to the third quarter of 2012, employment and unemployment rates for both age groups have stabilised, and the very latest data for the third quarter of 2012 show a slight fall in unemployment rates and a slight rise in employment rates for both groups of young people. It is worth noting that the employment and unemployment rates of young people have largely been driven in recent years by the increasing proportion of young people who have remained in FTE (as shown in figures 3.10 and 3.11) and the fall in employment levels.

Figure 3.12: Employment and Unemployment Rates for Young People Not in Full-time Education, by Age, UK, 2006-2012



Source: LPC estimates based on LFS Microdata, quarterly, four-quarter moving average, UK, Q2 2005-Q3 2012.

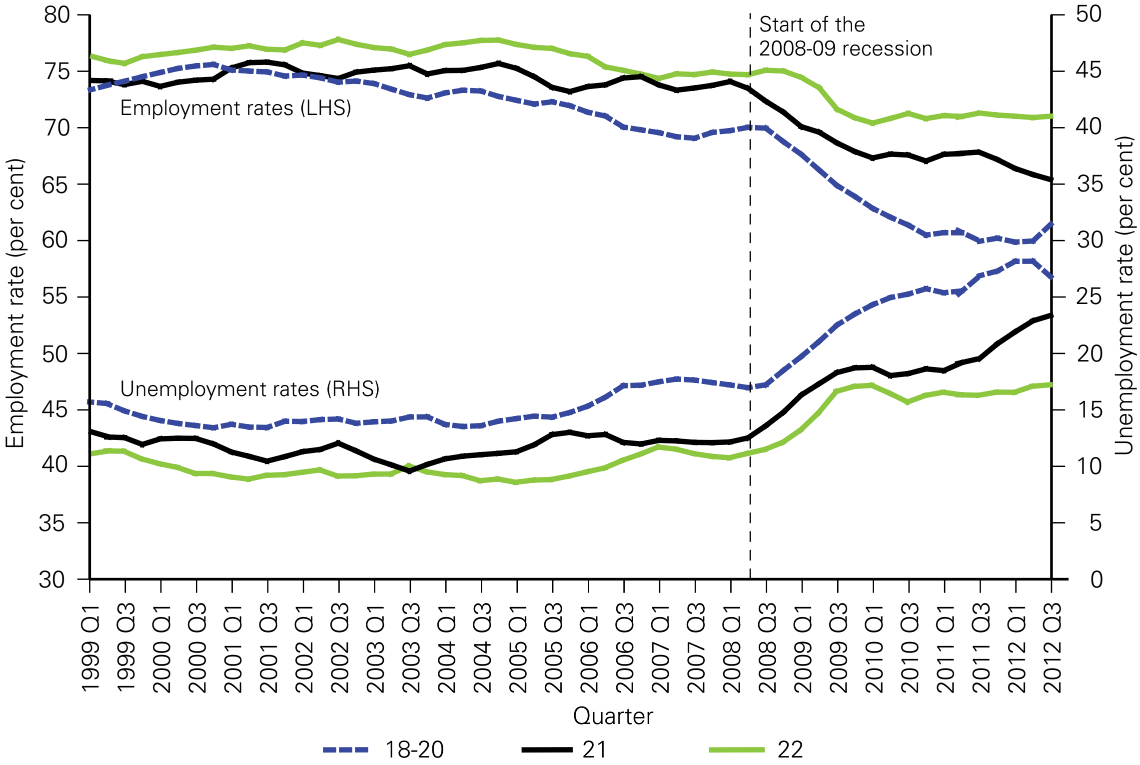
21 Year Olds

3.29 From 1 October 2010, 21 year olds have been entitled to the adult minimum wage rate. With the adult rate rising to £5.93 an hour, this was an effective increase of 23 per cent in the minimum wage entitlement for 21 year olds, from the previous Youth Development Rate of £4.83 an hour. We said in our 2012 Report that we would continue to monitor the earnings and labour market position of 21 year olds relative to older and younger workers to see if this change in minimum wage entitlement had an adverse impact on their employment or earnings.

3.30 The latest evidence shows that median hourly earnings of 21 year olds increased by 1.0 per cent in 2012 to £6.88 an hour. This was the lowest percentage increase among all workers aged 16 to 29 years old. This suggests that the earnings of 21 year olds at the median are closer to those of 20 year olds than 22 year olds. In 2011, 21 year olds were paid 7.0 per cent more at the median than 20 year olds, but this fell to 5.8 per cent in 2012. In contrast, the gap between 21 and 22 year olds was stable in 2012, at 8.5 per cent.

3.31 Turning to their labour market position, we noted in our 2012 Report that the employment and unemployment rates of 21 year olds had closely followed those of 22 year olds, both before and after the recession. Figure 3.13 shows that since the end of 2011 the unemployment and employment rates of those 21 year olds not in FTE appear to have diverged from those of 22 year olds. While unemployment rates were broadly flat in 2012 for 22 year olds and fell slightly for 18-20 year olds, they rose sharply for 21 year olds. And where employment rates rose slightly for 18-20 year olds, and were flat for 22 year olds, they fell steadily for 21 year olds not in FTE. However, employment and unemployment rates for 21 year olds were still distinctly different from those of 18-20 year olds.

Figure 3.13: Employment and Unemployment Rates of 18-22 Year Olds Not in Full-time Education, by Age, UK, 1999-2012



Source: LPC estimates based on LFS Microdata, quarterly, four-quarter moving average, UK, Q2 1998-Q3 2012.

3.32 It is too early to tell, from one year of data, if this divergence in the employment positions of 21 year olds and 22 year olds is the start of a new trend. We will continue to monitor and analyse new data on the employment and earnings of 21 year olds as they become available, to determine if this divergence has continued into 2013. We will also explore what may lie behind any new trend, including the contribution of any change in the propensity of 21 year olds to remain in FTE.

Research on Earnings, Employment and Hours

3.33 For this report we commissioned two research reports on the labour market position of young people. In one, Lanot and Sousounis (2013) investigated the impact of the minimum wage on substitution between low-paid workers, analysing data from ASHE and the LFS. They attempted to identify any effect from the age-related rates of the minimum wage and their upratings on relative wages and the age-related employment structure in the low-paying sectors. Their analysis found that the introduction and the upratings of the NMW had a significant effect on the determination of wages and the wage bill, but they found no evidence that the NMW had a systematic effect on the evolution of relative employment (that is, in terms of the employment size of younger worker age groups relative to the employment size of older worker age groups). However, they noted that relative wages between the groups had not been significantly altered throughout the period.

3.34 The researchers did, however, find some evidence that younger workers (aged 18-21 years old) were substantial, if not perfect, complements to older workers (aged 55 and older). This suggested that the minor changes to the differences in the NMW between age groups since the introduction of the NMW had not affected the composition of the labour force.

3.35 In the second, Fidrmuc and Tena (2013) examined the impact of the minimum wage on employment and hours of young workers by sector and size of firm, up to the end of 2011. In line with previous work they had conducted for us, they found no negative employment or hours effect at the age a young person became eligible for the adult rate of the minimum wage. They did however find some negative employment effects of the minimum wage for young men a year before they became entitled to the adult rate.

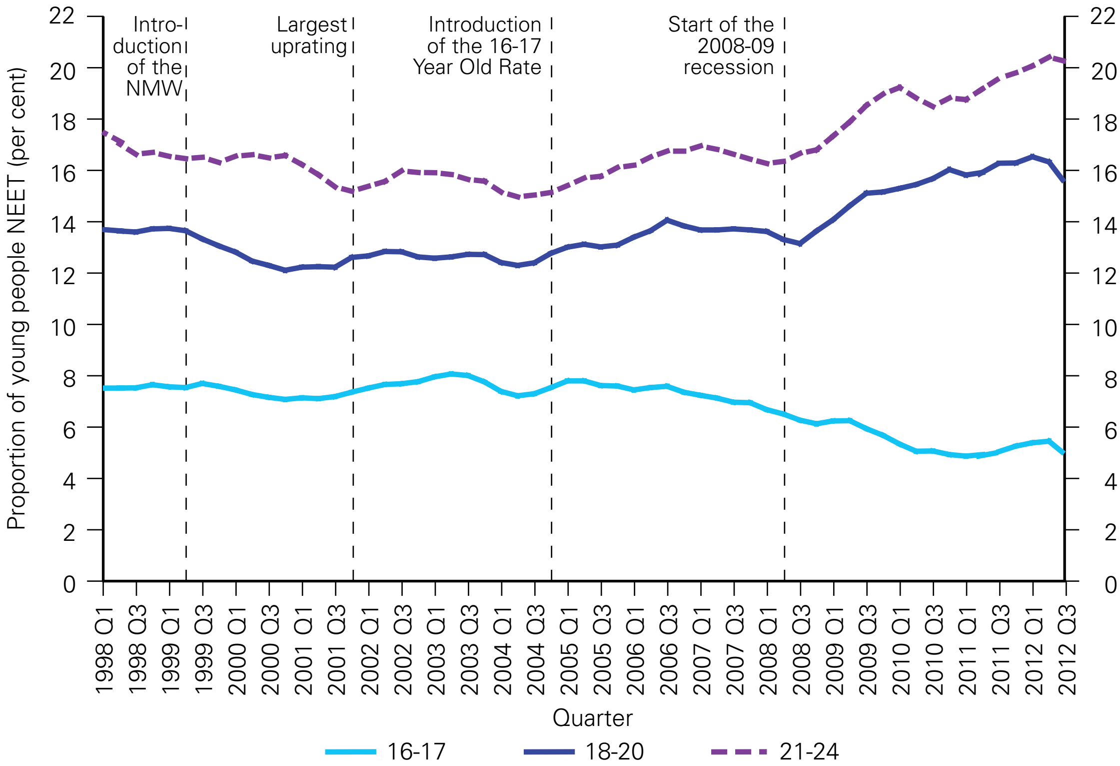
3.36 In other research we commissioned, which was mainly focused on the impact of the adult rate, Bryan, Salvatori and Taylor (2013) built on their previous work, and looked at the impact of the NMW on employment, hours and unemployment across the whole economy. Bryan, Salvatori and Taylor (2012) had found some evidence of a negative effect of the NMW on hours worked, particularly for young people, which was exacerbated during the recession. Their new research also found some, albeit weaker, evidence of a reduction in hours. Although these results were not statistically significant, they were significantly different when compared with the pre-recession period, implying that there was some weak evidence that the NMW reduced basic hours for young people during the recession relative to the pre-recession period.

Young People Not in Education, Employment or Training

3.37 To complete the overview of how young people are engaging with the labour market, we look at those young people who are not in employment, education or training (NEET). We use data from the Labour Force Survey to define a person as NEET if they are unemployed or inactive but are not: a student; on a course; working towards a qualification; or undertaking an apprenticeship.

3.38 Figure 3.14 shows that following the start of the 2008-09 recession the proportion of 18-20 and 21-24 year olds who were NEET rose sharply, with the rate of increase slowing in 2010, before the proportion fell slightly in the third quarter of 2012. In sharp contrast, the proportion of 16-17 year olds NEET continued to fall following the start of the 2008-09 recession, rising slightly in late 2011 and early 2012 before falling back to 4.9 per cent by the third quarter of 2012.

Figure 3.14: NEET Rates by Age, UK, 1998-2012



Source: LPC estimates based on LFS Microdata, quarterly, four-quarter moving average, UK, Q2 1997-Q3 2012.

3.39 Having considered the economic activity of young people, and the proportion who are NEET, we now move on to look at new Government policy. In particular, Raising the Participation Age in England – whose implications for the youth and apprentice rates the Government has asked us to examine – may affect the proportion of young people who are NEET, and increase the proportion who remain in FTE or enter the labour market.

Raising the Participation Age in England

3.40 The Raising the Participation Age (RPA) policy means that between September 2013 and September 2015 the age to which a young person in England must remain in education or training will be increased from 16 to 18. A young person can meet this obligation by remaining in FTE, undertaking an apprenticeship, or doing some part-time education or training while working full-time.[4] Some aspects of RPA have changed since the Government issued our remit, and there will no longer be any responsibility on employers to ensure the continuing participation in education or training of young people they employ.

3.41 The RPA policy will be phased in from September 2013, and the obligation to continue in education or training until their 18th birthday will apply first to those who will be 17 during the academic year 2013-14. In practice it will only have a direct impact on those young people who are in full-time employment and are not undertaking any education or training, or those who are NEET, as all other young people will already meet its requirements. Based on the latest official statistics from the Department for Education (DfE), there were 20,000 16-17 year olds in England in employment and not in education or training (out of a total population

4 For more information on Raising the Participation Age see: http://www.education.gov.uk/childrenandyoungpeople/youngpeople/participation/rpa

of 1.3 million), and 60,000 16-17 year old NEETs at the end of 2011.[5] Since, by definition, NEETs are not working this means that the population of young people who would be entitled to the NMW but who would not, in the absence of RPA, be undertaking any training or education will number around 20,000, or around 1.5 per cent of all 16-17 year olds in England (1.3 per cent in the whole of the UK).

3.42 Alongside the introduction of RPA, the Government announced funding of £1 billion for the 'Youth Contract'[6] – a range of policies and programmes designed to support young unemployed people in England to get a job. The Youth Contract includes £126 million of funding to support the most disaffected young people to get back into education. This money will be made available to local authorities, who will be responsible for securing the participation of all young people in education or training, and ensuring that there is adequate provision available to meet this demand.

3.43 As in previous years we have received a wide range of consultation responses relating to the youth rates and the role they play in the employment outcomes of young people (summarised in Chapter 5). We have also discussed the potential impact of RPA with a number of stakeholders, as well as the DfE, the government department responsible for the policy. Those respondents to our consultation who commented on it generally did not expect it to have much impact on the youth labour market, or many implications for the NMW. The numbers directly affected are relatively small (as noted above) and consultees also thought that the absence of any obligation on employers would reduce its impact in practice.

3.44 We noted in our 2012 Report that it would be important to develop the RPA policy in a way which sits comfortably with any future structure of the NMW, and referred to the risk that different NMW regimes could apply to 16-17 year olds doing similar activities, according to whether their training takes the form of an apprenticeship or not.

3.45 We share the view of those stakeholders who expect the practical implications of the RPA for the minimum wage to be modest. Insofar as it leads NEETs to undertake training or education we would expect any effect on their employability to be positive. We are assuming that those concerned will take a commonsense approach to avoid education or training commitments becoming an obstacle to taking up a job. In relation to the 20,000 or so young people subject to RPA and who would otherwise be working but not in any training or education we doubt that it is likely to lead employers or young people to make changes which would affect their employment in very many cases. We are mindful here that, as already mentioned, there is no obligation on employers to ensure compliance with RPA, and no sanction on young people for failing to do so. Moreover the diversity of ways in which the DfE advise that the RPA obligation could be met suggests to us that young people will usually be able to comply without needing to adjust their employment.

3.46 It also appears unlikely that the confusion which the 2012 Report recognised could occur will materialise in practice, particularly as there is now no RPA obligation on employers. It seems improbable that two teenagers doing similar activities at the same workplace will find themselves on different wages as a result of application of different NMW regimes, because

5 Data taken from DfE Statistical First Release 'Participation in Education, Training and Employment by 16-18 Year Olds in England, end 2011' published on 28 June 2012. Available at: http://www.education.gov.uk/rsgateway/DB/SFR/s001072/index.shtml

6 See www.dwp.gov.uk/youth-contract/ for further information.

it seems unlikely that an employer would remunerate such staff differently in this way, even if he or she legally could.

3.47 Of course, we are making these judgements before RPA has taken effect, and we will keep this area under review in case we need to revise our assessment in the light of experience. Moreover although the implications of RPA for the NMW appear limited, there remains a need, identified in our 2012 Report, to develop RPA policy in a way that sits comfortably with any future structure of the NMW. This arises partly because of the different geographical coverage of RPA and the NMW: the minimum wage is UK wide, and policy changes which affect its development would ideally be UK wide. More immediately, we would encourage the Government to consider further the parallel promotion of apprenticeships and other training and development in a way that is mutually coherent. While the danger that different NMW rates could apply to two employed teenagers doing broadly similar things at the same workplace, one as an apprentice and one not, is probably more theoretical than real it nevertheless sits a little uneasily with the Government's ambition to maintain a simple and straightforward NMW regime, which the Commission supports. The wider concern is to avoid blurring the differences between the various sorts of training and development available to young people, and thereby risking confusion about the distinctive value of each.

Employment Prospects of Young People

3.48 This year the Government asked us to review the contribution the NMW could make to the employment prospects of young people. In doing so, we have reviewed evidence from a wide range of consultees, commissioned specific research on young people in the labour market, and conducted extensive in-house analysis on a number of data sources. We have kept in mind our 'ongoing focus in helping as many low paid workers as possible, without adversely impacting employment prospects' (BIS, 2013b). This body of evidence, much of which is summarised in this chapter, has not suggested other measures or adjustments which we could recommend to enable the NMW to better support the employment prospects of young people, other than to continue to focus very closely on recommending appropriate levels for the 16-17 Year Old Rate and the Youth Development Rate. In arriving at our recommended levels, which we give in Chapter 5, we have drawn heavily on the evidence summarised in this chapter since striking the right balance between minimum wage levels which may encourage more young people to enter the labour market and those which may encourage employers to increase their demand for young people is an empirical question.

3.49 Furthermore, the research we commissioned for this report from Lanot and Sousounis (2013) (discussed in more detail above) found no evidence that the NMW had a systematic effect on the evolution of relative employment (that is, in terms of the employment size of younger worker age groups relative to the employment size of older worker age groups). The researchers did, however, find some evidence that younger workers (aged 18-21 years old) were substantial, if not perfect, complements to older workers (aged 55 and older). This suggested that the minor changes to the differences in the NMW between age groups since the introduction of the NMW have not affected the composition of the labour force.

3.50 Having considered the impact of the youth rates on the earnings and labour market position of young people, we now go on to consider the impact of the Apprentice Rate.

Apprentices

3.51 Our remit this year also asked us to review the contribution that the NMW could make to the employment prospects of young people in apprenticeships. This section first looks at how the volume of young people undertaking an apprenticeship has changed since our last report, placing it in the context of the change in overall apprenticeship numbers. It then considers apprentice pay using data from the BIS 2012 Apprentice Pay Survey (BIS, 2013c). Finally, it reports the latest research we have commissioned into the impact of the introduction of the Apprentice Rate in 2010.

Apprenticeship Starts

3.52 Table 3.1 shows that the volume of starts across the UK has continued to rise, mainly due to a further large increase in England. The number of apprenticeship starts also increased in Scotland in 2011/12, but fell slightly in Wales and Northern Ireland.

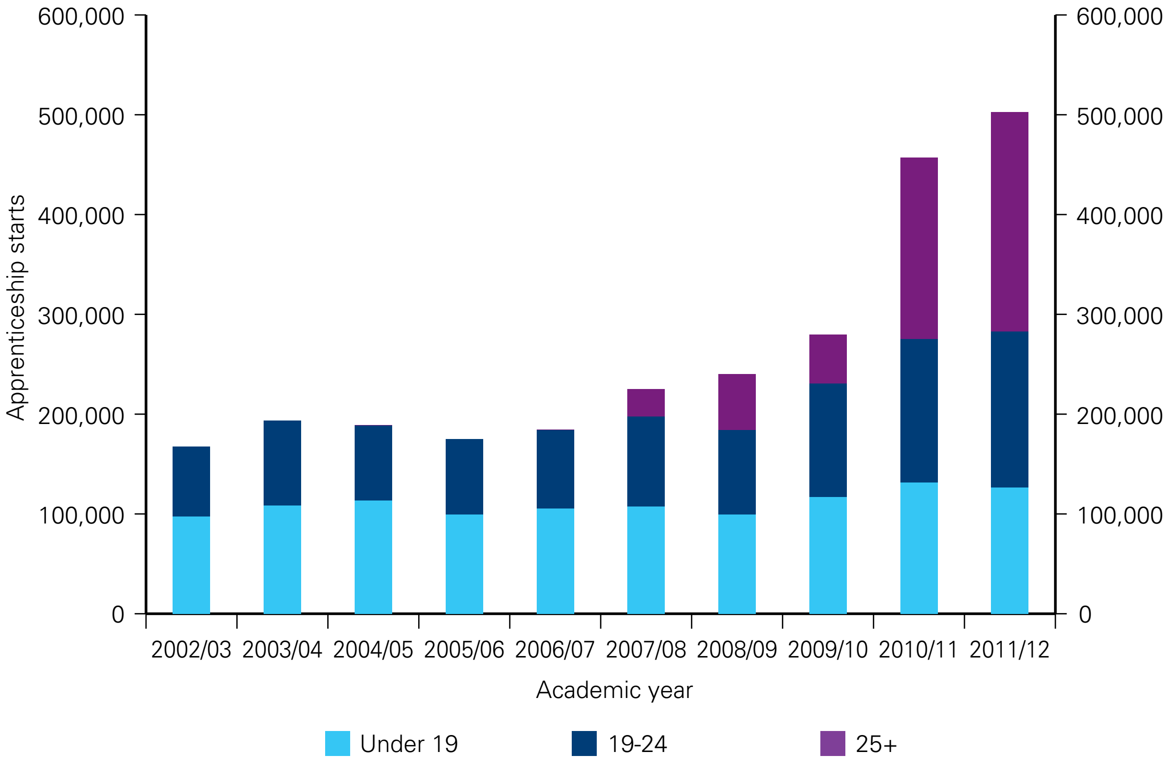
Table 3.1: Number of Apprenticeship Starts, by Country, 2003/04-2011/12[a]

Thousands	UK	England[b]	Northern Ireland[c]	Scotland[d]	Wales
2003/04		193.6	3.5		
2004/05		189.0	3.4		24.6
2005/06		175.0	3.3		28.1
2006/07		184.3	3.3		19.6
2007/08	266.6	224.8	5.5	14.7	21.6
2008/09	275.7	239.8	7.1	10.6	18.1
2009/10	321.9	278.2	7.1	20.2	16.4
2010/11	504.0	455.0	8.9	21.5	18.6
2011/12	551.8	499.0	8.7	26.4	17.7

Source: UK administrations, 2003/04-2011/12.
Notes:
a. England and Wales figures are for the academic year; Northern Ireland and Scotland figures are for the financial year. No earlier years were available for Scotland and Wales.
b. England data for 2011/12 are provisional, and may be subject to small revision. They exclude the small number of Level 4 apprenticeship starts from 2008/09.
c. In Northern Ireland, Apprenticeships NI replaced Modern Apprenticeships in September 2007; hence the figures from 2007/08 are the sum of these two schemes.
d. Figures for Scotland are only available for Modern Apprenticeships, which will not include all those at Level 2.

3.53 Scotland and Northern Ireland saw small increases in the number of young people starting an apprenticeship in 2011/12. However, Figure 3.15 shows that the number of 16-18 year olds starting an apprenticeship in England in 2011/12 fell by about 5,400 to 126,300. This is the first time since 2008/09 that the volume of 16-18 year olds starting an apprenticeship had fallen in England. In sharp contrast, the volume of apprenticeship starts for those aged 25 and older continued to rise in England in 2011/12, increasing by almost 38,000 to 219,900 (based on provisional data).

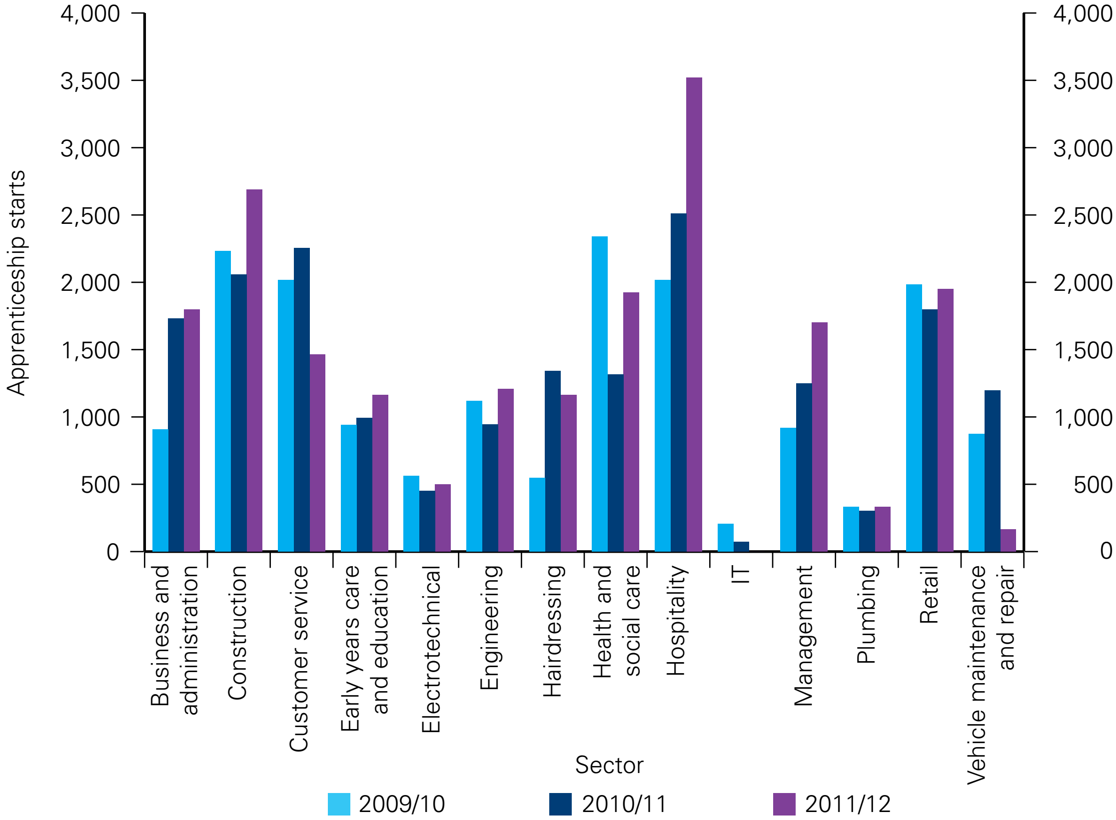
Figure 3.15: Total Apprenticeship Starts, by Age, England, 2002/03-2011/12



Source: Individualised Learner Record for England, 2002/03-2011/12.
Note: Data for 2011/12 are provisional and may be subject to minor revision. They exclude the small number of Level 4 apprenticeship starts from 2008/09.

3.54 Some countries have also seen a change in the contribution that different types of apprenticeship framework make to overall apprenticeship starts. For example, Figure 3.16 shows that most of the increase in apprenticeship numbers in recent years in Scotland comes from 'non-traditional' apprenticeship frameworks such as business and administration, hospitality and management. This is also the case in Northern Ireland, where there have been large increases in apprenticeship starts in the hospitality and catering, business management and administration frameworks between 2009/10 and 2011/12.

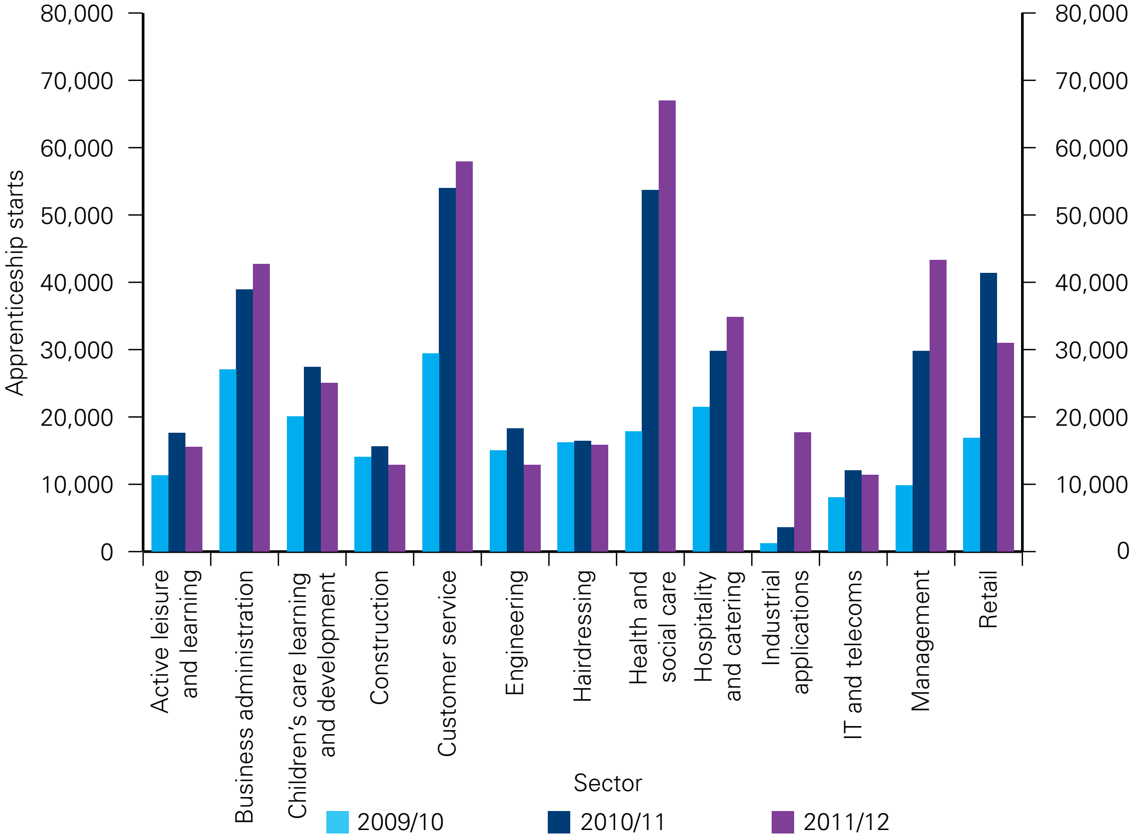
Figure 3.16: Apprenticeship Starts, by Framework, Scotland, 2009/10-2011/12



Source: Skills Development Scotland, 2009/10-2011/12.

3.55 In Wales there has been little change in the relative popularity of different apprenticeship frameworks between 2008/09 and 2010/11, apart from a small increase in health and social care starts, and a corresponding fall in starts in construction. Figure 3.17 shows that, like Scotland and Northern Ireland, there has also been a large increase in England in the number of apprenticeship starts in non-traditional sectors. The business administration, customer service, health and social care and management frameworks in particular have all seen very marked increases in the number of apprenticeship starts since 2009/10.

Figure 3.17: Apprenticeship Starts, by Framework, England, 2009/10-2011/12



Source: Individualised Learner Record, England, 2009/10-2011/12.
Note: Data for 2011/12 are provisional and may be subject to minor revision. They exclude the small number of Level 4 apprenticeship starts from 2008/09.

Apprenticeship Funding

3.56 The continuing increase in apprenticeship starts across the UK may slow in 2013 due to changes to apprenticeship funding arrangements in England and Northern Ireland. From August 2013, government funding for further education courses in England (including apprenticeships) will be removed for learners aged 24 and above, on a Level 3 or higher course. To mitigate this, the Government will introduce new 'Advanced Learning Loans', which will be available to those learners who are no longer eligible for government funding.

3.57 These loans will work on the same basis as higher education student loans, with repayments on an income contingent basis and any outstanding loan amount written off after 30 years. Individuals will only begin to repay the loan when their earnings reach £21,000 or more a year, at which point 9 per cent of all earnings above this threshold will be collected as repayment.

3.58 The Department for Business, Innovation and Skills (BIS) has completed an impact assessment of the removal of funding and introduction of fees for this age group, and it estimates that around 55 per cent of learners who would have previously been eligible for funding would still undertake learning under the new fee and loan system. This implies that there may be a reduction of about 45 per cent in the number of apprenticeship starts for those apprentices aged 24 or above on an Advanced Level apprenticeship (equivalent to

Level 3) from August 2013. Based on current volumes this would imply a significant reduction of up to 34,000 apprenticeship starts for people aged 24 and over in England from 2013/14.

3.59 There may also be a fall in apprenticeship starts in Northern Ireland. From September 2008, the apprenticeship programme in Northern Ireland was opened up to all age groups. Between 2008 and 2011 apprentices aged 25 and above were eligible for 100 per cent funding from the Northern Ireland Administration. From September 2011 to September 2012, the level of funding was reduced from 100 per cent to 50 per cent for over 25s, for all apprenticeship frameworks. However, since September 2012, funding of 50 per cent has been restricted to a small number of selected frameworks that the Administration regards as being key to rebalancing the economy. These frameworks include business services, financial services, advanced manufacturing and engineering, creative industries, and any other important emerging sectors. For learners aged 25 and older all other apprenticeship frameworks will no longer be eligible for any government funding. This is likely to significantly reduce the volume of apprenticeship starts in Northern Ireland from 2012/13.

Apprentice Pay

3.60 We are pleased that the Government commissioned a new survey of apprentice hours and pay in the autumn of 2012 (BIS, 2013c). This enables us to build on the analysis we included in our 2012 Report on apprentices from the Apprentice Pay Survey conducted in 2011 by Ipsos MORI (BIS, 2012a), and improve our understanding of the impact of the Apprentice Rate since its introduction in October 2010.

3.61 The 2012 Pay Survey analysis presented in this section includes data for England and Wales. Care should be taken when comparing these data with data from the 2011 Pay Survey due to a change in the cohort of apprentices questioned, and associated sample error.

3.62 Table 3.2 shows that in 2012 the level of apprentice pay varied substantially with the age of the apprentice. For all age groups, mean (average) pay was higher than median pay, due to a small number of apprentices in each age group being paid significantly more than the average wage. Compared with the position of apprentices in England and Wales in 2011, median hourly pay was slightly higher for 16-17 year old apprentices and those aged 21 and above, but at the same level for 18-20 year olds.

Table 3.2: Mean and Median Gross Hourly Pay for Apprentices, by Age, England and Wales, 2012

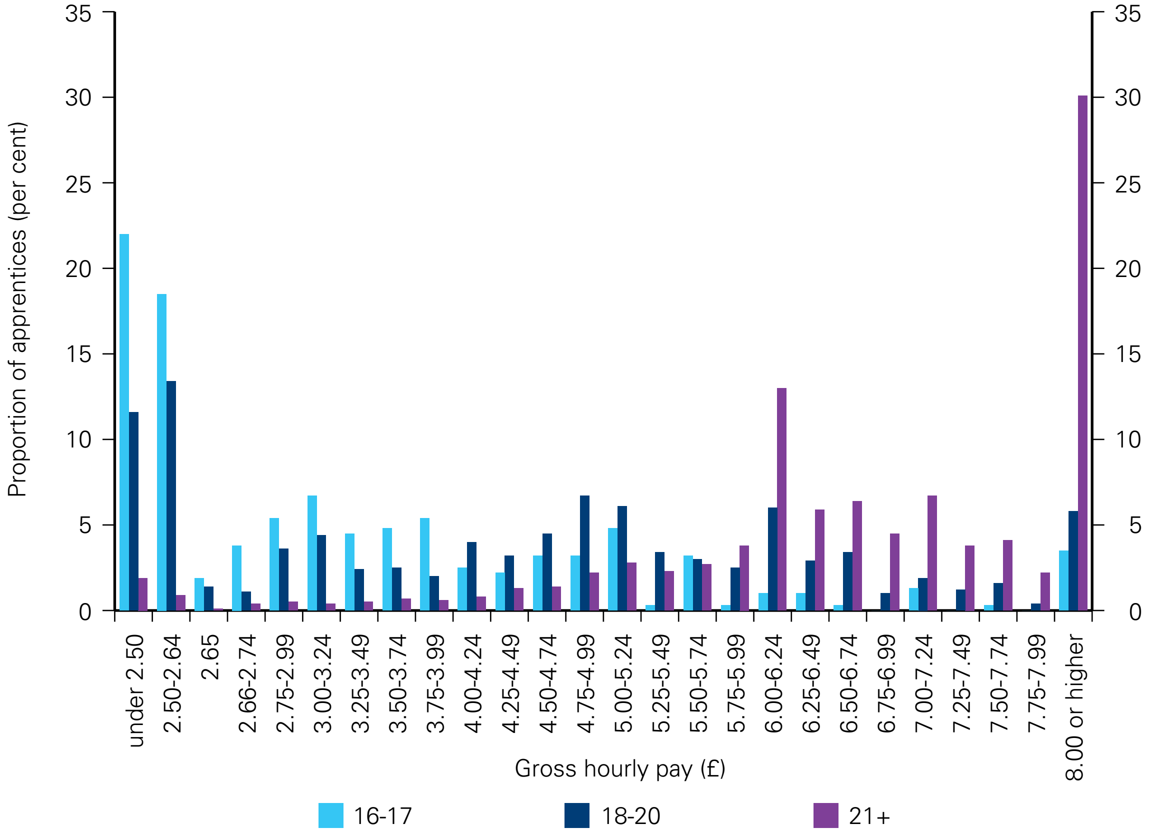
£	Mean gross hourly pay	Median gross hourly pay
16-17	3.67	2.88
18-20	4.66	4.50
21 and above	7.40	6.83
All apprentices	**6.34**	**6.19**

Source: BIS Apprentice Pay Survey, England and Wales, 2012.
Note: Data exclude those apprentices with no stated pay.

3.63 Figure 3.18 shows the hourly pay distribution in more detail for each apprentice age group. In our 2012 Report we showed that a substantial minority of apprentices were paid less than their NMW entitlement. Based on data from the 2012 Pay Survey, the proportion of apprentices paid below their NMW entitlement appears to have increased. However, it should be noted that the 2012 Pay Survey was carried out in early October 2012, shortly after the Apprentice Rate increased from £2.60 to £2.65. At the time of the survey, some apprentices would not have been paid since the uprating of the Apprentice Rate, and so their reporting that they were paid less than the Apprentice Rate in October 2012 may not indicate non-compliance. In the analysis below estimates of the proportion of apprentices paid below the NMW rates that were in place before October 2012 have also been provided so that the size of any potential timing effect on the analysis can be seen.

3.64 Figure 3.18 shows that just over 40 per cent of 16-17 year old apprentices were estimated to be paid less than £2.65 an hour, the Apprentice Rate from October 2012 (this figure falls to about 32 per cent if we instead look at the proportion paid below the Apprentice Rate prior to October 2012, of £2.60 an hour). Around 42 per cent of all 18-20 year old apprentices were estimated to be paid less than their minimum wage entitlement and a quarter were paid less than £2.65 an hour (38 per cent were paid less than their 2011 minimum wage entitlement and 18 per cent were paid less than £2.60 an hour). Around 19 per cent of adult apprentices (aged 21 and above) were paid less than their NMW entitlement (16 per cent based on 2011 rates), meaning that overall just over 27 per cent (24 per cent based on 2011 rates) of all apprentices were estimated to be paid less than their minimum wage entitlement. Even allowing for possible timing effects, this is a significant increase on 2011, when data from the 2011 Pay Survey showed that around 20 per cent of apprentices received less than the NMW.

Figure 3.18: Hourly Rate of Apprentice Pay, by Age, England and Wales, 2012



Source: BIS Apprentice Pay Survey, England and Wales, 2012.
Note: Data exclude those apprentices with no stated pay.

3.65 The 2012 Pay Survey suggests that awareness of the Apprentice Rate and its annual uprating continues to be an issue for employers of apprentices. Close to 5 per cent of all apprentices in 2012 were paid an hourly rate of either £2.50 or £2.60 an hour, which were the levels of the Apprentice Rate of the minimum wage from October 2010 and October 2011 respectively. This suggests that employers may have initially been compliant with the minimum wage, but over time had become non-compliant, either intentionally or through ignorance of the upratings to the Apprentice Rate. In addition, a much higher proportion of apprentices was paid less than their NMW entitlement in their second or subsequent year of their apprenticeship. Around 40 per cent of apprentices in their second or subsequent year were paid below the NMW, compared with just 10 per cent who were in the first year of their apprenticeship. This may indicate that many employers are unaware that for apprentices aged 19 and above, their NMW entitlement rises to their age-related rate in the second year of their apprenticeship, and so they are kept on a lower, non-compliant, wage.

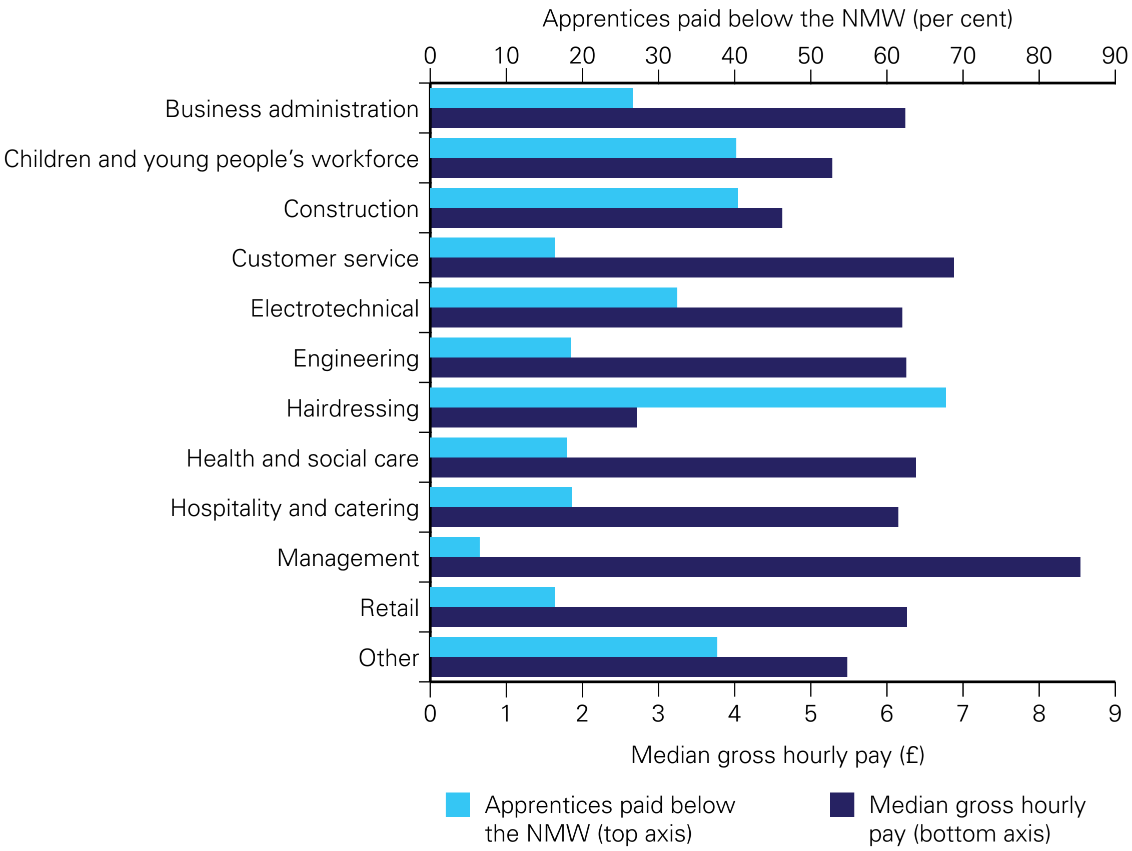
3.66 Figure 3.19 shows that non-compliance with the minimum wage is more prevalent in certain sectors, and as expected this has a direct relationship with median apprentice pay. In sectors with relatively high apprentice pay, such as management, customer service and retail, the proportion of apprentices paid less than their minimum wage entitlement is relatively low. However, in sectors with lower apprentice pay, including hairdressing, construction, and children and young people's workforce, the proportion of apprentices paid less than the NMW is worryingly high.

3.67 The hairdressing sector had estimated median hourly apprentice pay of £2.71 an hour in 2012 – six pence above the Apprentice Rate, and 68 per cent of apprentices in the sector were paid less than their entitlement under the NMW (this falls to 62 per cent if we use the 2011 minimum wage rates). Similarly, in construction the median pay rate was £4.62 an hour, and 40 per cent of apprentices were paid less than their entitlement (38 per cent based on 2011 rates), and in children and young people's workforce, a median wage of £5.28 an hour saw just over 40 per cent of apprentices paid less than the NMW (31 per cent based on 2011 rates).

3.68 The Pay Survey indicates levels of non-compliance with the Apprentice Rate which undermine the principle of a minimum wage for apprentices and are very disturbing. We have noted before that the minimum wage depends on widespread compliance, and in Chapter 4 we recommend a communications campaign and a targeted enforcement initiative to ensure that the Apprentice Rate is known to employers and apprentices, and that infringers are caught, punished, and wherever appropriate, named. We will need to explore and monitor non-compliance with the Apprentice Rate further in future.

3.69 Having considered administrative and survey data on the stock of apprenticeships and their levels of pay, we now consider related research, examining the impact of the introduction of the Apprentice Rate in October 2010.

Figure 3.19: Median Apprentice Pay and Apprentices Paid Below the Applicable Minimum Wage, by Sector, England and Wales, 2012



Source: BIS Apprentice Pay Survey, England and Wales, 2012.
Note: Data exclude those apprentices with no stated pay.

Impact of the Introduction of the Apprentice Rate

3.70 The Apprentice Rate was introduced at a relatively cautious level. It was broadly equivalent to the existing £95 contractual weekly wage payable to apprentices on government-supported schemes in England, where around 90 per cent of all apprenticeships in the UK take place. In our 2012 Report we said the available evidence and research suggested that the Apprentice Rate had had little negative effect, although we also expressed our concern that around 20 per cent of apprentices were being paid less than their minimum wage entitlement. This section considers recent additional evidence from our commissioned research and from stakeholder submissions on the impact of the Apprentice Rate.

Research

3.71 For this report we commissioned Behling and Speckesser (2013) to carry out a quantitative investigation into the impact of the introduction of the Apprentice Rate. They used data from two Apprentice Pay Surveys as well as the Labour Force Survey to carry out both a descriptive analysis of apprenticeship volumes and pay over time, and an impact analysis of the introduction of the Apprentice Rate.

3.72 The researchers found that it was likely that the introduction of the Apprentice Rate had increased apprentice pay for young people in those sectors that paid wages close to the Apprentice Rate (for example, hairdressing). Using data from the 2007 and 2011 Apprentice Pay Surveys, they found that in many sectors apprentice wages for young people had fallen, which they found unsurprising considering the wider context of high youth unemployment and subdued wage growth for young people generally. Notwithstanding the specific effects already mentioned, they did not find any overall impact on young people's pay from the introduction of the Apprentice Rate. However, they found that the Apprentice Rate may have helped to prevent wages for all apprentices decreasing any further in sectors paying close to the apprentice minimum wage.

3.73 Their descriptive analysis showed that many new apprenticeships were in the 'non-traditional' segment of the service sector and in small firms. They found that these were sensitive to costs, with pay levels closer to the Apprentice Rate than more 'traditional' apprenticeships. Further analysis found that apprentices aged 19 and over were not generally affected by the Apprentice Rate, as they were typically paid significantly above £2.50 (the Apprentice Rate at the time of the 2011 Pay Survey). This was partly due to the high proportion of apprentices aged 19 and over who were already working for their employer prior to starting their apprenticeship.

3.74 This year the Government asked us to review the contribution the NMW could make to the employment prospects of those young people in apprenticeships. In considering this, we have reviewed all of the available evidence on apprentices, including administrative data from each country of the UK and two Apprentice Pay Surveys. In addition, we have commissioned specific research on the impact of the introduction of the Apprentice Rate, and consulted with a wide range of stakeholders. The 2012 Apprentice Pay Survey exposed significant non-compliance, and we make a recommendation about this in Chapter 4. That apart, as with the youth rates we did not find evidence implying changes or measures other than continuing to focus very carefully on recommending an appropriate level for the Apprentice Rate, and we will monitor new data on apprenticeships as they become available.

Conclusion

3.75 The labour market position of young people was deteriorating before the start of the recession in 2008, and since then it had got worse. However, there are signs that for those young people choosing to enter the labour market, their position has stabilised over the last year with unemployment rates and employment rates of those not in FTE levelling off. Although youth employment is significantly below its pre-recession level, this is in large part due to the increased number of 16-17 and 18-20 year olds staying in full-time education.

3.76 Young people's median hourly earnings growth in 2012 exceeded the upratings in the youth rates. Consequently, as we had intended, the bites of the minimum wage for young people have fallen, by 0.8 percentage points to 72.0 per cent for 16-17 year olds, and by 0.3 percentage points to 79.7 per cent for 18-20 year olds.

3.77 Although the bites of the minimum wage fell for young people, more employers appear to be using the youth rates (and the adult rate) to pay young workers. A greater proportion of young people are being paid at their applicable minimum wage rate than ever before, and in 2012 there was an increase in the number of them paid at the adult rate.

3.78 In general the research we commissioned for this report, like earlier research, found little effect of the minimum wage on employment of young people. However, Bryan, Salvatori and Taylor (2013) again found evidence that minimum wage upratings had a negative impact on hours worked, particularly for younger workers during the recession, although the evidence in support of this finding was weaker than previously found. Lanot and Sousounis (2013) found that younger workers (aged 18-21 years old) were substantial complements to older workers (aged 55 and older). This suggested that the minor changes to the differences in the NMW between age groups since the introduction of the NMW have not affected the composition of the labour force.

3.79 Fidrmuc and Tena (2013) found, like their previous work, no negative employment or hours effect when a young person became eligible for the adult rate of the minimum wage. They did however find some negative employment effects of the minimum wage for young men a year before they became entitled to the adult rate.

3.80 The total number of apprenticeship starts in the UK continued to rise in 2011/12, driven by large increases in England among those aged 25 and over. The number of 16-18 year olds starting apprenticeships in England fell in 2011/12 (based on provisional data). The 2012 Apprentice Pay Survey again found significant levels of NMW non-compliance. We consider this further in Chapter 4.

3.81 Behling and Speckesser (2013) did not find any overall effect on young people's pay from the introduction of the Apprentice Rate, but found that it was likely its introduction had increased apprentice pay for young people in those sectors that paid wages close to the Apprentice Rate. They also found that the Apprentice Rate may have helped to prevent wages for all apprentices decreasing any further in sectors paying close to the apprentice minimum wage. Apprentices aged 19 and over were typically paid more than the Apprentice Rate and generally were not affected by it.

3.82 We aim to ensure that the minimum wage rates do not provide an incentive for young people to leave education or training while preventing exploitation for those in work, or undertaking an apprenticeship or internship. We present our recommendations for the youth and apprentice rates for October 2013 in Chapter 5, alongside stakeholder views and other evidence that influenced our decisions. In this chapter we have considered the contribution that the youth rates and the Apprentice Rate of the NMW could make to the employment prospects of young people, including those in apprenticeships. The evidence, including commissioned research and stakeholder views has not suggested measures or adjustments which we would recommend other than to continue to focus on recommending appropriate levels for the 16-17 Year Old Rate, the Youth Development Rate and the Apprentice Rate. We now go on to look at compliance and operation of the minimum wage, including concerns around compliance with the Apprentice Rate, in Chapter 4.

Chapter 4

Compliance and Operation of the National Minimum Wage

Introduction

4.1 In our remit this year, the Government asked us to review the regulations for salaried-hours workers, and to consider any simplification measures. It also asked us to review the accommodation offset. In this chapter we first report on these two reviews.

4.2 This chapter also considers the evidence from stakeholders and research about the operation of the National Minimum Wage (NMW). While our sense is that the great majority of employers comply with the NMW, we continued to receive evidence which suggested that in particular areas of low-paid work there was continued and growing non-compliance. We therefore focus in particular on these areas where there appear to be specific problems of non-compliance; these need to be tackled if the levels of the different minimum wage rates are to be the floor under wages in practice as well as in principle. We consider measures the Government has taken to address non-compliance across sectors and we also look at the enforcement regime more generally and actions that have been taken to strengthen it. Finally, we report stakeholders' concerns about awareness of the NMW, and the importance of ensuring that employers and workers know their obligations and entitlements under the NMW Act.

Salaried-hours Workers

4.3 Our remit for the 2013 Report asked us to 'Evaluate the regulations for salaried hours workers and consider whether there are any measures that the Government could take to ensure that it is as simple and easy as possible for employers to make sure they are paying at least the NMW and for individuals to be confident that they are being paid at least the NMW.'

4.4 In carrying out our work we questioned stakeholders during our consultation about their experience of operating this area of the NMW Regulations, including the effectiveness of the official guidance. We also spoke to HM Revenue & Customs (HMRC) about its experiences of enforcing the NMW for salaried-hours workers. In addition, we analysed the Annual Survey of Hours and Earnings (ASHE) to estimate the number of salaried workers that might be covered by the NMW Regulations. We also looked at the current regulations and supporting guidance in some detail and considered carefully whether there were any changes which could improve their operation.

The Salaried-hours Worker Group

4.5 For the purposes of testing compliance with payment of the NMW paying someone a salary has a very specific meaning which distinguishes it from work paid in other ways. Under the NMW Regulations salaried-hours work means work where there is an annual salary, paid in equal (ignoring variations for pay rises, overtime, performance bonuses etc.) weekly or monthly instalments, for a set basic number of hours a year.

4.6 ASHE data can be used to provide estimates of the number of salaried-hours workers and their pay levels. We cannot directly match the data to the NMW salaried-hours worker definition, but length of pay period (e.g. monthly) and absence of a stated hourly rate of pay are indicators of workers likely to be in receipt of a salary. According to ASHE (April 2012) out of around 24.8 million workers, nearly 14.2 million did not have a stated rate of hourly pay and just over 18 million workers were paid monthly. Ninety four per cent (953,000) of those paid at their applicable NMW rate were paid hourly, compared with only 40 per cent of those paid above their then forthcoming NMW rate. Of those paid at their age-related NMW, 6 per cent (or 63,000 workers, based on a one penny pay band) were on a non-hourly rate of pay and so were likely to be employed on a salaried basis. In other words ASHE suggests there was a small, but significant, group of salaried-hours workers receiving the NMW in 2012.

4.7 Because the NMW is an hourly rate there is unavoidably some complexity in assessing the NMW compliance of workers who are not paid hourly, and the regulations on salaried-hours workers are more complex than those concerning other categories of work. During our review of the salaried-hours arrangements we looked at how far the additional complexity in the regulations was necessary and whether the arrangements could be made easier to use.

Evidence from Our Consultation

4.8 This section considers the available evidence on how the NMW rules for salaried-hours workers have operated and what, if any, issues have arisen. This evidence is drawn from our consultation processes, including meetings undertaken by our Secretariat to discuss the regulations and guidance for salaried-hours workers with representatives from the HMRC Compliance, HMRC Technical and the Department for Business, Innovation and Skills (BIS) NMW teams.

Stakeholder Awareness of the Rules

4.9 Most responses to our written consultation did not address our questions on salaried-hours workers. Overwhelmingly those who did comment said they understood the regulations and that there wasn’t a problem. The Association of Convenience Stores (ACS) said the existing guidance (at that time on the businesslink website – see below) was clear. Others said they accepted the need for some additional complexity in the rules in order to accommodate arrangements for different pay systems. Some told us of the odd specific issue raised by a single member about the operation of the NMW rules for salaried-hours workers, but such problems appeared to have often been resolved through consultation with the representative sector body.

4.10 In Secretariat meetings with key organisations from the low-paying sectors their representatives said the rules for salaried-hours workers were not likely to affect their NMW workers. Many, such as the United Kingdom Homecare Association, told us that most low-paid workers in their sector were hourly paid. This matched the findings from the ASHE data, presented above. Stakeholders told us that salaried staff in many of the low-paying sectors were usually managerial or higher skilled and paid above the NMW.

4.11 This general stakeholder silence is not necessarily to be read as 'no news is good news'. For example, it may indicate low awareness of the rules for salaried-hours workers. There may be employers who are mistaken about the applicability of the salaried-hours category to their staff. We look later in this section at whether there are areas of low awareness of the NMW rules for salaried-hours workers, or areas of higher risk of non-compliance, and how these might be addressed.

Views on the Content of the Regulations

4.12 Representatives of some business groups made positive statements about the NMW rules. The CBI commented that the NMW legislation was relatively straightforward for organisations to comply with and generally well understood. It said that where parts of the regulations were more complex – for example in relation to salaried-hours workers – the additional rules were valuable and needed. In a Secretariat meeting, the Trades Union Congress (TUC) indicated that it was also supportive of the current rules for salaried-hours workers; the principle of this type of work was clear, albeit expressing it within the NMW Regulations necessarily involved catering for a number of different situations.

4.13 There was no suggestion made during the Secretariat's discussions with HMRC and BIS that any of the regulations were technically deficient. Nor are we aware that the salaried-hours regulations require any substantive adjustment as part of the BIS consolidation of the NMW regulations. Our work did, however, unearth a possible alternative way to calculate compliance with the NMW which may be a little simpler, and this is covered later in this section.

Views on Accounting for Additional Hours

4.14 Some stakeholders such as The Royal College of Midwives referred to a concern about salaried workers undertaking hours in excess of their contracted hours without being paid. It was worried that, while the starting salaries for full-time maternity support workers were above the NMW, because staff were often working additional hours it was unable to accurately assess if they were in fact paid above the NMW. These concerns relate to accounting for additional hours worked and the effects on hourly rates; they are not evidence, per se, of a specific problem with the NMW rules for salaried-hours workers.

4.15 UNISON thought the issue around establishing the hourly rate for NMW purposes was about contracted hours: employers needed to be clear about these and not seek unpaid hours over and above them. Employers should have systems for recording all working time by salaried-hours staff.

4.16 We also heard of situations where some employers who have previously paid their salaried workers well above the NMW, may now find that wages are much nearer to the statutory minimum following pay restraint. Incomes Data Services (2012a) highlighted that minimum rates in local government were now close to the level of the NMW. These workers were likely to have clearly defined contracts and when paid a salary fall into the category of salaried-hours worker. Local authorities in these situations would need to make sure they applied the necessary NMW calculations to ensure compliance.

4.17 HMRC told the Secretariat that compliance issues had arisen in parts of the hospitality sector where neither an employer nor their workers had kept accurate records of hours worked. This had been a particular issue where pubs were part of a larger chain and the company head office had failed to control and keep track of hours worked.

HMRC Experience of Compliance and Enforcement

4.18 We asked HMRC how many of its complaint cases related to salaried-hours in the six months to October 2012. There were ten cases closed during this period which had salaried-hours workers as the main risk. Of these, 4 cases were found to involve underpayment of the NMW totalling £30,694 for 48 workers. It should be noted, however, that there would have been other cases in which the main issue involved was another type of work, for example time work, with salaried work a secondary issue. The four cases represented around 1 per cent of all HMRC NMW cases during the same period where arrears of NMW pay were found.

4.19 We also asked HMRC which sectors experienced non-compliance with the salaried-hours regulations. They tentatively highlighted the hospitality sector, in particular pub chain managers, adding that sectors where managers have autonomy provided the work is done (for example retail businesses, holiday camps, restaurants etc.) were more likely to have salaried-hours compliance problems.

4.20 However, HMRC advised us that there were many more instances of compliance officers checking salaried-hours work and finding that it was in order. But officers often spent time and effort explaining how salaried-hours pay was calculated under NMW legislation. This advice was given as part of HMRC's service to try to educate employers at every opportunity in order to prevent problems from occurring. In addition, because of their complexity, the actual calculation of arrears is a longer process than for other types of work. In other words HMRC experience lends some support to the view that simplification is desirable, if it could be achieved. We look next at what simplification might be possible.

Making It Simpler and Easier

4.21 We examined whether the existing rules for salaried-hours workers could be made simpler and easier for employers and workers to use so that both might have greater assurance that their obligations and rights were being met. We also considered the reasons why the rules exist and the available evidence on how they have operated.

4.22 As explained earlier, the NMW Regulations relating to salaried-hours workers are necessarily complex. If the NMW is to remain an hourly rate, and employers are to be free to use the pay system of their choice – both of which we have taken as read – then the regulations are needed and the question is whether there is any avoidable complexity which can be reduced, or any scope to assist users in understanding what the rules require.

4.23 We considered whether an alternative approach to salaried pay could be adopted under the NMW Regulations. For example an annualised pay assessment could allow pay to vary during the year so long as at the end of twelve months at least the minimum hourly wage was paid. However, such an approach would preclude assessment of NMW compliance during the year, making it harder to establish compliance, as well as greatly exacerbating practical difficulties calculating entitlements when workers moved on.

4.24 We looked in detail at the regulations, including how salaried-hours workers were defined, and the specific provisions relating to handling travelling time, on-call arrangements, deductions from pay, and calculating hours worked in the pay reference period (such as where basic hours changed or were exceeded, or when employment was terminated).

4.25 Overall we found that the regulations provided the necessary ground rules for salaried-hours. Nothing appeared superfluous or unnecessarily difficult to interpret. The one area where we found there may be room for simplification was where basic annual hours were exceeded during the year. At present a three-stage calculation is required by the regulations (to calculate the basic hours in the pay reference period before the annual hours were exceeded; to calculate the basic hours in the pay reference period after the annual hours were exceeded; and to identify the hours worked after the basic annual hours were exceeded). An alternative approach would be to adopt a two-stage calculation: this would simply add the basic hours already identified and due to be paid in the pay reference period to the actual excess hours over the annual total. This is the same approach that is already used to calculate the hours in the pay reference period following that in which the annual basic hours are exceeded. While this may be a worthwhile simplification we judge that further work is required by BIS and HMRC to better understand the technical details and implications of such a change. This should also ensure there are no hidden drawbacks to this approach.

4.26 As well as looking at whether the regulations could be made any simpler, we also considered the efficacy of the official guidance for this category of work on GOV.UK. While, as already noted, the regulations dealing with salaried-hours workers' pay are necessarily more complex than those dealing with time workers, it is important that the guidance supporting these should make it as clear as possible to the user what is required to be NMW compliant.

4.27 Later in this chapter we report on progress in implementing our recommendation in our 2012 Report to review the Government's NMW guidance. We report that the guidance introduced on GOV.UK, and which replaced that previously available on businesslink and directgov, lacks the breadth and depth of its predecessors. In some areas guidance is either missing or seriously diluted, and one of those areas is salaried-hours work. The stakeholder satisfaction we reported above with respect to the rules and guidance on salaried-hours work was of course referring to guidance that existed prior to GOV.UK. This previous guidance set out in detail the steps required to calculate salaried-worker pay, and gave worked examples where calculations were more complex, such as when hours changed, basic annual hours were exceeded or employment ended. However, the new guidance covers none of the complexities of salaried-hours work. An employer or employee now has no official explanation of how to comply with these aspects of NMW law.

4.28 We concluded from the evidence we have received that more should be done to aid employers and workers to understand the rules on salaried-hours work. The NMW on-line calculator on GOV.UK could be adapted to cover the calculations for salaried-hours work too, or if that is not possible some form of on-line worksheet could be provided for each necessary salaried-hours work calculation so as to help to give greater assurance that the NMW was being paid. In addition, the worked examples on salaried-hours work, and linked guidance, previously available through businesslink, should be added to GOV.UK.

4.29 In summary, we do not believe that the regulations are unnecessarily complex, but putting in place clear guidance would make it as simple and easy as possible for employers to make sure they are paying at least the NMW and for individuals to be confident that they are being paid at least the NMW. Therefore, **we recommend that the regulations for salaried-hours workers continue to be required in all their essentials. In order to make it as simple and easy as possible to achieve National Minimum Wage compliance the Government should adapt its guidance to include examples and an on-line means of determining what payment is required.**

The Accommodation Offset

4.30 In our remit this year the Government asked us to review the accommodation offset. We have reviewed the offset twice before (in 1999 and 2006) and it is an area of continued concern for some stakeholders and one on which we receive evidence each year.

What is the Accommodation Offset?

4.31 The accommodation offset was introduced in 1999 and provides a mechanism to enable employers to offset the cost of providing accommodation for workers against the minimum wage, up to a daily maximum limit (which has risen broadly in line with the adult rate, and is now £4.82 a day). Accommodation is the only benefit-in-kind that can count towards the minimum wage. The offset arrangements provide protection to workers and give some recognition of the value of the benefit, but are not intended to reflect the actual cost of provision.

This Review

4.32 Ever since our first report, we have commented on evidence received from stakeholders in relation to the offset. They have generally fallen into two camps: those who think the level is too low, and that as a consequence employers are deterred from providing accommodation; and on the other side, those who see the benefit to the employer of having workers on-site as more than compensating for the reduced charge for accommodation.

4.33 In this chapter, we only briefly refer to previous decisions and evidence. Detailed information on the evolution of the offset and evidence received (including the two previous reviews) can be found in Appendix 4.

4.34 Detailed information and data about the extent and use of the accommodation offset are limited, although there are some official data on tied accommodation. We received no responses to our invitation to submit proposals for research on the offset in January 2012. In May we held a workshop to gather stakeholder views on how we could obtain more evidence. The workshop identified the obstacles preventing substantive research but did suggest some possible sources of information, which we comment on, as appropriate, later in this chapter. We are very grateful to those who participated in the workshop and who subsequently facilitated an improved evidence base.

4.35 We have approached the review by focusing on several key questions:

- How far does the offset protect low-paid workers?
- Is the level of the offset depriving workers of accommodation that would otherwise be offered?
- How far has the offset led to changes, if any, in the provision of accommodation?

4.36 We also investigated the number of workers employed in the sectors where the provision of accommodation was more prevalent and how this had changed over time, the cost to employers of providing accommodation, and the variations in what was included within the accommodation provided for deduction of the offset (e.g. utilities etc.).

Simplification

4.37 One of the Commission's guiding principles has been to have a minimum wage that is simple and straightforward. As part of the work for our 2012 Report, the Government asked us to consider whether the minimum wage arrangements could be made even simpler, as it regarded reducing and simplifying regulation as a key priority. In conducting this review we have kept in mind our, and the Government's, desire to keep the minimum wage arrangements as simple and straightforward as possible.

4.38 The offset has given rise to some difficulties of interpretation of the regulations in the past, but in its evidence this year, the Association of Labour Providers (ALP) said that there was now no doubt in the minds of employers as to the current position, which was that employers that provided accommodation directly or indirectly to workers who were on the minimum wage could not charge more than the offset.

Provision of Accommodation

4.39 We examined how many workers are accommodated by their employer and likely to be affected by the offset, and how this has changed over the past 13 years. There are two main sectors from which we received evidence on the offset – agriculture and hospitality – but there are no readily available sources of data on employer-provided accommodation in these (or other) sectors. We have considered the official data on tied accommodation, but they have limitations, not least that they do not include caravans (a major source of accommodation for temporary workers in the agriculture sector) nor addresses where more than 25 people reside.

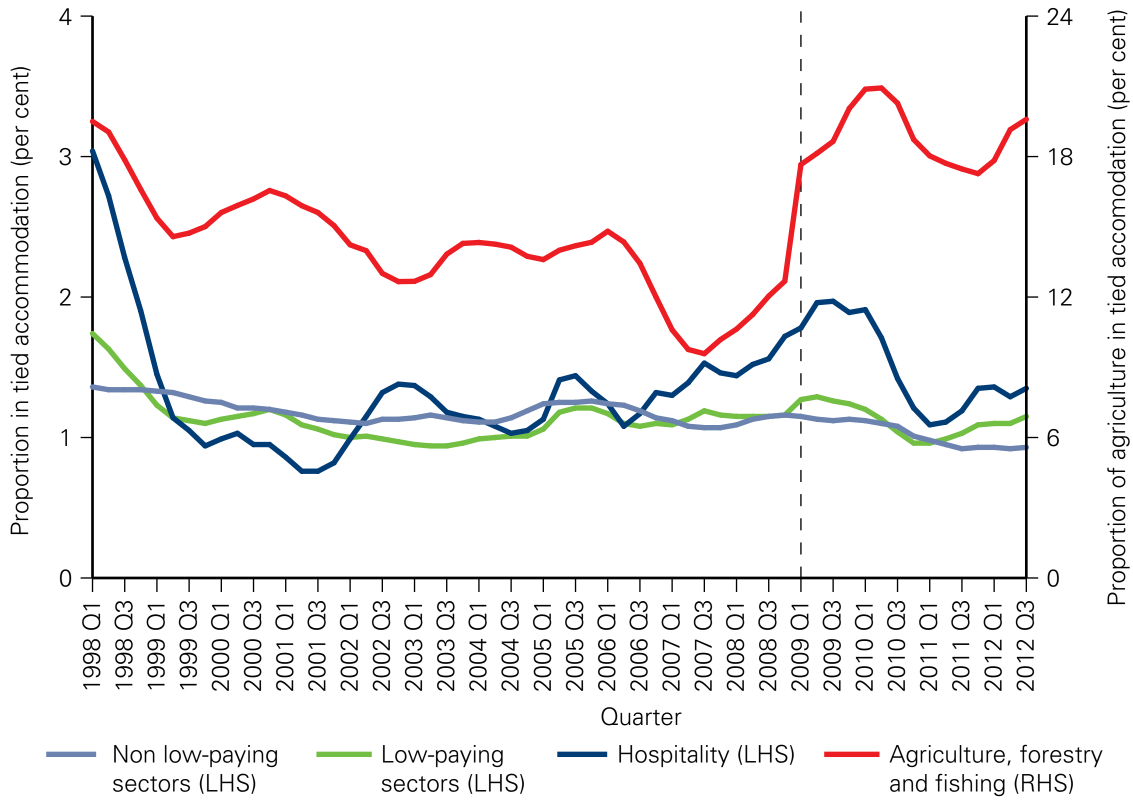
4.40 We also undertook two surveys – one for providers of accommodation and one for workers who receive accommodation from their employers. The results are included in our analysis, although low response rates limit the surveys' value.

Tied Accommodation

4.41 According to the Labour Force Survey, between 1998 and 2012 the number of workers in tied accommodation fell from around 320,000 to 230,000. For the low-paying sectors, the figures were 100,000 in 1998 and 75,000 in 2012 (although direct comparisons before and after 2009 should be made with caution due to a discontinuity in the series). Over half of the number in the low-paying sectors were accounted for by agriculture and hospitality.

4.42 In hospitality there was a sharp decrease in tied accommodation prior to the introduction of the NMW, reaching a low in 2001 before picking up generally through to 2010. It has since fallen back. Figure 4.1 shows that in the first quarter of 2012, the proportion in tied accommodation was slightly below that in 2009. In agriculture, the percentage declined between 1997 and 2007, but picked up during the recession before falling back in 2011 and 2012. In the third quarter of 2012 the proportion was similar to 2009. Numbers in tied accommodation are lower in low-paying sectors outside hospitality and agriculture.

Figure 4.1: Proportion of Workers in Tied Accommodation, by Sector and Low-paying Industry, UK, 1998-2012



Source: LPC estimates based on LFS Microdata, quarterly, four-quarter moving average, UK, Q2 1997-Q3 2012.
Note: Due to a change in sector definitions, there is a break in the series in the first quarter of 2009. Data before and after Q1 2009 are not directly comparable.

4.43 Our survey of accommodation providers yielded some information on the supply of accommodation in these two sectors. Of the 50 who said they currently provided accommodation, 46 per cent said they had reduced the amount of accommodation available to their workers. In hospitality, reasons given for reducing provision were that the rooms were required for hotel guests and that it was too expensive to subsidise accommodation for employees. In agriculture, the main reason was because it was too expensive to provide decent accommodation.

4.44 Our survey also asked accommodation providers if they would like to provide more accommodation to their workers. Around a third said they would, to increase staff retention and to attract new staff. When asked what would allow them to do this, the vast majority said an increase in the offset or the ability to charge a commercial rent.

Rented Accommodation

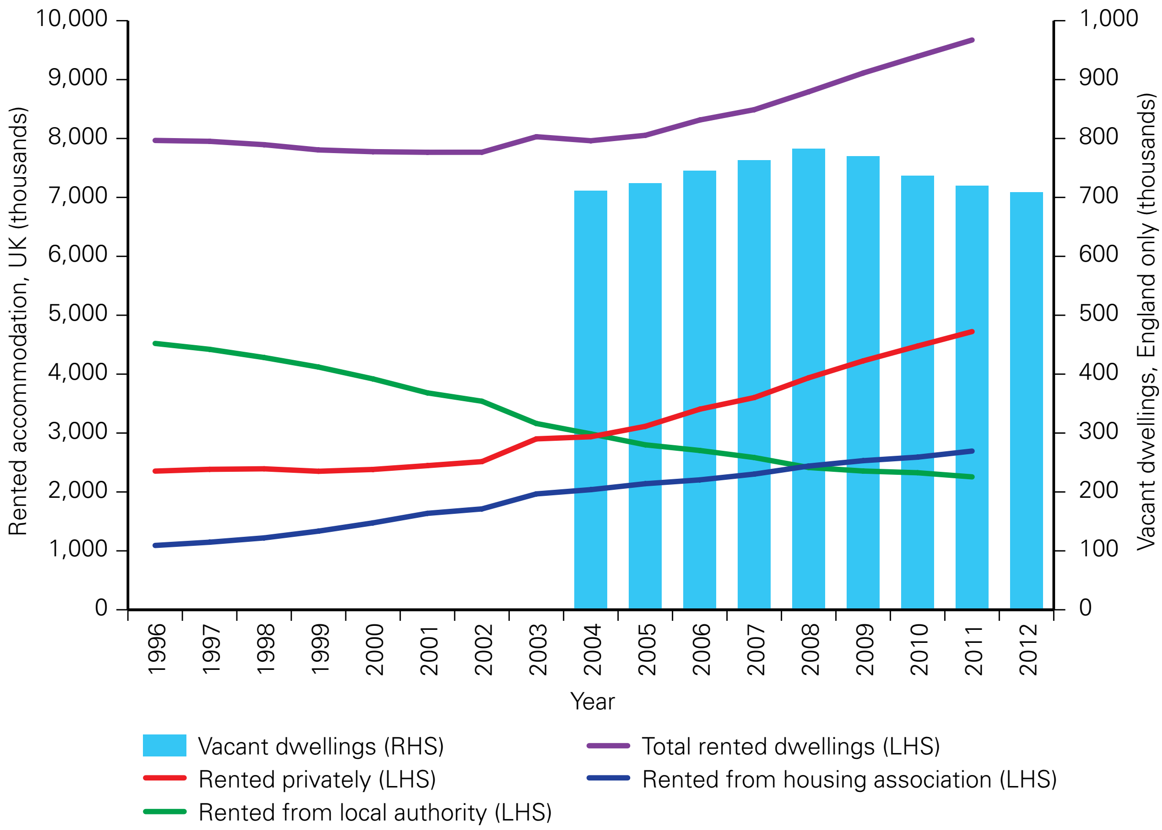
4.45 The Government publishes data on the stock of dwellings in the rented sector. Between 1996 and 2002, the number of privately rented dwellings increased marginally. Since then there has been a steady increase, as shown in Figure 4.2. Between 1996 and 2011, the number of privately rented dwellings has increased by 100 per cent. Over the same period the number of dwellings rented from housing associations has increased at a similar rate, while rentals from local authorities have followed the opposite trajectory. Overall, the number of rented dwellings increased by 21 per cent between 1996 and 2011. Between 2004 and 2008 the number of vacant dwellings (but not necessarily available to rent) in England increased steadily, but then fell between 2009 and 2012.

4.46 In agriculture, following the enlargement of the EU in 2004 (accession of the ‘A8’: Czech Republic, Estonia, Latvia, Lithuania, Hungary, Poland, Slovakia and Slovenia), there was a large increase in the number of workers requiring accommodation, much of which was provided by their employers. However, the temporary nature of the work meant a lot of this accommodation was in caravans, details of which are not captured by official data. In hospitality, specifically the hotel industry, accommodation provided to workers is often by way of rooms in a hotel, or adjacent housing block. Any change in supply of this accommodation is unlikely to register in official data as only small hotels are likely to be surveyed by the LFS.

4.47 The ALP told us that labour providers had generally ceased to provide accommodation. But accommodation was still required so workers now obtained this on the open market, in some cases through the informal economy. There was, according to the ALP, no evidence to suggest that workers were any more vulnerable to exploitation when services were provided by their employers, where at least they could be audited, rather than when they were provided by third parties.

4.48 During our visit to Cornwall in 2011, Winchester Growers told us that it had to provide accommodation to its workers, given the short picking season and the cost of local private rented accommodation available. In Cambridgeshire in 2012, The Shropshire Group showed us the accommodation it provided to around 2,000 workers, and set out the importance and necessity of providing it.

Figure 4.2: Dwelling Stock, by Tenure, UK, 1996-2011 and Vacant Dwellings, England, 2004-2012



Source: DCLG dwelling stock estimates, UK; DCLG vacant dwelling stock estimates, England, 1996-2012.

4.49 The data tell us that the number of rented dwellings has increased since the introduction of the minimum wage, but since 2004 there has been a modest increase in the number of vacant dwellings. However, it is not possible to determine what, if any, impact the accommodation offset has had on these changes. We have been told that labour providers are no longer providing accommodation, but evidence received during Commission visits clearly shows that some employers are still providing accommodation.

Defining the Benefit

4.50 When the offset was initially introduced, the intention was not to reflect the actual cost of providing the accommodation, but to recognise that there was a benefit to both workers and employers, and also to provide some recompense to the employer for the actual provision. Accommodation providers, and their representatives, tell us that some workers receive a large benefit by having accommodation provided at a very low rent. Some argue that this discriminates against those who are not provided with accommodation, and therefore have to find their own on the open market.

4.51 But accommodation providers generally accept that there is a benefit to housing their workers. In its consultation response, British Growers said that employers recognised the value of a motivated and comfortable workforce. In response to our accommodation provider survey, 68 per cent of respondents said it was important to their business to provide accommodation to workers. The most common reasons cited were the need to attract and retain staff and the limited availability of public transport. Only two respondents said it was not necessary to provide accommodation.

4.52 During our visits to Scotland and Cambridgeshire in 2012, we specifically asked accommodation providers if they could put a monetary figure on the value of the benefit to them. None were able to do so, but a Scottish hotelier said it made it easier to attract staff; they were on site if needed; and the company did not have to make use of casual staff (who were considerably more expensive).

4.53 Responses to our survey produced a range of costs of provision depending on the type of accommodation provided. In most instances the cost of provision exceeded the amount charged to the worker.

Free Choice

4.54 On a number of occasions it has been put to us that the offset should apply only where accommodation is provided as a condition of employment, and not where the employer would be content for the employee to live elsewhere. Labour providers have argued that the offset rules were primarily intended to apply to traditional tied accommodation, where the worker was housed at or near to their place of work and there was a recognised mutual benefit to both parties. They contrasted labour providers who were supplying a service to new arrivals to the UK, often at considerable inconvenience to themselves. This was particularly the case following the accession of the A8 to the EU. Labour providers were finding that they had to make arrangements to accommodate migrant workers because of these workers' difficulties in obtaining accommodation on the open market (e.g. they did not have bank accounts, could not provide references and often did not want to stay as long as the minimum rental period). Often labour providers subsidised the accommodation because they could not charge more than the offset.

4.55 The review the Commission undertook in 2006 recognised that employment conditions had changed since the introduction of the accommodation offset. The traditional model of tied accommodation did not fit the provision offered by employers to increased numbers of migrant workers in low-paying sectors.

4.56 We have considered whether the position has changed since 2006. There are still large numbers of migrant workers seeking employment in the low-paying sectors, particularly agriculture, and there is still a demand for these workers. What has changed, however, is the make-up of the migrant workforce. Some of the original migrant workers have now settled in the UK and we have been told previously that some are themselves becoming labour providers. Some have gone home, but there is still a demand for seasonal workers and it is being met in part by workers coming from Bulgaria and Romania (the A2) under the Seasonal Agricultural Workers Scheme. There are currently restrictions on A2 workers, but these restrictions are due to be lifted at the end of 2013.

4.57 In its written evidence, the TUC said that employers offer accommodation because they gain something by doing so, in terms of employee availability, attendance and retention. It recommended that the offset should only apply when living in accommodation was not a direct requirement of the job. Where it was, no deduction should be allowed.

4.58 Many of those workers from the A8 who have now been in the UK for some time are unlikely to face the same sorts of challenges that they encountered when newly arrived. During our visit to Scotland, Citizens Advice Scotland told us that it now saw more Polish nationals with out-of-work issues than with in-work issues.

4.59 But many migrant workers are still vulnerable and susceptible to exploitation, particularly newer arrivals. It is possible that a number of migrant workers will have little real choice but to accept accommodation from their employer in order to work in the UK. The ALP has told us that a large number of its members no longer provided accommodation due to the costs involved. It has argued that the separate accommodation offset arrangements should be abolished except in the case of tied accommodation (for which it says they were originally intended). Where accommodation was provided by employers on an optional basis, workers should be free to agree voluntarily to deductions from their pay to meet the cost of accommodation.

Compliance Issues

4.60 Over the last three years between 5 and 6 per cent of non-compliance cases have concerned the accommodation offset, according to statistics produced by the Government. Information provided by the Pay and Work Rights Helpline (PWRH) showed that since May 2009 it has received around one call a day about accommodation. A large proportion (though not all) of these calls have come from agriculture and hospitality, and they have come from all regions of the UK.

4.61 These data are not evidence of the extent of provision or protection offered by the offset but they are an indication of the incidence of problems associated with it. They suggest there may be a low but continuing level of infringement with regard to deductions for accommodation.

4.62 In its evidence, the TUC said that the offset had been claimed by employers in circumstances where accommodation was illegally overcrowded or unfit for human habitation. It had also gathered evidence on illegal evictions, and attempted evictions, from tied accommodation. The ALP said that some labour providers had arrangements with commercial letting agents and other landlords whose details they provide to their workers, and as long as the labour provider took no fee, this was within the accommodation offset arrangements. It said, though, that it would be naive to believe that there were not labour providers referring workers to letting agents and receiving a commission, but probably in such a way that there was no chance of HM Revenue & Customs (HMRC) detecting it.

International Comparisons

4.63 We have examined the different ways deductions for accommodation are treated in other countries. Details of these are shown in Appendix 3. Most of these provisions have changed little since we first looked at them in 1999. Some countries, like Spain and Greece have no provision for accommodation. Of the others that do have a provision, the extent and complexity of the arrangements varies considerably. In Ireland, for example, there are different rates depending on whether the worker receives board and lodgings, board only or lodging only. We have not found anything in overseas approaches which has altered the conclusions of our review.

Provisions under the Agricultural Wages Boards

4.64 There are different offset provisions under the three Agricultural Wages Boards (AWBs): England and Wales; Scotland; and Northern Ireland, and these also differ from the provisions under the NMW. The main difference is that under the AWBs, there are different rates of offset depending on whether a house or other type of accommodation is provided.

4.65 Information from the Department for the Environment, Food and Rural Affairs shows that on average, between 2007 and 2010, 20 per cent of workers sampled as part of its Earnings and Hours of Agricultural Workers Survey had a house or other accommodation provided by the employer. The higher the AWB grade the more likely it was that a worker had a cottage. Our Secretariat met with independent members of the AWB for England and Wales who advised that most tied accommodation was occupied by permanent skilled workers (i.e. above Grade 1[7]) and in many cases, no direct charge was made for its provision. They said Grade 1 workers may also be housed by their employer, perhaps in a caravan or other form of temporary accommodation. In its evidence this year, the National Farmers' Union (NFU) quoted a survey of 2,000 farm workers by Farmers Weekly, which showed that 43 per cent had a tied cottage as part of their employment package and a further 15 per cent had another type of accommodation.

4.66 In December 2012, the Government announced its intention to abolish the AWB for England and Wales before 1 October 2013, subject to the legislative process. If the Board is abolished, statutory requirements as to terms and conditions will be determined solely by the NMW Regulations and other employment legislation although existing workers will continue to have a contractual right to their current terms and conditions.

Stakeholder Views on the Offset

4.67 The British Hospitality Association, British Beer and Pub Association, Business In Sport and Leisure, and Association of Licensed Multiple Retailers (BHA, BBPA, BISL, ALMR) said they were supporters of the offset. They said providing accommodation was necessary to attract young workers in particular, but the current level of the offset did not meet the cost of doing so. They believed that the offset had protected low-paid workers, but that its low level meant that workers may be sharing bedrooms, when a higher offset might make the provision of single occupancy accommodation more feasible. Winnock Hotel said that the hospitality industry could generate many jobs in the future but the low level of the offset was an obstacle to employing people who were willing to relocate.

4.68 The NFU reported that in a survey it had undertaken in 2011, the average daily cost of providing accommodation was £5.62. It said that it was likely that a substantial increase in the offset would enable more reinvestment in accommodation. It suggested that a realistic

7 The Agricultural Wages Board for England and Wales sets minimum rates of pay for six grades of worker. The lowest rate, for workers in grade 1 (initial grade, typically covering casual/harvest workers) in the last couple of years has been set at just above the adult NMW. As of October 2012, it was 2 pence above the adult NMW. The minimum rate for grade 2 workers as of October 2012 was 77 pence above the adult NMW.

increase would be £10-£15 per week. The ALP said that labour providers could live with the present position whereby, in effect, they were financially precluded from providing accommodation to their workers. From the public policy perspective, however, labour providers could see no justification for the current approach as it bore no relation to the marketplace in which they operated or to the interests and wishes of their workers.

4.69 British Growers said that employers recognised the value of a motivated and comfortable workforce, but that the cap was set too low to provide accommodation good enough to create such a relationship. This meant that employers stopped providing accommodation, leaving workers exposed to exploitation by landlords, or subsidised it, but this was not sustainable in the long run. It wanted to see the limit raised to at least £45 per week.

4.70 The CBI said that the accommodation offset should be retained. It said that the offset played a valuable role, particularly in encouraging the provision of accommodation in rural areas where alternative accommodation was non-existent or cost-prohibitive. It was therefore vital that the offset was set at a level which encouraged employers to provide accommodation.

4.71 The Rail, Maritime and Transport Workers' Union regarded the offset as a tax on the lowest-paid UK seafarers. It wanted to see the offset removed. It gave examples of seafarers having the offset deducted, which it thought was wrong when the individuals had no choice of accommodation. The TUC believed that increasing the offset would push more workers into poverty. It believed that living in employer-provided accommodation could have a negative effect on the worker and that having control over where workers lived skewed the politics of working life further towards the employer. It said that the offset should be retained for employees who have a choice about whether to accept accommodation, but where there was no choice no deductions should be allowed. UNISON said employers should not be able to reduce NMW pay by more than £4.82 a day particularly where the worker had no choice about taking up the accommodation. Unite was opposed in principle to charges for accommodation being deducted from the NMW, but was concerned that ill-thought through deregulation without effective enforcement guidelines could lead to further exploitation. It recommended that the offset should be kept under review and that it would support an increase that did not exceed the rise in the adult NMW.

Our Conclusions on the Accommodation Offset

4.72 In undertaking this review, we identified a number of areas where we wanted evidence in order to consider the impact of the offset to date and therefore what, if any, changes should be made to it. Although we believe we have pursued all practicable options, the nature of the offset – covering types of work and worker about which official data are limited, and being only one of the factors affecting provision of accommodation – has presented major obstacles to assembling the substantial body of evidence we would have liked.

4.73 The data, including that from our survey of accommodation providers, have shown that the overall numbers and proportions in tied accommodation have decreased. Numbers in privately rented accommodation in the UK have steadily increased since before the minimum wage was introduced, and since 2004 the number of vacant properties (not necessarily available to rent) has remained relatively constant. Stakeholders have told us that supply of employer-provided accommodation has decreased, and this is borne out to a limited extent by the official data and our own survey. However, the evidence does not allow us to determine how far these changes may be due to the level of the offset rather than to other factors affecting property markets and provision.

4.74 There were differing views from stakeholders about what changes, if any, should be made. There was overwhelming support for an accommodation offset from both worker and employer representatives but with views differing on the actual level and the scope. Stakeholders have confirmed that where employers are providing accommodation the offset is protecting workers by precluding excessive charging for accommodation.

4.75 There remains a strong rationale for an accommodation offset – a measure that protects minimum wage workers against an excessive reduction in their income, while also recognising that there are benefits to both employers and workers. Defining that benefit (for both workers and employers), and therefore what the level of an offset should be is in significant part a matter of judgement, particularly as a single rate for the UK must cover very different local employment and housing markets.

4.76 We recognise too that the employment conditions in some sectors have changed since an offset was first introduced (and subsequently reviewed). There also remains a distinction between accommodation required to be taken and that where there is a free choice. But, as our last review found, it is not clear that there is a simple and robust test of this distinction in practice. Obtaining a signature on an employment contract or some separate agreement, for example, does not necessarily demonstrate a genuine free choice, nor that the offers of accommodation and work are really independent of each other. Any test must work in all sectors where accommodation is provided and not only in those where verification may be easier, for example those regulated by the Gangmasters Licensing Authority.

4.77 There are good employers who would not charge excessive rents if the offset rules were relaxed. But without the protection of a maximum charge for accommodation, provided by an offset, some employers could charge excessive amounts and therefore undermine the principle of the minimum wage. We believe, therefore, that there remains a strong case for retaining an offset for accommodation.

4.78 Therefore, **we recommend that the accommodation offset should remain the only permitted benefit-in-kind that can count towards payment of the National Minimum Wage and there should be only one rate. It should apply irrespective of whether the worker has a choice over taking the accommodation.** We make our recommendation on the level of the offset in Chapter 5.

Non-compliance

4.79 Having considered the two operational issues that the Government asked us to review this year, we now go on to consider topics on which we have evidence from stakeholders, including from our consultation and our meetings with them, and from research, which indicates that in some respects the NMW is not working as it should.

Extent of Non-compliance

4.80 We take a close interest in evidence of non-compliance with the NMW. We wish to know how far the levels of wages actually paid are at least the levels of the NMW rates that we have recommended and the Government has accepted. We also want to support the Government (BIS and HMRC) in maximising compliance with the minimum wage so that law-abiding businesses are not faced with unfair competition and employees receive their entitlement.

4.81 We have set out in previous reports the reasons why we believe compliance and rigorous enforcement are essential to the success of the minimum wage. It has always been difficult to get an accurate picture of the full extent of non-compliance but we believe that it is important to try, so that an assessment can be made as to how widely the minimum wage is being observed.

4.82 There are no official data that indicate reliably the level of non-compliance. Official data show that in April 2012 around 211,000 adults (those aged 21 and over) were paid less than the adult rate of the minimum wage. However, this figure should not be interpreted as a measure of non-compliance as there are legitimate reasons why workers may be paid below the minimum wage, for example those who have accommodation provided by their employer and those who are entitled to a lower rate because they are apprentices. That said, based on the data we have on apprentices (see Chapter 3) and the accommodation offset (discussed above) our working assumption is they probably account for less than half of this number. We also think it likely that there is almost certainly under-reporting of unlawful failure to pay the NMW, for obvious reasons.

4.83 Many stakeholders continue to raise non-compliance with us, whether in relation to specific concerns or to stress the general point that the effectiveness of the NMW depends upon widespread compliance. In its evidence this year, the CBI emphasised the importance of tackling non-compliance. It said that HMRC must continue to take action against unscrupulous businesses who fail to pay workers their due, and in the process undercut compliant businesses. It endorsed a risk-based approach to enforcement and the prioritisation of resources to 'at risk' areas. The TUC said that justice needed to be seen to be done if enforcement was to generate a deterrent effect that would encourage employers to pay the NMW. It detected that there was still a feeling among employers at the rough end of the labour market that they could get away with non-compliance.

Research on Non-compliance

4.84 For our 2012 Report, Ipsos MORI and Community Links (2012) undertook qualitative research into non-compliance. It found that non-compliant employers ranged from those who said they could not afford to pay the minimum wage to those for whom it was a deliberate choice. There were a number of drivers for this. Some businesses simply could not afford it and some employers felt there were those who should not be paid the minimum wage, for example students and those doing casual work to supplement income from a first job. The existence of a pool of workers prepared to work for less than the NMW was also commonly cited. This research gave an insight into the reasons why employers did not comply, but it did not give any further insight into the extent of non-compliance.

4.85 For this report, le Roux, Lucchino, and Wilkinson (2013) conducted quantitative research, using the Labour Force Survey (LFS) and the Annual Survey of Hours and Earnings (ASHE), into the extent of non-compliance with the minimum wage. This research only used official data sources so would not cover the whole non-compliant population, e.g. those who operate in the informal sector. Bessa, Forde, Moore and Stuart (2013) researched the impact of the NMW in social care, to which we refer later in this chapter.

4.86 Using ASHE, le Roux, Lucchino, and Wilkinson (2013) found that between 2000 and 2011 around 0.8 per cent of adult workers were estimated to be paid less than the minimum wage. Over the same period, when using the LFS, estimates of non-compliance for adult workers increased from around 0.4 per cent to 1.7 per cent. However, there were some biases in these measures, particularly the LFS, where the issue of rounding (when the NMW was not a round number) would have had an impact on these figures (see Fry and Ritchie (2012b) for further details). This reduces the estimate of non-compliance for adult workers to around 0.6 per cent using ASHE. They also found variations within these rates between different age groups, genders, and geographic locations. The impact of the recession on non-compliance rates was unclear.

4.87 The researchers suggested that, when comparing those paid less than the minimum wage with all those in work, the proportion not receiving their entitlement to the minimum wage was very low. However, two important caveats are required. First, ASHE data are reported by employers so we would not expect a large number to voluntarily report their non-compliance. Second, the extent of non-compliance is more meaningfully expressed in terms of the proportion of the low paid, rather than the proportion of all those in work. If the base population is limited to the bottom 10 per cent of earners, i.e. excluding those whose pay is significantly above the minimum wage (and who by definition are not among those at risk of underpayment of the NMW), then the findings of this research indicate that ASHE suggests that between 2000 and 2011 around 6 per cent of the bottom decile of adult earners did not receive their entitlement.

4.88 We recognise that the research we have commissioned has not been able to provide precise estimates of non-compliance across the UK. However, if non-compliance remains at this sort of level – and our sense from more recent evidence we have received is that if anything it is more likely to have increased than reduced – then it is a significant problem. There is clearly no room for complacency, especially as these findings may not include workers earning below the National Insurance threshold and will not include those working in the informal economy, where the evidence we have seen indicates that payment below the NMW is probably more common than in the formal economy. They underline the importance of tackling non-compliance in those specific areas which the evidence suggests are hotspots of infringement. We now go on to look at the more prominent of these.

Apprentices

4.89 In our 2012 Report we presented findings, from the 2011 Apprentice Pay Survey (BIS, 2012a) and our own research (Ipsos MORI and Cambridge Policy Consultants, 2012), on the implications of the introduction of the Apprentice Rate. The research found that the Apprentice Rate was more likely to affect the pay of the youngest apprentices, with 31 per cent of 16 and 17 year old apprentices paid below it. This was most apparent in hairdressing, where 48 per cent of all apprentices, and 53 per cent of 16 and 17 year old apprentices were paid below their applicable minimum wage – a proportion over half as large again as in any other sector. We were concerned by the finding that a substantial proportion of apprentices were paid below their NMW entitlement and we said action was needed to improve official guidance and raise awareness of the Apprentice Rate.

4.90 Chapter 3 of this report set out our findings from research on the operation of the Apprentice Rate in 2012. This showed that, disappointingly, matters seem to have deteriorated since our last report. We noted that estimates of the proportion of apprentices paid below their minimum wage entitlement may have been slightly exaggerated by the timing of the 2012 Pay Survey. But even allowing for this, estimates of the proportion of apprentices paid below the NMW have risen across many of the low-paying sectors, in particular hairdressing, construction and childcare. Data from the 2012 Apprentice Pay Survey (BIS, 2013c) indicated that in 2012, over 27 per cent of apprentices were paid less than their applicable NMW rate, compared with 20 per cent in 2011. Non-compliance appears most prevalent among employers of young apprentices: 40 per cent of all 16-17 year old apprentices were estimated to be paid less than £2.65 an hour, and 25 per cent of all 18-20 year old apprentices were estimated to be paid less than £2.65 an hour.

4.91 These are levels of non-compliance which undermine the principle of a minimum wage for apprentices. We have noted before that the minimum wage depends on widespread compliance. Without that it does not provide protection for workers and lawful employers may be unfairly undercut by infringing competitors.

4.92 The data suggest that the problem is most acute in hairdressing. In 2012, around 64 per cent of 16 and 17 year old apprentices and 70 per cent of 18-20 year old apprentices were paid below their entitlements. Financial pressures on the industry may be a factor, as may ignorance of what the law requires – a problem which the National Hairdressers' Federation and Habia raised in evidence, reported below. However, in our judgement these are unlikely fully to explain the problem. These factors are not unique to hairdressing, but non-compliance in hairdressing is markedly worse than elsewhere. We think it difficult to avoid the conclusion that in much of the industry there is a culture of non-compliance, in which paying the apprentice minimum wage is regarded by some as somehow optional.

4.93 The Government's evidence showed that issues relating to apprentices and apprenticeships were the reason for 25 per cent of HMRC's non-compliance cases in 2011/12. The Government said BIS was working closely with HMRC to enforce the NMW for apprentices and target communications to raise awareness of the NMW rules as they apply to apprentices. We support this, but it is clear from the evidence we have gathered this year that the problem of apprenticeship non-compliance is increasing, and so more needs to be done. Non-compliance is so extensive that the Apprentice Rate is not in fact functioning as the floor under apprentice pay. Therefore, **we recommend that the Government should combine a communications campaign and a targeted enforcement initiative to ensure that the Apprentice Rate is known to employers and apprentices, and that infringers are caught, punished, and wherever appropriate, named.**

Care Workers

4.94 In our 2012 Report we said that public commissioners of services had a responsibility to fund care providers such that they are able to discharge their statutory obligations, including payment of the NMW. The Commission asked the Government to address sustaining the supply of social care, so that providers could meet cost pressures like the NMW, in the (then) forthcoming Care and Support White Paper.

4.95 We were concerned that given the cost pressures in the system and complexity in pay arrangements such as payment by visit time, breaches of the NMW may be occurring, for example as a result of non-payment for travel time (this occurs if hourly rates are not set far enough above the NMW to remain above it when unpaid travel time is factored in). While, encouragingly, HMRC told us it had the social care sector on its radar, we were clear that the sector required appropriate enforcement and we called for NMW guidance to be better geared to the issues faced in social care, as part of our overall recommendation for improved guidance.

4.96 The evidence we received this year again broadly fell into two parts: of a continued inadequate level of fees paid by state commissioners of social care (the vast majority purchased by local authorities but some by the NHS) to independent sector providers; and that suggesting growing provider non-compliance with the NMW. We believe that, in reality, compliance is only likely to be satisfactorily resolved when action is taken to address commissioning practices. Commissioning practices set the financial context and can influence the organisation and delivery of care services, including pay arrangements for the sector workforce. We focus first on the nature and scale of evidence of non-compliance with the NMW in the social care sector.

Evidence of Non-compliance with the National Minimum Wage

4.97 Although ASHE data indicate that the great majority of workers in social care are paid at or above the NMW, we have received a growing body of evidence suggesting a worrying increase in non-compliance with the NMW in social care, particularly home care. The TUC said it regarded social care as the single biggest sector where evasion of the NMW occurred and that it continued to spread through practices such as the misuse of zero hours contracts and non-payment for travel time – a brief explanation of zero hours contracts is given in the box below. Other union organisations also advised of their concerns about NMW compliance in social care.

4.98 UNISON highlighted possible underpayment of the NMW when staff were paid by short visit time slots rather than actual time taken, and where no payment was made for travel time. Its recent survey of members in home care found that nearly 58 per cent were not paid for their travel time between visits, and nearly 80 per cent reported 'call-cramming' – being given too many visits too close together (UNISON, 2012).

4.99 GMB's evidence also referred to non-payment for travel time, but in addition, like UNISON, gave examples of care workers having to pay for their own mobile phones, transport and training. It also highlighted a growth in zero hours contracts in the care sector, where workers were only paid for the time they work, and may not be paid for waiting time (even on work premises).

Zero Hours Contracts

The term 'zero hours contract' does not have a statutory definition. It refers to an arrangement where the worker's contract does not specify hours that they are required to work, but – within parameters which may vary according to the contract – they must be ready to work when asked by the employer. Our sense from visits around the UK, from oral evidence sessions and from comment in the media was that there was increasing use of zero hours contracts, particularly in social care, hospitality and other service sectors where demand is to some degree uncertain but must be met as it arises. This was supported by official data which showed that from the end of 2007 to the end of 2011 the total number of workers on zero hours contracts increased by 10.8 per cent across the whole economy to 152,000. In the low-paying sectors the number of workers on zero hours contracts rose by 38.4 per cent, driven by large increases in hospitality, social care and leisure.

Workers expressed concerns to us that uncertainty about income and time commitments made it difficult to budget or to arrange childcare. It also made for difficulty in committing to any other employment. We heard on our visits how zero hours contracts can cause severe problems for workers who are also entitled to benefits, given the unpredictability of hours and income and the risk that benefits calculations will be based on over-optimistic assumptions about average income. The impact of benefit changes (particularly the introduction of Universal Credit) on the incomes of the low paid is considered further in Chapter 5.

Employers told us that zero hours contracts were an important and necessary tool for some sorts of employer, and that some workers valued their flexibility.

We think it important to understand changing models of employment in order to identify any implications for our work, and we have invited bids to research the prevalence and implications of flexible employment contracts such as zero hours contracts for our next report. In preparing this report we noted two respects in which zero hours contracts appear to touch on the NMW: some evidence of an association between them and being paid at or below the NMW; and the relationship with entitlement to the NMW when waiting to work. While under the NMW rules workers generally have to be paid for time they are required to be on work premises; this pay entitlement does not cover situations where zero hours contract workers are waiting at home for a call to come in to work.

4.100 Of course zero hours contracts are not in themselves at odds with NMW compliance. In addition the United Kingdom Homecare Association (UKHCA) told us zero hours contracts were regarded by employees in the sector as giving greater flexibility to their working pattern, and by employers as providing flexibility to highly variable demand. UKHCA stated that they were often used because there was not a sufficient predictable level of guaranteed contracted work from the local authority.

4.101 Our commissioned research into the impact of the NMW in social care (Bessa, Forde, Moore and Stuart, 2013) provided some insight into what may be happening to wages, and the pressures placed on work practices and pay arrangements by the commissioning process. They found evidence of a growth in zero hours contracts, and that this was related to the move away from block contracts which guaranteed a level of business, to spot or framework agreements. The research found that 70 per cent of those domiciliary care workers paid at or below the NMW were on zero hours contracts in the latest period, October 2011-April 2012 – up from 30 per cent in 2008.

4.102 The researchers found that, without adjusting for unpaid travel time, the median pay for domiciliary care workers was around 15 per cent above the NMW. However, between October 2008 and April 2012, 3.4 per cent were paid at or below the NMW, with 1.1 per cent paid below. In individual periods between these dates the proportion paid below was always between 0.4 and 0.8 per cent, and only rose sharply in the final period, between October 2011 and April 2012, to 2.5 per cent (6.1 per cent paid at or below). Other independent research (Hussein, 2011) which did adjust for travel time, found a mean of around 10 per cent of care workers paid below the NMW, however, this research did not distinguish between domiciliary and residential care workers. Based on their own findings, Bessa, Forde, Moore and Stuart (2013) suggested that a relatively small but possibly rising proportion of domiciliary care workers were paid under the NMW. As the research did not make any assumption about the inclusion of travel time in workers' hourly rates, the researchers regarded their estimates of the proportion paid at or below the NMW as a conservative or lower bound. We agree: in the light of other evidence (particularly about travel time) we received during the year – including from oral evidence and visits – we suspect that a materially larger proportion of care workers than this research suggests are actually paid below the NMW.

> *"Non-payment for travelling time is an issue for personal care and support workers.… They carry out a number of different assignments during the day and travel between them, however, this travel was not counted as working time. The council's policy was that travelling time should not be paid and therefore it did not include this when negotiating care contracts."*
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> **Unite evidence, Commission visit to Scotland**

4.103 The Government's evidence to us highlighted the scale of HMRC's risk-based work to review NMW compliance at residential homes and among domiciliary care providers. In total 120 care providers had been identified for investigation. This project was on-going, however, early indications were that unpaid travel time between clients, and deductions from wages, for example for uniforms, were common reasons for NMW non-compliance. At the time of reporting HMRC told us that 16 social care cases had closed since April 2012, and in one case a NMW team had identified over £50,000 in arrears for around 1,000 workers. However, UKHCA told us that its members had found HMRC compliance checks onerous and they had been surprised to be told by HMRC that enhanced pay rates for unsocial hours working were excluded from the assessment of compliance. UKHCA said this could force homecare providers into creating a pro-rata pay rate to reduce the risk of non-compliance, but they would then struggle to incentivise staff to undertake care outside normal hours.

4.104 We have already noted that commissioning practices are central to the problem of NMW infringement in social care. We look next at how they can affect NMW compliance.

Commissioning Practice: Financial Context and the Level of Fees

4.105 We have repeatedly recommended that the commissioning policies of local authorities and the NHS should reflect the actual costs of care, including the NMW. Just as frequently, we have received evidence that independent sector providers have faced difficulty in having their increased costs recognised in the fees paid by public sector commissioners.

4.106 This year one provider told us that we should be mindful that our recommendations on commissioning policies have gone unheeded. We also heard suggestions for a statutory minimum hourly fee that local authorities should be required to pay care providers and for an obligation on councils to increase their payment to care providers in line with NMW upratings. Stakeholders pointed to evidence of inadequate public funding of the services they were contracted to provide on behalf of the state putting pressure on what providers could afford to pay their staff. We also heard how certain commissioning practices influenced how providers organised and paid their staff and could affect NMW compliance. These included: short visit times; not taking account of travel time; not recognising travel costs or other additional service costs (perhaps for care delivered at unsocial hours); as well as the move away from block contracts which guaranteed a level of business to spot or framework agreements as highlighted earlier.

4.107 Additional monies are being allocated by the Government towards social care – the Department of Health (DH) is investing an additional £7.2 billion in adult social care in England over the four years up to 2014/15. We understand that the Government intends this, together with expected efficiency gains, to protect social care spending and meet the spending pressures it faces. However this is in the context of overall local government funding projected to fall by about 14 per cent in real terms (around 5.5 per cent in nominal terms) by 2014/15 from the 2010/11 Spending Review baseline. Moreover since social care funding is not ring-fenced, some local authorities may choose not to give social care this level of protection. The additional funding provided might therefore mitigate the impact of the overall reductions in local government budgets, rather than result in maintaining or increasing spending, on social care. An Association of Directors of Adult Social Services (ADASS) survey found local authorities in England had reduced social care budgets by £890 million in 2012/13 – £688 million to be saved via service re-design/efficiency, £77 million through higher charges, and the rest by reducing services. While the Government had allocated additional monies, and it was clear that this was not intended for business as usual – it challenged councils to increase productivity and spend money more wisely – the evidence we received was of a care system, particularly the providers of that care, under very real financial pressure. This was illustrated in the arrangements for the commissioning of care.

4.108 UKHCA said that while the Government believed it had taken sufficient steps to ensure there was no funding shortfall in social care, that was not what its members were saying. UKHCA (2012) suggested that nine in ten providers had received a real-terms decrease in the fees paid by their council for their existing business during the financial year, 2011/12. Over three-quarters of providers received no fee increase and 15 per cent reported actual fee decreases. UKHCA reported that the average hourly fee paid by councils in the UK for one hour of week-day daytime homecare was £12.87, but rates varied and were reportedly as low as £9.55 in some cases. It estimated that a homecare provider needed to be paid a minimum of £14.95 an hour to comply with the NMW and meet all costs, including training and supervision, National Insurance Contributions, pensions, other costs, profit margin etc.

4.109 UKHCA also found 76 per cent of councils were reducing the length of the visits they commission. It reported that the overwhelming majority of councils expected providers to cover care workers' travel time and travel costs out of the hourly rate paid for the time spent in the service user's home.

4.110 In the care home sector in 2012/13, the average uplift in local authority baseline fee rates for nursing and residential care was the highest for three years, according to the annual survey reported by Laing and Buisson (2012). However, at 1.6 per cent, it was estimated to be well below the cost inflation faced by providers. It said that the fees paid by most local authorities continued to fall well short of the 'reasonable level of fee' indicated by its own 'fair price' model. There was the usual regional variation in average fee uplifts: from just 0.4 per cent in London to 4.1 per cent in Wales. Of 134 councils providing full figures 59 gave below 'margin neutral' uplifts including 37 which froze or reduced fees. Fee revisions in the 'margin neutral' band (2.0-2.9 per cent) were given by 52.

"You will never solve the problem of low pay in social care unless the commissioning process changes. The arrangement needs to focus on outcomes and payment over a longer period rather than inputs and an hourly rate."

Social care provider, Secretariat meeting

4.111 The Government drew attention to its aim, stated in its recent White Paper (HM Government, 2012a), to rule out crude commissioning practices such as short visit times, and to move to a system of commissioning for outcomes. It intended to work with us and local authorities to understand and challenge the reasons behind cases of non-payment of the NMW by employers to care workers. Our Secretariat has established a dialogue with Department of Health social care policy officials. The White Paper also said work supported by ADASS would ensure that local authorities had the skills and expertise to embed the principle and practice of commissioning on the basis of quality, outcomes and value for money.

4.112 However, it will no doubt take a period of time to move away from contracts based largely on input costs, and to change the current pressures on providers which drive them to adopt a time-driven approach. During a meeting with our Secretariat the Registered Nursing Home Association (RNHA), English Community Care Association (ECCA) and the UKHCA, questioned how meaningful the commitments to standards and quality made in the White Paper would be in practice given the level of care fees.

Addressing Non-compliance in Social Care

4.113 Non-compliance with the NMW is a growing concern. The current financial stringencies facing local government, and the commissioning practices of public bodies, are part of the context in which NMW non-compliance takes place. Addressing commissioning practice so that commissioners take into account the actual costs of providing care including the NMW, as we have recommended in previous reports, continues to be the key component in ensuring that care providers have the resources to meet their obligation to pay the NMW.

4.114 We believe that insufficient account is being taken of the costs facing providers. None of the case study local authorities looked at by our commissioned research specified the payment of the NMW in their contracts with care providers or actively monitored compliance, although some were aware of the rates through their own research and contract monitoring.

4.115 Other bodies have also recognised the importance of making payment of the NMW a key issue in the contracting process. We reported last year how the Equality and Human Rights Commission (EHRC) had conducted an inquiry into homecare in England. Its recommendations included that the commissioning practices of local authorities needed to ensure that contracted providers could pay at least the NMW to care workers, including payment for travelling time (EHRC, 2011). EHRC has conducted a follow-up survey of local authorities to check progress in complying with its recommendations and we will be interested to see the results when they become available later this year.

"In the case studies a provider … reported that there had been no cost of living increase for four years, although providers had lobbied for an uplift on the basis of fuel costs, the two extra bank holidays … and the introduction of pension requirements on businesses."

Commissioned research (Bessa, Forde, Moore and Stuart, 2013)

4.116 We believe that local authorities and the NHS should accept responsibility for ensuring their commissioning practices are consistent with payment of the NMW. A concrete way to ensure that the financial implications of NMW compliance are addressed in the commissioning and contracting processes is for local authority and NHS contracts to include a provision requiring compliance with the NMW. While this would not increase the obligation to comply, which already has statutory force, it would increase its prominence and the incentive to do so (and provide a disincentive to contract to provide services at rates inconsistent with NMW compliance) since the provider which did not meet minimum wage requirements would jeopardise its contract. This provision may also help to focus local authority and NHS commissioners' minds on the costs that statute imposes on providers, and to prompt them to properly address our previous recommendation that commissioning policies should take account of the actual costs of care, including the NMW. **We recommend that contracts issued by public bodies which commission the provision of social care should contain a clause requiring at least the National Minimum Wage to be paid, just as they may require compliance with other aspects of the law, such as health and safety legislation. The Government should take responsibility for bringing this about.** We also urge the UK Devolved Administrations to follow this recommendation.

Unpaid Work: Internships, Work Experience and Volunteering

4.117 In recent years the Commission has received a substantial volume of evidence suggesting a growth in the terms ‘internship’, ‘work experience’ or ‘volunteer’ to denote unpaid activities that look like work and to which the NMW should apply. We have previously recommended that the Government raise awareness of the NMW rules through improved guidance and called for better enforcement of the regulations.

4.118 We again received evidence on this matter. Many stakeholders representing interns’ interests told us that the widespread breach of NMW rules has continued. The TUC said that work experience and internships remained the fastest growing source of abuse under the minimum wage. Mark Watson, a freelancer in the television industry, said that detailed evidence he had assembled over the past year suggested very little had changed with regards to the scale of unpaid internships.

4.119 The entertainment and media industry has again featured strongly in the evidence we received. We were told that the performing arts continued to see a proliferation of unpaid work. As well as advertisements for unpaid work we heard about unpaid stage performance work and a growth of charities promoting unpaid work and then ‘selling’ their unpaid workers on to third parties to help them with productions. Equity said that organisations, such as film schools, had used their charitable status in order to justify non-payment of the NMW in contexts that the union did not regard as compatible with the intentions of either the Charities or NMW Acts. The Broadcasting Entertainment Cinematograph and Theatre Union (BECTU) said the main area of illegally unpaid work was the large, informal micro-budget film production sector which operated outside the commercial mainstream. The National Union of Journalists (NUJ) told us student members were forced to work for nothing in order to gain a foothold in its industry and that many employers were flouting the law. Enforcement was proving difficult. Creative and Cultural Skills, YMCA England and GMB were among a number of stakeholders who again voiced concerns about the impact of non-payment of the NMW on social mobility.

“Many of the breaches with respect to interns and NMW law were due to ignorance, with the amount of guidance available not sufficient to deal with the issue in the media and entertainment sectors – a situation made even worse by the level of guidance now available on the new GOV.UK website.”

BECTU, IA, Equity oral evidence

4.120 Intern Aware (IA) believed that there were several shortcomings in current enforcement arrangements: advertisements were unchecked; specific intelligence from third parties was not followed up; HMRC’s risk-based assessment process was flawed;

vulnerable workers were given inadequate support and guidance; and enforcement of the NMW was not communicated. In oral evidence to us IA reported that it had achieved success in some cases when it took legal action or provided legal support against companies not paying wages to their interns. It had received some funding from the Joseph Rowntree Reform Trust to support this activity, and pro bono legal assistance in providing letters to companies confronting them with their alleged unlawful behaviour and asking for payment. It said the companies had often settled out of court without admitting liability, sometimes below the level of NMW pay arrears due, so full payment was not achieved.

4.121 Among employer organisations the Unquoted Companies Group said that it wanted interns to remain outside the NMW system. It regarded interns as students investing in themselves and was concerned that opportunities would be affected if payment of the NMW to interns was pursued. While the Recruitment and Employment Confederation (REC) believed that there was value to be gained from brief, well-managed internships, it thought there was a danger that some employers will look to longer-term, unpaid internships as a substitute for entry-level paid employment. Inspiring Interns' (an interns recruitment agency) main concern was that the NMW should be applied appropriately, and did not cover opportunities which were clearly learning experiences designed to help a student/graduate gain relevant skills.

> *"We suggest that enforcement of existing laws – targeted at companies who wilfully and deliberately use the internship mantle to breach NMW – would be the most effective method of ensuring internships remain a force for good in the youth labour market."*
>
> **Inspiring Interns evidence**

4.122 HMRC told us of the enforcement actions it had undertaken in this field. It had carried out a targeted enforcement campaign in the fashion industry. 'Health checks' were conducted on a number of employers in the sector identified as 'at risk' of not paying the NMW, with a visit to follow up within six to nine months to ensure full compliance. It said that, in tandem with this campaign it had also worked with interns' awareness-raising groups to promote the Pay and Work Rights Helpline (PWRH) and to ensure that its NMW guidance was fit for purpose. The PWRH was asked to fast-track callers who appeared to be interns, volunteers or working for no pay/expenses only. As at 31 August 2012, 61 employers had been investigated following fast-tracked complaints to the Helpline and other cases generated through the risk-assessed process. Investigations continue and we were told that (excluding cases selected for the health check) to date arrears totalling £137,000 had been identified for 138 workers. Although it had carried out a targeted enforcement campaign in the fashion sector HMRC had not yet rolled out the targeted campaign to the TV/film sector, as envisaged in evidence to us last year. However, HMRC had actively engaged with trade unions and other interested third parties in the creative sector to raise awareness of non-compliance with the NMW arising from unpaid work during the course of an internship.

4.123 Despite this activity many stakeholders suggested that the overall problem had not reduced and further action was needed. Some acknowledged the revised NMW guidance on interns the Government had produced in response to our 2011 recommendation. However, this revised guidance had been cut back on the GOV.UK site in the autumn of 2012, which stakeholders said was making it harder to ensure internships were NMW compliant. The TUC said the targeted enforcement in fashion was well executed, but it was not enough – other sectors now needed to be targeted. The National Union of Students called for strong enforcement action to avoid further exploitation of young people.

4.124 A number of groups, including the TUC and NUJ, suggested that advertising for unpaid interns should be illegal. Others said advertisements not offering the NMW should be required to cite the NMW exemption they were relying upon. The Stage Management Association urged HMRC to put more resources into investigating advertisements offering training or internships for low or no pay and to identify employment where a small increase in hours or unregulated hours would lead to a breach of the NMW. Equity was among those unions asking for the law to be amended to allow cases to be taken to Employment Tribunals by trade unions, so that individuals did not need to come forward, at risk to their careers. It also thought that the practice of film schools using their charitable status to advertise jobs under the guise of voluntary work should be challenged urgently. The Union of Shop, Distributive and Allied Workers (Usdaw) voiced concern that mandatory government work experience schemes, where employers had free labour for six weeks, could undermine the NMW. It suggested that anyone undertaking mandatory work experience should be entitled to the NMW.

4.125 Several stakeholders sought better advice from the PWRH and there were again calls in the entertainment industry for sector specific advice, in line with a previous Commission recommendation. The Arts Council England said more could be done to raise awareness of the NMW guidance and, in common with others, that the lack of a legal definition of an internship should be rectified. It thought the NMW was not enforced strictly enough and it would support the compulsory declaration or registration of all internship schemes with HMRC as a measure to prevent unpaid internships.

4.126 Despite the targeted enforcement of unlawful internships which breach the NMW we continue to receive evidence of widespread non-payment of the minimum wage for positions that appear to be work. The longer this continues the greater is the risk that extracting work from unpaid interns becomes a 'new normal'. The cutting back of the improved official NMW guidance with the move to the GOV.UK site increases the likelihood of non-compliance.

4.127 The suggestion that HMRC target for attention advertisers who appear to offer non-compliant employment seems to us sensible. However, we are not yet persuaded that action such as banning advertisements that appear to breach the NMW rules would be effective. There is force to the concern that it would add to regulation of legitimate employers while less scrupulous ones would still be able to adopt forms of words which avoid presenting an obvious target to enforcement authorities, for example by referring to NMW exemptions (which can only really be tested when employment has begun). We would like to see the Government put in place effective, clear and accessible guidance on all aspects of the issue (as it agreed to do in 2012) and combine that with vigorous and targeted enforcement action. We hope this will reduce the problem of unpaid work. If it should fail to do so then we would expect the Government to consider other measures to secure NMW compliance, not excluding changes to the law.

Fair Piece Rates: Homeworkers and Hotel Cleaners

4.128 In situations such as homeworking, where an employer cannot control a worker's hours of work, there are arrangements under the NMW Regulations for compliance with the NMW to be measured against an output pay arrangement (i.e. payment by the piece). This arrangement is called Fair Piece Rates (FPRs). Using LFS data we estimate that around 1.4 million people in the UK can be classified as homeworkers, with 0.5 million of these in the low-paying sectors and for many of these the statutory wage floor will likely affect their pay arrangements.

4.129 Over recent years we have received evidence of some homeworkers being paid below the NMW. We have also received accounts of underpayment of hotel cleaners, engaged through agency and contract cleaning companies, and paid on a 'per-room' basis (particularly in London). In 2010 we recommended that HMRC investigate whether these workers were receiving their entitlement under the NMW for their hours worked. This recommendation was accepted and by the time of the 2012 Report, HMRC was able to report on the outcome of its targeted enforcement campaign.

4.130 In evidence for this report, HomeWorkers Worldwide (HWW) told us about evidence it continued to receive of payment of homeworkers at rates below the NMW. In terms of future trends in homeworking HWW said that retailers and designers anticipated an increase in UK garment manufacturing, for both economic and ethical reasons, which would likely lead to an increase in associated homeworking. HWW was concerned at the lack of guidance on FPRs on the new Government website (at that point a test site) compared to what currently existed on businesslink.

4.131 In its evidence, Unite advised us that abuse of piece rates in hotels had not improved. It said piece rates for room cleaning were often simply too low for workers to achieve the NMW. It again called for a ban on payment by the FPR arrangement in the hotel sector. The union also referred to evidence of 'bogus' self-employment in London hotels, which it said typically involved an agency recruiting migrant workers (either legal, student visa or 'precarious' workers) and – after a couple of weeks training them as an employee – telling them to become 'self-employed', with loss of employment rights including entitlement to the NMW.

4.132 HMRC updated Commissioners in autumn 2012 on its work to enforce the NMW in the hotels/cleaning sector. This action had started in 2010/11 and HMRC told us it was now returning to businesses to re-check their compliance. There had also been 70 interventions in the hotel sector arising from worker complaints during 2011/12. In one notable case £40,000 in arrears had been identified for 100 workers. It planned a further 28 investigations at large cleaning businesses.

4.133 UK Fashion and Textile Association stated in their written evidence that NMW increases risked undermining incentive payment systems in its sector. Some companies had to make up the output-derived wages of some 35 per cent (revised to 42 per cent in oral evidence) of their workforces to the NMW. During our visit to Scotland we met a knitwear manufacturer who told us that all staff were paid by the piece and that around 25 per cent had to have this made up to the NMW each week. This was a concern for the business.

4.134 This year we again received evidence suggesting an association between NMW non-compliance, and output-based payment systems in homeworking and hotel cleaning. It remains our belief that what is needed is a combination of detailed and clear guidance, so that rights and obligations are understood, and effective enforcement through a continuation of HMRC's risk-based targeting of organisations in hotels and cleaning. We also urge HMRC to ensure that its compliance work engages with homeworkers.

4.135 For many homeworkers the NMW Regulations are likely to affect their pay arrangements. However, we have limited evidence on the effect of the NMW on homeworkers, especially the extent of non-compliance. They are a disparate group, spread geographically as well as occupationally, who have few representatives to express their interests. We will consider whether there are ways for us to be better informed about homeworkers. Our understanding of the impact of the NMW on homeworkers would certainly benefit from more evidence about this group of workers.

The Enforcement Regime

4.136 In previous reports we have noted the actions taken by the Government in relation to enforcement, and we have made a number of recommendations to help strengthen the enforcement regime. The Government has generally responded positively to our recommendations.

4.137 The enforcement regime has been evolving for a number of years, largely through measures aimed at getting the most impact from the available resources. The publication of a new compliance strategy has given focus and priority to enforcement efforts, as has the move to allocating resources to risk and adopting a more flexible, responsive approach. The introduction of a regime of penalties and fair arrears was something that we had requested.

4.138 A number of employers and business representatives supported a strong enforcement regime (not least to create a level playing field), but they wanted to see employers given the opportunity to put things right when genuine errors occurred. In its evidence, the National Hairdressers' Federation (NHF) said it wanted to see a more lenient stance on failure to comply where such failure was limited to issues of interpretation, and voluntarily corrected as soon as it came to light. It was seeking this particularly in relation to apprentices. Working with members of HMRC's enforcement team it found that they did not fully understand how the rules applied in many cases so it was not surprising that the NHF's members could experience difficulties. The National Farmers' Union objected to arrears being calculated at the current rate and not the appropriate historic rate. It said penalties should relate to the seriousness of the offence.

4.139 HWW was concerned about changes to arrangements when homeworkers tried to enforce their right to the NMW through Employment Tribunals. Like all workers, they now faced payment of a means-tested fee. HWW said the means test, based not just on their own earnings but those of their household, added a further hurdle to an already long, daunting and stressful process for homeworkers and could create further injustices.

4.140 The British Hospitality Association, British Beer and Pub Association, Business In Sport and Leisure and the Association of Licensed Multiple Retailers (BHA, BBPA, BISL, and ALMR) stated in their written evidence that it was unsatisfactory that little information was available by way of follow-up where enforcement issues were raised with HMRC. BECTU believed enforcement efforts were seriously undermined by HMRC's policy of confidentiality. It said that if some employers believed they could flout the law then they would continue to do so while enforcement activities remained a guarded secret. Intern Aware said HMRC operated without publicising its enforcement activities and BIS did not actively publicise the Pay and Work Rights Helpline. This, it said, meant that awareness of these services was extremely low among interns and employers, leading to greater levels of exploitation.

4.141 The Government advised in its evidence that it would be undertaking a review of the penalties and fair arrears regime, and that this would be completed by September 2013. We welcome this announcement and we look forward to seeing the outcome of the review, to which we would be pleased to contribute.

Resources

4.142 We are pleased that, at a time of widespread spending cuts, the Government has not reduced the budget for enforcement. We continue to favour maintaining the budget in real terms, to meet the enforcement challenges noted in this chapter. In evidence UNISON said the enforcement budget should not be cut to allow more targeted and proactive enforcement to continue; and that Ministers should use their powers to name and shame employers fined for breaking the NMW Regulations. Unite called for an increase in the real terms budget for monitoring and enforcement.

Naming

4.143 In 2009 the Government accepted our recommendation that a 'name and shame' policy should be put in place to expose those employers who show a wilful disregard for the NMW. The new policy was introduced on 1 January 2011. The Government's objective was to raise the profile of minimum wage enforcement and to act as a deterrent to other employers who may be tempted to flout the law.

4.144 Up to the end of 2012, only one person had been named under this scheme. This is very disappointing. We know the Government is publicising the outcomes of appeals in Employment Tribunals and County Court judgements and, as welcome as this is for raising the profile of minimum wage enforcement, it is no substitute for a systematic process for naming infringers. The Government has said that it too was disappointed it had not named more employers. It said it would be reviewing the scheme to ensure it had the right criteria to deliver its policy objectives.

4.145 In its evidence the TUC welcomed the decision to publicise the outcomes of court cases, but thought this was not enough. It was frustrated by the lack of naming. BECTU was critical of the lack of action so far. It said the fact that only one employer had been named hardly sent a convincing signal. It wanted to see a renewed commitment to naming. GMB was concerned that employers were not being named under this scheme. Usdaw said the threshold for naming was set so high that few employers would ever appear on the register. It wanted to see this threshold reviewed with a view to it being substantially reduced.

4.146 The current position with regard to naming is clearly untenable. We welcome the Government's recognition of this and we have indicated to the Government that we would be happy to participate in a review.

Prosecutions

4.147 We have long held the view that serious NMW infringers should be prosecuted, and that prosecutions should be publicised widely to deter others. To date there have only been seven prosecutions, and the last of these was in June 2010. The Government has consistently said that it supports prosecutions and that they have a role to play in a balanced compliance and enforcement regime. It has said it will always prosecute where there was robust evidence that an offence had been committed.

4.148 The TUC said naming was meant to be an antidote to the dearth of prosecutions for the most serious offences. So in the absence of naming cases, it called for the rate of prosecutions to be greatly increased. It, like the Government, recognised that prosecutions were resource-intensive, but believed that these have far more effect on the consciousness of the wider group of NMW-avoiding employers than other forms of enforcement action.

4.149 Ipsos MORI and Community Links (2012) found that awareness of enforcement activity and non-compliance penalties was low. Both naming and prosecutions are important to show that infringement is taken seriously. We very much hope that 2013 will bring a step-change in the use of naming and prosecutions.

Awareness

4.150 The evidence strongly suggests that, as would be expected, awareness of the NMW rates and requirements significantly affects the extent of compliance. This view is supported by the Ipsos MORI and Community Links research already mentioned and research commissioned by BIS in 2011 which examined employers' attitudes and behaviours towards compliance with the NMW (BIS, 2011c). It is supported too by a very large proportion of those who have given evidence to us.

4.151 Stakeholders have again this year raised concerns over the lack of proactive communication to raise awareness of the minimum wage. Habia said that the 2011 BIS Apprentice Pay Survey showed that hairdressing was the industry with the worst record for apprentices not receiving their correct NMW entitlement. It said there was clearly a need for an information campaign backed up by a rigorous enforcement programme, with errant employers being 'named and shamed'. It said employers who do not pay the NMW were not only exploiting their workers but also gaining an unfair competitive advantage over other employers who meet their obligations.

4.152 The TUC wanted to see the budget for awareness-raising activities increased. Usdaw said that although awareness of the NMW itself seemed widespread, there was a lack of awareness of its different levels, so funds should be made available for a publicity campaign.

4.153 In our report last year, we recommended the Government should more actively communicate both the rates themselves; the rights and obligations under the NMW; and that communication activities about the minimum wage should not be subject to the Government's marketing freeze. We are disappointed that the Government only noted this recommendation. In its evidence this year the Government said that a priority was raising the profile of NMW enforcement to ensure that workers and employers were aware of their rights and obligations. It was, therefore, producing a communications plan to increase compliance through raising awareness of the NMW and the enforcement of it. It said it would be drawing on its experience of enforcement to prioritise communication activity. Because of the marketing freeze, the Government has also continued to make use of a number of low/no cost alternative channels to publicise the changes taking place in October.

4.154 We welcome the communication activity undertaken by the Government in November 2012, using newspaper advertisements to highlight the NMW rates, promote compliance, and also publicise the Pay and Work Rights Helpline. We would urge the Government to undertake more communications activity to raise awareness of rights and obligations under the NMW.

National Minimum Wage Guidance

4.155 As part of our work for the 2012 Report, the Government asked us to consider whether the NMW could be made even simpler and easier to administer. Stakeholders told us that the NMW itself did not need adjusting but what would make it as simple as possible for users was to establish comprehensive and authoritative official guidance. The Commission therefore recommended that the Government put in place, and maintain, effective, clear and accessible guidance on all aspects of the minimum wage, particularly where there was significant evidence of ignorance or infringing practice. As a first step, we asked the Government to undertake a review of all existing guidance. The Government accepted this recommendation and we commenced discussions with BIS about our input to a review process.

"The GOV.UK guidance on the NMW is very basic. Employers need something that supports the more challenging issues they may have."

Association of Labour Providers oral evidence

4.156 Since our last report the Government has established a single government website ('GOV.UK'), managed within the Cabinet Office by the Government Digital Service. The new GOV.UK site went live in October 2012, replacing the businesslink and directgov sites which had previously housed the official guidance on the NMW. However, the NMW information on the new site lacks the depth and breadth of that which appeared on the previous sites and on which we were looking to build. Important guidance material is either missing or seriously diluted on areas such as: salaried-hours workers; interns and work experience;

"The sector has particularly complex working arrangements, but the level of official guidance to help homecare providers has got worse. It has deteriorated on GOV.UK and this needs to be addressed."

UKHCA oral evidence

apprentices; pay reference periods; deductions from pay; and travel time. Crucially there is a lack of worked examples to illustrate the application, and support understanding, of the NMW rules.

4.157 We have made our views known to Ministers and officials, in both BIS and the Cabinet Office. The Government has confirmed it is committed to ensuring that effective, clear and accessible guidance is available on all aspects of the minimum wage, particularly where there is significant evidence of ignorance or infringing practice.

> *"We are disappointed by the changed NMW guidance on GOV.UK – it has gone backward rather than forward."*
>
> **TUC oral evidence**

4.158 We make this assessment not just as the expert independent body charged with advising the Government on the NMW, but on the basis of concerns about the NMW guidance on GOV.UK raised by representatives of those in the low-paying sectors who are most affected by the NMW. These views were expressed to us by a number of stakeholders during our oral evidence hearing sessions, which took place after the GOV.UK guidance was launched. They told us that the guidance did not meet user needs.

> *"Put simply, the amount and quality of information now available from GOV.UK as the only source of Government guidance on the NMW is not fit for purpose."*
>
> **BHA, BBPA, BISL, and ALMR oral evidence**

4.159 In our view, based on the evidence we have received not just during the past year but over the life of the NMW, authoritative and comprehensive guidance is a prerequisite for maximising compliance. Without it businesses wishing to comply find it more difficult, and costly, to establish what is required of them, and they are more likely to be undercut by non-compliant competitors. They are at increased risk of penalties for inadvertent non-compliance. Fewer workers will receive their entitlement than would otherwise be the case.

4.160 We are disappointed that the Government's acceptance of our 2012 recommendation has not been accompanied by implementation. We remain keen to assist with the review of the guidance; we have supplied details of topics where improvement is needed, and our Chair has sought a meeting with the Executive Director of the Government Digital Service. We hope that in the near future the Government will achieve the improvement in the NMW guidance which we recommended and it accepted in 2012.

Conclusion

4.161 We have undertaken reviews of two elements of the NMW policy framework. The salaried-hours regulations are complex in some respects but we found this to be necessary. We have therefore recommended that the regulations should continue in their current form. As elsewhere, there is scope to adapt the on-line guidance to assist those wishing to calculate their or their employees' entitlement to the NMW.

4.162 The evidence we were able to gather for our review of the accommodation offset did not lead us to conclude that changes to the existing framework were necessary. There was widespread support for an offset, and although we have accepted that a distinction in principle exists between accommodation provided as a free choice and that as a condition of employment, we continue to believe that there is no simple test of a genuinely free choice for the worker. We have concluded that the existing framework should continue.

4.163 We take a close interest in non-compliance with the NMW because the minimum wage is the wage floor in practice, as well as statute, only if it is widely observed by employers. While our sense is that the great majority of employers comply with the NMW, the evidence we have gathered for this report suggests that there continue to be areas of non-compliance, in particular in relation to: apprentices; interns, those on work experience or volunteers; social care (especially domiciliary social care); and among hotel cleaners and homeworkers. Compliance with the NMW is a prerequisite for its success, and in all these areas there is a need for a combination of effective and comprehensive official guidance, and vigorous targeted enforcement action. HMRC has told us how it is bringing a focused approach to its work.

4.164 In social care we believe more can be done and we have recommended that contracts issued by public bodies which commission the provision of social care should contain a clause requiring at least the NMW to be paid. All commissioners of care need to focus on the costs statute imposes on providers. Non-compliance among employers of young apprentices appears to be so widespread as to jeopardise the credibility of the Apprentice Rate. We have recommended a combination of communication and enforcement activity to tackle this.

4.165 Overall we believe that the Government continues to make progress in adapting the enforcement regime to be flexible and responsive, and in making good use of the available resources. But more needs to be done to ensure all available tools are fully utilised to raise awareness that non-compliance is not an option and that where it occurs, swift action will be taken. The criteria for the naming regime are to be reviewed and should be changed to ensure it is used effectively.

4.166 The message we received last year was that clear and accessible guidance was essential, for both employers and workers. We are concerned that the move to the new single Government website (GOV.UK) has reduced the amount of advice available, and it is clearly not the comprehensive and authoritative guidance we thought necessary. Stakeholders share our concerns. We hope that the acceptance of our 2012 recommendation will indeed be translated into implementation, and that the Government will put in place and maintain effective, clear and accessible guidance on all aspects of the minimum wage, particularly where there is significant evidence of ignorance or infringing practice.

Chapter 5
The Rates

Introduction

5.1 Towards the end of January, we met to deliberate and agree our recommendations that we set out in this report. These discussions were based on data and information available up to 23 January 2013. The first estimate of gross domestic product (GDP) for the fourth quarter of 2012 was released on 25 January. However, that estimate (-0.3 per cent) was in line with what we and many others had expected.

5.2 In making these recommendations, we have taken account of the factors that we have set out in the previous four chapters. In Chapter 1 we considered the current state of the economy, especially recent trends in employment and unemployment levels and set out our understanding of the economic context in which the latest National Minimum Wage (NMW) recommendations came into effect on 1 October 2012. We investigated the impact of the minimum wage to date on earnings, employment and competitiveness in Chapter 2. We concluded that the minimum wage had increased in relative terms since it was introduced but that it had not had any significant adverse effects on employment as firms had coped by using a combination of adjusting hours, pay structures, and prices; and squeezing profit margins. We noted, however, that the real value of the minimum wage had returned to its level in 2004 as price inflation outpaced wage growth. In Chapter 3, we considered the youth labour market in great detail and assessed the recent introduction of the Apprentice Rate and changes to the age entitlement to the adult rate. We concluded that the long-run deterioration in employment and unemployment among young people had stalled, and there were signs of improvement in earnings growth in the last year. The operation of the NMW, including compliance and enforcement, was assessed in Chapter 4. We explored concerns about enforcement and made recommendations concerning apprentices and social care. We also set out the arguments around the appropriateness of the current level of the accommodation offset and reviewed the arrangements for salaried-hours workers.

5.3 In addition, as we set out in this chapter, we take account of the prospects for the economy going forward; the views of our stakeholders and the evidence they provided to us; and other Government changes and reforms, including proposed abolition of the Agricultural Wages Board in England and Wales, the staged phasing of pension reforms, the raising of the participation age in England, and changes to the tax and benefits system (including raising the personal tax allowance and the introduction of Universal Credit). We also place the NMW in the wider context of minimum wages in other countries.

5.4 After setting out our recommendations, we then consider the implications of those recommendations for the bite of the minimum wage, the coverage of the minimum wage, its effect on take-home pay and the implications for the Exchequer. We first consider the prospects for the economy in 2013 and 2014.

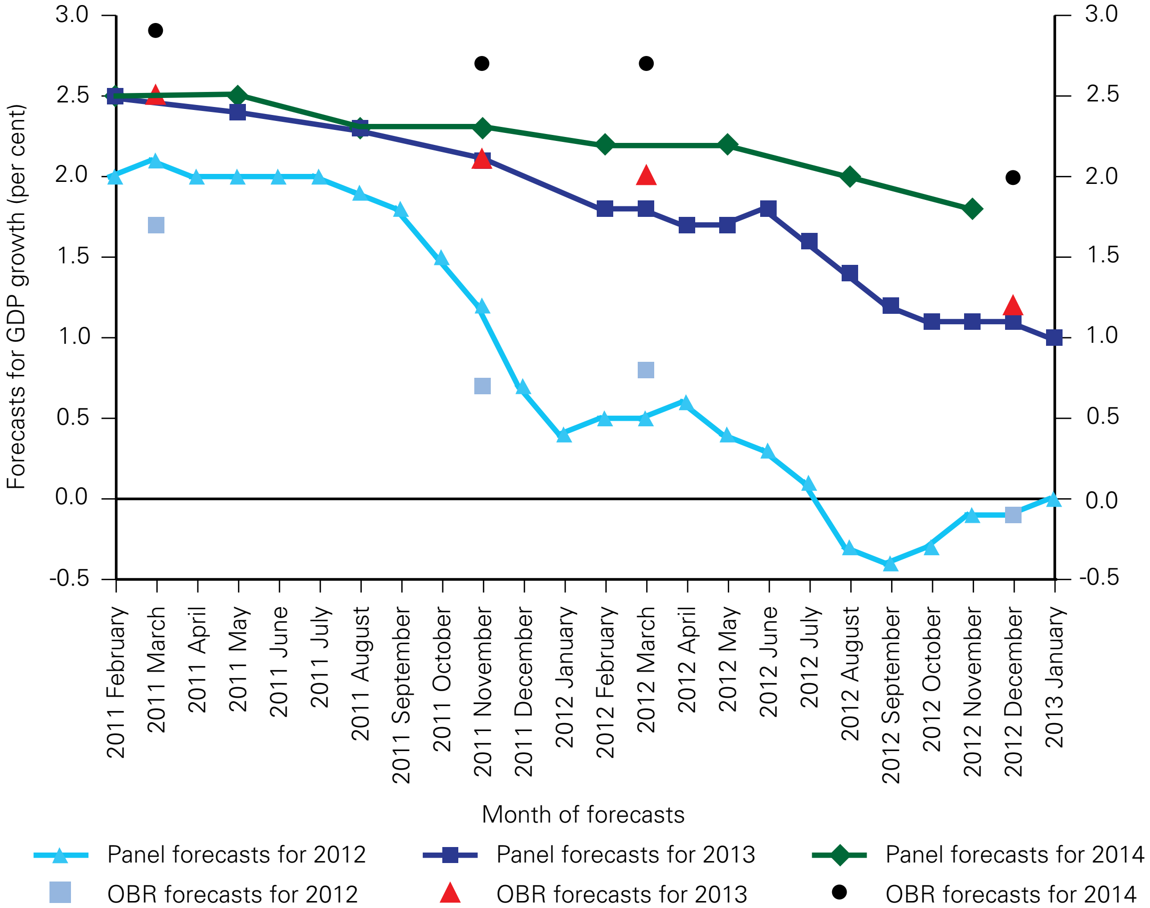
Economic Prospects

5.5 Our recommendations for the minimum wage rates will, if accepted, become effective in October 2013, so it is vital that we also take account of the likely future path of the UK economy, the labour market and inflation. Consideration of the real and relative levels of the minimum wage (that is, its real level, after taking account of inflation, and its value relative to average earnings) and future affordability, particularly to small firms and low-paying sectors were important determinants of our recommendations. In assessing future affordability, we look at the prospects for growth in the economy as a whole and in the low-paying sectors and small firms in particular. We then look at the prospects for inflation, pay settlements and earnings before considering how employment might be affected.

Prospects for Growth

5.6 As we discussed in Chapter 1, the performance of the economy was much weaker in 2012 than had been forecast. Throughout much of 2011 independent forecasters expected growth to be around 2.0 per cent in 2012 and slightly higher in 2013 and 2014 but, as shown in Figure 5.1, these forecasts have been revised downwards since the end of 2011, with forecast growth in 2012 falling to 0.4 per cent in January 2012, when we met to agree our recommendations for 2012. The prospects for 2013 and 2014 looked stronger with growth forecast to be over 2.0 per cent in both years. Since we wrote our 2012 Report, the forecasts for GDP growth continued to be revised down. After confirmation of a double dip recession in the spring of 2012, and continued falls in output in the second quarter resulting from the additional public holiday for the Diamond Jubilee, growth forecasts for 2012 fell further, reaching a low of -0.4 per cent in September. Forecasts for 2012 then picked up towards zero after confirmation that the Olympics had led to a rebound in the economy in the third quarter. This recent pick-up in growth forecasts for 2012 has not been reflected in the forecasts for 2013 and 2014, which have continued to be revised downwards. Growth forecasts for 2013 have been revised down from 2.1 per cent (forecast in November 2011) to just 1.0 per cent (in January 2013). The forecasts for 2014 have also been revised down but by less, from 2.3 per cent (forecast in November 2011) to 1.7 per cent (in November 2012 and the latest available).

Figure 5.1: Gross Domestic Product Forecasts for 2012-2014, UK, 2011-2013



Source: HM Treasury Panel of Independent Forecasts (median, monthly, February 2011-January 2013), OBR Forecasts (biannual, March 2011-December 2012), based on ONS data, GDP growth (ABMI), quarterly, seasonally adjusted, UK, 2011-2013.
Note: Forecasts for growth in 2012 were made before the first estimate of Q4 2012 growth was available.

5.7 In December 2012, in line with the median of independent forecasts discussed above, the Office for Budget Responsibility (OBR) significantly revised down its forecasts for growth to 1.2 per cent in 2013 and 2.0 per cent in 2014. Its previous forecasts made in March 2012 (and in November 2011) had expected growth of 2.0 per cent in 2013 and 2.7 per cent in 2014.

5.8 In recent months, the Bank of England (2012b), the International Monetary Fund (IMF, 2013) and the Organisation for Economic Cooperation and Development (OECD, 2012b) have all revised their estimates for UK output growth in 2013 and 2014 downwards. They all now expect growth in 2013 to be around 1 per cent (a year ago, all had expected growth to be around 2 per cent). The OECD is more pessimistic about 2014 (1.6 per cent) than the IMF (1.9 per cent). All of these forecasts suggest growth in 2013 and 2014 will continue to be below the pre-recession trend (around 2.5-2.8 per cent) and that by the end of 2014, the level of real GDP will still be below its level in the first quarter of 2008.

5.9 The components of growth are important considerations when assessing the economic outlook for the low-paying sectors. The prospects for consumer spending will affect low-paying sectors such as retail; hospitality; leisure, travel and sport; and hairdressing. Indirectly, cleaning will be affected by consumer spending. The level of, and growth in, government spending will be an important determinant of prospects for companies in the social care and childcare sectors, which rely heavily on government funding of places. Cleaning; hospitality; and leisure, sport and travel will also be affected by changes in government spending. The outlook for trade will be a significant factor for many low-paying sectors, such as agriculture; food processing; textiles and clothing; and non-food processing. Tourism is also important for retail, hospitality and leisure. Investment will help determine the long-run outlook for the UK economy and thus the long-term health of many low-paying sectors. We now turn our attention to look at the prospects for consumer spending, government spending, investment and trade.

5.10 It had been hoped that the economic recovery in the UK would be led by a rebalancing away from its dependence on consumer and government spending. Indeed, the independent forecasters, the Bank of England and the Government had placed great weight on net trade (exports minus imports) and investment driving growth in 2011 and 2012. Table 5.1 shows that these hopes have not materialised and that government spending has supported what growth there has been.

5.11 Current and future income and wealth will determine how much individuals spend on consumption. The squeeze on real incomes; household indebtedness; austerity measures; the weak housing market; and tight credit conditions had held back consumption spending in the aftermath of the recession. Many of these factors had eased a little over the last year. Although pay settlements and wage growth continued to be subdued, the increase in employment had led to a pick-up in nominal income. Inflation had also fallen back as the impact of VAT increases, and rises in fuel and import prices faded. However, utility prices had picked up again towards the end of 2012 and further price increases had been announced. Consumption will also depend on how much of their incomes individuals decide to save. The household savings ratio rose sharply during the recession and has remained at much higher levels than observed in the previous 12 years. The economic uncertainty may have increased the desire for precautionary savings but, in survey responses, households were mainly saving to reduce debts; or saving for big items or for a deposit for a house. Others may be looking to build their pension funds. The recent loosening of credit in the housing market, assisted by the Bank of England's Funding for Lending Scheme, and an increase in equity prices may give a boost to spending. Household spending increased by 1.4 per cent between the third quarter of 2011 and the third quarter of 2012 but remains nearly 5 per cent below its pre-recession peak. The temporary boost from the Olympics more than offset the reduced spending on services associated with the additional public holiday for the Diamond Jubilee.

Table 5.1: Components of Gross Domestic Product Growth in Recession and Recovery, UK, 1980-2012

Per cent	Average growth per quarter						Growth on previous quarter			
	Recession			Recovery			Latest			
	1980 Q1-1981 Q1	1990 Q3-1991 Q3	2008 Q2-2009 Q2	1981 Q2-1983 Q2	1991 Q4-1993 Q4	2009 Q3-2012 Q3	2011 Q4	2012 Q1	2012 Q2	2012 Q3
Household consumption	0.0	-0.7	**-1.2**	0.5	0.8	**0.1**	0.2	0.5	0.2	**0.4**
Government consumption	0.2	0.8	**0.2**	0.4	0.0	**0.3**	-0.1	3.2	-1.1	**0.8**
Investment	-3.5	-2.0	**-4.6**	1.1	0.3	**0.1**	-0.4	0.6	-0.5	**-0.2**
Business investment	-2.4	-2.8	**-3.3**	0.5	-0.3	**0.7**	2.6	-2.7	1.4	**3.8**
Dwellings investment	-7.1	-2.9	**-5.2**	1.9	1.9	**-0.1**	-4.8	-8.2	13.8	**-9.4**
Change in inventories	-1.6	-1.9	**-0.5**	-0.7	-0.4	**0.1**	0.7	-1.0	0.4	**0.6**
Domestic demand	-1.2	-1.0	**-1.6**	0.9	0.7	**0.2**	-0.6	0.3	0.6	**0.4**
Exports	-1.3	0.4	**-2.1**	0.6	1.1	**1.0**	2.9	-1.7	-1.1	**1.2**
Imports	-3.4	-1.1	**-3.0**	2.3	1.3	**0.9**	1.6	-0.1	1.7	**-0.4**
Real GDP	-0.9	-0.6	**-1.3**	0.7	0.6	**0.3**	-0.3	-0.2	-0.4	**0.9**

Source: LPC estimates based on ONS data, household final consumption expenditure (ABJR), general government final consumption expenditure (NMRY), total gross fixed capital formation (NPQT), business investment (NPEL), investment in dwellings (DFEG), change in inventories (CAFU), total domestic expenditure (YBIM), total exports (IKBK), total imports (IKBL) and GDP (ABMI), chain volume measures, quarterly, seasonally adjusted, UK, Q4 1979-Q3 2012.

5.12 The outlook for consumption continues to be uncertain with household debt levels still high, albeit falling; the effects of ongoing fiscal consolidation on post-tax and benefit income, public sector jobs and consumer confidence; forthcoming increases in the prices of many necessities; and the continued weakness in earnings growth. However, as Figure 5.2 shows, there were encouraging signs that consumer confidence had picked up towards the end of the year after being flat since the summer of 2011.

5.13 Since the end of the recession, government spending has been one of the main contributors to growth, holding up when other components have been weak. With growth lower than expected since the autumn of 2010, public sector finances have not improved as quickly as the Chancellor had hoped. Consequently, the Chancellor announced in the Autumn Statement 2012 (HM Treasury, 2012b) that the fiscal tightening would be extended for an additional two years. This is four years longer than his original plans as laid out in his June Budget of 2010 (HM Treasury, 2010). In December 2012 the Institute for Fiscal Studies told us that there was a hole in the public finances of 8.2 per cent of national income. The plans set out by the Chancellor would be equivalent to a consolidation of real national income of 9.2 per cent over eight years. Most of the tax increases had already been implemented or announced but the UK was only a third of the way through its fiscal consolidation with most of the spending cuts to come. Among other things, this is likely to add further to concerns about adequate funding for social care and childcare.

5.14 Investment will depend on the cost and availability of credit; and the prospects for future demand in the economy. Business investment fell sharply during the 2008-09 recession and in the third quarter of 2012 was still 15 per cent below its pre-recession peak. The low levels of investment reflect uncertainty about future demand and the tight credit conditions that have constrained many companies, particularly small firms. Surveys have suggested that the investment that had taken place was mainly to replace equipment rather than increase capacity. However, credit conditions looked set to improve. Funding costs for financial institutions had fallen due to the establishment of the Bank of England's Funding for Lending Scheme (FLS) and reductions in wholesale funding costs for UK banks. This improvement in credit supply conditions was feeding through into lower loan rates. This was most notable in the mortgage market, which had seen an uplift in demand as better fixed-rate mortgage deals became available. The costs of new lending to medium-sized and large firms had fallen significantly in the last quarter of 2012. However, there was little change in the costs of loans for small businesses. The Bank of England (2013) reported respondents expecting the availability of credit to improve going into 2013. The costs of secured lending to households and lending to the corporate sector were expected to fall further, but the borrowing costs for small firms were not expected to ease much.

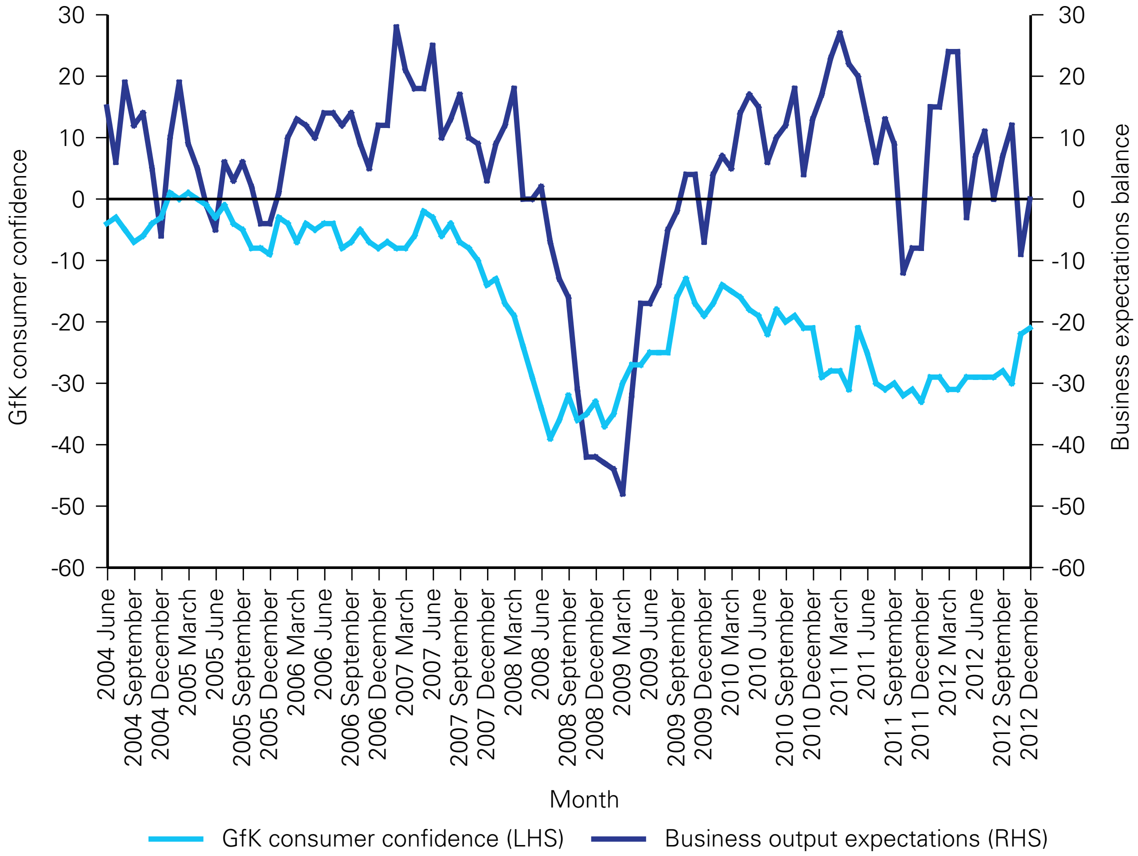
5.15 Many large companies had healthy balance sheets, with substantial financial surpluses, and faced benign financial conditions. They continued to raise funds through issuing corporate bonds rather than borrowing from banks or issuing equity. Between 2009 and 2011, much of these funds appeared to be used for repaying bank loans, however, over the last year these funds had also been put to other uses. Consistent with other surveys of investment intentions, this suggests that firms might be anticipating future expansion and putting these funds towards investment purposes. However, reducing costs and increasing cash flow, rather than increasing investment, remained priorities for Chief Financial Officers (Deloitte 2013).

5.16 On the other hand, credit conditions for small firms remained restrictive and SMEs account for around a third of total business investment. They rely much more than large firms on bank credit as they have limited access to capital markets and internal financing. The Federation of Small Businesses (2012) had noted that perceptions of cost and availability of finance had improved a little. There was hope that the FLS would help but this had not yet materialised. Further, as large companies pay back bank loans, this might free up funds for small firms.

5.17 Unlike after the two previous recessions, when inventories were run down further during the recovery, stockbuilding has supported growth since the end of the recession in 2009 and again contributed significantly to growth over the last year. However, surveys have suggested that current stock levels in manufacturing are adequate but that distribution companies may wish to run down their stocks. Changes in inventories are therefore unlikely to provide much of a boost to growth going forward.

5.18 Overall, business expectations had picked up in early 2012, as shown in Figure 5.2, but had gradually fallen over the year, and were relatively subdued as the year closed. Businesses were expecting another year of slow growth and, although credit conditions were likely to ease further, the prospects for strong growth were poor and this might lead firms to again hold back on investment plans.

Figure 5.2: Consumer and Business Expectations, UK, 2004-2012



Source: GfK consumer confidence index, and CBI, output expectations, monthly, not seasonally adjusted, UK, 2004-2012.

5.19 The trading performance of the UK will depend on economic prospects in the UK's main trading partners and the exchange rate. According to the IMF (2013), the growth in world trade slowed from 5.9 per cent in 2011 to 2.8 per cent in 2012 as advanced countries addressed their fiscal imbalances and attempted to reduce the risks in the financial system. This particularly affected the eurozone, which is the UK's main trading partner. Growth had however picked up in another important trading partner, the United States. Japan had begun to recover from its natural disasters in 2011 and growth in emerging economies had slowed but remained reasonably healthy.

5.20 Despite the large depreciation in sterling between 2007 and 2009, the contribution of net trade to growth had continued to disappoint. Exports had grown by 13.1 per cent since the second quarter of 2009, but imports had grown nearly as much (by 12.2 per cent). Although sterling remained around 20 per cent lower than its value pre-recession, it had appreciated over the last year. And to some degree the export performance reflected this as, between the third quarter of 2011 and the third quarter of 2012, exports grew more slowly (up 1.3 per cent) than imports (up 2.8 per cent). This acted as a drag on growth of around 0.5 per cent. However, net trade had picked up in the third quarter of 2012 and contributed 0.5 percentage points to growth (of 0.9 per cent).

5.21 Looking ahead, there has been some evidence of a modest improvement in the prospects for global growth. In its latest forecasts, the IMF (2013) suggests that the global economy will strengthen going into 2013 as policy actions in the eurozone and the US have reduced the acute risks of fiscal crises. Economic activity had weakened further in the periphery countries of the eurozone and that had spilled over to the rest of the eurozone. However, tensions had eased as borrowing costs for eurozone countries had fallen as a result of the Fiscal Compact and steps towards greater banking and fiscal integration. Concerns remained about excessive fiscal consolidation in the US and the need to raise the debt ceiling and agree spending cuts. But growth had continued to improve, jobs were being created, the housing market was recovering and the US Federal Reserve continued to loosen monetary policy. Japan had moved into recession in the second half of 2012 but had recently announced a fiscal stimulus plan that should help boost growth in the short-term. Growth had stabilised in China and supportive policies had aided the recent acceleration of activity in emerging and developing countries. However, weakness in the advanced economies might dampen growth and recently bottlenecks had emerged to hamper growth in Brazil and India. Despite these concerns, world trade was expected to strengthen in 2013 and 2014.

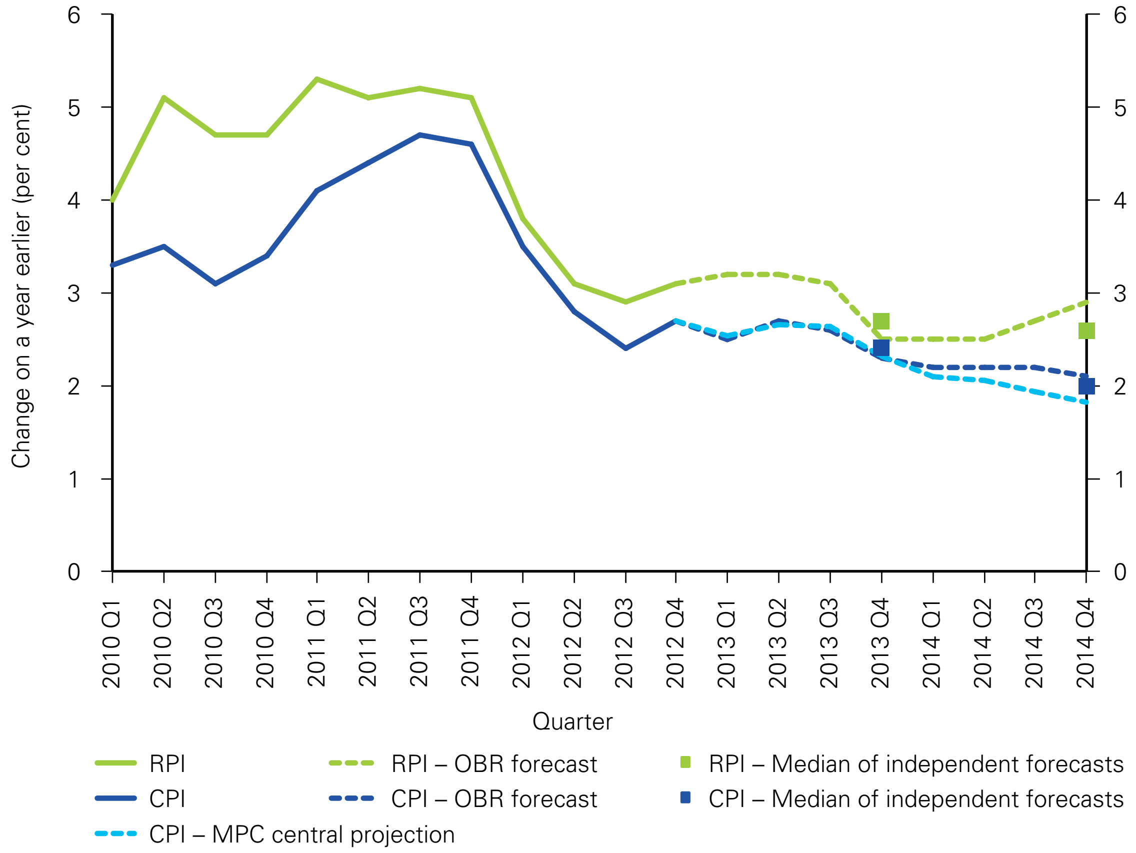
5.22 Overall, the recovery had been much slower than forecast and although growth was expected to pick up in 2013 and 2014, it was likely to be weaker than previously thought. We now go on to look at the prospects for inflation and wage growth.

Prospects for Inflation, Pay Settlements and Earnings

5.23 In the latest data available to us, for the twelve months to December 2012, the Consumer Prices Index (CPI) inflation rate was 2.7 per cent, and the Retail Prices Index (RPI) rate was 3.1 per cent. CPI inflation fell from a peak of 5.2 per cent in September 2011 to a low of 2.2 per cent in September 2012. The RPI rate followed a similar path, from 5.6 per cent in September 2011 to 2.6 per cent in September 2012. Inflation was then knocked off its downward path by the rise in undergraduate tuition fees to £9,000 from October 2012, rising food prices, and higher gas and electricity bills. This meant that inflation ended the year above its forecast level, and above the 2 per cent CPI target.

5.24 As shown in Figure 5.3, the CPI and RPI measures of inflation have been unusually close over the last year, but opposing factors have cancelled each other out. The formula effect reduced the CPI inflation rate by 0.9 percentage points compared with the RPI rate, while other differences (in weights and coverage, notably housing) brought them 0.5 percentage points closer together.

Figure 5.3: Annual Change in RPI and CPI, and Forecasts, UK, 2010-2014



Source: ONS, CPI (D7G7), quarterly, not seasonally adjusted, UK, Q1 2010-Q4 2012; Bank of England Inflation Report, November 2012, OBR December 2012; HMT panel of independent forecasts, November 2012 and January 2013.

5.25 The Bank of England revised up its near-term inflation outlook in November 2012, reflecting the higher-than-expected outturns for inflation together with large announced increases in household energy prices. It said that inflation was likely to fall back in the second half of 2013, as the impact of external price pressures eased and a partial recovery in productivity growth dampened domestic cost growth. Its central forecast was for CPI inflation of 2.3 per cent in the fourth quarter of 2013.

5.26 The OBR continues to expect CPI inflation to fall gradually over the next few years, but to be higher in 2013 and 2014 than it expected in March 2012, because of tuition fees, domestic energy prices and food commodity prices. Like the Bank of England, it forecasts CPI inflation of 2.3 per cent for the fourth quarter of 2013, and RPI inflation of 2.5 per cent.

5.27 The median of independent forecasters gives a similar picture, with the CPI rate of inflation expected to be 2.4 per cent in the fourth quarter of 2013, and the RPI rate 2.7 per cent. Some of the forecasters, however, assumed a change in the way the RPI is constructed during 2013, which was expected to have lowered the rate by around 0.3 percentage points, but will not now happen (see Appendix 5).

5.28 There is a clear consensus for a small fall in inflation over 2013. We note, however, the degree of uncertainty around these forecasts and how unforeseen shocks have led to the persistent under-forecasting of inflation in recent years. The Bank of England points in particular to the variability in commodity prices, notably food. Further, in its latest minutes, the Monetary Policy Committee (2013) noted that a number of regulated and administered prices, including train fares, domestic energy prices, water and sewerage costs, were set to rise in 2013. Combined, these would add around 1 percentage point to CPI inflation. Thus other prices in the economy would need to rise less in order for CPI inflation to meet its target.

5.29 In Chapter 1 we noted the strong medium to long-term relationship between the RPI inflation rate and the level of basic pay increases. During and since the 2008-09 recession, however, this relationship has weakened. In the recession year of 2009, pay increases were driven most by a firm's ability to pay, with many companies recording pay freezes, albeit in a year of negative inflation. In the three years since then, the level of median pay settlement has remained persistently below inflation, leading to a substantial fall in real pay rates.

5.30 The link between inflation and pay settlements has weakened rather than disappeared, however, and it has remained a significant influence on pay-setting, but not the most important factor. Incomes Data Services (IDS) (2012b) identified affordability and the future business outlook as the most important factors in pay setting in a survey of firms. Similarly, in a survey of 2012/13 pay prospects, XpertHR (2012) found that company performance/ability to pay was the most common influence on pay settlements, but inflation/cost of living was the next biggest factor. Using a much larger sample, Workplace Employment Relations Study (2013) confirmed the importance of these factors. It reported that financial performance was the predominant influence on pay-setting in the private sector in 2011 (it was also important for the public sector). The cost of living, the National Minimum Wage, productivity, and recruitment and retention were also significant factors influencing pay settlements in the private sector. The minimum wage was cited by 31 per cent of private sector employers (and 14 per cent of public sector employers) as being an important influence in setting pay.

5.31 We looked at pay settlement measures published by IDS, XpertHR, the Labour Research Department and EEF, the manufacturers' organisation. These settlements cover a higher proportion of larger employers and unionised workplaces than the economy as a whole. No such databases for small firms exist. However, they still provide a valuable indicator of developments in these organisations, and cover a large number of employees, but they may not be an exact proxy for earnings changes in the whole economy. In the three months to December 2012, the whole economy median pay settlement was 2.0-2.5 per cent, depending on the provider. There had been a gradual fall in median pay settlements reported by the main providers during 2012, from around 3 per cent at the start of the year, pushed up by a number of inflation-linked long-term deals, to 2 per cent at the end of the year, brought down by falling inflation and an absence of recruitment and retention pressures. Around one in ten private sector pay reviews resulted in freezes in 2012, a similar proportion to 2011. According to IDS, median pay settlements in the low-paying sectors in 2012 were 2.0-2.5 per cent.

5.32 Early indications of 2013 pay reviews have been given by XpertHR and IDS. January pay reviews are particularly important, as they cover a large proportion of private sector reviews and set the scene for pay bargaining through the year. XpertHR reported a median of 2.5 per cent, based on 60 deals in January 2013. IDS reported a provisional median of 2.4 per cent (based on 22 pay reviews in January 2013), mainly covering long-term deals at manufacturing and energy companies. Both providers noted that early January deals tended to be at the higher end, and the medians may well fall back later in the year.

5.33 A number of surveys conducted in autumn 2012 gave an indication of the level of pay reviews in 2013. IDS (2012b) suggested that pay increases in 2013 would be similar to those made in 2012 (when the median increase was 2.5 per cent), although fewer organisations intended to pay higher awards in 2013 than in 2012. XpertHR (2012) also reported that the median private sector pay award would be 2.5 per cent in 2013. Pay awards were expected to be tightly bunched, between 2 and 3 per cent. Pay freezes were predicted to account for less than 10 per cent of awards. The Chartered Institute of Personnel and Development (CIPD) (2012b) reported that the expected mean basic pay settlement, among those employers that were planning a pay review in the next 12 months, was 1.7 per cent. This was 2.6 per cent in the private sector and 0.6 per cent in the public sector. Just 7 per cent of private sector employers were planning a pay freeze, compared with 28 per cent of public sector employers.

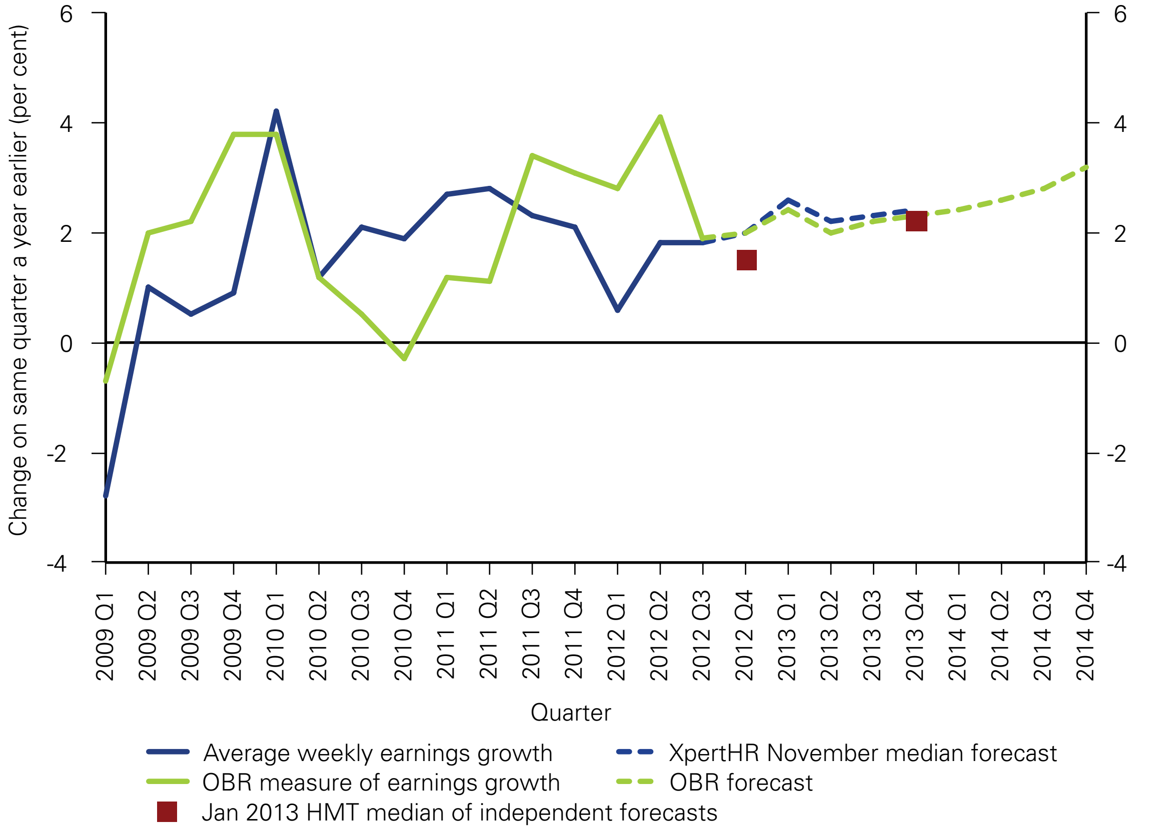
5.34 This evidence suggests a large degree of continuity in pay-setting, with reviews centring again on 2.5 per cent in 2013. There will undoubtedly be variations between sectors and individual organisations. As noted above we are conscious that aggregate pay settlement data are valuable evidence but it is important to recognise their limitations. For example, they do not reflect the experiences in many small firms that are not covered by these surveys.

5.35 Pay settlements measure changes in basic pay while the broader measure of average earnings growth includes progression, variable pay, overtime and changes in the labour market, such as workforce restructuring or upskilling. Over the longer term, improvements in productivity and wage drift have meant that average earnings growth is ahead of basic pay settlements. Throughout 2012, however, average earnings growth has been below 2 per cent, meaning that other factors, such as a restructuring towards lower paid jobs, increasing part-time work, or reduced overtime have been keeping earnings growth down. Lower bonus pay has been a factor in some sectors, notably finance.

5.36 Annual average earnings growth across the whole economy was 1.5 per cent in the three months to November 2012, and did not broach 2 per cent all year. Total pay growth has been subdued in all the broad Average Weekly Earnings (AWE) sectors. The sector with the highest concentration of low-paid employees, wholesaling, retailing, hotels and restaurants, showed the strongest annual earnings growth, at 2.7 per cent in the three months to November 2012.

5.37 Regular average earnings growth has been remarkably stable over the last three years, at around 2 per cent (having been around 4 per cent in the pre-recession period), while the recession affected bonus payments much more significantly, as shown in Figure 5.4.

Figure 5.4: Average Earnings Growth and Forecasts, GB, 2009-2014



Source: ONS, AWE total pay (KAC3), quarterly, seasonally adjusted, GB, 2009-2012; OBR estimates and forecasts of earnings growth, UK, 2009-2014; XpertHR (November 2012); and HM Treasury panel of independent forecasts (January 2013).

5.38 Average earnings growth is not expected to pick up in 2013, with a median independent forecast of 2.2 per cent for the fourth quarter of 2013. The OBR forecasts average earnings using a national accounts measure of total compensation per employee, rather than AWE. It revised down its forecast of earnings growth in its December report, in line with slower productivity growth, rising unemployment and lower expected price inflation in the medium term. The OBR also expects whole economy wages to grow by around 2.2 per cent in 2013. This would again leave earnings growth slightly below the rate of inflation.

5.39 For the purposes of measuring the impact of the minimum wage we compare the NMW rates against the median of the relevant earnings distribution taken from the Annual Survey of Hours and Earnings (ASHE). We use forecasts for average earnings growth as a proxy for the growth in the relevant ASHE medians. Measures of average earnings growth such as AWE differ in a number of respects, such as coverage, weighting, time periods and the way in which workforce changes are accounted for, as we have previously noted, so there will be short-term variations in their estimates of earnings growth. Over the longer term, however, these short-term variations largely cancel out so that between April 2000, the earliest date from which we can compare the two series, and April 2012, the ASHE median increased by 49.5 per cent, while AWE total pay increased by 50.5 per cent. In other words the difference between the growth in the ASHE median and the AWE average was just 1 percentage point over the 12 year period.

5.40 We have outturn data for two-thirds of the period between ASHE surveys already: average weekly earnings showed annual growth of 1.7 per cent on average between April 2012 and November 2012. The forecast suggests a slight pick-up in this rate in 2013, to 2.1 per cent, which would suggest year-on-year growth in the April 2013 ASHE median of around 1.8 per cent.

5.41 The OBR earnings growth forecasts are calculated in a way that takes account of expected changes in employment that are broadly comparable with ASHE. Averaging the OBR forecasts for the four quarters from the second quarter of 2012 to the first quarter of 2013 (i.e. April 2012 to April 2013) gives a higher expected earnings growth figure of 2.4 per cent. The same analysis for April 2013 to April 2014 suggests earnings growth of 2.4 per cent for the April 2014 ASHE.

Prospects for Employment

5.42 Despite the weakness in output growth, the UK labour market prospered in 2012, increasing employment, as measured by workforce jobs, by 2.2 per cent. In contrast to last year, when weak below-trend growth was forecast to lead to net job losses, the continuing below-trend growth forecast in 2013 is this time expected to lead to some employment growth, albeit less than that observed in 2012. The OBR and the median of independent forecasters expect an increase in employment in 2013, albeit by only 0.3-0.5 per cent, but claimant unemployment is also expected to increase from 1.57 million at the end of 2012 to 1.62 million by the end of 2013. The expected upturn in growth in 2014 should lead to further increases in employment but this may not be sufficient to prevent unemployment rising slightly.

5.43 CIPD (2012b) showed that the labour market was expected to weaken going into 2013. Expectations among private sector employers continued to show a positive outlook for employment but it was stronger looking forward in the short-term than over the next twelve months. In contrast, employment was expected to fall across the public sector throughout the next twelve months, albeit at a slower pace than in the previous twelve months. This suggests that the rate of job growth in the private sector will continue to strengthen in the short-term and more than make up for the job losses in the public sector. However, this growth in private sector jobs would struggle to offset the increase in the working age population (around 60,000 a quarter) and unemployment is likely to increase slightly as a result.

5.44 The Recruitment and Employment Confederation (REC)/KPMG (2012) reported that in November 2012 the labour market continued to show strength with recruitment consultants again placing more people in permanent and temporary placements. It also showed that vacancies were strong with private sector employers offsetting the weak demand from the public sector. REC (2012) reported that about 86 per cent of employers intended to increase or maintain their temporary workforces and this was up on the same time a year ago. The availability of temporary staff had accelerated markedly, but the availability of permanent staff was static. These reports are generally consistent with the official statistics showing a strengthening labour market.

5.45 The recessions of the early 1980s and early 1990s saw much greater falls in employment and hours than in output. Output fell by 4.7 per cent in the 1980s recession but employment fell by 6.5 per cent and hours by 10.2 per cent. The fall in output in the 1990s recession was much smaller, 2.5 per cent, but employment (down 6.3 per cent) and hours (down 9.1 per cent) fell by nearly as much as in the 1980s recession. In contrast, during the recent recession, the loss in output (6.3 per cent) was much larger than both the fall in jobs (2.5 per cent) and the reduction in hours (4.7 per cent). After the earlier recessions had ended, it took a further seven to eight quarters for output to return to its pre-recession levels. Output in the third quarter of 2012, thirteen quarters after the end of the 2008-09 recession, is still 3.0 per cent below its level in the first quarter of 2008.

5.46 In the 1980s employment did not return to its pre-recession level until 91 months (over seven years) after the start of the recession. It took 101 months (over eight years) after the start of the 1990s recession. Hours took even longer to recover from both recessions. But, as we noted in Chapter 1, total employment and hours have already more or less recovered to their pre-recession levels this time.

Summary of Forecasts for 2013 and 2014

5.47 In summary, the prospects for the UK economy in the short to medium-term are very similar to those that we faced in January 2012. Then, as now, forecasts for growth in the coming year or so were being revised down. In January 2012, most forecasters thought that the UK might avoid a double dip recession and looked ahead to the Diamond Jubilee and the Olympics to provide the 'feel good' factor to boost consumer and business confidence and produce a sustained recovery. That does not appear to have happened. In January 2013, it seems that we may stand on the edge of an unprecedented triple dip, although the latest forecasts suggest that it would be short-lived and shallow with growth picking up through 2013 and into 2014. The latest forecasts are shown in Table 5.2.

Table 5.2: Actual Outturn and Independent Forecasts, UK, 2012-2014

Per cent	Actual data 2012	Median of independent forecasts (November 2012 and January 2013)		OBR forecasts (December 2012)	
	(Actual to Q4/whole year or latest)	2013	2014	2013	2014
GDP growth (whole year)	**0.0**[a]	**1.0**	1.8	**1.2**	2.0
Average earnings growth (whole year)	**1.4**[b]	**2.2**	-	**2.2**	2.8
Inflation RPI (Q4)	**3.1**	**2.7**	2.6	**2.5**	2.6
Inflation CPI (Q4)	**2.7**	**2.4**	2.0	**2.3**	2.2
Employment growth (whole year)	**2.2**	**0.5**	-	**0.3**[c]	0.3[c]
Claimant count (millions) (Q4)	**1.57**	**1.62**	1.61	**1.69**	1.70

Source: HM Treasury Panel of Independent Forecasts (November 2012 and January 2013), OBR Forecasts (2012b) and Low Pay Commission (LPC) estimates based on ONS data, GDP growth (ABMI), total employment as measured by workforce jobs (DYDC) and claimant unemployment (BCJD), quarterly, and AWE total pay (KAB9), monthly, seasonally adjusted; RPI (CZBH) and CPI (D7G7), quarterly, not seasonally adjusted, UK (GB for AWE), 2011-2014.
Notes:
a. Estimate of economic growth based on current ONS data and LPC estimates of likely Q4 outturn.
b. Estimate of average earnings growth based on January-November 2012 compared with the same period a year earlier.
c. OBR forecasts employment levels rather than growth. Growth forecasts shown here reflect the percentage differences between these forecast levels.

Stakeholder Views

5.48 We have again sought the views of stakeholders on the rates of the minimum wage that should apply from October 2013. We have obtained information through our written consultation, oral evidence sessions with stakeholders, our visits around the UK and through the meetings our Secretariat conducted with interested parties. The Introduction set out how we have gathered evidence for this report and Appendix 1 lists the people and organisations that have provided evidence. Not all of those who submitted evidence gave views on the rates that should apply from October 2013.

Adult Rate

5.49 Views on the adult rate again roughly fell into two camps. Those representing employers highlighted the continued fragility of the economic recovery and stressed that now was not the time to be increasing costs. On the other hand, those organisations representing workers pointed out that the low-paid had continued to see a fall in their real wages and that this position should be reversed. They pointed to the strength of employment in the low-paying sectors, compared with the economy as a whole, and the financial reserves of many (large) companies.

5.50 The evidence from employer groups generally called for a freeze or restraint in the light of the current economic conditions. Around a dozen (out of about 30 employer submissions which covered the review of the adult rate) proposed no increase in October 2013. These included the Unquoted Companies Group, representing family businesses, and a number of sectoral organisations and individual businesses. In retail those supporting a freeze included the Association of Convenience Stores, in the hospitality sector the Association of Licensed Multiple Retailers (ALMR), and in textiles the UK Fashion and Textiles Association. The concerns of such organisations included the costs faced by businesses, the state of the economy as well as conditions in product and labour markets. We also heard from organisations in adult social care that insufficient monies would be available to care providers to pay for the increased cost of a higher NMW.

5.51 The majority of other employer bodies favoured a 'modest' increase at most, but these, like the CBI, stressed an uncertain economic outlook, cost pressures on business and the need for us to exercise caution, with the economic risks on the downside. The British Hospitality Association, British Beer and Pub Association and Business In Sport and Leisure (BHA, BBPA, BISL) told us that as the economy did not seem to be recovering; costs were continuing to rise; and young people were in particular difficulties, this all implied a further year of caution was required. Some organisations, many of them first stating a preference for a freeze, indicated a maximum if the rate was to increase. The National Hairdressers' Federation said that until growth returned to its sector any increase would be difficult and businesses would definitely not be able to cope with any increase beyond the cost of living. The National Day Nurseries Association said that nurseries wanted the rate to 'remain stable' – meaning it should be either frozen or increased by 1 or 2 per cent. In agriculture the National Farmers' Union (NFU) said an increase of over 2 per cent may limit growth in the job market. The British Retail Consortium said its long held view was that increases in the NMW should not exceed long-term average earnings growth, which over the previous twelve months suggested 1.8 per cent, although it thought a cautious approach needed to be adopted given the highly uncertain outlook for the euro area and the UK recovery.

5.52 Some employer groups suggested an increase which in some way related to changes to prices or wages. Habia said the rise should be equal to the level of inflation, while the Employers Network for Equality and Inclusion believed that any increase to the adult NMW should be limited to the amount needed to maintain its real value. EEF, the manufacturers' organisation, said a formula should be used to determine increases in the minimum wage, based on the average level of basic pay settlements over the previous twelve months.

5.53 On the other hand, organisations representing workers highlighted the very difficult situation of many low-paid workers, with falling real wages and increased costs. They wanted to see the adult rate increased, which was affordable given the accumulated financial reserves held by companies, with many citing the level of the living wage as their ultimate goal for the NMW. Many of these organisations emphasised evidence that the labour market had been resilient, particularly in low-paying sectors and that by October next year re-establishment of economic growth could be expected. They favoured increasing the rate to offset the fall in its real value due to inflation.

5.54 The Trades Union Congress (TUC) argued that economic growth was forecast to return in 2013, and increase in 2014, and that employment had grown more across the low-paying sectors than in the rest of the economy. It also pointed out that earnings growth was predicted to increase during the next two years and that a well-judged increase in the real value of the NMW could be absorbed by employers. The TUC wanted to see the NMW rise by more than the higher of RPI inflation and the increase in average earnings, in order to address the erosion of the real value of the NMW. UNISON argued that implementing a significantly increased NMW could stimulate the economy by efficiently increasing consumer spending power. It said the NMW should be raised substantially in 2013 to reflect the increased cost of living. The Union of Shop, Distributive and Allied Workers (Usdaw) favoured an increase at least in line with RPI projections.

5.55 A number of trade unions wanted to see the NMW reach the level of a living wage over time. UNISON said that after 2013 the NMW should move in stages towards a living wage of £8.30. Unite wanted to see an increase that brought the adult rate to a minimum of £6.39 and as near as possible to £8.38. The GMB recommended increasing the adult rate to at least £6.34, with a view to moving towards £8 an hour. The Public and Commercial Services Union said it was imperative that the NMW rose above inflation to a level that significantly closed the gap between the NMW and the living wage.

5.56 The Communication Workers Union stated that the starting point for assessing the level of the NMW should be the principle that anyone in work should be able to afford a socially acceptable standard of living for themselves and their family. Consequently, in 2013 there should be a significant increase – above inflation and earnings – as an interim step towards reaching a living wage. The Church of Scotland also wanted to see the NMW rise towards the level of a living wage.

Youth Rates

5.57 Stakeholder views on the youth rates were divided into two groups: those in favour of a freeze or very cautious increase in the youth rates; and those calling for significant increases to reduce the gap between the youth rates and the adult rate, that had widened following the freeze in the youth rates in 2012.

5.58 The CBI argued that the youth rates of the minimum wage needed to reflect the lower productivity of young people, and referred to the higher bites of the youth rates compared with the adult rate of the minimum wage. It thought that pay restraint had been essential to the resilience of the labour market, and supported freezing the youth rates again from October 2013. The Association of British Bookmakers and the Cleaning and Support Services Association wrote that they had seen increases in the use of the youth rates, and urged caution when considering any upratings to them.

5.59 The TUC supported increasing the youth rates by at least as much as the adult rate, arguing that no statistically significant evidence has been found of an adverse impact of the NMW on the employment level of young people. The British Youth Council and the YMCA England wanted to see the gap closed between the youth rates and the adult rate, and the National Union of Students supported the equalisation of all rates of the minimum wage.

Apprentice Rate

5.60 We met with the four administrations of the UK in 2012, and all advised that employers had raised few concerns with them about the Apprentice Rate, and its increase to £2.65 from October 2012. This view was shared by many other stakeholders we met, including the National Apprenticeship Service.

5.61 However, the Unquoted Companies Group wrote in its consultation response that 'for some low productivity apprenticeships the Apprentice Rate is undoubtedly now too high.' The CBI argued that the recent increase in apprentice numbers across the UK was driven by starts in the 25 year olds and above age group, and the Apprentice Rate needed to remain relatively low to encourage employers to recruit young apprentices.

5.62 Some stakeholder groups called for large increases in the Apprentice Rate, arguing that it had not affected apprentice volumes to date, and that a higher rate would encourage more people to start an apprenticeship. The Royal College of Midwives and Broadcasting Entertainment Cinematograph and Theatre Union both argued for substantial increases in the Apprentice Rate, while UNISON wanted to see the Apprentice Rate increased to match the age-related rates of the minimum wage.

Implications of Other Government Legislation

Pension Reforms

5.63 In our remit this year the Government asked us to take into account pensions reform in recommending the NMW rate. In October 2012 auto-enrolment came into effect, whereby eligible workers are required to be automatically enrolled into a (qualifying) pension scheme.

5.64 Eligible workers are those who are aged 22 years and above and below State Pension Age. As of 1 October 2012, they also had to earn more than £8,105 per year, although contributions would be based upon earnings between £5,564 and £42,475 (the lower and upper earnings limits for National Insurance (NI) contributions). The arrangements are being implemented in stages, depending on the size of firm. For the period October 2012 to September 2013, those firms employing more than 1,250 employees will join the scheme. Contribution rates are also being phased in. Between October 2012 and September 2017, both the worker and employer will contribute a minimum of 1 per cent each. By October 2018 the total minimum contribution will be 8 per cent: made up of 4 per cent from the worker, 3 per cent from the employer and 1 per cent tax relief. A worker can choose to opt-out of the arrangements.

5.65 For the period for which we are making recommendations in this report (i.e. October 2013 to September 2014) firms employing between 61 and 1,249 employees will be joining. Medium-sized firms, those employing fewer than 250 workers, will start joining from April 2014.

5.66 In December 2012, following consultation, the Government announced changes that would significantly affect eligibility for the scheme. It announced that it would change the auto-enrolment limits (to align with the general tax and NI levels) so that, as from April 2013, a worker would be automatically enrolled if they earned more than £9,440 and contributions would be based on earnings between £5,668 and £41,450. Our estimates show that a worker paid at the National Minimum Wage (£6.19 an hour) as of April 2013 would have to work in excess of 29.3 hours a week to be automatically enrolled. This has increased from 25.2 hours a week (when using the threshold in place at October 2012).

5.67 Using data from the Annual Survey of Hours and Earnings, around 39 per cent of those aged between 22 and 65 and paid at the NMW worked in excess of 29.3 hours per week in April 2012. (The proportion that worked more than 25.2 hours is 46 per cent.) These figures do not take into account workers already in a pension scheme, but give an initial indication of the proportion of minimum wage workers that will fall within the scope of auto-enrolment when it is fully rolled out, in the absence of significant changes in thresholds or hours worked by minimum wage workers. The ASHE data for 2013 (released in November 2013) will provide a more accurate update, and we will include this in our next report.

5.68 A number of stakeholders this year have again raised concerns over the new arrangements, particularly the cost and additional administrative burdens it will place on businesses. EEF, the manufacturers' organisation, said that pension changes will have a significant (cost) impact on businesses. BHA, BBPA, BISL, and ALMR noted in their joint evidence that auto-enrolment was being phased in and said that the LPC should adjust the NMW recommendations each year during the transition period to take the rising cost into account. They also said that the majority of employees in hospitality were currently outside a pension scheme and would therefore be subject to auto-enrolment. The Association of Convenience stores said that retailers had indicated that 54 per cent of employees would be eligible for auto-enrolment.

5.69 The CBI said that firms in the lower-paying industries were disproportionately affected by the introduction of auto-enrolment because their employees were currently much less likely to already contribute to a pension and take advantage of employer contributions than those on higher incomes; and the NMW reduced wage flexibility at the lower end of the labour market. It said the NMW clearly placed a significant restraint on the ability of companies to absorb the increased cost (of auto-enrolment) elsewhere in the pay bill. The CBI wanted the significant cost and impact of auto-enrolment to be taken into account when setting the level of the NMW.

5.70 REC stated that it expected pension reform to have minimal impact on NMW workers as it expected significant opt-out rates at the lower end of the labour market. It said that even if the NMW was to rise to compensate for the loss of immediate income to a pension scheme, its members felt that the majority of their workers would still opt out.

5.71 On the other hand, the TUC did not foresee that the phasing in of modest statutory pension contributions would cause employers any problems. Unite said that many low-paid workers would choose to opt out because of their greater need to spend their income, and because of the low statutory employer contribution. It also said that many workers on three-month contracts would miss out. Unite believed that the employer's contribution for minimum wage workers was affordable and should not negatively affect this year's increase to the NMW rates. Usdaw highlighted the then proposed qualifying threshold and that anyone working fewer than 25 hours a week would not qualify. It said that that the average part-time contract in retailing was 16 hours a week which would suggest that the vast majority of the UK's 1.6 million part-time workers in retailing would not be eligible for auto-enrolment.

5.72 Prior to the introduction of auto-enrolment, there had been a number of surveys published reporting on the likely impact of the new pension arrangements. Scottish Widows (2012) found that awareness of the new arrangements was low, especially for those earning less than £20,000 a year. Only around 30 per cent of workers earning up to this level were aware of the new rules. However, of all those questioned who were aware of the changes, only 11 per cent were planning to opt out. Chartered Institute of Payroll Professionals (2012) found that 15 per cent of employers thought that the impact of auto-enrolment would mean that their employees would have to endure pay freezes for the foreseeable future.

5.73 The new arrangements came into force in October 2012. From discussions with stakeholders early in 2013, it is clear that a number of employers have taken up the opportunity to defer auto-enrolling their staff by three months. We have, therefore, not been able to gather substantial data on the impact on firms/workers in the low-paying sectors since the arrangements came in. However, some anecdotal evidence would suggest that opt-out rates may actually be lower than had initially been predicted.

5.74 As stated above, the increase to the qualifying threshold (from April 2013) will reduce the number of workers that fall within scope for auto-enrolment. Both workers and employers contribute a minimum of 1 per cent each until September 2017. This means that a worker earning £6.19 an hour and working a 30 hour week in April 2013 will make a minimum annual contribution of about £40 (or 0.4 per cent of their annual income). This contribution will be matched by the employer. A worker paid at the current level of the minimum wage and working a 40 hour week will make a minimum annual contribution of about £72 (or 0.6 per cent of their annual income). Again, this contribution will be matched by the employer.

5.75 In our 2012 Report, we estimated that the cost to employers in the first year of auto-enrolment would be no more than 0.2 per cent of their total wage bill, on average. Our estimate for medium-sized firms (who join from April 2014) is that the cost will be 0.4 per cent of their total wage bill, on average. We believe that the changes announced (reducing costs to business) are partially offset by reductions in the expected opt-out rate, leading to similar (but certainly not higher) estimates of costs to business. At the time of writing this report we do not have data to show what the actual impact has been on those that have started auto-enrolment. But we should be in a position for our 2014 Report to analyse the impact to date.

5.76 We have carefully considered the likely impact of the new arrangements in reaching our recommendations on the minimum wage this year. It is clear from what we have been told again this year that auto-enrolment will have an impact both through the level of actual contributions and the administrative burden on businesses. At the time of meeting to agree our recommendations it is not yet possible to quantify exactly what that impact will be, as meaningful data on enrolment are not yet available, although some features are clear. We have given our estimate of the impact on wage bills above. While low-paid workers are less likely to already have pension arrangements, not all low-paid workers will be affected in

2013/14 as some will be in smaller firms who will join later. The majority of workers on the minimum wage will earn too little to fall within scope. Low initial contribution rates until 2017 will also affect the impact. We will continue to monitor the reforms next year and beyond as more data become available.

Changes to Personal Tax and Benefits System

5.77 The 2013/14 tax year will see changes to the tax and benefits system that will affect minimum wage workers. These changes were considered in our deliberations for the 2013 recommendations. The personal tax allowance for those aged under 65 will be increased by £1,335 to £9,440 from April 2013. Those earning between £8,105 and £9,440 (working between 25.2 and 29.3 hours a week at the minimum wage) will be removed from income tax altogether while anyone earning more than the personal allowance will benefit by £267 a year. There will also be an increase in the employee Class 1 National Insurance Contribution threshold. These changes will affect just under half of all minimum wage workers. Further, these gains in taxation will be offset to some degree by changes to benefits. The balance of gains and losses will depend on household circumstances.

5.78 In the Autumn Statement 2012 (HM Treasury, 2012b) the Chancellor proposed limiting increases in most working-age benefits to 1 per cent a year for each of the next three years from 2013-14. As a result of these changes to taxes and benefits (excluding Housing and Council Tax benefits) a family with one child, where one person works and earns the minimum wage, will see their net weekly income for a 35 hour week increase by around £6.00 to £336.00 in April 2013.

Universal Credit

5.79 Universal Credit will be introduced across the UK from October 2013 and will replace a number of existing benefits with a single payment for people who are looking for work or are on a low income. It has been designed to improve work incentives and reduce in-work poverty. We received evidence about this through our consultation process and commissioned research. Where employers, such as the Unquoted Companies Group, commented on the introduction of Universal Credit they generally saw this as likely to have the potential to increase incentives to work. However, business groups in several sectors also highlighted the requirement, as part of the rollout of Universal Credit, for employers to supply information on their staff through HMRC's Real Time Information (RTI) system. This they said would particularly affect many small and medium-sized businesses. The CBI stated that providing this information would constitute a significant cost to businesses, and that this should be taken into account as part of the challenges businesses are currently facing.

5.80 Trade unions pointed to evidence that the impact of Universal Credit on incentives to work was likely to be more mixed. The TUC said there would be groups of both winners and losers. It saw no reason for the introduction of Universal Credit to have any particular bearing on the rate at which the NMW was paid. Usdaw highlighted a change in benefit arrangements which had already been introduced, that a couple with children now only received maximum working tax credit if their combined hours totalled 24 or more (an increase from 16 previously). It thought this would have a dramatic impact on the incomes of the lowest paid and that we should take account of what was happening in this area as we look to recommend the rate for 2013.

5.81 This year we commissioned research looking at the interaction of the NMW with the tax and benefits system, including the introduction of Universal Credit. Brewer and De Agostini (2013) found that families for whom NMW jobs were the main source of earnings tended to be in the bottom half of the income distribution, most commonly in the third and fourth deciles. Families for whom NMW jobs were a secondary source of income were more likely to be in the top half of the earnings distribution, in particular the sixth and seventh deciles. For those families for whom a NMW job was the main source of earnings, earnings from NMW jobs typically made up about 70 per cent of net income. In contrast, for those families where NMW jobs provide a secondary source of income, typically around 30 per cent of net income came from NMW earnings.

5.82 The researchers found that following the introduction of Universal Credit, average family incomes would be slightly higher. According to their forecasts, both families for whom NMW jobs are the main source of earnings and families for whom NMW earnings were a secondary source of earnings would be very slightly worse off under Universal Credit than they would otherwise have been. However there is a great deal of variation within these small overall changes, depending on family type and other circumstances. Many families would be better off, while some families (mainly in the top half of the earnings distribution) would be slightly worse off.

5.83 The researchers also found that across the majority of the earnings distribution a 10 per cent increase in the minimum wage would lead to an average increase in net family income of 3 per cent, due to either an increase in tax paid, or the loss of benefit income. This rose to 4 per cent for those families where the NMW was the main source of earnings but fell to 2 per cent for those families where the NMW was a secondary source of earnings. They also concluded that families without children would gain more from an increase in the NMW, as they were less likely to be in receipt of Universal Credit from October 2013.

Abolition of the Agricultural Wages Board for England and Wales

5.84 Our remit this year also asked us to consider any implications of the proposed abolition of the Agricultural Wages Board for England and Wales (AWBEW), pending the outcome of the legislative process, when making our recommendations.

5.85 For our 2012 Report, Incomes Data Services (2011b) undertook research looking at the implications for the NMW of the abolition of the AWBEW. Its report highlighted the diverse nature of the agricultural sector in England and Wales and noted that, according to figures from the Department for the Environment, Food and Rural Affairs, around 140,000 agricultural workers would be directly covered by the NMW Act following abolition of the Board. It should be noted, however, that around 75 per cent of these are currently paid at hourly rates significantly above the NMW (i.e. at least 60 pence an hour above).

5.86 The research made it clear that there were marked differences in the respective terms of the AWBEW Wages Order and the NMW. Broadly, the main differences are:

- We recommend one minimum adult rate and other minimum rates for young people. The AWBEW sets minimum rates for a six grade structure and the appropriate grade minimum applies to all workers irrespective of age (with one exception).
- Piece rates are used under both the Wages Order and the NMW Regulations, which are underpinned by the relevant minimum wage. However, a Fair Piece Rate System (FPR) can only be used under the NMW, if a worker's hours are not controlled. Under a FPR, it is possible for a worker to be paid below the NMW.
- Under the AWBEW, deductions for accommodation vary depending on whether a house or other accommodation is provided and can be subject to the worker having worked a minimum of 15 hours a week. There is only one rate under the NMW and no minimum work requirement.
- There are a number of terms and conditions governed by the AWBEW, e.g. sick pay, on-call allowance etc., none of which are covered by the NMW.

5.87 Some stakeholders have expressed a view to us about the proposed abolition. The NFU said abolition represented an opportunity for agriculture to become aligned with other sectors and it was consistent with the aspiration to foster an efficient, competitive and modern farming sector. One farmer said in his response that as all AWB work was covered by the NMW, abolition would save money and bureaucracy. On the other hand, Unite said opponents of the AWB missed the point. Although the majority of agricultural workers were currently on rates well above the minimum, the AWB also covered a number of other issues, such as grading arrangements, skills and qualifications, and allowances and grants. These protections for workers would be lost if abolition went ahead.

5.88 In October 2012, the Government launched a consultation on its intention to abolish the AWBEW and two associated Committees. We responded to this consultation highlighting two points (a copy of our response can be found on our website at http://www.lowpay.gov.uk/lowpay/agricultural_wages_board.pdf). First, if abolition was to go ahead, there should be a communications campaign to ensure both workers and employers were aware of the changes. Second, strong and effective enforcement was a cornerstone of the NMW and we wanted to see sufficient resources allocated to HM Revenue & Customs to extend its enforcement work into the agricultural sector. In December, the Government published its response to the consultation, announcing its intention to abolish the AWBEW, before October 2013, subject to the legislative process.

5.89 The agricultural sector is already one of our low-paying sectors and we consider issues within this sector when making recommendations on the National Minimum Wage (notwithstanding that there are separate arrangements for some workers under the UK's three Agricultural Wages Boards (two of which are not being abolished)). If abolition goes ahead, existing workers will retain their contractual rights under the AWBEW. New workers will have employment protection currently enjoyed by workers in other sectors, including those under the NMW. We will continue to monitor developments in the sector and will consider further the need for specific research if abolition goes ahead.

Changes to Other Regulations

5.90 Some employer organisations also asked us to take into account in our review of the NMW rates changes to other government regulations (other than those covered above) which had imposed, or could impose, further costs on business. Employer stakeholders told us these included regulations which affected the hospitality and leisure sectors. In pubs and brewing, the excise duty escalator (2 per cent above inflation) continued to be an issue. The pub sector would also be subject to a new taxation system for gaming machines from 1 February 2013, with associated administrative costs. In childcare stakeholders referred to the introduction by the Government of a funded offer (free places) for some two year olds in England from September 2013. Childcare providers were concerned there may be a funding shortfall for providers, as they said there was already for the existing free early education places for three and four year olds.

5.91 Other regulatory costs causing concern and raised in our consultation included: flexible working provisions; managing and administering direct payroll costs (including National Insurance, holidays and maternity costs); and the Agency Workers Directive.

International Comparisons

5.92 We again considered evidence on the level and arrangements for minimum wages in other countries, including changes that had been made to each country's minimum wage over the past year (end of 2011 to the end of 2012). In order to maintain consistency we once again used as comparators the basket of 12 European Union and Organisation for Economic Co-operation and Development countries we have looked at since the minimum wage was introduced in the UK. All this information is set out in detail in Appendix 3.

5.93 Unsurprisingly there was a range in the level of national currency upratings of the respective minimum wages. Four of the comparator countries did not increase their minimum wage during the past year (US, Spain, Portugal and Ireland) while one (Greece) reduced its minimum wage by 22 per cent. These rate freezes or reductions were usually linked to the economic circumstances of these countries and often reflected the terms laid down under international loan arrangements. This group of countries generally had a lower minimum wage than the UK's. Those countries with a higher minimum wage than in the UK (such as Australia, France and New Zealand) generally uprated their minimum wages by more than the rise in the UK minimum wage over the same period. They generally faced less severe economic circumstances than those countries freezing or reducing their wage rate and in some of these cases wage changes were also driven by other factors such as regional or provincial wage setting, or wage indexing arrangements. The increase in the national currency value of the UK minimum wage was similar to that in Japan and the Netherlands.

5.94 When exchange rates are taken into account the value of the UK's minimum wage remains in the middle of this pack of comparator countries. In terms of purchasing power, adjusting for inflation as well as exchange rates, the NMW also remains in a similar position. When we considered the value of each country's minimum wage relative to full-time median earnings, averaged over the year to allow for the timing and number of upratings, we again found that the bite of the UK minimum wage had remained in a broadly similar position, that is lower middle ranking. We also looked at how the value of each minimum wage had grown since 1999 and found that, in purchasing power terms the growth in the UK's minimum wage was middle ranking across the whole period from 1999 to 2012. But between 2007 and 2012, due largely to depreciation in sterling as well as a relatively higher inflation rate in the UK, all the comparator countries experienced relatively higher increases in their minimum wages.

Recommended Rates

5.95 In arriving at our recommendations to Government we examined the evidence very thoroughly, paying particular attention to matters which our remit asked us to consider.

5.96 Arguments for a significant increase in the adult rate centred on the strong employment performance of the low-paying sectors, where employee jobs grew at more than double the rate of the economy as a whole. This did not suggest adverse effects on employment among the low paid as a result of the minimum wage. We also noted that the real value of the minimum wage had again fallen because of inflation, and that increases in prices of essentials such as energy and food had hit the lowest paid especially hard. Furthermore, while the performance of the economy in 2012 was disappointing, most forecasters expected some improvement in the period to be covered by our recommendations.

5.97 Other considerations pointed to holding down the adult rate. The economy remained weak, and the bite of the adult minimum wage had reached its highest ever level as the minimum wage increased by more than median earnings. These relative increases in the NMW had intensified pressures on affordability for some employers, particularly small firms. To the extent that the resilience of the labour market may be attributable to falling real wages then adverse consequences for employment might be expected if inflation falls and real wages start to rise.

5.98 When we met in January 2013 to decide on our recommended rates we considered the economic outlook, and its implications for wages and earnings, very carefully. We are conscious that GDP forecasts have tended to be too optimistic in recent years. However we agree with the prevailing view that throughout the period of these rates GDP growth is likely to be well below its long term pre-recession trend, but the consensus of forecasts is for a little higher growth in 2013-14 than equivalent forecasts before us a year ago for 2012-13.

The Adult Rate

5.99 We noted last year that the National Minimum Wage gave the lowest paid a level of pay which was a higher proportion of median earnings than it had ever been, and that the weight of the evidence shows no adverse effects on employment. That remains the case.

5.100 During the economic downturn we have taken a cautious approach to NMW rates in order to avoid jeopardising this achievement and because of the pressures on business, particularly small businesses. In practice our recommendations have approximated very closely to what has proved to be the path of average earnings – since 2009 the two series have diverged by only one penny. Over that period forecasts of average earnings have turned out to be too optimistic, and this experience suggests that our recommended rate for 2013-14, when we have again been cautious, may be closer to actual average earnings than forecasts available at the time of our meeting.

5.101 In 2012 we recommended an NMW increase which we expected to maintain the relative incomes of the lowest paid, while recognising that, like other workers, they would be likely to see some reduction in their real incomes. The economic environment is not markedly different this year, and our recommendation is similar to the one we made a year ago. **We recommend that the adult rate of the National Minimum Wage be increased by 1.9 per cent, or 12 pence, to £6.31 an hour, from 1 October 2013.**

The Accommodation Offset

5.102 We report our review of the accommodation offset in Chapter 4. At its optimal level the offset will balance the benefits of employer-provided accommodation for worker and employer, and will support the provision of accommodation where that is mutually beneficial. However, the evidence indicates that the provision of accommodation by employers has decreased. Although this is the result of several factors, we believe a higher offset would help to encourage mutually beneficial provision of accommodation. On the other hand we do not favour reducing the take-home pay of the lowest earners at a time when, like other workers, they are experiencing erosion in the real value of their wages. It is therefore our intention to recommend staged increases in the accommodation offset towards the value of the hourly adult rate of the NMW when economic circumstances mean that the real value of the NMW is tending to rise. This year, we recommend maintaining the value of the offset relative to the minimum wage. **We recommend that the accommodation offset be increased by 1.9 per cent, to £4.91 a day, from 1 October 2013.**

The Youth Development Rate and 16-17 Year Old Rate

5.103 In 2011 we recommended increases in the two young people's rates of the NMW below that for adults, and in January 2012 we reluctantly recommended a freeze, because of the worsening labour market position of young people. Since then their position has stopped deteriorating, and there are one or two signs of improvement although it is too early to know if these will become a trend. Rises in their median pay mean that the bites of young people's minimum wage rates have fallen; on the other hand employers are paying more young workers the youth rates. There continues to be debate about the role of pay in the labour market outcomes of young people. In these circumstances, we do not believe another freeze in these rates is necessary, but we remain mindful that employment of young people is more sensitive than that of adults to the economic cycle, and we recommend smaller increases in these rates than in the adult rate, which we believe should further add to the relative attractiveness of young people to employers. We again note that because of the sensitivity to the economic cycle we would expect to be able to recommend larger increases for young people when economic conditions have eased. **We recommend an increase of 1 per cent in the Youth Development Rate to £5.03 an hour and in the 16-17 Year Old Rate to £3.72 an hour from 1 October 2013.**

The Apprentice Rate

5.104 Our remit this year asked us to review the contribution the Apprentice Rate could make to the employment prospects of young people, and we have focused particularly on the evidence relating to young apprentices. This group comprises the great majority of those paid the Apprentice Rate. The Apprentice Rate has risen significantly since it was introduced and this year, for the first time, there has been a fall in apprenticeship starts among 16-18 year olds in England. However, we have also heard evidence that pay is not the decisive factor in employers' decisions to take on apprentices.

5.105 But it is another piece of evidence that has influenced our recommendation for the Apprentice Rate. The most recent Apprentice Pay Survey indicates that 30 to 40 per cent of 16-17 year old apprentices are paid below the Apprentice Rate. In these circumstances we are, reluctantly, unable to recommend an increase: there is no point in raising the legal floor under apprentice pay if it is not in practice observed. In Chapter 4 we recommended that the Government should combine a communications campaign and a targeted enforcement initiative to ensure that the Apprentice Rate is known to employers and apprentices, and that infringers are caught, punished, and wherever appropriate, named. We very much hope that it will take action so that problems of non-compliance do not affect our recommendation in the same way in 2014. Accordingly, **we recommend that the Apprentice Rate should remain at £2.65 an hour from 1 October 2013.**

Implications of the Recommended Rates

5.106 In assessing the likely impact of our minimum wage recommendations, we have looked at various factors, including coverage and bite (the value of the minimum wage relative to average or median earnings), as well as likely changes to household income, wage bills and the Exchequer.

Coverage

5.107 According to ASHE data, in April 2012 there were around 1.43 million jobs that paid less than the minimum wage rates we recommended for October 2012 and around 2.00 million jobs that paid less than the minimum wage rates we are recommending for October 2013. These jobs were predominantly held by adult workers. Of those jobs below the recommended rates for 2013, 1.79 million were held by those aged 21 and over (7.2 per cent of such jobs), 173,000 were held by 18-20 year olds (15.5 per cent of such jobs), and 40,000 were held by 16-17 year olds (14.1 per cent of such jobs).

5.108 In order to estimate future coverage of the minimum wage, we need to make assumptions about how the wages of the low paid would change in the absence of any minimum wage upratings. In other words, in order to estimate the value of the recommended upratings at April 2012 (the date of the latest earnings data) the recommended future minimum wage rates need to be downrated using estimated wage growth, based on OBR quarterly forecasts. However, this modelling will only produce sensible estimates of coverage when the downrated value of the future minimum wage is at least as great as its current value.

5.109 In April 2012 the downrated values of the October 2013 minimum wage rates are lower than their then current values. We therefore cannot adopt our previous approach to estimating future minimum wage coverage. If the OBR's quarterly earnings forecasts are realised, then it is likely that coverage of the minimum wage would fall to some degree, though we would not expect this to be substantial. If, as has been the case in previous years, actual earnings growth through 2013 and into 2014 is lower than the OBR have forecast then we would expect the coverage of the minimum wage to remain around its historic level of about one million workers.

5.110 Our recommendations for the youth rates are below those for the adult rate, and we would not expect a material increase in the number of young workers covered by the minimum wage. Such an increase would tend to imply average wages of young workers either fall, or increase by appreciably less than 1 per cent. We think it more likely that the effect of our recommendations will be to reduce rather than increase the numbers of young people covered at the 16-17 Year Old Rate, the Youth Development Rate and the adult rate by comparison with April 2012. However, it should be noted that employers may in any event continue to make increased use of the youth rates (as they have done since the onset of recession in 2008) and this would also affect coverage.

Position Relative to Average Earnings

5.111 The bite of the minimum wage is another way of assessing the impact of the minimum wage on the earnings distribution. In April 2012, according to ASHE, the median gross hourly earnings (excluding overtime) of all employees aged 21 and over (full and part-time) was £11.36 an hour. In order to properly compare this median with the recommended adult rate for October 2013, it needs to be uprated by the predicted growth in average earnings. On that basis, the adult rate of £6.31 is expected to be about 53.0 per cent of estimated median earnings for those aged 21 and over (£11.91) in April 2014. This is lower than the estimated bite at the median of 53.2 per cent in April 2013, and the current bite based on actual median earnings in 2012, of 53.5 per cent.

5.112 Using the mean, the bite in April 2014 is estimated to be around 41.0 per cent for employees aged 21 and over based on the earnings assumption. Again, this is lower than the estimated bite at the mean (41.2 per cent) in April 2013, and lower still than the actual bite at the mean (41.4 per cent) in April 2012.

5.113 In order to compare the estimated bite with the historical time series we need to exclude those aged 21 from the analyses. In April 2014 £6.31 is expected to be about 52.3 per cent of median earnings for those aged 22 and over. Compared with mean earnings, we estimate the bite to be around 40.7 per cent for those aged 22 and over. The bites at both the median and mean for those aged 22 and over are expected to fall slightly between April 2012 (based on actual data) and April 2013, and fall slightly further between April 2013 and April 2014.

5.114 These estimated small changes to the bite of the NMW give credence to our conclusions above that coverage of the minimum wage is likely to fall a little in April 2014. Coverage should be similar to that observed in April 2012.

Impact on Household Income

5.115 When the adult minimum wage increased to £6.19 in October 2012, a minimum wage worker's gross weekly income would have been £216.65 for a 35 hour week. Using HM Treasury estimates for the 2012/13 tax year, this gross income would have been equivalent to a net income of around £210.00 for a single person working full-time with no children (a net wage of £6.00 an hour for a 35 hour week). The corresponding amount for a couple with two children (one partner working and the other not) would have been around £395.00 (equivalent to a wage of £11.28 an hour for a 35 hour week).

5.116 Again assuming a 35 hour week, gross weekly income would increase by £4.20 to £220.85 following the minimum wage increase to £6.31 an hour in October 2013. Taking into account the minimum wage uprating and the 2013/14 tax year, the net weekly income for a single person would rise by about £6.00 to around £216.00. For a family with two-children, net income would rise by around £8.00 to £403.00. The effective hourly rate for the single person would be £6.19 (19 pence higher than in October 2012), and for a two-children family would be £11.51 (23 pence higher than in October 2012).

Wage Bills

5.117 Given the size of our recommended increase we expect that the direct impact of our recommendations on the wage bill is likely to be limited. We expect a very small direct impact on the public sector wage bill as very few jobs in the public sector are paid at the minimum wage.

Exchequer Impact

5.118 An increase in the minimum wage can also affect the public sector through savings to the Exchequer resulting from increased tax receipts and reduced benefit payments. Table 5.3 is based on information supplied by HM Treasury and illustrates our best estimates of the effects of the 12 pence increase in the adult rate of the minimum wage.[8] We estimate that in total the Government would gain around £183 million from the 2013 minimum wage uprating, three-fifths of which consists of additional yield from income tax (£70 million) and National Insurance Contributions (£40 million) as the earnings of minimum wage employees increase. The Government would also stand to make savings from a reduction in Working Tax Credits (£30 million) and other benefits (around £43 million in total).

8 HM Treasury provided us with estimates of yield and savings for hypothetical increases to the minimum wage of 10 pence and 20 pence.

Table 5.3: Estimated Exchequer Yield and Savings from the Recommended October 2013 Uprating of the Adult Rate of the National Minimum Wage, UK, 2013/14

£ million	Exchequer yield and savings from the increase in the minimum wage to £6.xx in October 2013
Income Tax	70
National Insurance Contributions	40
Working Tax Credit	30
Child Tax Credit	16
Income Support	6
Housing Benefit	17
Council Tax Benefit	4
Total	**183**

Source: LPC estimates interpolated from HM Treasury calculations using 10 and 20 pence increases based on Family Resources Survey 2010/11, uprated to 2013/14, UK, tax year 2013/14.
Notes:

a. The Family Resources Survey derives hourly wages from weekly income and hours worked, which overestimates the number of individuals on the minimum wage. As a result the Exchequer savings presented above are also likely to be overestimated.
b. These figures take account of changes in tax credits, benefits, taxes and National Insurance Contributions but do not take any account of likely behavioural change caused by an increase in hourly pay, such as changed levels of employment or hours worked.
c. The figures take no account of wage changes or behavioural response for those paid just above the National Minimum Wage or changes in Exchequer yield from business or indirect taxes.
d. The figures do not include the effect of the £10,000 disregard in tax credits, which allows income to rise between one year and the next by up to £10,000 before tax credits begin to be withdrawn. This means that the reductions in tax credits would in practice be significantly smaller, at least in the initial tax year.

Conclusion

5.119 In arriving at our recommended rates of the National Minimum Wage we have considered carefully the prospects for the economy, including the consensus among forecasters that growth will be weak in the period covered by our recommendations. Employment levels are higher than expected, given the performance of the economy. They are forecast to remain fairly close to current levels through 2013 and 2014. We have again focused our attention in particular on the youth labour market, which appears to have stopped deteriorating, though it is too early to see what path it may take from now on. We believe that, after a thorough assessment of the evidence, we have made recommendations which are appropriate to a weak economy and a relatively resilient labour market. We will continue to monitor developments closely, especially in relation to the performance of the economy and employment, and particularly employment of young people.

Appendix 1
Consultation

We are grateful to all those people and organisations that contributed to the preparation of this report. We would like to thank in particular those who provided evidence, either written or oral, and those who organised or participated in Low Pay Commission visits and meetings. All such individuals and organisations are listed below, unless they expressed a wish to remain unacknowledged.

Agricultural Wages Board for England & Wales
Alliance of Sector Skills Councils (SSCs)
Antur Waunfawr
Apprenticeship Ambassadors Network
Arts Council England
Association of British Bookmakers
Association of Convenience Stores
Association of Directors of Adult Social Services
Association of Employment and Learning Providers
Association of Labour Providers
Association of Licensed Multiple Retailers
B&CE Insurance Ltd
Bank of England
BECTU, Broadcasting Entertainment Cinematograph & Theatre Union
Berwickshire Housing Association
Blackburn with Darwen Borough Council
British Beer & Pub Association
British Furniture Manufacturers
British Growers
British Hospitality Association
British Independent Retailers Association (bira)
British Retail Consortium
British Youth Council
BUPA Care Services
Business In Sport and Leisure
CBI
Chantreyland Day Nursery
Chartered Institute of Payroll Professionals
Chartered Institute of Personnel and Development
Cheadle Hulme Quaker Meeting
Church and Society Council of the Church of Scotland
Citizens Advice Bureau, Sheffield
Citizens Advice Northern Ireland
Citizens Advice Scotland

Cleaning and Support Services Association
Communication Workers Union
Community Gateway Association
Creative & Cultural Skills
Crieff Hydro Ltd
Department for Employment and Learning Northern Ireland
Department of Enterprise, Trade and Investment Northern Ireland
Donnelly Group
East Lancashire Chamber of Commerce
EEF, the manufacturers' organisation
Eildon Housing Association
Employers Network for Equality & Inclusion
Emtelle UK Ltd
English Community Care Association
Equality and Human Rights Commission
Equity
Federation of Small Businesses
Federation of Wholesale Distributors
Food and Drink Federation
Forum of Private Business
Gangmasters Licensing Authority
GMB
Greentree Enterprises Ltd
H G Wayre
Hair and Beauty Industry Authority (Habia)
Harlow College
Hawick Knitwear Ltd
HM Government
HomeWorkers Worldwide
Huckvale, Gavin
Incomes Data Services Ltd
Independent Retailers' Confederation
Inspiring Interns
Institute for Public Policy Research
Institute of Fiscal Studies
Intern Aware
Irish Congress of Trade Unions
John Lewis Partnership
Johnstons of Elgin
Kalayaan
Kentech Electronic Production Ltd
KFC
L S Starrett & Co Ltd
Local Government Association
London Borough of Newham

London Citizens
Mainetti UK Ltd
Mears Group
National Apprenticeship Service
National Association of Master Bakers
National Association of Pension Funds
National Care Association
National Care Forum
National Day Nurseries Association
National Farmers' Union
National Hairdressers' Federation
National Institute of Economic and Social Research
National Union of Journalists
National Union of Students
Nautilus International
Northern Ireland Hotels Federation
Northern Ireland Public Service Alliance
Oregon Timber Ltd
Oxfam
Perspective
Plexus UK Ltd
Policy Exchange
Prostrakan Group
Public and Commercial Services Union (PCS)
Qube GB Ltd
Rail, Maritime and Transport Workers' Union
Rapid Employment & Recruitment Ltd
Recruitment & Employment Confederation
Registered Nursing Home Association
Resolution Foundation
Rural Shops Alliance
Scottish Enterprise
Scottish Government
Scottish Women's Convention
Sheffield Chamber of Commerce and Industry
Sheffield Fairness Commission
Siwgr Plwm Day Nursery
Spar
St Anthony's Residential Home
Stage Management Association
Tech Europe Ltd
The Prince's Trust
The Royal College of Midwives
The Shropshire Group
Trades Union Congress

UK Fashion & Textile Association
Union of Shop, Distributive and Allied Workers
UNISON
Unite
United Kingdom Home Care Association
Unquoted Companies Group
Watson, Mark
Welsh Government
WH Smith Group
White Horse Child Care Ltd
Winnock Hotel
Work Foundation
YMCA England

Appendix 2
Low Pay Commission Research

Overview

1 In our 2012 Report, we concluded that the research to date had found little evidence of any significant adverse effect of the minimum wage on employment, although research covering the recession had suggested some tentative negative effects on employment and hours, especially for young people and those with no qualifications. Our research priorities for this report continued to concern the impact of the National Minimum Wage (NMW) on employment and on young people. We revisited the impact on small firms and commissioned the first quantitative analysis of the impact of the introduction of the Apprentice Rate. We investigated non-compliance in the whole economy and the impact of the minimum wage in the social care sector. In addition, we investigated wage-setting behaviour and commissioned research looking at the introduction of Universal Credit and how it will interact with the NMW and the tax regime.

2 In this overview, we first look at research that investigated how wages are measured in our two main sources of individual earnings data, the Annual Survey of Hours and Earnings (ASHE) and the Labour Force Survey (LFS). Fry and Ritchie (2012b) looked at how employers set wages and how employees recorded them. Building on work previously conducted at the Office for National Statistics (ONS), they highlighted issues concerning how respondents round wages to particular numbers and that estimates of coverage and bite may therefore depend on the 'roundness' of the level of the National Minimum Wage. They presented evidence that the numerical characteristics of the NMW had real effects on wage setting. Some employers set wages at focal points (round numbers). This finding was persistent over time and was most noticeable among small private sector firms. This had implications for the interpretation of bite and coverage estimates. Changes in bite or coverage may simply reflect whether the NMW is at, just above or just below a round number. Furthermore, the evidence suggested that small variations in the minimum wage were absorbed by businesses.

3 The study showed that the potential for measurement error was more severe using household data (the LFS in this case) than individual data from employers (ASHE). There was much greater divergence between stated and derived earnings but this was not related to proxy responses, moreover, this error appeared to be relatively predictable. As well as measurement error, they found that the timing of the survey was important. The LFS shows that the numbers paid below the minimum wage increase as a result of the October upratings but then fall as the year progresses. The ASHE survey is conducted in April when many of these effects have fallen out.

4 They concluded by recommending that the LPC acknowledge that the numerical value of the NMW has real effects and suggested that the LPC recommend rounded rates (divisible by 5 pence at least) and avoid setting them just above or below a focal point (for example, not £6.19 an hour). Failing that, the LPC should be aware of the implications for the bite and coverage of the NMW of doing so. They also recommended that researchers into low pay should take account of focal points; be careful when interpreting 'concertina effects'; and run extensive robustness checks, especially when using LFS wage data. They also urged the LPC to make greater use in its analysis of 'blobograms', a visualisation technique for charts which conveys especially clearly the kind of clustering effects they described. We made use of these techniques in Chapter 3 when discussing the youth rates.

5 Two research projects investigated the impact on firms using industry and firm level data. Riley and Rosazza Bondibene (2013) investigated the impact of the minimum wage on firm behaviour since the introduction of the NMW and during the recession using data from the Annual Respondents Database (ARD) and Financial Analysis Made Easy (FAME). They explored wage effects for firms in all sectors and for firms in low-paying sectors as well as by size of firm. They showed that, using either data source (FAME or ARD), average labour costs rose significantly more among low-paying firms than among firms with higher pay when the minimum wage was introduced. They noted no such relationship before its introduction. These effects were also evident among firms of all sizes in the low-paying sectors. They concluded that the NMW increased average labour costs for low-paying firms by 3-6 per cent in its initial years and that this increase in average labour costs was then maintained relative to firms with higher pay by subsequent upratings to the NMW.

6 Their study also found little evidence that the introduction of the NMW had any effect on employment, and this was also the case during the recession. In line with previous research using the same data source (FAME), they also found some evidence that the NMW may have reduced firms' profitability. These effects were more evident over the longer term (1999-2007). They also found some evidence to suggest that the NMW resulted in productivity improvements among low-paying firms in low-paying sectors. These productivity increases occurred in the initial years of the NMW and were evident using both data sources (FAME and the ARD). The research found no robust evidence to indicate that the NMW changed the investment behaviour of low-paying firms; upon introduction, over the longer term, or during recession. In addition, they found no evidence to suggest that the NMW had led to a change in company exit rates.

7 Crawford, Jin and Simpson (2013) also investigated firm behaviour using firm level data. To broaden the evidence on the effects of the NMW in the economic downturn, and to contribute to the recent debate about labour hoarding, they conducted research on the impact of the NMW regime on firm investment and labour hoarding during the recent recession. They used ASHE data and two ONS firm surveys (ARD; and the Annual Business Survey (ABS)). As a measure of labour productivity they used firm-specific Gross Value Added (GVA) per employee. Their main findings were that since 2008, there had been a real fall in GVA per employee of 6.1 per cent across their sample of firms compared with the pre-recession trend. The proportion of employees working part-time had increased and average hours (including overtime) had fallen by three hours per week. Wage prospects had worsened, both in real hourly wage growth and in the number of pay freezes. They found small firms (with up to 50 employees) had experienced much greater falls in productivity than larger firms. This, together with the observations of larger reductions in average hours and in average wage growth within small firms than within large ones, suggested that small firms were more likely to be hoarding labour.

8 When looking at the coverage of the NMW, they found some indicative evidence that almost all of the effects described above were most strongly experienced by firms with higher long-term coverage of the NMW. However, firms with the highest coverage did not experience falls in average real hourly wage growth of their existing employees, which is not surprising given the fact that these workers benefited most from NMW increases. But it has to be noted that this is an association as a causal relationship cannot be inferred from their methods.

9 The study also looked at the impact of the NMW on investment by firms. It found that since the onset of the recession, firms had decreased investment by 14 per cent compared with the pre-recession trend. There was no strong evidence of differences in investment responses by firms of different sizes, and also little evidence of any differences in investment according to the long-term coverage of the NMW.

10 One of our commissioned projects looked at the impact of the NMW on employment, hours and unemployment across the whole economy. Using individual data from the LFS with supplementary geographic information from ASHE, Bryan, Salvatori and Taylor (2013) found little evidence that the minimum wage had generally affected employment retention in the period before or during the recession. This was in line with previous research. They did however find some evidence of significant effects on men in particular upratings but these were both negative (the 2001 uprating) and positive (the 2006 and 2011 upratings); and they were also sensitive to model specification. No such evidence was found for women. For young people, especially for those most affected by the NMW, there was some evidence of a reduction in employment retention prior to the recession but this finding could not be replicated in the period since the start of the recession.

11 In work commissioned for last year's report, Bryan, Salvatori and Taylor (2012) had found tentative evidence that the 2010 uprating had led to a reduction in hours, particularly among young workers. Their latest research (2013) did not confirm that finding and concluded that they could find no systematic effect of the NMW on hours worked by adults across time or even during the recession. In general, they found small but statistically insignificant negative effects on hours worked for men before the recession but small and generally positive effects since the start of the recession. They found no consistent or significant effects for women. In their previous study, they had found some evidence of a negative effect on hours worked among youths, and that this was exacerbated during the recession. This new research also found some, albeit weaker, evidence of a reduction in hours. They found estimates of negative effects during the recession, reducing hours by up to two hours a week but these were not statistically significant. However, these results were significantly different to those in the pre-recession period, implying that there was some weak evidence that the NMW reduced basic hours for young people during the recession relative to the pre-recession period.

12 Using three different methodologies, the research found that the minimum wage generally had no effect on the probabilities of unemployed adults entering work. From the geographic analysis, they found evidence that the NMW had increased job entry rates in the mid-2000s with some weak evidence that this had reversed during the recession. The pre-recession results were consistent with previous findings from Dolton, Rosazza Bondibene and Wadsworth (2009), and Dickens, Riley and Wilkinson (2012). However, they found no effects when using predicted entry wages or when estimating job entry probabilities, just small positive effects on female entry into minimum wage jobs during the recession. Overall, these findings were not robust to specification and they concluded that there was no empirical support for the NMW adversely affecting job entry.

13 We commissioned two projects that looked at the impact of the minimum wage on young people. Fidrmuc and Tena (2013) looked at the impact of the minimum wage regime on employment and hours of young workers by sector and size of firm. First, building on previously commissioned work by Dickens, Riley and Wilkinson (2010) and Fidrmuc and Tena (2011) they conducted regression discontinuity analysis using LFS data to investigate the impact of the age-specific NMW rates on the employment of adults at age 21 and 22. Similar to that previous research, they found no negative effect on employment at the discontinuity despite the large increase in NMW entitlement. However, in common with their previous study, for men they did find a negative impact a year prior to their entitlement to the adult rate. They could find no evidence of an impact by size of firm but there was some weak evidence of a negative impact for movers into the service sector and stronger evidence among stayers in manufacturing. They found no difference between the public and private sectors. The study also found no effect on hours at the discontinuity. The methodology used to estimate these effects considered both the step and slope effects rather than just the pure discontinuity. Their findings suggested that firms would lay off workers around twelve months before they were entitled to a significant increase in their minimum wage, which they interpreted as a possible anticipation effect of entitlement to a higher NMW. But it is difficult to explain why this should be the case.

14 A second strand of their study investigated the impact of the NMW on employment for those aged 18-40. In an analysis of job exit and entry, they found that minimum wage increases were not only associated with an increase in job loss but also increased job entry. As some workers lost their jobs, others were attracted into employment. This finding appeared stronger in the private sector and in services.

15 Lanot and Sousounis (2013) investigated the impact of the minimum wage on substitution between low-paid workers. They analysed ASHE and LFS data in order to identify the effect of the different NMW age-based rates and their upratings on the relative wages and the age-related employment structure among the low-paying occupations. Their analysis suggested that the introduction and uprating of the NMW had a significant effect on the determination of wages and wage bills. But they found no evidence that the NMW had a systematic effect on the evolution of relative employment (that is, in terms of the employment size of younger workers age groups relative to the employment size of older workers).

16 The evidence pointed in the direction of substantial, if not perfect, complementarity between the young age groups (18-20 year olds and 21 year olds) and older workers (over 55 years old). This in turn suggested that the current differences in the NMW between age groups (and minor changes to these differences since introduction of the NMW) are not determinative of labour force composition. In other words, such changes in the relativities of the NMW as have occurred do not appear to have affected the distribution of employment among the age groups. In that sense, they concluded that the current structure of the minimum wage appeared innocuous. They did, however, find some weak evidence that as the minimum wage increased, low-paying sector employers appeared to substitute away from 16-17 year olds in favour of older workers. The evidence they reported shows that the regular upratings of the NMW have had an effect on the relative wages between younger and older age groups, but it remains small.

17 Behling and Speckesser (2013) conducted our first quantitative exploration of the impact of the introduction of the Apprentice Rate. They examined in detail two Apprentice Pay Surveys and the LFS for comparison. In their descriptive analysis they found that the Apprentice Rate was biting especially for young apprentices who start a multi-year programme, as they are often paid very close to the Apprentice Rate. The researchers supposed that this reflected the low productivity of young people just entering the labour market. Adult apprentices, who had experienced the largest recent increase in apprenticeship starts, were generally paid considerably better. The huge take-up of apprenticeships by adults has led to rising average apprentice pay over time. In contrast, hourly wages of young apprentices had been falling on average over the last three years. A bimodal wage distribution had emerged, which clearly showed a growing gap between those being better and worse paid.

18 When looking at different sectors, the bite of the Apprentice Rate was highest for hairdressing (98 per cent) and construction (63 per cent), and lowest for customer service (38 per cent) and team leading and management (29 per cent). In their multivariate analysis, they at first found that the introduction of the Apprentice Rate had a negative impact on the pay for young apprentices under 25. But when controlling for different trends between apprentices and non-apprentices before the introduction of the Apprentice Rate, this effect disappeared. Thus, they concluded that the introduction of the Apprentice Rate had no impact on pay levels of young apprentices in general. However, sector-specific findings suggested that some sectors did experience increases in pay levels (hairdressing and health). They noted that there were data limitations which made it difficult to estimate this impact precisely.

19 They concluded by recommending that the Commission continue recognising the heterogeneity among apprentices, especially between the young and adults. For adult apprentices, they suggested that the eligibility to the age-specific rates be retained and that the Commission should consider reviewing the eligibility of older apprentices to the Apprentice Rate in their first year of the apprenticeship. For young apprentices they concluded that uprating the Apprentice Rate should take into account the increased net costs for employers, in order to remove disincentives for engaging in apprenticeships. They also suggested that the Commission consider increasing minimum wage levels over the years of the apprenticeship.

20 One of the first quantitative investigations into the extent of non-compliance was undertaken for this report by le Roux, Lucchino and Wilkinson (2013). Using individual data from the LFS and ASHE, they attempted to identify those paid below the NMW. They noted that estimates of non-compliance were likely to be affected by legitimate exclusions and by measurement error in the recording of pay. They identified three legitimate factors that may lead to over-estimates of non-compliance as they were difficult to take into account accurately in the available data sets. Bonuses and commissions may not be fully recorded in any one pay period; workers receiving employer-provided accommodation and subject to the accommodation offset; and apprentices may all have legitimately recorded pay less than the NMW. The study found it difficult to estimate the number of workers that could be affected by these considerations but the researchers believed the numbers to be small for those affected by bonuses, commissions and the accommodation offset. The number of apprentices, however, would affect estimates of non-compliance among young people.

21 They also noted the difficulty in measuring non-compliance when the NMW was close to a round number. Many employers and employees often record pay at the nearest round number rather than at the NMW. This may be above or below the NMW but affects the estimates of those paid below the minimum wage, particularly if the NMW is just above a round number.

22 In general, they found that the baseline estimates of non-compliance rates (those recorded as being paid below the minimum wage) were lower for adult workers than for those on the Youth Development Rate or the 16-17 Year Old Rate. For adult workers, the baseline estimate of non-compliance according to the LFS increased over time from 0.4 per cent in 2000 to 2.0 per cent in 2012; while the estimate of non-compliance according to ASHE remained at around 0.8 per cent throughout the period from 2000 to 2011. Accounting for rounding (focal points) and apprentices leads estimates of non-compliance for adult workers to fall on average by 0.6 percentage points using the LFS and rounding reduced estimates by 0.2 percentage points using ASHE. Thus, according to ASHE, around 0.6 per cent of adult employees might be paid less than their entitlement to the NMW.

23 Local area based regression models for non-compliance rates indicated that non-compliance was positively associated with the bite of the NMW; that is, in areas where the NMW was closer to the median wage, the non-compliance rate was higher. The evidence relating to non-compliance in the recent economic downturn was mixed and not statistically robust. The LFS estimates of non-compliance suggested a positive association with the downturn but the ASHE estimates did not.

24 A comprehensive investigation of the impact of the minimum wage on the domiciliary care sector was conducted by Bessa, Forde, Moore and Stuart (2013). They took an approach using two methods to gather as much evidence as possible from different sources. In a quantitative analysis they used the National Minimum Data Set for Social Care (NMDS-SC) which was available from 2008 to 2012. Additionally, they conducted case studies in five local authorities. They talked to key actors tendering and commissioning domiciliary care; care providers; representatives of local authority trade unions; and domiciliary workers themselves.

25 They provided a descriptive analysis of the domiciliary care sector. This sector was characterised by female care workers (84 per cent), workers in the private sector (72 per cent) and workers who were not born in the UK (20 per cent). There was a prevalence of zero hours contracts, with more than half of the domiciliary care workforce employed on such arrangements across the period looked at (56 per cent), especially among private care providers (nearly 80 per cent). Between October 2008 and April 2012 the percentage of workers paid at or below the NMW was 3.4 per cent on average (with 1.1 per cent paid below). This increased to 6.1 per cent (with 2.5 per cent paid below) between October 2011 and April 2012. The authors emphasised that this was likely to be a lower bound, as no account was taken of paid or unpaid travel time. Their findings should be interpreted carefully because there is some volatility in the data over time. However, these estimates of non-compliance were not dissimilar to our own from ASHE. When doing multivariate analysis, they found that employees were more likely to be paid at or below the NMW if they had not completed their induction training and if they were less qualified. The importance of additional working hours was highlighted by the finding that weekly pay for those on zero hours contracts was significantly less than for those on fixed contractual hours. While they found no consistent influence of zero hours contracts on the probability of being paid at or below the NMW, their results suggested that those on zero hours contracts were more likely to be paid at or below the NMW between October 2010 and September 2011.

26 The case studies suggested that there had been a move away from commissioning guaranteed volume block contracts, to spot or framework agreements. This caused care providers to employ more care workers on zero hours contracts and gave them disincentives to pay any enhancements for weekend and evening rates; or for travel time. None of the local authorities specified payment of the NMW in their contracts or actively monitored compliance. Care providers believed that the method of commissioning and paying their employees might affect the quality of the service they could provide. A number of case study authorities were considering introducing a living wage for their own staff, and for domiciliary care workers on outsourced contracts. However, the case studies also suggested that, in a period of budgetary restraint, guaranteed minimum hourly pay rates were accommodated through use of zero hours contracts and unpaid travel time.

27 Using the Family Resource Survey (FRS) and LFS, Brewer, and De Agostini (2013) analysed the interaction of the NMW with the tax and benefits system, focusing on the impact of the introduction of Universal Credit (UC) on NMW workers and their families. They noted that there had been significant changes to personal taxation (large increases in personal allowances) and benefits (substantial cuts in benefits and a change in uprating rules) since the last General Election and that many more were in the pipeline (major reform of working age benefits and tax credits). They ran microsimulations of the impact of the introduction of UC but in their assessments ignored both the transitional arrangements and the changes to Council Tax Benefit. They included all announcements made about the tax and benefits system up to and including the Chancellor’s Autumn Statement (HM Treasury, 2012b), made in December 2012. They showed that minimum wage workers who were the main earners tended to be towards the bottom of family income distribution (with the NMW accounting for typically 70 per cent of net income) but that secondary earners (and those with second jobs) tended to be higher up the income distribution (for whom the NMW typically accounted for around 30 per cent of net income).

28 They estimated that UC will lead to small gains in income on average for low-income families and small losses for middle-income working families. These averages concealed a large number of families that will lose, offset by an even larger number of gainers. Families for whom the NMW is the main source of earnings will gain more than those whose NMW jobs are secondary sources of income. In general, they found that UC will reduce the number facing very high Marginal Effective Tax Rates (METRs) (80 per cent or more) but will increase the number facing high METRs (60-80 per cent). These changes broadly offset each other. Their results suggested little change, on average, in the relationship between gross income and METRs. Although UC will tend to increase the financial incentives to work for those not in work, on average, it will reduce the financial pay-off from working for secondary earners in a NMW job. This was most evident for families with the main earner also paid the NMW and those with higher wages.

29 They also estimated that across much of the income distribution, an increase in the NMW of 10 per cent led to an increase in net family income of around 3 per cent. They noted that this was around 4 per cent for families where the NMW was the main source of income and 2 per cent for those where the NMW was the secondary source of earnings.

30 In summary, we again conclude that the research in general finds little adverse impact of the minimum wage on employment. We have now commissioned over 100 research projects that have covered various aspects of the impact of the National Minimum Wage on the economy. Metcalf (2008) and Butcher (2012) provide literature reviews of the findings of much of that research. Both studies concluded that since the introduction of the NMW, the low paid had received higher than average wage increases but that the research had, in general, found few adverse effects on aggregate employment; the relative employment shares of the low-paying sectors; individual employment or unemployment probabilities; or regional employment or unemployment differences. The research suggests that employers have coped with the minimum wage by adopting a combination of strategies. Pay structures may have been adjusted or non-wage costs reduced. There may have been small reductions in hours worked and increases in productivity. Some prices may have been increased and profits squeezed but these reductions in profits had not been sufficient to lead to an increase in business failure. Business creation may also have slowed. We will continue to monitor the impact of the National Minimum Wage and have recently invited tenders for a range of research projects that we hope will enhance further our evidence base.

Table A2.1: Low Pay Commission Research Projects for the 2013 Report

Project Title and Researchers	Aims and Methodology	Key Findings and Results
Behavioural Aspects of the National Minimum Wage: Measuring and Interpreting Behaviour in the Low-wage Labour Market **Suzanne Fry** (Office for National Statistics) and **Felix Ritchie** (University of the West of England and Trig Consulting)	The researchers used data from the Annual Survey of Hours and Earnings (ASHE) and the Labour Force Survey (LFS) to investigate whether the level of the NMW affected: a) employer behaviour in setting wages during the recession; and b) employee reporting of hourly pay (and hence estimates of compliance). This study built substantially on previous work conducted at ONS: Lam, Ormerod, Ritchie and Vaze (2006) looked at company pay policies; Ormerod and Ritchie (2007a, 2007b and 2007c) investigated issues around measuring low pay; Hayes, Ormerod and Ritchie (2007) analysed earnings sources; and Fry and Ritchie (2012a) looked at the impact of the recession and found that the absolute value of the NMW mattered. This report extended the previous analysis in four ways by: i) using more recent data; ii) proposing and testing hypotheses on patterns of behaviour; iii) reviewing data issues; and iv) developing guidelines for future research.	The main findings of the research using ASHE were: ● the NMW was the most common wage. ● some employers showed a preference for paying at rounded numbers. ● this preference was persistent but most common in small firms. ● firms anticipate the forthcoming NMW (with large firms more likely than small ones to do so). ● the results provided a psychological, rather than economic, rationale for the distribution of ASHE data. ● the continued accuracy of ASHE data was reassuring. The main findings of the research using LFS were: ● paying at focal points more pronounced than in ASHE. ● measurement error was very problematic if ignored, but relatively simple to correct in both descriptive statistics and complex analyses. The report's recommendations included that: ● the Commission should recognise that the penny value of the NMW had real effects. ● the Commission should in future consider recommending the NMW to the nearest 5 pence or be aware of the implications of not doing so. ● the definition of 'low pay' should reflect employer behaviour. Indeed, the Commission's use of 5 or 10 pence pay bands already takes this into account. ● the Commission should include 'blobograms' in its reports to help identify clustering effects (in ASHE) and measurement errors (in LFS) ● further research could most productively concentrate on sub-markets (low-paying sectors and/or regions) and on the increasing concentration of employment at round-number wages.
The Impact of the National Minimum Wage on Firm Behaviour During Recession **Rebecca Riley** and **Chiara Rosazza Bondibene** (National Institute of Economic and Social Research)	This project aimed to build evidence to address the following questions: a) How has the NMW affected the behaviour of small and large firms and firms in the low-paying sectors? b) Has the impact of the NMW on firm behaviour changed since the 2008-09 recession? c) How has access to finance interacted with minimum wage policy in influencing firms' behaviour during recession? They examined the effects of the NMW following in broad terms the approach taken in Draca, Machin and Van Reenen (2005 and 2011). They applied a difference-in-difference approach to firm level data from two data sources: Financial Analysis Made Easy (FAME), which records UK company accounts; and the Annual Respondents Database (ARD), which derives information from official sources held by the ONS. They used FAME (1994-2010) and the ARD (1997-2007) to analyse the impact of the NMW on wages, employment, productivity, profitability, investment and probability of exit and distinguished these impacts by firm size and/or broad low-paying sector. Sample sizes meant that not all disaggregations (firm size and sector) were possible. They also investigated how these effects had changed since the onset of recession.	The research on the introduction the NMW found that: ● increased relative average labour costs for low-paying companies. Central estimates of these increases were larger for small firms and firms in low-paying sectors. Most of the increases occurred upon introduction and not from subsequent upratings. ● on balance, this had no effect on employment. ● there was some evidence of a positive association with labour productivity. This was apparent for small and large firms and in both datasets. ● there was some evidence of reduced profit margins for small firms in low-paying sectors using FAME but it was not robust. ● there was no evidence that the NMW had affected investment. ● there was no evidence of a change in firm exit rates. The research into the impact of the NMW up to 2007 found: ● there was no robust evidence of an impact on employment. ● there was some evidence of a positive effect on labour productivity but these effects were weaker than on introduction. ● there was evidence from both datasets of a reduction in profitability over the longer run (1999-2007). ● there was no evidence of an impact on investment. The research into the impact of the NMW in recession (using FAME only) found: ● there were no effects on average labour costs (as NMW increases had been more modest). ● there was no consistent evidence that the NMW affected employment, profits, productivity or firm exit differently after 2008. ● no robust evidence that NMW had compounded any potential effects of credit constraints on investment in small firms. They concluded that the NMW had no consistent effect on employment; some effect on labour productivity; some effect on profits; and no effect on investment behaviour or a firm's reliance on external finance.

Project Title and Researchers	Aims and Methodology	Key Findings and Results
Firms' Productivity, Investment and Training: What Happened During the Recession and How was it Affected by the National Minimum Wage? **Claire Crawford**, **Wenchao Jin** (Institute for Fiscal Studies), and **Helen Simpson** (University of Bristol)	The research aimed to provide an analysis of the extent of labour hoarding during the recent recession, in particular whether labour hoarding had in any way been in response to the NMW regime. As there is no standard way of measuring labour hoarding, the researchers examined a number of options. The research considered the evidence that firms adjusted to the recession in other ways, such as reducing physical or human capital investment. The study used firm-level data to document what happened to a variety of indicators of labour hoarding as well as firm investment and training over the course of the 2008-09 recession. It also investigated how firm behaviour varied by firm size and other pre-recession characteristics, including the coverage of the NMW, vacancies and the extent of skill shortages. The main dataset used for the research was the ARD. It was supplemented by the National Employer Skills Survey (NESS) and ASHE. In a departure from the existing literature, they used fixed effects techniques to examine within-firm changes in labour and capital inputs during the recession. A similar regression approach used NESS to estimate the impact of the NMW regime on employers' training decisions.	The main findings of the research were: ● there was strong evidence, from a range of indicators, that firms hoarded labour in response to the 2008-09 recession. ● real gross value added per employee fell by 6.1 per cent relative to the pre-recession trend. ● aggregate changes in labour productivity, hours and wages were not just the result of compositional changes in firms and workers over time but also occurred within firms. The results suggested that firms reduced hours and wages rather than made workers redundant. ● in line with other recent research, they found that small firms were more likely to hoard labour than large firms. ● there was mixed evidence of the impact of the minimum wage. It seemed the main correlate of labour hoarding was size of firm, rather than the coverage of the NMW. ● labour hoarding was positively correlated with higher profits, higher average wage costs and pre-recession skills shortages. ● labour hoarders appeared less likely to train their workforce. ● they found that the fall in real wages explained more than half the 'productivity gap', although the direction of causation is unclear. ● firms had reduced capital inputs over the recession. Investment had fallen by 14 per cent compared with the pre-recession trend. ● the likelihood of making profits had also fallen since the recession (by around 5.7 percentage points). ● there was no evidence that investment varied by firm size or by coverage of the minimum wage during the recession but they found some weak evidence that firms with high proportions of NMW workers had reduced investment over the long run. They concluded that there was no strong evidence that the minimum wage had prevented firms from reducing hours or real wages.
The Impact of the National Minimum Wage on Employment Retention, Hours and Job Entry **Mark Bryan**, **Andrea Salvatori** and **Mark Taylor** (Institute for Social and Economic Research, University of Essex)	Building on previous work by Bryan, Salvatori, and Taylor (2012), the project had two main aims: a) To provide an update of their previous analysis on the impact of the NMW on employment retention, working hours, and job entry. b) To add to the evidence base on the impact of the NMW on unemployment by using three different methodologies. They estimated job entry probabilities using geographic analysis; predicted hiring wages; and the probability of being hired at the NMW. They used the LFS and the ASHE to examine the effects of the NMW in a downturn. As in their previous work, they analysed the LFS to compare those affected by the minimum wage with a 'control group'. They used three estimation techniques: horizontal difference-in-difference (DID); vertical DID; and vertical and horizontal DID. They separately investigated whether the minimum wage had affected hours and employment for adults and youths in the recession by comparing 2000-07 with 2008-11. Finally, they used difference-in-difference analysis to examine the impact of the NMW on the probability of leaving unemployment to become employed. They also exploited the geographic variation in the bite of the NMW across 140 local areas to estimate probabilities of job entry between 1999 and 2011. They also investigated the impact on young workers.	The main findings of the research were: ● there was little evidence that the NMW upratings had affected employment retention either before or during the recession taken as a whole. ● there was some weak evidence that the NMW upratings had increased employment retention for men during the recession but it was not robust. ● there was some evidence that the NMW upratings affected employment retention for men in certain years but it was mixed (reducing retention in 2001 but increasing it in 2006 and 2011) and sensitive to model specification. ● there was no such evidence for women in any year. ● there was some evidence for young workers that the NMW may have reduced employment retention in the pre-recession years, particularly those years with the largest upratings, but no such evidence in 2008-11. ● they found no systematic effect of the NMW on hours of adults across the years or during the recession. ● the evidence for adverse hours effects on young people was much weaker than they had found previously. ● there was no strong evidence of an impact of the NMW on the job entry probabilities of unemployed adults. ● consistent with previous research, they found some positive job entry effects before 2008 but negative afterwards. However, these results were not robust. They concluded that their latest findings broadly indicated that there had been no adverse effects of the NMW on labour market outcomes either before or after the recession.

Project Title and Researchers	Aims and Methodology	Key Findings and Results
Impact of the Minimum Wage Regime on Employment and Hours of Young Workers by Sector and Size of Firm **Jan Fidrmuc**, (Brunel University, Charles University and CESifo Munich) and **Juan de Dios Tena** (Universidad Carlos III, Madrid and Università di Sassari)	The researchers built on their previous work (Fidrmuc and Tena 2011) and that of Dickens, Riley and Wilkinson (2010 and 2011) with additional years of data and also investigated differences in the impact by sector and firm size. The study was in two parts. First, they took advantage of the change in entitlement to the NMW at different ages. Workers become entitled to the adult rate of the NMW at age 21 (prior to October 2010, this threshold was not reached until the age of 22). They made use of the partially longitudinal nature of the LFS data to analyse the labour market outcomes of young workers before and after they turned 21 (22 prior to October 2010). They used a regression discontinuity approach as set out by Lee and Lemiux (2010) to identify the impact of the NMW. Their previous study had found few effects at the age threshold but had found some evidence of an anticipation effect. They had concluded that some employers discriminated against young workers who were approaching a year from these age thresholds. This re-investigation also covered whether this practice was more common in certain sectors or sizes of firm. Second, they investigated the impact of the NMW on employment of 18-40 year olds using difference-in-difference methodology. They compared the employment outcomes of a treatment group (workers whose wages have to be increased because of the NMW increase) with the outcomes for workers in a control group (whose wages are close to but above the new NMW rate). They then compared the results by firm size and sector.	The main findings of the research were: ● similar to their previous study, they again found no impact of the NMW on the probability of employment at the age on entitlement. ● however, they again found a significant negative impact for men one year prior to the age threshold. There appeared to be a lower employment probability for young males one year prior to them becoming eligible for the adult rate. The researchers again suggested that this was due to an anticipation effect from employers. They argued that employers were either less inclined to hire or were more likely to dismiss young workers a year before the age at which the adult rate becomes binding. ● they did not find similar results for women. ● they did however find that there were differences by firm size. In contrast to the finding above, they found that young workers were more likely to be employed in small firms one year prior to the age threshold. Thus, the negative effect was more likely in large firms. ● they found no difference by firm size at the age threshold. ● their findings by sector were mixed and weak but generally found larger adverse effects in services than in manufacturing. ● they found no discernible NMW effect on hours. ● when looking at all NMW workers aged 18-40, they found a greater probability of job loss, but also of job entry. The effect on job entry exceeds that on job loss. They concluded that any adverse employment effects were likely to be found in large firms in the service sector.
The Substitution Rate Between Low Pay Workers and the National Minimum Wage **Gauthier Lanot** and **Panos Sousounis** (Keele University)	This project studied the effect of the National Minimum Wage on workforce composition, in terms of distinct age groups with similar qualifications, within the low-paying sectors. The researchers were interested in ascertaining the degree of substitutability between labour inputs (young and older workers). Within each sector, they considered the relationship between the average wages of the two groups and the employment size of the two groups. They used the LFS (1997-2010) and ASHE (1997-2011) to create a 'pseudo panel' of distinct characteristic cells based on occupation, geography and age. The empirical approach adopted leads to straightforward estimation of the elasticity of substitution between young and old employees by relating the effect of changes in relative average wages on relative employment size for each group of young workers relative to older workers. They also assessed the impact of the NMW and its annual upratings on relative wages, employment, and sectoral cost.	The main findings of the research were: ● average wages in the low-paying sectors have risen steadily since 1997 but not by more than the NMW. They thought that this suggested that wages had risen more in line with legal obligations than in line with productivity growth (although they do not attempt to measure productivity growth). ● the ratio of employment across age groups has remained stable over time. There have been no significant adjustments to the labour force composition since 1997, with the exception of those aged 16-17 years old. Between 2004, when the 16-17 Year Old Rate of the NMW was introduced, and 2008, relative employment of the youngest workers increased. Since 2008, this trend has reversed and a significant downward adjustment has been apparent. ● as a result of the onset of recession in 2008, firms adjusted to reduced demand by shedding the workforce, in particular the youngest workers (aged 16-17). ● the regular uprating of the NMW rates has affected the observed wages. ● they found no evidence that the NMW had affected the relative employment size of young or old age groups. ● there is evidence supporting substantial complementarity between the young age groups (18-20 year olds, and 21 year olds) and the older workers (more than 55 years old). This in turn suggested that the current differences of the NMW rates between the age groups had little impact on the labour force composition and the distribution of work among the age groups. They concluded that the stability of employment ratios across age groups over time suggested that the potential adverse employment effects of the NMW were small and limited to 16-17 year olds.

Project Title and Researchers	Aims and Methodology	Key Findings and Results
An Impact Analysis of the Introduction of the Apprentice Rate of the National Minimum Wage **Felix Behling** and **Stefan Speckesser** (Institute for Employment Studies)	This study attempted to estimate the impact of the introduction of the Apprentice Rate at £2.50 an hour in October 2010. The researchers used data from 2007 and 2011 to conduct a quantitative study that built on previous qualitative research we had commissioned in this area (Cox, Denvir and Pearmain 2009, Lawton and Norris 2010, IPSOS Mori and Cambridge Policy Consultants 2012) as well as using previous pay surveys of apprentices (Fong and Phelps 2008, and BIS, 2012a). The study was conducted in two parts: a) A descriptive analysis using data from the individual learner records of the UK administrations. b) An impact analysis using DIUS/BIS apprentice pay surveys and LFS data. The impact analysis faced a number of limitations, in particular the lack of good quality data on apprentice pay and employment. Cell sizes; restrictions on the identification of apprentices; and lack of pay data outside England before 2011 were most problematic. The researchers therefore restricted the impact analysis to England, and adopted different control groups in their difference-in-difference analysis. With LFS they used control groups of similar, non-apprentices, working towards similar qualifications. With BIS pay data, they used groups of apprentices paid above and below the introductory level of the Apprentice Rate.	The main findings of the research were: ● the bite of the Apprentice Rate (its value relative to median earnings) was very high for young apprentices (16-18 year olds), many of whom started on wages close to the Apprentice Rate. ● the bite was near 100 per cent in some low-paying sectors, such as hairdressing, where lowest quartile earnings were £2.30 an hour, below the Apprentice Rate. ● apprentice pay, on average, rose between 2007 and 2011 but median hourly wages of the youngest apprentices fell in all sectors bar retail, and health and social care. ● although median pay increased in most sectors, average (mean) apprentice wages in many sectors actually fell. ● there was a growing dichotomy in the distribution of apprentice wages. There had been large increases in the number of apprentices aged 25 and over and they generally had wages considerably above the Apprentice Rate. Coincident with the introduction of the Apprentice Rate, the youngest apprentices had seen their pay fall, apart from the very lowest-paid sectors, such as hairdressing and social care, where the Apprentice Rate may have helped to prevent wages decreasing any further. ● many of the new apprenticeships were in the 'non-traditional' segment of the service sector and in small firms. These were sensitive to costs, with pay levels closer to the Apprentice Rate than traditional apprenticeships. ● apprentices aged 19 and over were not generally affected by the Apprentice Rate. They concluded that the rate for young apprentices should be raised cautiously but that there was little impact on older workers.
An Investigation into the Extent of Non-compliance with the National Minimum Wage **Stephanus le Roux**, **Paolo Lucchino** and **David Wilkinson** (National Institute of Economic and Social Research)	The research built on US research (Ashenfelter and Smith, 1979) in tackling methodological issues in relation to the measurement of non-compliance (workers paid less than the NMW) to produce analysis on the extent, evolution and distribution of NMW non-compliance. The researchers used ASHE (1999-2011) and the LFS (1999-2012) to produce parallel estimates of non-compliance with the NMW. They also constructed local area measures of non-compliance in order to estimate econometric models. In addition, they investigated the relationship between non-compliance and the bite of the NMW (defined as the NMW relative to the median); and whether this had altered as a result of the recession. They noted two main sources of difficulty in estimating non-compliance – rounding and identifying legitimate exemptions from full entitlement to the NMW. Rounding of pay (measurement error or deliberate non-compliance) was a problem but especially using LFS. The researchers believed that under-payment of the NMW related to the accommodation offset, piece rates, and bonuses or commission was small. Under-payment related to apprentices was regarded as important but only for young workers. They produced baseline estimates of non-compliance and then adjusted these to take account of rounding and potential NMW exemptions.	The main findings of the baseline estimates were: ● using the LFS, they estimated that non-compliance was relatively stable at 0.5 per cent between 2000 and 2004, after which it increased each year, except in 2010 when the NMW increase was its lowest since introduction, reaching 2.1 per cent in the first quarter of 2012. ● using ASHE, estimates of non-compliance rates for adult workers were generally below 1 per cent for the whole period (2000-11). ● using both datasets, non-compliance was typically higher for younger workers than adults; higher for women than men; higher in retail and hospitality; and higher in small firms. ● in general, non-compliance for adults was higher when the bite of the NMW was higher using both datasets. The main findings of the adjusted estimates were: ● if the NMW was rounded down to the nearest 10 pence, then the researchers estimated that this would reduce the estimates of non-compliance for adult workers by, on average, 0.6 percentage points using LFS, and 0.2 percentage points using ASHE. ● adjusted estimates of non-compliance were similar for both datasets up to 2005, thereafter the LFS estimates increased while those from ASHE remained broadly constant over time. ● for young workers, the treatment of apprentices made a large difference to estimates of non-compliance. They concluded that non-compliance was generally positively associated with the bite of the NMW.

Project Title and Researchers	Aims and Methodology	Key Findings and Results
The National Minimum Wage, Earnings and Hours in the Domiciliary Care Sector **Ioulia Bessa**, **Chris Forde**, **Sian Moore** and **Mark Stuart** (Leeds University Business School)	In this study, the researchers aimed to: a) Examine the impact of the NMW on domiciliary care. b) Map the extent to which the NMW had become the bench mark for hourly pay in domiciliary care. c) Investigate the extent to which there had been a reconfiguration of pay and hours, in a period of increased outsourcing and contract pressures. d) Assess the impact of any reconfiguration upon earnings and working arrangements. e) Explore the impact of the contracting process on paid induction, training etc. They carried out the study using two methods: i) a longitudinal analysis of over 265,000 records for domiciliary care workers from the National Minimum Data Set for Social Care (NMDS-SC), regarded as a rich source of information, containing both establishment and individual worker level data. The period covered was from October 2008-April 2012. ii) case studies tracking and illuminating the tendering process for the most recent domiciliary care contracts in five local authorities. The NMDS-SC analysis was used to inform selection, and tender/contract information was obtained. A total of 27 interviews were held with key players.	The main findings of the research were: ● the NMDS-SC in England showed that median hourly pay of all domiciliary workers was about 15 per cent higher than the NMW. ● between October 2008 and April 2012, on average, 2.3 per cent were paid at the NMW and 1.1 per cent below the NMW, but that between October 2011 and April 2012, these had increased to 3.6 per cent paid at the NMW and 2.5 per cent paid below. ● the researchers suggested that these findings probably represented a lower bound estimate of the number of workers paid at or below the NMW as they had made no adjustment to the stated hourly wages for payment or non-payment of travel or waiting time. ● just over half of the workforce were on zero hours contracts. The average hours worked per week on zero hours contracts was 24 compared with 30 hours for those with other contracts. ● over two thirds of those paid at or below the NMW were on zero hours contracts. Being on a zero hours contract had a significant effect in some time periods on the likelihood of being paid at or below the NMW, but not when regarding the whole period 2008-12. ● zero hours contracts were prevalent across all the case studies and were directly attributed to local authority commissioning and predicted to increase with the move away from block contracts. ● case studies illuminated the difficulty in using the hourly rates in the NMDS-SC data set as those hourly rates might not measure the true hourly earnings due to the complexity of payments and the extent to which they reflect travel time/enhancements for shorter visits and/or unsocial hours payments.
The National Minimum Wage and its Interaction with the Tax and Benefits System: A Focus on Universal Credit **Mike Brewer** and **Paola De Agostini** (Institute for Social and Economic Research, University of Essex)	This project built on previous research conducted for us by Brewer, May and Phillips (2009) to examine the likely impact of the introduction of Universal Credit (UC) on the incomes and work incentives of families containing NMW workers. The analysis was completed after the 2012 Autumn Statement but before the 2013 Budget, so only reflects announced changes up to 5 December 2012. As no single data set records sufficient information on hourly pay, and entitlement to taxes and benefits, the researchers created a synthetic data set, based on the Family Resources Survey (2009-10) but imputing information on pay from the LFS (2009-10). The analysis then used this data set to run a number of microsimulations on the EUROMOD tax and benefits microsimulation model. They used this model to assess the impact of recent and likely future changes to the personal tax and benefit system, including Universal Credit (UC) and personal tax allowances, on NMW workers, and the families in which they live. This included estimation of the family's position in the income distribution, as well as the marginal effective tax rate (the fraction of earnings lost as income increases) and the participation tax rate (the proportion of earnings lost in withdrawn benefits and taxes paid when entering employment) facing NMW workers. The study assumed that UC is fully implemented in October 2014 (in reality, it will be phased and is subject to transitional arrangements). The analysis ignored Council Tax Benefit. It was also a static model and ignored supply side responses.	The main findings of the research were: ● families for whom the NMW is the main source of earnings tend to be found in the bottom half of the income distribution (peaking in the 3rd and 4th income deciles), typically earning 70 per cent of the family income. ● families for whom the NMW is a secondary source of earnings tend to be found in the top half of the income distribution (peaking in the 6th and 7th income deciles). ● under Universal Credit, NMW families who will see large (small) changes in income after a rise in the NMW are those facing low (high) METRs or where other sources of income make NMW earnings relatively unimportant. These effects vary significantly depending on the characteristics of the family. ● under Universal Credit fewer people will face very high marginal tax rates, but more people will face fairly high (60 per cent to 80 per cent) marginal tax rates. ● on average, these two effects will broadly offset each other. There is little discernible change in the relationship between gross income and the marginal tax rate, either for NMW workers or those on higher wages. ● UC, on average, reduces the pay-off from working for potential secondary earners. ● across the main part of the earnings distribution, a 10 per cent rise in the NMW will lead to a 3 per cent rise in net income on average (around 4 per cent for families whose main source of income is the NMW and 2 per cent for families where it is a secondary source).

Appendix 3
Minimum Wage Systems in Other Countries

1 We have again assembled information on minimum wage systems in other countries with the help of British Embassies and High Commissions as well as the Organisation for Economic Co-operation and Development (OECD). We thank them for their assistance. While the UK's National Minimum Wage (NMW) is set in the context of the prevailing economic conditions in the UK, it is useful to look at how other countries operate their wage floor, both in terms of level and structure. This appendix provides the latest information on minimum wages in the basket of European Union (EU) and OECD countries we have monitored since the introduction of the UK's NMW, including: their levels; how they were adjusted; variation by age or for those undergoing training; and, as part of our review of the accommodation offset, whether a similar arrangement operates in other countries.

2 Table A3.1 sets out the respective minimum wage values at the end of 2012 in each national currency (and how these have changed over the past year) as well as these values in sterling and in terms of purchasing power parity (PPP). When exchange rates are taken into account the value of the UK's minimum wage remains in the middle of this pack of comparator countries. In terms of purchasing power the NMW also remains in a similar position, still higher than countries such as the US and Japan, but lower than a group headed by France and Australia.

3 Changes made by countries to their wage rates or wage arrangements over the past year were often linked to the policy and economic context within each country. Those countries with a higher minimum wage than the UK's (such as Australia, France and New Zealand) generally uprated their minimum wage, while those with a lower one (such as Portugal and Spain) generally froze or reduced it (Greece). This latter group faced severe economic circumstances and in some cases, had specific minimum wage related terms linked to international loans. We look in more detail at these circumstances below. The former group, who uprated their minimum wage, generally faced less severe economic circumstances and in some cases also had wage changes driven by other factors such as regional/provincial wage-setting or wage-indexing arrangements.

Table A3.1: Comparison of Adult Minimum Wages, by Country, 2012

	In national currency expressed as hourly rate[a]	In UK £, using:		Date of last uprating	% Increase in national currency from 2011-2012	Age full minimum wage usually applies[b]
		Exchange rates	PPPs			
Australia[c]	AU$15.96	10.29	8.58	Jul-12	2.9	21
Belgium	€8.67	6.92	7.95	Dec-12	4.1	21
Canada[d]	C$10.10	6.40	6.60	-[e]	3.1	16
France	€9.40	7.51	8.84	Jul-12	2.3[f]	18
Greece	€3.52[g]	2.81	3.80	Feb-12	-22.0[h]	25
Ireland	€8.65	6.91	7.43	Jul-11[i]	0.0	20
Japan[j]	JPY749	5.95	5.46	Oct-12	1.6	15/18[k]
Netherlands	€8.40[l]	6.71	8.08	Jul-12	1.4	23
New Zealand	NZ$13.50	6.85	7.14	Apr-12	3.8	16
Portugal[m]	€2.80	2.24	3.07	Jan-11	0.0	16
Spain[m]	€3.70	2.95	3.83	Jan-11	0.0	16
UK	£6.19	6.19	6.19	Oct-12	1.8	21
US	US$7.25[n]	4.50	6.16	Jul-09	0.0	20

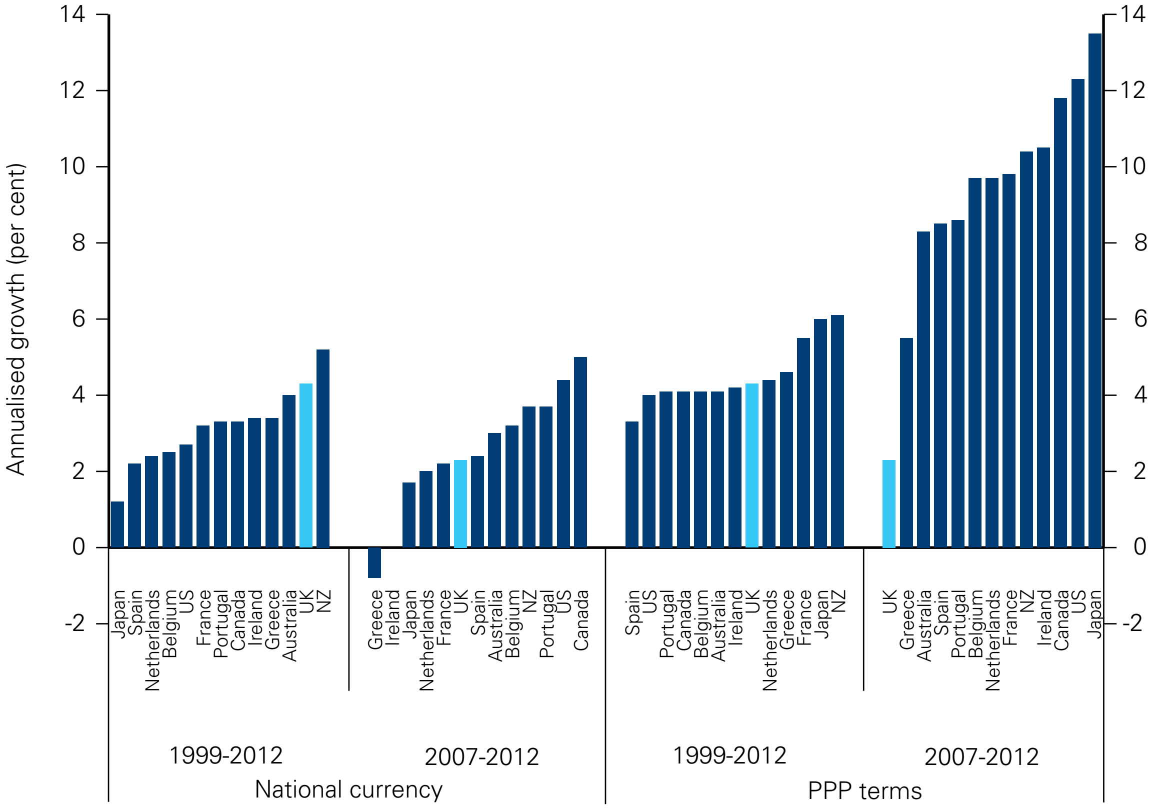
Source: British Embassies and High Commissions. Low Pay Commission (LPC) calculations of country minimum wage rates in pounds sterling using exchange rates and PPPs. PPPs derived from Comparative Price Levels (CPLs), OECD Main Economic Indicators, September 2012. Exchange rates, Bank of England monthly average spot exchange rate, September 2012.

Notes:

a. 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.
b. 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 and more than three months respectively.
c. The Australian Federal National Minimum Wage Order, effective from first pay period on or after 1 July 2012.
d. Weighted average of provincial/territorial rates.
e. Date of last uprating varies between provinces.
f. Increase on hourly rate of €9.19 in December 2011.
g. Minimum hourly rate for 'employees'. Different hourly rate operates for 'blue collar' workers.
h. This represents the reduction in minimum wage rates for those aged 25 and over in February 2012. Due to changes in minimum wage arrangements there was not a direct hourly equivalent in 2011.
i. The hourly minimum rate was reduced from €8.65 to €7.65 for adult workers on 1 February 2011. That reduction was reversed and the hourly rate went back up to €8.65 on 1 July 2011.
j. Weighted average of prefectural rates.
k. Age 15 to receive the regional minimum wage. Age 18 to receive the sectoral minimum wage.
l. Excludes 8 per cent supplement for holiday pay.
m. Not including annual supplementary pay of two additional months of salary for full-time workers.
n. Federal minimum wage. Tipped employees receive a lower minimum wage depending on state laws, the lowest being $2.13 per hour in direct wages.

4 Figure A3.1 shows how minimum wage rates have grown in each country since the NMW was introduced in the UK in 1999 and also how this varied, before and after 2007. In the period between 1999 and 2012, the UK minimum wage grew faster in national currency terms than all the comparator countries except New Zealand. However, since 2007 minimum wages have grown faster in seven of these comparator countries. In purchasing power terms, while the growth in the UK's minimum wage was middle ranking in the 1999 to 2012 period, during 2007 to 2012, largely due to depreciation in sterling as well as a relatively higher inflation rate in the UK, all the comparator countries experienced higher minimum wage growth. These findings are similar to when we looked at the data up to 2011 in our 2012 Report.

Figure A3.1: Annualised Growth in Adult Minimum Wages, by Country, 1999-2012



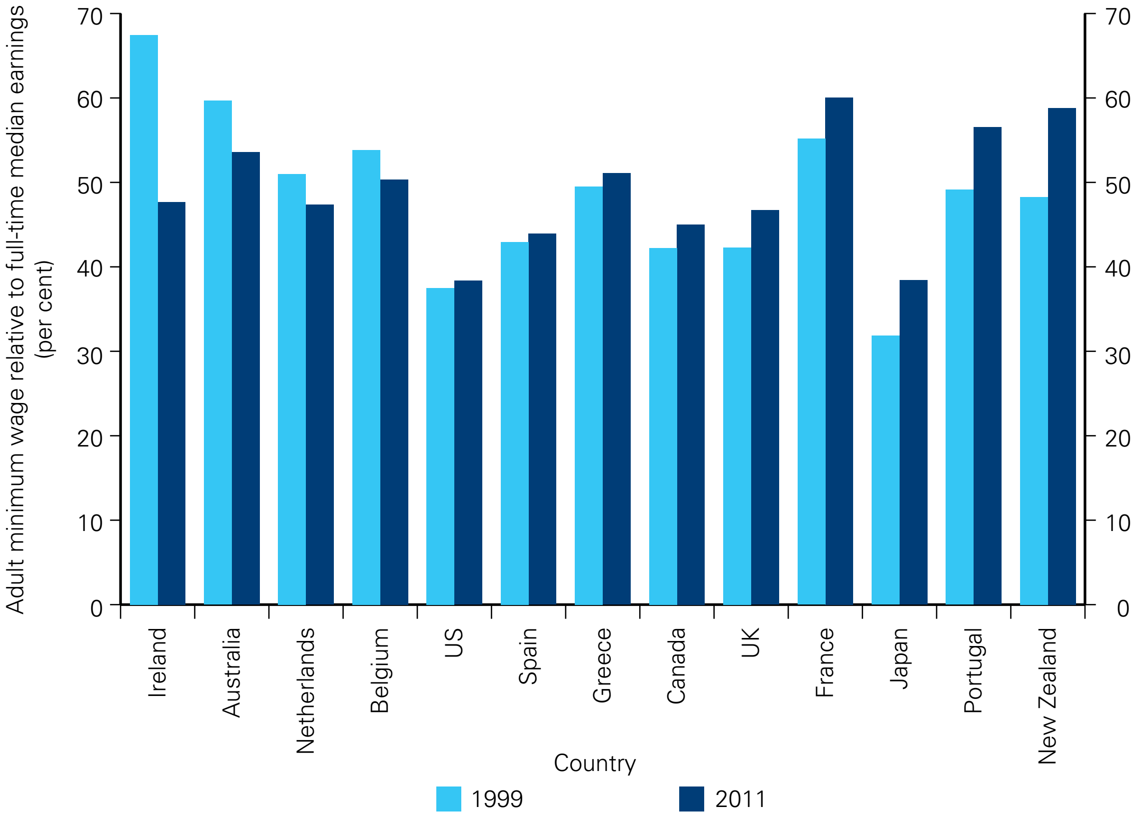
Source: British Embassies and High Commissions. LPC calculations of country minimum wage rates in pounds sterling using PPPs. PPPs derived from: CPLs, OECD Main Economic Indicators, November 1999, September 2007 and September 2012; and exchange rates, Bank of England monthly average spot exchange rate, November 1999, September 2007 and September 2012.

Notes:

a. Figures for Ireland are from 2000 when its minimum wage was introduced.
b. Monthly CPLs are not a time series. They are snapshots at given points in time and their changes over time should be interpreted with caution. They are likely to be influenced more by changes in exchange rates than changes in prices.

5 Figure A3.2 shows the value of each country's minimum wage relative to full-time median earnings averaged over the year to allow for the timing and number of upratings. The bite of the UK minimum wage has remained in a broadly similar position, lower middle ranking, when the position in 1999 is compared to that in 2011 (the latest year for which we have comparable earnings data across countries). The growth in the bite of the UK minimum wage was similar to Canada, higher than the US, Spain and Greece, but below a group experiencing the fastest growth, headed by New Zealand and Portugal. This is similar to the findings when we previously compared 1999 with 2010 for our 2012 Report.

Figure A3.2: Adult Minimum Wages Relative to Full-time Median Earnings, by Country, 1999 and 2011



Source: OECD estimates based on OECD minimum wage database and median earnings for full-time workers, 1999 and 2011.
Notes:
a. Average value of minimum wage in each year.
b. Figures for Ireland are from 2000 when its minimum wage was introduced.
c. Countries ranked according to the changes in the bites of their minimum wage rates.

6 Table A3.2 sets out the arrangements for adjusting each country's minimum wage. As indicated above there have been some notable developments in these arrangements during the past year, particularly in those countries experiencing a minimum wage freeze or reduction.

7 For Greece, the conditions under the terms of the further International Monetary Fund (IMF) loan facility agreed in mid-March 2012 (Greece's second international bail-out) included a 22 per cent reduction in the minimum wage (for over 25s); a 32 per cent reduction from the previous (over 25s) level for those aged under 25 (this means the under 25s minimum wage now amounts to 87 per cent of the over 25s minimum wage); and a 32 per cent reduction in the minimum wage for apprentices. The loan conditions also included a commitment to the 'overhaul of the general collective agreement' to reform the country's minimum wage setting arrangements.

8 Portugal's international loan bail-out, agreed with the EU/IMF in May 2011, was accompanied by a three-year economic adjustment programme which states that 'over the programme period any increase in the minimum wage will only take place if justified by economic conditions and agreed in the context of regular programme reviews'. The mechanics and framework of the national minimum wage settlement (i.e. a Government decision based on consultations with social partners – unions and employers' representatives), remained unchanged but the Government did not implement a previous commitment agreed with the social partners to increase the minimum wage to €500 a month by the end of 2011, given the current economic conditions. The minimum wage for 2012 was kept unchanged at €485 per month.

Table A3.2: Adjustment of Minimum Wages, by Country, 2012

Country	Method of adjustment
Australia	Fair Work Australia (FWA), National Workplace Relations Tribunal, sets minimum wages for employees in the national workplace relations system. Each financial year FWA's Minimum Wage Panel conducts a review and issues a decision and national minimum wage order for award/agreement-free employees. The decision and order generally come into operation on 1 July of the following financial year.
Belgium	The minimum monthly average guaranteed income is set for the private sector by collective labour agreements made at the National Labour Council (social partners). All workers benefit from salary indexation which varies according to inflation.
Canada	In most provinces and territories, minimum wages are fixed (and increased) by regulation. A provincial Governor-in-Council has the authority to change regulations which are frequently based on recommendations of a Minimum Wage Board, Review Committee, Labour Standards Board or the Minister of Labour. The rate for the federal jurisdiction is the general adult minimum rate of the province or territory where the work is performed.
France	The minimum wage is reassessed each year on 1 January. The uprating must be in line with inflation and at least half that of the increase in purchasing power of the average hourly wage. The wage is automatically raised by the price index increase if it increases by over 2 per cent during the year. The Government can also increase the minimum wage at any time.
Greece	The National Minimum Wage has normally been set by the National General Collective Labour Agreement (NGCLA), agreed by the social partners and then voted into law. The latest NGCLA was signed in July 2010 to cover a three-year period, however, it was replaced by new legislation in February 2012. This included a number of labour market reforms as a prerequisite for approval of Greece's second international loan agreement, including a 22 per cent reduction in its NMW and no uprating until the unemployment rate drops to 10 per cent.
Ireland	The National Minimum Wage can only be increased following a recommendation in a national agreement. Where there is no national agreement the Labour Court can be asked to examine the minimum hourly rate. The Labour Court can then make a recommendation to the Minister.
Japan	The system operates regionally. The minimum wage is reviewed and amended each autumn. The Central Minimum Wage Council makes recommendations to 47 Regional Minimum Wage Councils by the end of July, comprising representatives of labour unions, employees and public agencies. The final decision is made by the Regional Director of the Labour Standards Agency by around September. Industry level minimum wages can also be set within a prefecture.
Netherlands	The Ministry of Social Affairs normally uprates twice yearly (on 1 January and 1 July). The average uprating of collectively agreed wages determines the size of the minimum wage increase.
New Zealand	The Minister of Labour conducts annual reviews in line with the Minimum Wage Act 1983 by 31 December of each year, with changes effective from the following April.
Portugal	Since 2007 a tripartite committee (representatives from Government, unions and employers) has monitored economic conditions to consider the social and economic impacts of the minimum wage and recommend an annual uprating.
Spain	The minimum wage is set once a year on 31 January by the Government in consultation with the social partners, although it can be reviewed after six months if the Consumer Prices Index is higher than the Government's forecast. To calculate the increase the government takes certain economic indicators (CPI, national productivity, national income) into account.
UK	The Government considers recommendations from an independent commission, which reports following wide-ranging consultation. Since the minimum wage was introduced in 1999 there have been annual upratings.
US	Changes to the federal minimum wage are voted on by Congress intermittently. Most states have their own minimum wage rates. Where federal and state laws stipulate different rates, the higher rate applies.

Source: British Embassies, High Commissions and Low Pay Commission.

9 Spain had also adopted a longer-term target for the level of its minimum wage, to increase the minimum monthly wage to €800 by 2012, but it decided not to increase the wage in 2012 due to the current economic situation. Ireland, like Greece, had been required to reduce the level of its minimum wage under the terms of an international loan arrangement, by €1 an hour on 1 February 2011. Shortly afterwards, however, a new Government was elected and it reversed that reduction. This reversal took effect on 1 July 2011. The restoration of the €8.65 an hour minimum wage was made in tandem with a cut in employers' Pay Related Social Insurance. At €8.65 an hour, the minimum wage remains at the same level as in 2007.

10 Table A3.3 sets out the proportion of the full adult minimum wage rates paid at each age below age 20, while Table A3.4 gives further details about these arrangements. Most of those countries with a comparatively higher minimum wage have an age-related wage structure. Of those which don't, Canada has a provincially set wage, while New Zealand abolished its youth rates in 2008. However, it is currently legislating to introduce a starting-out wage and if introduced this will commence in the first half of 2013. The wage will be no less than 80 per cent of the adult minimum wage and will replace the existing new entrant's minimum wage and modify the training minimum wage (both set at 80 per cent of the adult rate). The starting-out wage expands the group of young people who may be eligible to be paid less than the adult rate. The New Zealand government has signalled that three groups of young people will be eligible for the starting-out wage: 16 and 17 year olds in their first six months of continuous employment with an employer; 18 and 19 year olds commencing employment after having been on benefit in their own right for more than six months; and trainees under the age of 20 years doing recognised training relating to their job, involving at least 40 credits a year. The starting-out wage does not apply to those workers supervising or training other workers.

Table A3.3: Youth Minimum Wage Rates as a Percentage of Adult Minimum Wage Rates, by Country, 2012

Country	Percentage at age 16	Percentage at age 17	Average percentage at ages 18/19
Australia[a]	47	58	68-83
Belgium	70	76	85
Canada	100[b]	100[b]	100
France[c]	80	90	100
Greece	87	87	87
Ireland	70	70	85
Japan	(regional) 100 (sectoral) 0	(regional) 100 (sectoral) 0	(regional) 100 (sectoral) 100
Netherlands	34.5	39.5	49
New Zealand[d]	100	100	100
Portugal	100	100	100
Spain	100	100	100
UK	59	59	80
US[c]	59	59	59

Source: OECD Minimum Wage Database, British Embassies High Commissions, and Low Pay Commission.
Notes:

a. These percentages apply to juniors only. Apprentices and trainees have different rates.
b. All provinces except Ontario. Ontario's youth minimum wage is 94 per cent of the adult minimum wage.
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. The youth minimum wage was replaced by a new entrants' minimum wage in 2008. This only applies to employees aged 16 and 17 years who have completed fewer than 200 hours or 3 months of employment, whichever is shorter and who are not supervising or training workers. An employee will not be a new entrant if they are a trainee who is subject to a training minimum wage.

Table A3.4: Age Variations Under Minimum Wage Systems, by Country, 2012

Country	Treatment by age
Australia	Junior rates contained in Australian Pay and Classification Scales vary across industries and occupations. Typically a sliding scale applies from age 16 (40-50 per cent of the adult minimum wage) through age 18 (65-80 per cent) to age 20 (85-100 per cent). Adult wages apply at age 21.
Belgium	Full minimum wage applies at age 21. An additional premium is payable to workers aged 21½ who have been employed for at least six months and to workers aged 22 who have been employed for at least twelve months. There is a 6 per cent deduction from the minimum wage for each year below age 21, with those aged 16 or under receiving 70 per cent of the full rate.
Canada	Full minimum wage at all ages except in Ontario, which has a youth rate for students aged under 18 and working for no more than 28 hours per week. In addition Nova Scotia has a first job/entry-level wage rate for workers new to the paid labour market with less than 3 months experience.
France	Full minimum wage at age 18. Certain categories of young people receive a reduced rate, provided they have worked less than six months in a sector (80 per cent for those aged 16 and 90 per cent for those aged 17).
Greece	Full minimum wage at age 25. For those in the 15-24 age group, the minimum wage is 87 per cent of the adult rate.
Ireland	Full minimum wage applies to an experienced adult employee (which is an employee who is not (i) under age 18 or (ii) in the first two years after the date of first employment over age 18 or (iii) undergoing structured training or study). Employees in the first year after the date of first employment over age 18 are entitled to 80 per cent of the full minimum rate and 90 per cent in the second year. Employees under age 18 are entitled to 70 per cent of the full adult rate.
Japan	The regional minimum wage applies to employees over 15 years old. The sectoral minimum wage applies to employees aged between 18 and 64.
Netherlands	Full minimum wage at age 23. Youth rates are 30.0 per cent at age 15, 34.5 per cent at age 16, 39.5 per cent at age 17, 45.5 per cent at age 18, 52.5 per cent at age 19, 61.5 per cent at age 20, 72.5 per cent at age 21 and 85.0 per cent at age 22.
New Zealand	From 1 April 2008 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 new entrants' minimum wage and the training wage are equivalent to 80 per cent of the minimum wage. Changes are expected to be introduced in the first half of 2013 – see above.
Portugal	Full minimum wage at all ages.
Spain	Full minimum wage at all ages.
UK	Full minimum wage at age 21 (from 1 October 2010). Separate rates exist for 16-17 and 18-20 year olds (currently 59 and 80 per cent respectively of the adult rate).
US	Full minimum wage at all ages, except below age 20 where a lower rate of $4.25 can apply (approximately 59 per cent of the current full minimum wage) for the first 90 days in any job. Also full-time students can be paid 85 per cent of the minimum wage. Additionally, student-learners (those aged 16 and over who are enrolled in vocational education) can be paid 75 per cent of the minimum wage while on the vocational education programme.

Source: British Embassies, High Commissions, and Low Pay Commission.

11 Table A3.5 explains the treatment of apprentices under arrangements for those undergoing training in each comparator country. Most countries have arrangements where, when certain training specifications apply, a lower rate of minimum wage is applicable.

Table A3.5: Minimum Wage and Apprenticeships, by Country, 2012

Country	Apprenticeship exemptions
Australia	Special national minimum wages are set for trainees, apprentices and juniors who are not covered by any other award or agreement. For apprentices, the hourly rates are: year 1 of apprenticeship $10.22, year 2 of apprenticeship $12.08, year 3 of apprenticeship $14.87, year 4 of apprenticeship $17.65.
Belgium	Apprentices are paid a percentage of the minimum salary depending on age. Those aged 21 are paid 50 per cent of the minimum salary, with younger apprentices paid between 64 per cent (age 15) and 94 per cent of this level (age 20). Some sectors apply a further reduction based on level of qualification held by the apprentice.
Canada	Apprenticeship training and pay is set at provincial level and is dependent on the regions and zones in each of the 13 territories where the apprentice is in training. The hourly wage for apprentices ranges between 50 per cent and 90 per cent of a journeyperson's wage, depending on year, occupation and the jurisdiction.
France	Apprentices/trainees are paid at a percentage of the minimum salary depending on age and year of study, rising from 16-17 year olds paid at 25 per cent of minimum salary in the first year, 37 per cent in the second year and 53 per cent in the third year, to those aged 21 and over paid 53 per cent of minimum salary in the first year, 61 per cent in the second year and 78 per cent in the third year.
Greece	Apprenticeship training contracts can only be signed with persons in the 15-18 age group and their duration cannot exceed 12 months. The wage is 87 per cent of the adult NMW. Those below age 16 are not allowed to train for more than 6 hours per day and 30 hours per week, rising to 8 hours per day/40 hours per week for those 16+.
Ireland	NMW does not apply to apprentices in designated sectors. However, registered employment agreements set out the minimum rates for apprentices working in the Construction and the Electrical Contractor sectors. Minimum wage rates apply for employees aged over 18, on a course of training or study undertaken in normal working hours: 75 per cent of the minimum wage rate in the first third period; 80 per cent in the second third period, and 90 per cent in the third period.
Japan	Employees are exempt from the minimum wage only if the employer gets approval from the Head of the Regional Labour Standards Agency. Employees under certified vocational training, which is training approved by the prefectural Governor, are exempt from the minimum wage. Each exemption is discussed individually.
Netherlands	Students on the Educational Learning Path Arrangement, or in higher education, and on an internship with an employer do not have to be paid the minimum wage and do not fall under the sectoral collective labour agreement. Students studying under the Learning by Doing Learning Path Arrangement are with an employer for four days a week and spend one day a week at school. They have a labour contract, are paid at least the NMW and subject to the sectoral labour agreement.
New Zealand	The training wage applies to apprentices who are enrolled in recognised training. It applies to those employees aged 16 years and over who are undertaking at least 60 credits a year in an industry training programme for the purpose of becoming qualified for the occupation they are employed in.
Portugal	Apprentices/trainees in qualified/highly qualified jobs can receive 80 per cent of the minimum wage for up to a year, or 6 months if the course is technical/professional.
Spain	Training cannot be less than 15 per cent of an apprentice's day and their wage cannot be less than the minimum wage, proportionate to their working hours. Indivduals on training who have a degree but no professional experience are a special case: pay is fixed by collective agreement but cannot be less than 60 per cent (first year) and 75 per cent (second year) of the agreed salary of an experienced worker doing the same or an equivalent job.
UK	Employed apprentices below the age of 19 and older workers in the first year of an apprenticeship on Level 2 or Level 3 schemes are entitled to the Apprentice Rate of the minimum wage, set at £2.65 per hour from 1 October 2012.
US	Anyone aged 16 or over can apply to enter the Government-run apprenticeship programme. The minimum wage must be paid at the start of the apprenticeship with pay increasing during the programme, to be consistent with the skills acquired.

Source: British Embassies, High Commissions, and Low Pay Commission.

12 As part of our review of the accommodation offset, we looked at whether a similar arrangement operated in other countries. Table A3.6 sets out our findings, and shows that there is variation in the use of offsets and in their details.

Table A3.6 Accommodation Offset, International Comparisons, 2012

Country	Accommodation offset
Australia	No accommodation offset as part of the minimum wage. The minimum wage is the minimum hourly rate that can be paid to employees. An employer is, however, allowed to make a deduction (such as accommodation) from an employee's pay if certain conditions are met, including that the employee has agreed in writing and the deduction is principally for the employee's benefit.
Belgium	No accommodation offset. Different arrangements can be negotiated at either sectoral or company level, but in principle the minimum wage represents a basic 'core minimum salary'.
Canada	Out of thirteen provinces and/or territories, six have provisions for deductions for room and board. Maximum deductions per week range from $51.00 in Quebec to $71.82 in Alberta. The federal maximum, applying to private sector industries which are federally incorporated and operate inter-provincially, is $0.60 per day for accommodation and $0.50 per meal for a maximum deduction of $2.10 per day.
France	Offset allowed for accommodation (the amount depends on the number of rooms and on the employees' income) and for food. The offset costs will be deducted from the gross salary but subjected to taxes.
Greece	No accommodation offset.
Ireland	If an employee receives board and lodgings, board only or lodgings only from an employer, then the following amounts are reckonable: €54.13 for full board and lodgings per week (or €7.73 per day), €32.14 for full board only per week (or €4.60 per day), €21.85 for lodgings only per week (or €3.14 per day)
Japan	No accommodation offset.
Netherlands	Arrangements exist for employers to compensate employees for accommodation costs incurred as a result of employment, paid free of tax, but these arrangements do not depend on the level of the minimum wage.
New Zealand	The maximum that can be deducted is 15 per cent for board and lodging or 5 per cent if lodging alone.
Portugal	Payments in kind cannot exceed 50 per cent of the minimum wage. The limit for accommodation is 12 per cent and/or an indicative €27.36 per month per unit of accommodation provided. The actual value attributed to the house to calculate the offset is defined according to the current prices in the region in question. For meals the limit is 35 per cent of the minimum wage (all meals provided) or 15 per cent (where one main meal provided).
Spain	No accommodation offset.
UK	Employer-provided accommodation is the only benefit-in-kind that can count towards the NMW. The accommodation offset limit is £4.82 a day.
US	Reasonable cost or fair value of lodging may be considered part of the wages. Decided on a case-by-case basis. The two main principles are that the employee must agree in advance and that the employer cannot profit from the arrangement. Employers must submit their proposals for agreement to the Wages & Hours Division of the Department of Labor.

Source: British Embassies, High Commissions, and Low Pay Commission.

Appendix 4

History of the Accommodation Offset

Key Principles and Early Decisions

1 The Low Pay Commission's First Report said '*the provision of accommodation or lodging only as a benefit-in-kind is significant, and sometimes covered by collective agreements.… For employers, the advantage of providing accommodation is that it helps ensure workers are on the premises. For workers, the advantage is that convenient accommodation is available, reducing their costs and preventing problems in locations where finding accommodation can be difficult*.' It was envisaged that if no accommodation offset was allowed, employers might transfer the accommodation charge from a benefit-in-kind to a cash charge to the worker, which could be particularly disadvantageous to the low paid.

2 The Commission therefore recommended that an offset should be allowed where accommodation was provided as a benefit-in-kind. In order to protect workers from unreasonable charges a maximum figure of £20 a week was suggested for any deduction which might be made. The First Report went on to argue that '*Since we believe that workers should ideally be remunerated in money not in kind, and should be able to earn enough to pay rent, we further recommend that the operation of the offset should be monitored and consideration given to phasing it out in the longer term.*'

3 The Regulations laid before Parliament provided a more complicated arrangement than the original recommendation. They provided for an hourly (50p) or daily (£2.85) amount not exceeding £19.95 a week. Following the First Report, and consultation by the Government on the draft National Minimum Wage (NMW) Regulations, the Commission was asked in February 1999 by the Secretary of State to revisit the recommendation on accommodation. This was prompted by both employers' concerns about the level of the deduction allowed and by the Commission's suggestion that the offset might only be a temporary measure. It also reflected a view that the First Report had not fully explained how the figure of £20 had been arrived at.

Review of the Accommodation Offset

4 A review (Low Pay Commission, 1999a) of the accommodation offset was submitted to the Secretary of State in March 1999. The Review reiterated the original recommendation and stated that no new evidence had been found to support a larger offset. The Review did, however, suggest that the draft NMW Regulations were complex in setting a weekly, daily and hourly rate of deduction. The rationale for those provisions was that this was necessary to protect those working part-time and those who did not live in the accommodation for a full week. The Review also laid out in more detail the evidence on which the original recommendation had been based, including: the practice of previous Wages Councils; current practices in various sectors where tied accommodation was provided; and examples of international practice. It also indicated that the statistics on tied accommodation, while problematic, suggested that this benefit-in-kind was limited to a few sectors and that it was in decline.

5 The initial level of the offset was not set by direct reference to any average rent. Rather it was reached by considering previous Wages Councils' rates (which had been determined by such a reference with a discount to represent the cost to the worker and value to the employer of provision) and current practices. The Review listed seven different offsets for low-paid workers, including Wages Councils, Agricultural Wages Boards and the Committee of Registered Clubs Association (CORCA). The mean of the different rates was £16.34, close to the uprated Wages Council figure (£16.50) for licensed hotels and restaurants, a sector in which a deduction for live-in accommodation was most common.

6 In reaching a recommendation, the Commission noted that there had been some upward drift in the level of accommodation offsets since the abolition of the Wages Councils and therefore a simple mean figure could be too low. Consequently a maximum rate of £20 a week was recommended.

7 The Review also considered how the provision of accommodation was treated in other countries. The conclusion was that there was no clear pattern across countries: three had no offset and in the others the rate varied between 0.1 per cent and 15.0 per cent of the weekly minimum wage.

8 The Review laid down in more detail the principles underlying the allowance of an accommodation offset in the NMW definition. It stated that '*When deciding on the level of the accommodation component, we did not seek to reflect the actual value of the accommodation to the worker, or the cost to the employer. We believe that it would be inappropriate and impracticable to do so. Allowing a market rate would not have recognised the benefits to the employer of providing accommodation. Furthermore, the standard and type of accommodation provided, and consequently its market value, can vary considerably. Finally, a single national rate of accommodation component was consistent with a national rate of minimum wage.*'

9 The Review recommended that the '*most sensible approach would be for us to monitor the impact of the level and scope of the accommodation offset, and to make recommendations for its application in the longer term as part of our report in December.*'

The Second Low Pay Commission Report (2000)

10 Following the Review, the Commission collected further evidence about the operation of the accommodation offset for the report in 2000. While there was evidence that some employers had faced major problems with the introduction of the NMW and the limit on the offset, they were a small minority of firms in the sectors most affected – hospitality, leisure and agriculture. According to a survey by the British Hospitality Association only 33 out of 712 respondents reported increased costs because of the offset limit and only 12 were reducing its availability as a result. In a Commission survey of 600 businesses in the hospitality sector, only 12 mentioned the accommodation offset. While employer organisations argued for a higher level of offset, the major trade union in the sector (GMB) argued that the level was relatively high in relation to the level of the NMW. The GMB also argued that accommodation was disproportionately likely to be given to young workers who were on a lower rate of the NMW anyway.

11 The Second Report concluded that, '*so long as the NMW is set at the current prudent level, we see no reason for either raising or reducing the level of the deduction allowable for the provision of accommodation'*. It recommended that '*the accommodation offset should be retained at its present rate and its level considered again when the National Minimum Wage is reviewed,'* and that *'the Government should investigate whether the regulations relating to the offset could be simplified to make compliance easier for employers. At the least, simpler guidance should be issued.'*

The Third Low Pay Commission Report (2001)

12 Evidence from employers for the Third Report called for a considerable increase in the level of the offset to between £40 and £60 a week. The GMB, however, proposed that the offset should be frozen at its current level. Some employers argued for a variable offset according to factors such as quality of property, geographical location, or whether provided on site or externally. The Commission however noted that a differentiated approach would conflict with the guiding principle of simplicity and create enforcement problems.

13 Analysis found that the vast majority of those in receipt of accommodation were aged 21 and over, and most workers with tied accommodation were paid above the minimum wage. In a Commission survey only 12 of the 905 hospitality firms which responded mentioned the accommodation offset.

14 The Government's evidence stated that it had 'looked into simplifying the Regulations regarding the application of the accommodation offset but concluded that any simplification would be at the expense of fairness.' The Government also pointed out that it had clarified the guidance on the treatment of accommodation and that there was a ready reckoner on the website which calculated the offset automatically.

15 The Third Report concluded that the level of the offset should be increased. It said '*In recommending an increase, we have sought to retain the balance between providing employers with a reasonable amount which they can deduct in respect of accommodation while not reducing the value of the minimum wage to workers. We have therefore decided to recommend that the level of the offset should be increased by the same amount as the increase in the main minimum wage rate between April 1999 and the new rate in October 2001.'*

The Fourth Low Pay Commission Report (2003)

16 The Fourth Report again set out some of the evidence from both employer and worker representatives as to why the level of the offset should or should not be changed. The Report noted that the initial rationale still held good and that a balance should be struck between providing employers with a reasonable amount which they could deduct for accommodation while not reducing the value of the minimum wage to workers. The Commission continued to believe that having both hourly and daily rates was an unnecessary complication and along with recommending an increase in the weekly charge, recommended that '*… hourly and daily rates should be abolished. Where accommodation is provided for less than the full week, the offset should be correspondingly reduced.'* The Government accepted this and the earlier system was replaced by a single daily rate from October 2004.

17 The 2005 Report again reported briefly on the evidence received, in particular from those organisations calling for the level of the offset to be substantially increased.

The 2006 Report – Review of the Offset

18 The remit for the 2006 Report asked the Commission to review the operation of the offset and make recommendations for any changes needed. This review looked at the initial rationale for the offset; evidence with regard to the provision of accommodation; the question of accommodation required to be taken as a condition of employment; and issues around accommodation and migrant workers (given the then recent influx of migrant workers from Eastern Europe into the low-paying sectors).

19 A number of stakeholders wanted a distinction made between tied accommodation and accommodation offered as an option. In the agriculture sector it was argued that greater flexibility for employers to recover accommodation costs would reduce the risk that migrant workers would be forced into the hands of unscrupulous landlords who might exploit them. On the other hand, employee representatives argued that the existing arrangements were being abused and called for greater enforcement activity.

20 Having considered the evidence, the Commission concluded that there was no strong reason to recommend changes to the provisions for workers who were required to occupy accommodation as a condition of employment. However, the Commission accepted that conditions in some sectors had changed since the introduction of the NMW (through the marked increases in migrant workers) and that workers' and employers' needs meant accommodation was being offered outside of the traditional model of tied accommodation. Commissioners *'accepted that there was a distinction between the type of situation we envisaged when we first recommended an accommodation offset, and that described by the Association of Labour Providers and the National Farmers' Union.…'*

21 The Commission noted the arguments put forward about this distinction and concluded that, on balance '*while there is a case in principle for distinguishing between workers who are given a free choice and those obliged to accept housing from their employer, there are significant practical difficulties associated with any such distinction*.' It would be very difficult to devise a simple, robust test of choice where an employer has provided accommodation to a worker. The Commission therefore recommended that the existing provision should remain, but said it would keep the offset under review, in particular the treatment of housing offered as an optional service and not tied to the job.

The Story Since 2006

22 Since 2006 we have continued to report on the evidence received from stakeholders. Some employer representatives (e.g. in hospitality) have continued to call for the offset to remain and for the level to be increased to reflect the cost of actually providing accommodation. Others (e.g. in agriculture) have argued that where there is a free choice, the offset rules should not apply. Worker representatives have maintained that the arrangements should remain as they are (some supporting the annual increases in line with the adult rate of the NMW) and for stronger enforcement to be undertaken.

23 As part of the consultation for the 2010 Report, we requested more detailed evidence on the operation of the offset. In the event we received little new evidence. Since then some representative stakeholders in the agriculture sector have told us that the offset is no longer such an issue for them, as many of their members no longer provide accommodation. On the other hand on our visits around the UK we have met a number of employers in agriculture who continue to provide accommodation. In the 2012 Report we stated our intention to review the offset, as part of the work for the 2013 Report. The Government subsequently asked us to undertake such a review as part of our remit.

Previous Research on Accommodation

24 The lack of evidence about the operation of the offset in practice has been a continued concern. We have heard over recent years how fewer employers (particularly in agriculture) are providing accommodation as it is not economically viable to do so. Employers tell us it costs them more to provide the accommodation than the offset allows them to withhold from workers' pay, but as indicated above, it was never the intention to set the level to cover the full cost of provision.

25 The Labour Force Survey (LFS) gives information on the numbers provided with tied accommodation, broken down by various sectors. But its sample is limited and it does not cover temporary migrants (those intending to stay in the UK for less than twelve months); those in temporary accommodation (e.g. caravans); and those in accommodation for 25 people or more (e.g. hotels, nursing and student accommodation).

26 More general research has been undertaken which has picked up some issues in relation to accommodation and the offset. This research is summarised below.

- Adam-Smith, Norris and Williams (2001) – Impact of the NMW in the hospitality sector: found half provided accommodation, but the charge for and quality of the accommodation varied considerably.
- IDS (2004) – Impact of the NMW: found that the majority of hotels charged live-in workers £22-£45 a week for accommodation.

- IDS (2005) – Non-cash benefits in low-paying sectors (care, leisure, hospitality and retail): found that 12 per cent of respondents offered accommodation.
- Precision Prospecting (2005a, 2005b) – Found that 18 per cent of labour providers in agriculture provided accommodation and 23 per cent of seasonal workers in food processing used labour-provider accommodation.
- French and Möhrke (2006) – The impact of new arrivals on the North Staffordshire labour market: found abuse of the offset with regard to migrant workers.
- IDS (2007) – Impact of the NMW: found that the provision of accommodation was common in the hospitality sector. In hotels, charges ranged from £15 to £85 a week but lower-paid staff were sometimes charged less.
- Balch, Brindley, Geddes and Scott (2009) – Research for the Gangmasters Licensing Authority: found 25 per cent of gangmasters had a direct link to their workers' accommodation.

Appendix 5
Main Data Sources

Introduction

1 In this appendix we document the main data sources used in our analyses and outline any major changes that have been made since our 2012 Report. There are three main sources of data that we use in this report to measure earnings: the Annual Survey of Hours and Earnings (ASHE), Average Weekly Earnings (AWE), and the Labour Force Survey (LFS). These are all published by the Office for National Statistics (ONS). There are two main sources of employment information: the LFS and the ONS employee jobs series. The LFS captures the number of people in employment, whereas the employee jobs series measures the number of jobs in the economy. This is an important distinction as a person can have more than one job.

2 ONS has revised the Standard Occupational Classification (SOC) that defines occupations. The new classification (SOC 2010) has replaced the previously used SOC 2000 in ONS outputs including ASHE, and it is not possible to make direct comparisons between data on the old and new classifications. The move from SOC 2000 to SOC 2010 codes means we have had to update our definition of the low-paying sectors based on the latest SOC 2010 codes. In the following section, we outline how this change has affected the analysis included in this report.

3 In addition to labour market data, we also look at a variety of macroeconomic data. The final section of this appendix outlines the two main macroeconomic series that we use (measuring inflation and gross domestic product (GDP)) and summarises the revisions that ONS have recently made to GDP estimates.

Annual Survey of Hours and Earnings

4 ASHE is the main source of structural earnings data in the UK and is regarded by ONS as the best source of earnings information. It provides information on the levels, distribution and make-up of earnings, as well as on hours, gender, age, geography, occupation and industry. It is a survey of employees completed by employers and conducted in April each year. Results are based on a 1 per cent sample of employee jobs in Pay-As-You-Earn income tax schemes obtained from HM Revenue & Customs (HMRC). The self-employed are excluded. We carry out our own analysis of earnings from ASHE whereby those employees not on an adult rate of pay are included in the data set (they are excluded from ONS ASHE earnings estimates). This means that our earnings estimates will be different from ONS ASHE earnings estimates.

5 From 2011, the ASHE data have been reweighted to SOC 2010 codes. This means that earnings estimates for 2011 onwards are not directly comparable with those prior to 2011. In light of these changes to occupation codes, we have reviewed and updated our definition of the low-paying occupations. This review is similar to the re-assessment of the definition of low-paying industries we undertook when the Standard Industrial Classification (SIC) codes changed from SIC 2003 to SIC 2007 (see Appendix 4 of our 2010 Report for more information). The results of this review are outlined in Appendix 6 of this report.

6 There is no official, consistent, long-run time series of structural earnings in the UK. The best source available now consists of five overlapping New Earnings Survey (NES)/ASHE survey data sets: NES, 1975-2003; ASHE without supplementary information, 1997-2004; ASHE with supplementary information, 2004-2006; ASHE 2007 methodology, 2006-2011; and ASHE 2010 methodology, 2011 onwards.

Average Weekly Earnings

7 AWE is a short-term measure of the level of average weekly earnings per job in Great Britain which is based on data from the Monthly Wages and Salaries Survey. It is available monthly, showing regular pay, bonus pay and total pay. AWE uses current industry weights that are updated each month to take account of the distribution of jobs across sectors. ONS also produces a decomposition of the growth rates to show how much growth is due to wage growth, and how much is a result of changes in employment across sectors. Apart from the standard regular revisions as new information and weighting becomes available, there were two occasions in the last twelve months where data were revised beyond the previous month. These revisions were due to revised information on bonus payments from a small number of respondents. The largest revisions in 2012 took effect in the September 2012 publication of AWE, where the back-series were revised from June 2010.

Labour Force Survey

8 The LFS is the official data source used to measure employment and unemployment. It is a quarterly survey of around 60,000 UK households conducted on a rolling monthly basis and provides information on employment, unemployment, earnings, and personal and socio-economic characteristics including gender, ethnicity and disability.

9 In our report, analyses of aggregate employment, unemployment and hours worked use seasonally adjusted monthly and quarterly LFS data published by ONS. For detailed analyses of the labour market by age, ethnicity, disability and other personal characteristics, we use the non-seasonally adjusted LFS Microdata. We take the four-quarter moving average of these outputs to take account of seasonality. The population weights used in our analysis may differ from those used by ONS, as it updates its weights more regularly than in the LFS Microdata. Consequently our analyses based on LFS Microdata produce estimates of levels that differ from the headline aggregates published by ONS. Estimates of proportions tend to differ less, as both the numerator and the denominator are affected.

10 ASHE contains no information on disability, ethnic background, country of birth, nationality or education level. The LFS is, therefore, our only source of data on earnings for disabled people, ethnic minorities, migrants and people with no qualifications. However, data on pay and hours in the LFS tend to be less reliable than in ASHE. Reasons for this include: a smaller sample; people often answering the earnings questions without reference to pay documentation (although they are prompted to consult available documents); and some information being provided by proxy respondents. ASHE collects information from employers about employees' paid hours, whereas the LFS collects information from individuals about their actual and usual hours of work, which might include unpaid hours. This generally means that the derived hourly earnings variable in LFS is below the derived hourly pay rate recorded in ASHE. Where a stated hourly rate of pay is unavailable from the LFS, ONS has developed an imputation method using a nearest neighbour regression model, which also takes account of information on second jobs. This methodology reduces the differences between hourly earnings estimates from the LFS and ASHE, and we use it to estimate earnings in our LFS analyses.

11 In this report the figures we have presented on disabled people have used the old definition of working age (men aged 16-64 and women aged 16-59), rather than all aged 16-64, in order to allow the data to be consistently compared across time. The LFS changed the way it asked questions on disability in 2010, which caused a discontinuity in the time series. Prior to 2010 most women aged 60 or over were not asked whether they had a work-limiting disability. Since the state pension age for women started to increase (in April 2010) the question has been asked of all women aged 60-64. Men were not affected by this change. Until there are sufficient data on the new basis to form a substantive time series, we will continue to use the old working age definition for analyses of disabled people.

12 LFS Microdata are usually revised on an annual basis, resulting from reviews of the seasonal adjustment process and reweighting to new population estimates. A consistent back-series of estimates based on the latest revised LFS Microdata were provided back to Q3 2009.

Employee Jobs

13 The employee jobs series provides a timely breakdown of jobs in the UK. A number of Short Term Employer Surveys, which collect data from businesses across the economy, are used to compile the employee jobs series. Figures at a more detailed industry level, however, are available only for Great Britain and are not seasonally adjusted. This makes quarter-to-quarter comparisons problematic, particularly as much of the employment in the low-paying sectors is of a seasonal nature, for example Christmas trading in the retail sector. Comparisons between one quarter and the same quarter a year earlier, however, help to alleviate this problem. Other than the annual benchmarking exercise, there were no substantive revisions to the data. A consistent back-series, based on SIC 2007, is now available back to the second quarter of 1978.

Inflation

14 ONS publishes monthly inflation indices which reflect changes over twelve months in the cost of a 'basket' of goods and services on which people typically spend their money. We use three main inflation measures: the Consumer Prices Index (CPI), Retail Prices Index (RPI), and Retail Prices Index excluding mortgage interest payments (RPIX).

15 Each measure uses the same basic price data, but the CPI (which follows international definitions) excludes Council Tax and a number of housing costs faced by homeowners that are included in the RPI. Other differences include: the methodologies used to combine individual prices at the first stage of aggregation; the sources used to derive the weighting that each component contributes; and the population whose spending the 'basket' is designed to represent. These price series are never revised.

16 A recent report by ONS prompted by the need to address the gap between RPI and CPI concluded that the methodology used to produce the RPI does not meet certain international standards and recommended that a new index be published. However, ONS also noted that there was significant value to users in maintaining the continuity of the existing RPI's long time series without major change, so that it may continue to be used for long-term indexation and for index-linked gilts and bonds in accordance with user expectations. Therefore, while the current methodology for producing RPI remains unchanged, ONS is constructing a new price index (known as RPIJ) which will be based on a new methodology and published from March 2013.

Gross Domestic Product

17 GDP provides a measure of total economic activity. It is often referred to as one of the main 'summary indicators' of economic activity and is used to measure growth in the economy.

18 In 2011 ONS implemented significant methodological changes in the production of GDP figures, which brought the UK into line with international standards. The details of these changes and their impacts were outlined in Appendix 4 of our 2012 Report. These changes included: adopting the 2007 SIC; using a revised classification of products; changing the method of calculating deflation; and revising the base and reference years. Following these changes the data indicated that the 2008-09 recession was shorter (five quarters instead of six) but deeper (7.1 per cent loss of output instead of 6.4 per cent) than previously thought.

19 However, since January 2012, ONS has again revised the GDP data, reflecting methodological changes in the way insurance services are measured, new HMRC earnings data and other updated data including the ONS Annual Business Survey. The latest GDP data for Q3 2012 used in this report now show that the recession was not as deep as previously thought (resulting in a 6.3 per cent loss of output), but it was still the deepest since the recession of the 1930s.

Appendix 6
Review of the Low-paying Sectors

1 Throughout this report, but particularly in Chapter 2, we refer to the low-paying sectors. These are occupations or industries which are defined as those containing a high number or proportion of low-paid workers based on the Standard Occupation Classification (SOC) and the Standard Industry Classification (SIC) codes published by the Office for National Statistics (ONS). Therefore, we have two distinct definitions of low-paying sectors, one based on industries and one on occupations. Ideally we would like our earnings and employment analyses to be based on occupational definitions. However, the main ONS data series that are released monthly or quarterly are only disaggregated by industry. Further, stakeholder groups tend to be industry-based. We therefore need to use industry-based measures when considering the ONS employee jobs series and the Average Weekly Earnings series. Industry definitions will capture many managers and supervisors who will not necessarily be low-paid but occupational definitions are generally only available quarterly for employment using the Labour Force Survey (LFS) and annually for earnings using the Annual Survey of Hours and Earnings (ASHE).

2 The definition of low-paying sectors was last reviewed and updated in 2010, following changes in the SIC codes (see Appendix 4 of our 2010 Report for further information). In 2010, ONS introduced a new Standard Occupation Classification (SOC 2010), which replaced the SOC 2000 previously applied in ONS' published data, including those data sources used in our report. In the light of this move from SOC 2000 to SOC 2010 codes, we have conducted a review to assess whether our low-paying industries and occupations are still the most appropriate sectors on which to focus our analysis.

3 This appendix outlines the review process and resulting changes to our low-paying sectors, which have been implemented in our 2013 Report. They are based on SOC 2010 and SIC 2007. A detailed list of sectors is contained in Table A6.1.

Reviewing the Low-paying Occupations

4 In this review, we defined low-paid workers as those paid at or below their applicable age-related National Minimum Wage (NMW) plus 10 per cent in April 2011. For example, all adult workers earning £6.52 (the adult rate of £5.93 + £0.59) or less would be identified as low-paid workers. We have ranked occupations according to their proportion of low-paid workers. Those sectors which include the 25 per cent of occupations with the largest proportions of low-paid workers have been classified as low-paying sectors. This definition is similar to that used in defining low-paying industries based on SIC 2007, thus ensuring that our analyses are comparable over time, and that the two sets of classifications, based on industry and occupation, are aligned as closely as possible.

5 We use ASHE to identify our sectors, as ONS considers this to be the best source of information on earnings by industry and occupation. ASHE data have been reweighted to SOC 2010 codes from 2011 onwards, meaning that earnings estimates from 2011 onwards will not be directly comparable with those prior to 2011. But we are able to compare earnings data based on our new definition of low-paying occupations for 2011 and 2012, identifying the impact of the NMW. This review was based on the ASHE 2011 data but has been checked against the recently released ASHE 2012 data. These checks proved to be robust.

6 As low-paid workers are identified across a broad range of industries and occupations, our sectors are unlikely to capture all of them. Based on our review of the low-paying occupations under SOC 2010, our new definition captures 81.6 per cent of all low-paid workers, and 30.8 per cent of the total workforce in April 2011. The coverage of these low-paying occupations for both the total workforce and low-paid workers is higher than that using the previously defined low-paying occupations based on SOC 2000. In the following sections, we outline changes to the previously defined low-paying sectors following the move to SOC 2010. Table A6.1 shows the industry and occupation codes included in each low-paying sector definition.

7 **Agriculture:** The review has resulted in several additional occupations with a high proportion of low-paid workers being included in this sector: *Managers and proprietors in forestry, fishing and related services; Horticultural trades; Gardeners and landscape gardeners;* and *Groundsmen and greenkeepers.*

8 **Childcare:** There has been a small change to this occupation: *School crossing patrol attendants* has been merged into *School midday and crossing patrol occupations* under SOC 2010.

9 **Cleaning:** Three new occupations within the SOC 2010 framework have been added to this sector: *Housekeepers and related occupations; Vehicle valeters and cleaners* and *Cleaning and housekeeping managers and supervisors.* We have removed *Road sweepers* as this occupation no longer exists under SOC 2010.

10 **Food processing:** The move to SOC 2010 has led to the addition of one occupation: *Packers, bottlers, canners and fillers*.

11 **Hairdressing:** SOC 2010 has not changed the definition of the occupation.

12 **Hospitality:** The only minor change is that the *Chefs, cooks* occupation in the 2000 SOC has been split into two occupations: *Chefs* and *Cooks* in the 2010 SOC. Both occupations remain in the hospitality sector, so overall the composition of the sector is unchanged.

13 **Leisure, Travel and Sport:** We have added the following new occupations with a high proportion of low-paid workers: *Actors, entertainers and presenters; Sports players and fitness instructors; Animal care services occupations not elsewhere classified (n.e.c);* and *Other elementary services occupations n.e.c.*

14 **Office work:** The only change to this occupation is the addition of one new occupation: *Financial administrative occupations n.e.c.*

15 **Retail:** The review has led to a number of changes to this occupation. We have added the following occupations: *Pharmacy and other dispensing assistants; Vehicle and parts* *salespersons and advisers; Roundspersons and van salespersons* and *Market and street traders and assistants.* All of these occupations have a high proportion of low-paid workers. The only occupation removed from the previous SOC 2000 definition is *Telephone salespersons*, which now contain a relatively low proportion of low-paid workers.

16 **Security:** As this occupation no longer has a very high proportion of low-paid workers we have removed this occupation from our low-paying occupation definition. However, it should be noted that this occupation does have lower median earnings than the economy as a whole and also employs more low-paid workers than the average across the economy. It has been removed because its pay, although lower than average, is no longer in line with other low-paying occupations.

17 **Social care:** We have added *Care escorts* to this occupation.

18 **Textiles and clothing:** Changes to SOC 2010 have resulted in the following additional occupations in the sector: *Upholsterers* and *Footwear and leather working trades.*

19 Our review has led to three new sectors being added to our low-paying occupation definition. These sectors all have high proportions of low-paid workers. These newly defined low-paying sectors are described below.

20 **Non-food processing:** This sector comprises the following occupations with a high proportion of low-paid workers: *Smiths and forge workers; Rubber process operatives; Glass and ceramics process operatives; Glass and ceramics makers, decorators and finishers; Weighers, graders and sorters; Plastics process operatives; Assemblers (electrical and electronic products); Metal working machine operatives; Elementary construction occupations; Assemblers and routine operatives n.e.c.; Chemical and related process operatives;* and *Elementary process plant occupations n.e.c.*

21 **Storage:** *Elementary storage occupations* is the only occupation included in this sector.

22 **Transport:** There are four low-paying occupations included in this sector: *Taxi and cab drivers and chauffeurs*; *Tyre, exhaust and windscreen fitters; Vehicle technicians, mechanics and electricians* and *Van drivers.*

Low-paying Industries

23 As we noted above, we would ideally use occupations to define low-paid groups of workers and those most affected by the minimum wage. However data are not always available on this basis and stakeholder groups tend to be industry-based. We therefore have two sets of classifications, industries and occupations, which share similar categories.

24 Our review has not led to changes to our definitions of most low-paying industries: retail; hospitality; social care; leisure, travel and sport; food processing; cleaning; agriculture; childcare; hairdressing; and employment agencies (not included in the low-paying sectors based on SOC). However, analysis of earnings by SIC 2007 codes also suggests that security no longer meets our criteria for inclusion in our definitions of low-paying industries, so it has been removed.

Table A6.1: New Definitions of Low-paying Industries and Occupations, by SIC and SOC Codes

Low-paying industry/occupation	Old industry definition (SIC 2007)	New industry definition (SIC 2007)	Old occupation definition (SOC 2000)	New occupation definition (SOC 2010)
Retail	45, 47, 77.22, 95.2	45, 47, 77.22, 95.2	1234, 5496, 711, 7125, 721, 925	1254, 5443, 7111,7112,7114, 7115, 7123-7125, 7130, 7219, 925
Hospitality	55, 56	55, 56	5434, 9222-9225	5434, 5435,9272-9274
Social care	86.10/2, 87, 88.1	86.10/2, 87, 88.1	6115	6145, 6147
Employment agencies	78.10/9, 78.2	78.10/9, 78.2	n/a	n/a
Food processing	10	10	5431-5433, 8111	5431-5433, 8111, 9134
Leisure, travel and sport	59.14, 92, 93	59.14, 92, 93	6211, 6213, 6219, 9226, 9229	3413, 3441, 3443, 6131, 6139, 6211, 6212, 6219, 9275, 9279
Cleaning	81.2, 96.01	81.2, 96.01	6231, 9132, 923	6231,6240, 9132, 9231, 9233-9236, 9239
Agriculture	01, 03	01, 03	5119, 9111, 9119	1213, 5112-5114, 5119, 9111, 9119
Security	80.1	n/a	9241, 9245, 9249	n/a
Childcare	85.1, 88.91	85.1, 88.91	6121-6123, 9243, 9244	6121-6123, 9244
Textiles and clothing	13, 14	13, 14	5414, 5419, 8113, 8137	5412-5414, 5419, 8113, 8137
Hairdressing	96.02, 96.04	96.02, 96.04	622	622
Office work	n/a	n/a	4141, 4216, 9219	4129, 4216, 7213, 9219
Non-food processing	n/a	n/a	n/a	5211, 5441, 8112, 8114-8116, 8125, 8131, 8134, 8139, 9120, 9139
Storage	n/a	n/a	n/a	9260
Transport	n/a	n/a	n/a	5231, 8135, 8212, 8214

Note: 'n/a' denotes not applicable.

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