



National Minimum Wage

Low Pay Commission
Report 2015



National Minimum Wage

Low Pay Commission Report 2015

Presented to Parliament
by the Secretary of State for
Business, Innovation and Skills
by Command of Her Majesty

March 2015



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Introduction

Since we submitted our 2014 Report, public interest in the National Minimum Wage (NMW) has remained high, fuelled by broader concern about living standards. Several bodies that had initiated independent reviews of aspects of the NMW have reported. The value of the minimum wage, its affordability to employers, its UK-wide structure, and arrangements to enforce it have been widely discussed in the media and by politicians.

The economic climate has also been characterised by continuity, with a strengthening recovery. Last year we reported that, while conditions remained difficult, pressures were easing for some. This year we have seen and heard evidence that trading conditions remain tough. But the overall performance of the economy has remained robust and there have been continued improvements in the labour market. Towards the end of the year softening sentiment and uncertainties in the Eurozone have been accompanied by a falling oil price, and lower inflation. This has provided the context to our deliberations.

Our recommendations are once again based on extensive examination of the evidence. This has included: written and oral submissions from stakeholders meetings with employers and workers, including in low-paying sectors and small firms; a programme of commissioned external research; and detailed in-house analysis of labour market and other economic data.

Remit

This is the 16th Low Pay Commission report. Our remit from Government said that its aim is to have “NMW rates that helped as many low-paid workers as possible, while making sure that we do not damage their employment prospects”. It also said that, as the economy continues to recover, the Government’s ambition is to increase the real value of the NMW. It asked us to:

- monitor, evaluate and review the levels of each of the different NMW rates and make recommendations on the levels which should apply from October 2015;
- consider whether any changes can be made to the Apprentice Rate to make the structure simpler and improve compliance and also consider whether the structure and level of the Apprentice Rate should continue to be applied to all levels of apprenticeship, including higher levels; and
- consider whether, as concluded in our 2014 Report, the UK is entering a new phase where real increases in the NMW can be afforded. We should review the conditions that need to be in place to allow the value of the minimum wage to increase in real terms, including an update on our previous advice on the future path of the NMW.

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In making recommendations in these areas the Government asked us to take account of the state of the economy, and employment and unemployment levels, and relevant policy changes. It requested that we report to the Prime Minister, Deputy Prime Minister and Secretary of State for Business, Innovation and Skills as early as possible in February 2015.

Evidence

We are once again enormously grateful to the organisations and individuals that provided evidence about the NMW. We received 163 written responses to our consultation, approaching three times as many as in 2014. In addition 549 people responded to our snapshot on-line survey. Fifteen organisations presented at our regular Commission meetings throughout the year and, in November, 32 came to our oral evidence sessions. Our Secretariat held more than 30 meetings with stakeholders. Appendix 1 records those who responded to our call for evidence and who agreed to be listed.

We also visited employers, workers and others affected by low pay in the four countries of the UK. Eight visits took place over the course of our work for this report, during which we had a total of 54 meetings. We visited: Belfast, Kilkeel and Lisburn; Llandudno and Colwyn Bay; Southampton and the Isle of Wight; Norwich, Southwold and Hemsby; Leeds and York; Glasgow; London; and Liverpool. These visits again provided invaluable real world insights into the effects of the NMW that other forms of evidence cannot provide. We would like to record our sincere gratitude to everyone who gave their time to meet us.

We commissioned six external research projects. Five of them were completed for this report, and these are outlined in Appendix 2 together with a summary of their findings. The research this year included the findings of three projects that have run over two years. During the year we brought academic experts and policy-makers together for the second annual Low Pay Commission Research Symposium to explore findings of the commissioned work, and hear insights from other experts. We have again examined economic evidence carefully and once again worked closely with the Office for National Statistics to obtain a comprehensive and consistent database on earnings and employment.

We met formally as the Low Pay Commission eight times since our previous report, including two days to take oral evidence from representative organisations, and an all-day meeting in December to take presentations from the Government and a number of other stakeholders on economic and labour market issues. In addition, we met in January for two days to review and assess the evidence relevant to our remit and to agree all the recommendations contained in this report.

This year two members of the Commission are stepping down after eight years of service. We are very grateful to Professor Bob Elliott and Neil Goulden for their contributions.

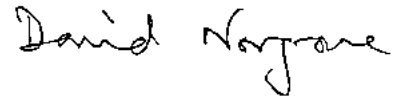
Conclusion

We have again aimed to produce a report which explains the reasons for our conclusion and recommendations, and is a valuable wider resource on the UK labour market. Our conclusions and recommendations represent the unanimous views of all Commissioners.

The Commissioners

David Norgrove (Chair)

Chair, Family Justice Board and Council member, Oxford University



Kay Carberry

Assistant General Secretary, TUC



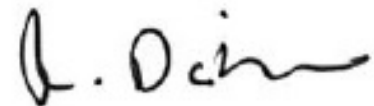
Neil Carberry

Director for Employment & Skills, CBI



Professor Richard Dickens

Professor of Economics, University of Sussex



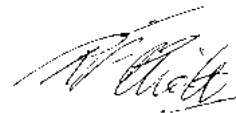
Peter Donaldson

Director, d5 Consulting Limited and Chairman,
Downland Marketing Limited



Professor Bob Elliott

Professor of Economics, University of Aberdeen



Neil Goulden

Director, Neil Goulden Consulting Limited



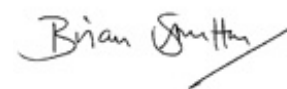
John Hannett

General Secretary, Usdaw



Brian Stratton

National Secretary, GMB



The Secretariat

Simon Blake, Secretary (from September 2014)

Robin Webb, Secretary (to April 2014)

Nicola Allison

Jay Arjan

Tim Butcher

John Caseley (from August 2014)

Helen Connolly

Rosalind Hands

Tony Studd

Yi Zhang

Executive Summary

- 1 This is the 16th Low Pay Commission report. Our remit from Government said that “its aim is to have National Minimum Wage (NMW) rates that helped as many low-paid workers as possible, while making sure that we do not damage their employment prospects”. It also said that, as the economy continues to recover, the Government’s ambition is to increase the real value of the NMW. It asked us to monitor, evaluate and review the levels of each of the different NMW rates and make recommendations on the levels which should apply from October 2015. It also asked us to review the Apprentice Rate structure. Finally it asked us to consider whether, as we had hoped in our 2014 Report, the UK is entering a new phase where real increases in the NMW can be afforded. This report is provided in response to the remit request and, as in previous years, we set out in it the detailed evidence on which we have based our conclusions and recommendations.

Chapter 1: The Economic Context to the October 2014 Rates

- 2 Since we met to agree our recommendations in January 2014, the Office for National Statistics (ONS) has made substantial revisions to the data for economic output. These revisions showed that the recession was shallower than previously thought, with output falling by 6 per cent. The economy is recovering strongly with economic growth in 2014 around the level forecast, 2.6 per cent. However, the UK economy still underwent its longest and deepest recession since at least the Second World War and the recovery remains the slowest on record. Output is over 15 per cent below what it would have been had the long-run trend growth (1955-2008) continued from 2008 onwards. Thus, full economic recovery has a long way to go.
- 3 The labour market has continued to perform remarkably strongly in terms of jobs and hours, with job growth greater than forecast. Indeed, the number of jobs increased in the year to June 2014 faster than at any point since records began in 1959, and the increase in employment was its fastest since 1989. As a consequence, the reductions in unemployment and the claimant count have also been bigger than forecast. However, much of the increase in employment since the onset of recession has been in self-employment and the proportion of part-time workers who would like to work full-time remains almost double its pre-recession level. In conjunction with increasing labour supply from older workers, more women in work, greater conditionality for benefits claimants, and immigration, this means that strong employment growth appears to have put little pressure on wages. Higher employment combined with the sluggish recovery has had significant adverse consequences for the UK’s

productivity performance. Since 2011, productivity (whether measured by output per worker, per job or per hour) has stalled and remains below its level in the first quarter of 2008.

- 4 In the face of continued low productivity and spare capacity, forecasts for wage growth have turned out to be lower than expected. Average wage growth is expected to be around 1.1 per cent for 2014 with Consumer Price Index (CPI) inflation at 0.9 per cent and Retail Price Index (RPI) inflation at just 1.9 per cent in the fourth quarter of 2014. Low wage growth is likely partly to reflect the changing composition of the workforce. But the overall picture remains one of sluggish performance. Despite this, falling inflation means there may have been a modest increase in real pay – the first since 2009 – at the end of 2014.
- 5 The weak out-turn has important implications for the National Minimum Wage. The NMW increased by 3.0 per cent in October 2014. This was much higher than average wage growth, measured by the Annual Survey of Hours and Earnings (ASHE) or Average Weekly Earnings (AWE), suggesting an increase in the relative value of the NMW. It was also much higher than the increase in CPI or RPI inflation suggesting an increase in the real value of the NMW.

Chapter 2: the Impact of the National Minimum Wage

- 6 The adult rate of the NMW has increased by over 80 per cent since its introduction at £3.60 an hour in April 1999. This is greater than the increase in average earnings or prices over the same period. Over the course of the recession and recovery, the real value of the NMW fell as the increase in the NMW was lower than the increase in both CPI and RPI inflation – in line with trends in pay for other workers. But its value relative to typical earnings rose significantly, increasing the relative pay of the lowest paid – a marked difference from recessions going back to at least the 1970s, in which those at the bottom had tended to fall behind.
- 7 Using CPI to calculate the value of the NMW in real terms its value peaked in October 2007. By October 2013, it had fallen by 5.2 per cent, to below its value in 2005. The recent increase of 3.0 per cent in the NMW in October 2014 has since begun to restore some of that lost value, up by 1.7 per cent since October 2013. Against CPI, it has therefore recovered around a third of its lost value, and is now above its real value in the years 2005 and 2011.
- 8 By contrast, the value of the NMW relative to average earnings has never been higher than it was in October 2014. 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 now at its highest level since the NMW was introduced. For employees aged 21 and over it was 53.9 per cent. For those aged 22 and over – a measure comparable over time – the bite was 53.2 per cent. This compares with a bite of 45.7 per cent on introduction in April 1999 and 50.9 per cent in April 2010. The NMW has most impact on small firms and low-paying sectors. Here the bite has risen to 67.2 per cent for micro firms (those with fewer than 10 employees), and just under 80 per cent in the low-paying sectors as a whole.
- 9 Despite the increased level of the bite of the NMW, total employment has continued to grow in the economy as a whole and in the low-paying sectors with the year to September 2014 showing the highest annual (September-September) increases in employment and jobs since

the introduction of the NMW, as well as strong growth in hours and vacancy levels. Indeed, although the bite has risen sharply in the low-paying sectors since 2007, the number of employee jobs in this part of the economy has grown more rapidly than those elsewhere – 4.3 per cent over the last year compared with 3.1 per cent for other sectors. Employment growth has generally been strong across all firm sizes, including small firms and across sectors though jobs and hours in retail have stagnated this year. Furthermore, the employment performance of most groups of workers particularly affected by the minimum wage – women, older workers, disabled workers, ethnic minorities, and migrants – has been better since 2008 than that of others not so affected by the NMW. The two groups whose experience has been worse are young people and those with no qualifications, although employment rates of those aged 18-20 not in full-time education and those with no qualifications have increased over the past twelve months.

- 10** Research we have commissioned to inform our decisions – now totalling around 140 projects – has generally shown that the NMW has led to higher than average wage increases for the lowest paid, with little evidence of adverse effects on employment or the economy. Firms appeared to have responded by: adjusting pay structures; reducing non-wage costs; making small reductions in hours; increasing productivity; increasing some prices; and some squeezing of profits (although insufficient to lead to an increase in business failure). Our most recent research has helped shed further light on these issues. Using one data source, ASHE, research on employment and hours found some strong negative effects on employment retention for female part-time employees and male full-time employees. However, this analysis using ASHE was limited to job outflow and did not investigate job entry, which would give a rounded picture of the impact of the NMW on employment. Furthermore, using an alternative data source – the Labour Force Survey (LFS) – no such evidence was found of negative retention effects although that analysis found some positive impacts on job entry for low-wage men in the period of economic recovery. Separate research found a positive association between the minimum wage and labour productivity, and that the increases in productivity had not resulted from reductions in employment. It found little evidence of the impact of the NMW on profits or firm exit.

Chapter 3: Young People and Apprentices

- 11** Earnings growth for young people varied sharply by age this year. Those aged 18-20 saw strong wage growth of 2.5 per cent between April 2013 and April 2014, more than double last year's increase in the Youth Development Rate. This resulted in a fall in the bite. By contrast, 16-17 year olds experienced very little earnings growth, just 0.6 per cent over the year and, as a consequence, the bite rose. Indeed, the typical earnings of 16-17 year olds have remained stuck at around the £5.00 an hour mark since 2008. Wage growth across the 16-20 group was far stronger for young men than for young women.
- 12** Change in the labour market position of young people was more similar between ages, modestly improving over the year. There were small reductions in unemployment and increases in employment, but there was more striking change for young people not in full-time education, where the unemployment rate fell by 5.7 percentage points for 16-17

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year olds and by 3.2 percentage points for 18-20 year olds. The proportion of 18-20 year olds and 16-17 year olds not in employment, education or training (NEET) also fell over the year. Overall, the picture was one of encouraging stabilisation, albeit with a long way to go to recover lost ground.

- 13** Wage improvements for 18-20 year olds and a stabilising labour market position for both them and 16-17 year olds come against the backdrop of several years when we have reluctantly recommended lower increases for the youth rates of the NMW in order to protect employment opportunities. New research for this report found this approach may indeed have helped to protect younger workers' employment prospects.
- 14** This year – in contrast to our 2014 Report, which had found greater use of the adult rate of the NMW – more employers appeared to be paying young workers at their respective youth rates. Excluding apprentices from the data (for whom a lower minimum wage often applies) lifted median earnings for other young people slightly but very substantially reduced the proportions of young people recorded as being paid below their applicable NMW. This analysis, which we were able to carry out for the first time this year, helps allay previous fears of much higher non-compliance for the youth rates than the adult rate.
- 15** Turning to apprenticeships, starts fell again over the last year, driven by the reduction in apprentices aged 25 and over outweighing the effects of a modest increase for apprentices aged under 19. New data – including the first Apprentice Pay Survey since 2012 – revealed that median gross pay was significantly above the Apprentice Rate on average, but much lower for younger workers and those in low-paying frameworks. The new data also shed fresh light on non-compliance, recording levels of between 9 and 14 per cent, much lower than previous estimates, but still unacceptably high and more prevalent in some frameworks, particularly Hairdressing, Construction and Childcare.

Chapter 4: Review of the Structure of the Apprentice Rate

- 16** The Government asked us to consider whether any changes can be made to the Apprentice Rate to simplify the structure and improve compliance, including the option of combining it with the 16-17 Year Old Rate. It further asked us to consider whether the structure and level of the Apprentice Rate should continue to be applied to all levels of apprenticeship, including higher levels.
- 17** At the moment the Apprentice Rate, £2.73 per hour from October 2014, is applicable in the first year for all apprentices. For those aged 19 and over, the age-appropriate rate applies after this point – the same as for any other minimum wage worker. For those aged 16-18, the Apprentice Rate remains due.
- 18** Having reviewed the evidence carefully, evaluating options for structural change for their effect on apprentice pay, compliance and apprentice numbers, we recommend clarifying in regulations that the Apprentice Rate should not apply to Higher Apprenticeships. But we have found no other structural change that we feel able to recommend.

- 19** We judge that there would be significant risks in a merger between the Apprentice Rate and the 16-17 Year Old Rate. It increases the value of the rate by between 39 and 88 per cent, affecting between 90,000 and 200,000 apprentices – up to about a quarter of the cohort. The increased cost could reduce provision, particularly in low-paying sectors that have been important in providing starts to low-skilled young people. We estimate a direct cost to employers of at least £160 million each year – around half the total cost of this year’s recommended increase in the adult rate. The risks to provision are amplified by other funding uncertainties in relation to mandatory cash contributions for training for employers in England.
- 20** We are particularly concerned about possible effects on disadvantaged 16 and 17 year olds. The bite is already over 80 per cent for this group. There would no longer be a wage difference for 16-17 year old apprentices compared with peers for whom no training was being provided. Older apprentices would still attract a wage discount relative to their peers to cover training costs, so 16-17 year olds seeking an apprenticeship would be both more expensive than their contemporaries, and worse ‘value’ than those somewhat older than them. This cohort remains the group where successive governments have struggled to expand provision. Phased introduction would not remedy these issues.
- 21** The benefits of such a change are also uncertain. The proposal has the potential to worsen non-compliance because of greater complexity for 18 year olds and if employers struggle to pay the new higher rate. It is focused where evidence is weakest that non-compliance has a relationship to structure. To the extent that greater generosity is a driver of the proposal, the current level of the rate was originally designed to be equivalent to what students could receive in full-time education and had broadly tracked this level since. There are significantly more applications for apprenticeships than places – suggesting a weak ‘market’ case for change on this scale. Research for our 2014 Report showed that relative to countries like Germany, apprentice pay is higher in the UK, with a smaller discount and lower training quality. This evidence suggests that the status of apprenticeships is more related to training quality and wages on completion than the applicable wage floor.
- 22** On the broader question, we agree with the Government that apprentice pay non-compliance is far too high at up to 14 per cent according to the 2014 Apprentice Pay Survey. However, the argument that structural change is the solution to this has at least two limitations.
- 23** First, our analysis shows that main reform options are a zero sum game: they either lead to lower pay for apprentices or higher costs to employers with consequent risks to training quality and the supply of apprenticeships. The key complexity that evidence suggests has a relationship with non-compliance – a rate that changes with both experience and age – is inherent if policy-makers wish to keep current employer incentives to provide apprenticeships and the higher pay that rewards experienced apprentices while seeking to protect the relative attractiveness of offering apprenticeships to young people.
- 24** Second, the evidence further suggests that high non-compliance is in any event not simply, and possibly not primarily, a problem of a complex structure. Though the evidence is not conclusive, it appears substantially to reflect a mixture of a lack of understanding and awareness (as well as some deliberate evasion). This is reflected in high non-compliance at the point where the structure is a simple flat rate, namely for 16-18 year olds, and preliminary

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analysis suggesting that up to half of non-compliance could be explained by non-payment of training hours or reporting error rather than problems complying with the hourly rate.

- 25** Communication and enforcement are the proportionate response to lack of awareness or deliberate non-compliance. Welcome efforts by the Government to strengthen publicity, guidance and enforcement following a recommendation by us in 2013 are recent and small scale relative to need. They have not yet addressed weak incentives for training providers to communicate the rate.
- 26** Despite this analysis, we present a range of possibilities for structural reform with the advantages and disadvantages of each, rather than a specific recommendation. We are conscious that reform needs to fit with broader government policies that lie outside our competence and scope, for example on training subsidies, higher contributions by employers and decisions about whether apprenticeships should be re-focused away from entry to the labour market for disadvantaged young people and more towards occupations that demand higher skills.
- 27** Overall, we believe that the evidence available to us does not support a case for structural change. However, we recommend that if the Government decides to make a change it should do so only after further consultation. Of course any change risks an increase in non-compliance unless accompanied by the major communication effort that is anyway needed.

Chapter 5: Compliance and Operation of the National Minimum Wage

- 28** The past year has seen a range of encouraging developments in the compliance and enforcement regime. This includes the naming of non-compliant employers under the revised Naming Scheme and higher penalties for those employers found in breach of the minimum wage. We strongly welcome the increase in the resources available to HMRC, whose budget is due to increase by a further £3 million in the next financial year; though this needs to be sustained to make a lasting difference. There has also been renewed focus on case handling times, where we see a need for improvement.
- 29** However, in other areas further action is needed. There has been a marked rise in the number of complaints to HMRC concerning the NMW. But demand-led work has affected risk-based targeted enforcement. The latter is critical to ensuring the compliance regime has a systemic effect, helping individuals who do not or cannot complain. Resources for pro-active work need to be protected. Other priorities for government include: the depth of official guidance; the need for more awareness-raising; publicity for confidentiality rules; and the use of prosecutions for the most serious infringers.

- 30** The evidence continues to suggest that some groups are at greater risk than others of not receiving their entitlement to the NMW. We remain concerned about social care, where reports continue of non-payment for travel time leading to non-compliance. We are also concerned about non-compliance among employers of apprentices; inappropriate use of unpaid interns; the application of the NMW to seafarers on ships working between UK ports; and abuse of the Family Worker Exemption for migrant domestic workers.
- 31** We urge the Government to consider further action in all of these areas including: more targeted compliance work, focused on social care; raising awareness of the Apprentice Rate including targeted enforcement action guided by data, and exploring strengthening the responsibilities or incentives of training providers to communicate the NMW; developing the NMW guidance further in partnership with stakeholders; encouraging further enforcement activities in relation to interns and voluntary workers; looking again at the application of the Family Worker Exemption to migrant domestic workers; and reviewing how the NMW should apply to seafarers on ships working between UK ports.

Chapter 6: The Rates

- 32** Last year we were pleased to recommend the first real terms increase in the value of the minimum wage since the recession. We said that, provided the economy continued to recover, we expected to recommend further progressive improvements, restoring and then surpassing the previous highest level of the minimum wage.
- 33** This year, strong performance on employment and unemployment has continued, beating expectations. Growth has been sustained while inflation and the oil price have fallen. Nominal pay growth has remained sluggish. Overall we judge that excessively sharp increases in the minimum wage would put jobs at risk – not least bearing in mind pressure on low-paying sectors and small firms. The bite is at its highest level ever: overall; for low-paying sectors; and in firms of all sizes.
- 34** We do believe however that continued recovery, and in particular the impressive growth in employment of the low paid, should this year allow a further increase in the real and relative value of the minimum wage. We recommend that the adult rate of the National Minimum Wage be increased by 3 per cent to £6.70 from 1 October 2015. Forecast inflation at the time we met to agree our recommendations was 1.0-1.5 per cent, so this is likely to be a larger real terms increase than last year and should restore two-thirds of the fall in the real value of the NMW relative to its peak in 2007.¹

¹ The Bank of England's latest CPI forecast, released on 12 February 2015, after we met and agreed our recommendations, was 0.5 per cent for the fourth quarter of 2015. On this basis, the recommended increase would restore three-quarters of the fall in the real value of the NMW relative to its peak in 2007.

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- 35** Over two years the NMW will have increased by more than 6 per cent. Because of the improved economic and labour market conditions we believe once again that employers will be able to respond in a way that supports employment. However, our recommendation this year is predicated on a forecast which foresees lower input costs for business in fuel and energy, a strong economic performance, significant recovery in earnings across the economy and rising productivity. If these expectations are not borne out over the year we will take this into account when considering next year's recommendation. We also remain concerned about the pressures the increase will place on social care. We urge the Government to ensure funding is available to meet the extra burden the NMW rise will place on the sector.
- 36** Overall our recommendations for the adult rate may increase the number of jobs covered by the minimum wage significantly – to 1.43 million in October 2015 compared with some 1.2 million in April 2014, albeit this analysis is sensitive to what happens to earnings growth and pay structures. When the ASHE surveys become available to validate this estimate, the 2014 and 2015 NMW increases may each be seen to have added about 115,000 jobs to the total, together expanding the coverage of the NMW by 20 per cent. For comparison, around 900,000 jobs were covered at the start of the downturn in 2008. The increase reflects the fact that the minimum wage has risen in relation to median earnings.
- 37** In 2013 we conducted a review of the accommodation offset. As a result we said that it was our intention to recommend staged increases towards the level of the adult rate of the NMW when its real value is tending to rise – a condition met by our above-inflation adult rate recommendation this year. We recommend that the accommodation offset be increased by 27 pence to £5.35 a day from 1 October 2015.
- 38** In recent years we have recommended smaller increases for young people than for adults because their labour market position has been worse, and the damaging consequences of unemployment even more serious. We have also said that we expected to be able to recommend larger increases when economic conditions have eased. This year wages for workers aged 18-20 have significantly outperformed those of adults, their employment position has improved, and the bite has fallen. The abolition of employer National Insurance contributions for workers aged under 21 from April 2015 should modestly reduce employment costs for about two-fifths of this age group on the minimum wage. These factors mean we see scope to take a step towards bigger increases for this cohort. We recommend an increase of 3.3 per cent in the Youth Development Rate to £5.30 an hour from 1 October 2015. This should increase its real and relative value. For 16-17 year olds, whose position is also improving, though more slowly, we recommend an increase in the minimum wage of 2.2 per cent, taking it to £3.87 an hour.
- 39** Over the past year apprenticeship starts have fallen overall, driven by those aged 25 and over, but have increased for those aged under 19. The new Apprentice Pay Survey has shown non-compliance remains unacceptably high. Overall, we judge that large increases in the level of the Apprentice Rate could pose risks to provision. However, we do believe there is scope for a more cautious step. We recommend an increase in the Apprentice Rate of 2.6 per cent to £2.80 an hour from 1 October 2015. We encourage the Government to redouble its efforts in actively publicising the existence and level of the rate, which the evidence suggests is poorly understood. This rate would apply unless the Government decides to proceed with

structural change, for example the option set out in its evidence, merging the Apprentice Rate with the 16-17 Year Old Rate.

- 40** This year we have again been asked to review the conditions that need to be in place to allow the value of the minimum wage to increase in real terms including updating our advice on the future path of the NMW.
- 41** Last year we said 2014 could mark the start of a new fourth phase for the minimum wage, of bigger increases than in recent years, following previous phases of: cautious initial increase from the late 1990s; bolder above-inflation increases in the early 2000s; and increases above average earnings growth but below inflation during the recession and its aftermath. However, to achieve our shared aim of faster increases in the minimum wage without risk to the employment of the low paid, we believed it would be necessary to see: rising real wages in the economy; stable or rising employment, particularly in low-paying industries and small firms; and an expectation of sustained economic growth.
- 42** A year on, our analysis of the basic considerations necessary for rises are unchanged: growth, jobs, productivity and earnings remain critical – especially trends in low-paying sectors. In relation to where the UK stands against those considerations, we judge that employment is strong and rising, with impressive performance in low-paying industries and small firms. Economic growth has also been solid and is somewhat more balanced than last year. The area where there is least certainty is wage growth and productivity, where 2014 saw limited progress. While this year we believe that there is scope for another real increase, further evidence of improvement in average pay, and productivity will be important to the future trajectory.
- 43** We remain of the view that policy action can help to support a higher minimum wage, including via advocacy. As we argued last year, one in four NMW workers are not in low-paying sectors and for many it may be affordable for employers to raise wages without adverse impacts. This should be encouraged.

Recommendations

National Minimum Wage Rates

We recommend that the adult rate of the National Minimum Wage be increased by 3 per cent, to £6.70 an hour, from 1 October 2015.

We recommend an increase of 3.3 per cent in the Youth Development Rate to £5.30 an hour from 1 October 2015

We recommend an increase of 2.2 per cent in the 16-17 Year Old Rate to £3.87 an hour from 1 October 2015.

We recommend an increase of 2.6 per cent in the Apprentice Rate to £2.80 an hour from 1 October 2015. (This rate would apply unless Government decides to proceed in this timescale with structural change, for example the option to combine the Apprentice Rate and 16-17 Year Old Rate set out in its evidence).

Accommodation Offset

We recommend that the accommodation offset be increased by 27 pence to £5.35 a day, from 1 October 2015.

Structure of the Apprentice Rate

We recommend amending regulations to exempt Higher Apprenticeships from the scope of the Apprentice Rate. These apprentices should be entitled to the age-related rate of the NMW.

We believe that the evidence available to us does not support a case for structural change. However, we recommend that if the Government decides to make a change it should do so only after further consultation.

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Chapter 1

The Economic Context to the October 2014 Rates

Introduction

- 1.1** In our 2014 Report, we recommended that the National Minimum Wage (NMW) should increase by 3 per cent for those aged 21 and over and by 2 per cent for young people. These recommendations came into effect on 1 October 2014. We start this report, our sixteenth, by considering how the economy has performed in 2014 and comparing it with the forecasts available and our expectations when we agreed those recommendations in January 2014. As well as those forecasts, our recommendations also took account of: the impact of the NMW to date; the state of the economy at the time; international comparisons and developments; and the likely impact of current and forthcoming government legislation. Our recommendations in this report again take account of the same considerations and are detailed in this and subsequent chapters.
- 1.2** In Chapter 2, we look at the impact of the adult rate of the National Minimum Wage on: earnings; the distribution of earnings; pay structures; employment; hours; and business competitiveness. As the recent changes in the rates of the minimum wage only took effect in October 2014, it is too early to adequately assess their impact. We thus consider the whole period since the introduction of the NMW in April 1999, but focus much of our analysis on the most recent upratings, in particular those that came into effect on 1 October 2013. Chapter 3 considers the impact of the youth rates of the minimum wage and the experiences of young people in the labour market. It also provides an overview of recent developments concerning apprenticeships. Chapter 4 provides a detailed review of the structure of the Apprentice Rate, as requested by the Government in its remit for this report. The workings of the NMW, including issues concerning compliance and enforcement, are then discussed in Chapter 5. Chapter 6 brings together an overview of: the prospects for the economy; stakeholder views; international developments; consideration of other relevant government legislation; an assessment of the extent to which conditions are in place for faster increases in the minimum wage; before concluding with our recommendations for the various minimum wage rates from October 2015, and an assessment of the likely impact of the proposed rates.
- 1.3** In this report we make use of the evidence available to us up to 23 January 2015, when we agreed our recommendations.

2014 National Minimum Wage Upratings

- 1.4** When we met in January 2014, we considered in detail the likely speed, strength and extent of economic recovery and its implications for wages and earnings. It was noted that the outlook for growth had improved, with higher forecasts than a year previously, which were also tending to be revised upwards. The performance of the labour market had exceeded all expectations, with the employment rate of 25-64 year olds passing its pre-recession peak, while absorbing a significant increase in labour supply. Importantly, job growth in the low-paying sectors had continued to match or surpass that of the economy as a whole. Further, the bite of the NMW had fallen for adults a little from its 2012 peak and inflation had continued to erode the real value of the minimum wage. All of these considerations might have supported a substantial increase in the minimum wage. On the other hand, other evidence suggested caution. In particular, the economy was still in recovery, with growth to that point too dependent on consumers reducing their savings to command confidence in its sustainability. There was little sign of a pick-up in trade or investment and the recovery was patchy across sectors, regions and nations. Small firms still faced difficult financial conditions. Further, despite falling slightly in 2013, the bite remained close to its historic high. Real wages had fallen for most workers since 2009 and showed few signs of picking up. The UK's productivity performance in 2013, whether measured as output per worker, per job, or per hour, had also disappointed. There remained significant economic uncertainty arising from conflicting information from official sources of data and external risks to the still-fragile economy.
- 1.5** As in previous years, we sought to balance these considerations in reaching our recommendations. Our priority is to make a difference to workers without harming employment or the economy. Our 2014 Report noted that in the period since 2008 the National Minimum Wage had tended to rise as a proportion of median earnings but had fallen in real value. The real wages of all workers had been falling because of a range of factors that had led to inflation outpacing pay rises. However, the lowest paid had done relatively better than other workers, whose real wages had fallen faster. Our recent recommendations had tended to be close to the out-turn of average earnings growth, though not to forecast wage growth, which had repeatedly been too high. Increases in the minimum wage have meant that for the first time since recessions going back to at least the 1970s, the lowest paid have fared better than other workers, while adverse employment effects have been avoided.
- 1.6** We thought that economic and labour market conditions in January 2014 were significantly improved from a year earlier. In particular, the economic outlook appeared more optimistic, the labour market had performed more strongly in 2013 than 2012 and the NMW had fallen as a proportion of median earnings. We thus judged that there was some headroom to recommend a larger increase in the NMW than in recent years. It was still too early to know if the recovery would turn out to be strong and sustained or how far it would spread across all of the economy and the country. But we sought to balance the risk of recommending more than business could afford against the risk of doing too little to start to restore the real value of the earnings of the lowest paid.

- 1.7** Our recommendation was that the adult rate of the NMW should be increased by 3 per cent to £6.50 an hour in October 2014: the biggest percentage rise in the NMW since 2008. This was above expected CPI inflation in 2014 of around 2 per cent. Therefore, we expected it would lead to: an increase in the real value of the minimum wage for the first time in five years; an increase in NMW workers' pay relative to others; and an increase in the number of jobs covered. We did, however, express concern that this would place extra pressures on the care sector and urged the Government to ensure that adequate funding was available.
- 1.8** Our position on the rates for young people was different. Between 2011 and 2013, we had recommended smaller increases in the minimum wage for young people than for adults because their labour market position had been weaker. Their average wages had not grown as strongly and their labour market position had not matched the improvement among adults. However, we noted that employment among young people had stabilised. We therefore recommended an increase in the youth rates of the NMW of 2 per cent – a level that would broadly protect their real value, but was still lower than the increase recommended for adults. The Youth Development Rate increased by 10 pence to £5.13 an hour and the 16-17 Year Old Rate increased by 7 pence an hour to £3.79. We also noted that there was little new evidence to inform our recommendation on the Apprentice Rate. We recommended that it maintain its position relative to the youth rates, increasing by 2 per cent to £2.73 an hour.
- 1.9** The evolution of the rates of the National Minimum Wage is shown in Table 1.1. In summary, the adult rate rose by 3.0 per cent from £6.31 an hour to £6.50 an hour from October 2014, while the Youth Development Rate increased by 2.0 per cent to £5.13 an hour; the 16-17 Year Old Rate by 1.9 per cent to £3.79 an hour; and the Apprentice Rate by 1.9 per cent to £2.73 an hour.

Table 1.1: National Minimum Wage Hourly Rates, UK, 1999-2014

	Adult rate		Youth Development Rate		16-17 Year Old Rate		Apprentice Rate	
	Rate	Change	Rate	Change	Rate	Change	Rate	Change
	£	%	£	%	£	%	£	%
Oct 2014-	6.50	3.0	5.13	2.0	3.79	1.9	2.73	1.9
Oct 2013-Sept 2014	6.31	1.9	5.03	1.0	3.72	1.1	2.68	1.1
Oct 2012-Sept 2013	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	0.0				
Jun 2000-Sept 2000	3.60	0.0	3.20	6.7				
Apr 1999-May 2000	3.60	-	3.00	-				

Source: Low Pay Commission (LPC).

Notes:

- a. From October 2010, those aged 21 have been covered by the adult rate. Previously they had been covered by the Youth Development Rate.
- b. '-' denotes not applicable.

1.10 The adult rate of the minimum wage has now increased by 80.6 per cent since it was introduced in April 1999. Over the same period, the Youth Development Rate has increased by 71.0 per cent. It should be noted that the age of entitlement to the adult rate was reduced from 22 to 21 in October 2010. The 16-17 Year Old Rate was introduced in October 2004 at a level of £3.00 an hour and, by October 2014, had increased by 26.3 per cent. This was slightly faster than the increase in the Youth Development Rate, 25.1 per cent, over the same period. In contrast, the adult rate of the minimum increased by 34.0 per cent in that time.

1.11 Since its introduction in October 2010, the Apprentice Rate has increased by 9.2 per cent from £2.50 an hour to £2.73 an hour in October 2014. Over that period, it largely maintained its relativity to the adult rate, which rose by 9.6 per cent. However, its value relative to the youth rates has increased as the Youth Development Rate has risen by 4.3 per cent and the 16-17 Year Old Rate has risen by 4.1 per cent over that time.

The UK Economy in 2014

- 1.12** Our deliberations in January 2014 took place in the context of growing evidence of an improving economic outlook. Forecasts for GDP growth in 2014 and 2015 centred around 2.5 per cent, as shown in Table 1.2, with the Office for Budgetary Responsibility (OBR, 2013b) forecasting 2.4 per cent for 2014 and the HM Treasury Panel of Independent Forecasts (2014b) ranging from 1.8-3.2 per cent with a median at 2.6 per cent. On the back of this pick-up in performance, both sets of forecasts expected employment to continue its strong growth with ILO unemployment falling below 7.0 per cent by 2015. However, the OBR forecast the claimant count to be little changed. Both the OBR and the HM Treasury Panel expected growth to soften by 0.2 percentage points in 2015.
- 1.13** The Bank of England (2013) expected CPI inflation to remain around 2.0 per cent throughout 2014, reaching 2.1 per cent by the fourth quarter (not shown). CPI inflation was expected to be subdued, with appreciation of sterling holding down import prices and some spare capacity curbing domestic wage pressures. The OBR and the HM Treasury Panel forecast CPI inflation to be slightly higher, at 2.3 per cent, before falling back slightly in 2015. Both also expected interest rates to rise on the back of a strengthening economy that would lead to RPI inflation of around 3.0 per cent by the end of 2014.
- 1.14** We also noted that average earnings growth had been relatively sluggish in 2013, at around 1.2 per cent according to the Average Weekly Earnings (AWE) measure. In contrast, the 2013 Annual Survey of Hours and Earnings (ASHE) had suggested that average and median wage growth had already picked up and was at 2.2-2.9 per cent, depending on the measure used. Both the HM Treasury Panel and the OBR forecast average earnings growth to pick up in 2014 to 2.2-2.6 per cent, with OBR forecasting wage growth rising to 3.4 per cent in 2015.

Table 1.2: Economic Forecasts Available in January 2014, UK, 2014-2015

Per cent	Forecasts for 2014		Forecasts for 2015	
	Median of independent forecasts (January 2014)	OBR forecasts (December 2013)	Median of independent forecasts (November 2013)	OBR forecasts (December 2013)
GDP growth (whole year)	2.6	2.4	2.4	2.2
Average earnings growth (whole year)	2.2	2.6	-	3.4
Inflation RPI (Q4)	3.0	3.0	3.1	3.5
Inflation CPI (Q4)	2.3	2.3	2.2	2.1
Employment growth (whole year)	1.4	1.1	-	0.3
ILO unemployment rate (Q4)	6.9	7.1	6.8	6.8
Claimant count (millions, Q4)	1.13	1.26	1.26	1.21

Source: HM Treasury (2013a and 2014b) and OBR forecasts (2013b) 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); 2014-15.

Note: '-' denotes not applicable.

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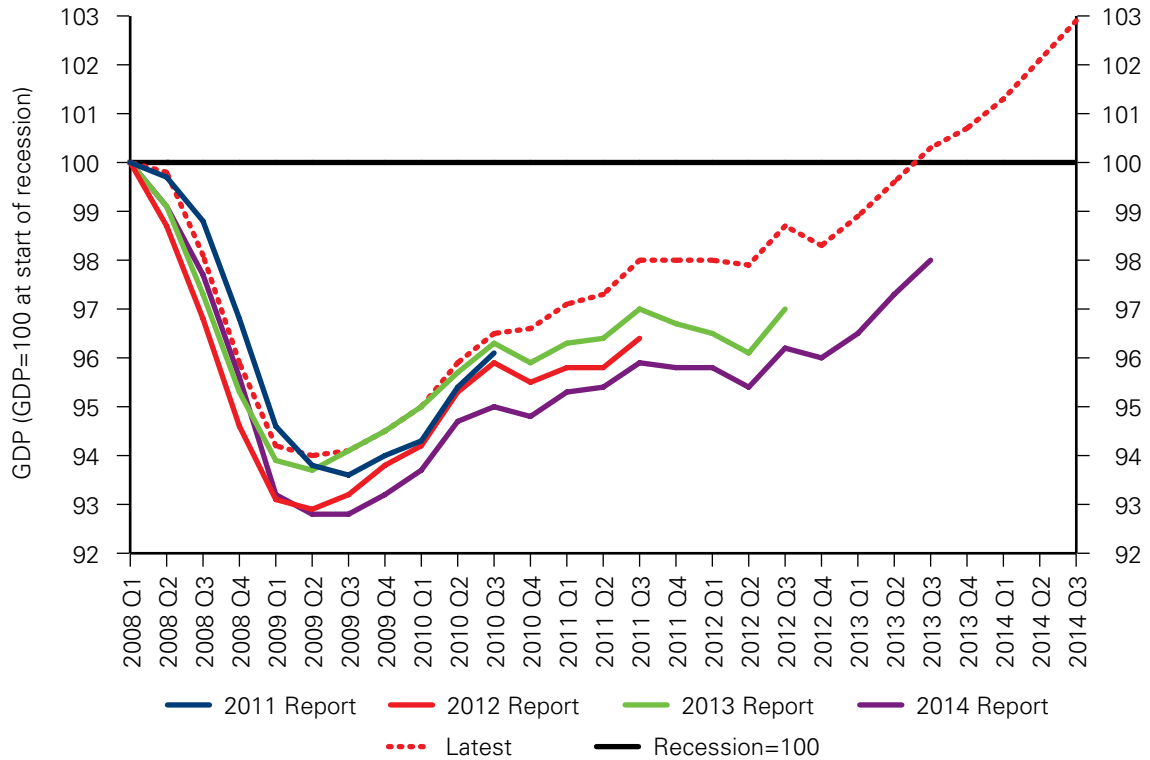
- 1.15** Pay settlement data also suggested that median increases in pay awards were running in line with the (higher) average earnings growth forecasts, at 2.0-2.5 per cent, with most pay researchers expecting this level of award to continue into 2014, but others were a little more pessimistic, expecting a median of 1.6 per cent. At the end of 2013, pay settlement medians were running at around 2.0 per cent, having fallen back from around 2.5 per cent in the first four months of 2013. Both Incomes Data Services (IDS) and XpertHR noted a pick-up in settlements to 2.5 per cent in January 2014, similar to that observed in January 2013, but IDS expected pay settlement medians to fall back towards 2.0 per cent later in the year, following a similar pattern to settlements in 2013. Surveying employer's intentions, XpertHR (2013) suggested that a median of 2.5 per cent might be maintained. In contrast, the Chartered Institute of Personnel and Development (CIPD, 2013) reported weaker expectations of pay settlements, with a median of 1.6 per cent. However, it noted that if pay freezes and deferrals were excluded, average expected pay awards in the private sector were 2.8 per cent.
- 1.16** On the basis of these considerations, and a range of other factors set out in our 2014 Report, as briefly summarised earlier in this section, we recommended that the NMW for adults be increased by 3.0 per cent to £6.50 an hour. We judged that improved labour market conditions meant employers would be able to respond in a way that supported employment. The increase would be above average wage growth, giving the lowest paid an increase in their relative wages. It would also be modestly above price inflation giving the lowest paid an increase in their real wages for the first time since 2007, using CPI, and 2009, using RPI. We now consider how those forecasts have turned out.

Gross Domestic Product

- 1.17** Since we wrote our 2014 Report, the ONS has made substantial revisions to the National Accounts data, affecting the level of GDP, its growth and its composition. These revisions were not only the result of its usual annual benchmarking exercise, but also a consequence of the ONS incorporating changes required under new international standards and guidelines, as well as ensuring comparability in measuring National Income across EU countries. This had the effect of raising the level of output of the UK by an average of 4 per cent each quarter. This received considerable media attention in September, for it included for the first time new estimates of drug use and prostitution. The increased level of GDP resulted in a higher EU contribution. It also had an effect, albeit much smaller, on GDP growth rates.
- 1.18** The key impact of the revisions was slower estimated growth in 2007 prior to the onset of recession, but stronger growth in the aftermath of the recession. The recession's start date – the second quarter of 2008 – was unchanged but, as shown in Figure 1.1, it was not as deep as previously thought. Output is now estimated to have fallen by 6.0 per cent between the first quarter of 2008 and the second quarter of 2009, less than the previous estimate of 7.2 per cent. The latest data also suggest that the economy recovered its pre-recession level of GDP in the third quarter of 2013, three quarters earlier than the previous estimates.
- 1.19** All told there have now been seven continuous quarters of reasonably strong growth starting in the first quarter of 2013. Growth was revised down a little from 1.9 per cent to 1.7 per cent for 2013, because the economy was revealed to be stronger than previously thought in

2012. Between the third quarter of 2013 and the third quarter of 2014, the economy grew by 2.6 per cent. For the whole of 2014, it will have grown in line with the forecasts made in January 2014, provided growth in the fourth quarter of the year is in the range of 0.1-0.8 per cent, which seems likely. This is the strongest annual growth since 2007.

Figure 1.1: Effect of Recent Revisions to Gross Domestic Product, UK, 2008-2014



Source: ONS, quarterly change in GDP (ABMI), quarterly, seasonally adjusted, UK, Q1 2008-Q3 2014.
 Note: The data are those that were available in January of each year.

1.20 We noted last year that the service sector had returned to its pre-recession level of output in the third quarter of 2013, though the performance within services was mixed. Output in real estate, education, and health and social services was already above pre-recession levels, but it remained lower in the two largest low-paying sectors (wholesale and retail, and hotels and restaurants), as well as finance. The revised data now suggest that output in services recovered to its pre-recession level as early as the third quarter of 2011, and wholesale and retail by the third quarter of 2013. It took longer for hotels and restaurants to reach that landmark but it did so in the first quarter of 2014. However, finance was still around 10 per cent lower than its pre-recession level in the third quarter of 2014. Likewise recovery in non-service sectors remained some way off. By the third quarter of 2014, manufacturing and construction were still around 5 per cent lower and agriculture 8 per cent lower than in the first quarter of 2008.

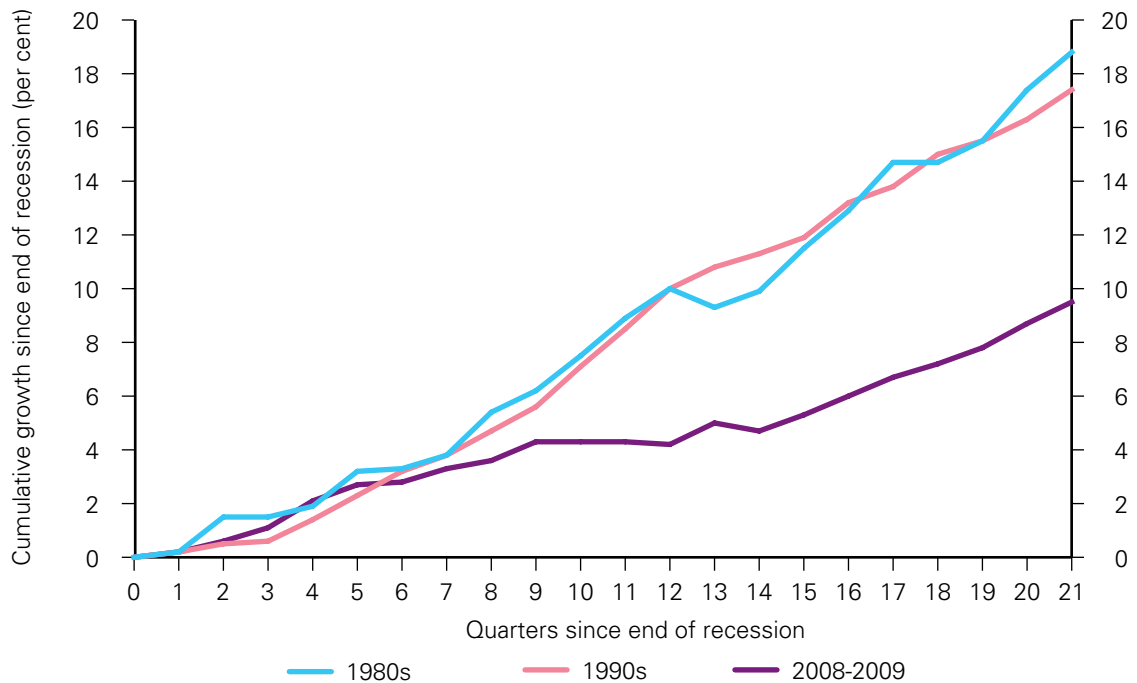
1.21 Despite those revisions and the sustained growth over the last year or so, the recent recession remains the deepest in living memory and the recovery has been one of the slowest on record. Population growth throughout the period of recovery means it is even more sluggish when measured by GDP per capita. GDP per head of the working age population only surpassed its pre-recession level in the third quarter of 2014, and GDP per head of the adult population is still 2 per cent below that level. The population above the

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State Pension Age has increased faster than that of working age, up by 5.1 per cent and 2.3 per cent respectively since the first quarter of 2008. In the third quarter of 2014, GDP per head, which adjusts GDP for the size of the whole population, remained 1.8 per cent below its pre-recession level. Adjusting GDP to take account of net income from abroad and capital depreciation, we can derive the net national disposable income (NNDI) per head, which ONS suggests is arguably a better measure of national income. However, net income from abroad has fallen in recent years and, on this measure, the UK in the third quarter of 2014 was still 5.6 per cent below its pre-recession peak.

- 1.22** The recovery remains much slower than those after the two previous recessions. Figure 1.2 shows that the UK economy has grown by 9.5 per cent since the end of the recession in the second quarter of 2009. In contrast, after a similar recovery period (21 quarters), growth had been nearly twice as fast in the recoveries following the 1980s and 1990s recessions.

Figure 1.2: Previous Recoveries Compared, UK, 1980-2014



Source: LPC calculations based on ONS data: GDP (ABMI), quarterly, seasonally adjusted, UK, Q1 1981-Q3 2014.

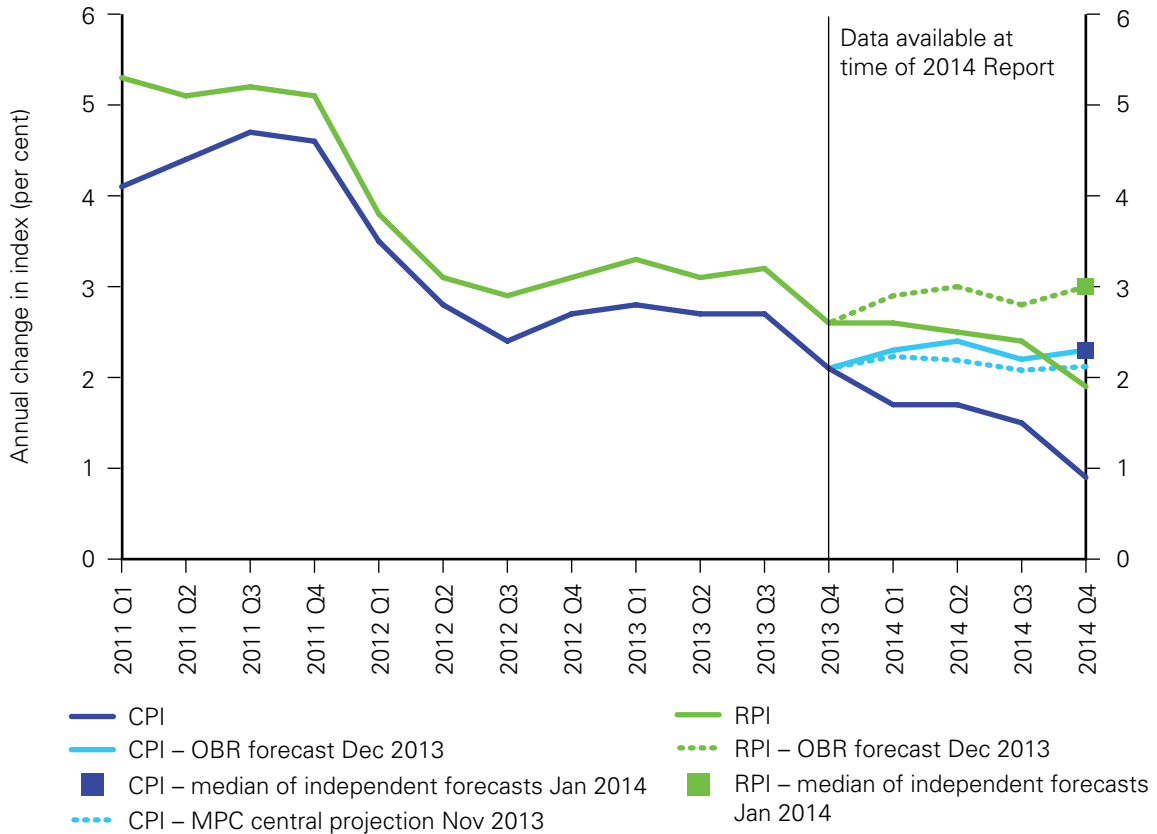
Note: The data are those that were available in January of each year.

- 1.23** Indeed, had growth continued on its pre-crisis trend (about 2.7 per cent a year), GDP would have been over 15 per cent higher in the third quarter of 2014 than it actually was (£426 billion), which was just 2.9 per cent above its level in the first quarter of 2008.
- 1.24** In summary, at the time we wrote our 2014 Report, the independent forecasts suggested that growth in the economy would pick up from about 1.9 per cent in 2013 to around 2.5 per cent in 2014. In contrast to forecasts over a number of years following the recession, these predictions appear to have been quite accurate. Growth is now likely to be about 2.6 per cent in 2014, around its pre-crisis trend, but significantly higher than the revised growth of 1.7 per cent in 2013. GDP growth in 2015 is still forecast to be similar at around 2.5 per cent. However, it remains the case that recent growth has not been as strong as in previous recoveries.

Inflation, Pay Settlements and Earnings Growth

- 1.25** The latest inflation data available to us at the time of our deliberations in January 2014 related to December 2013. The CPI inflation rate at the time was 2.0 per cent, a four-year low, and the RPI rate was 2.7 per cent. CPI inflation was forecast by the Monetary Policy Committee of the Bank of England (2014a) to remain around its 2 per cent target level over 2014, as the impetus from past increases in import prices faded and a gradual revival in productivity growth, together with a persistent margin of spare capacity, curbed domestic price pressures. The Bank's central forecast for CPI inflation was 2.1 per cent for the fourth quarter of 2014.
- 1.26** The OBR (2013a) expected a slightly higher CPI rate of 2.2-2.4 per cent through 2014, held above target by utility price rises. It expected RPI inflation at 3.0 per cent, pushed further above the CPI rate by house price rises. A minority of independent forecasters expected a base rate rise in 2014, which would have further pushed up the RPI rate. As it turned out, inflation proved to be significantly below these forecasts, as shown in Figure 1.3, reflecting a number of factors.
- 1.27** First, oil, and therefore petrol and diesel, prices have fallen. Second, sterling has appreciated, which has reduced the price of imported goods. Third, there has been lower food price inflation, due to better harvests and supermarket price competition, as well as the stronger exchange rate. Forbes (2014), a member of the MPC, estimated that the appreciation of sterling had reduced inflation by 0.8 per cent in September 2014. She suggested that, by the end of 2014, inflation could be close to 1 percentage point lower than without the sterling effect.

Figure 1.3: RPI and CPI 12-month Change and Forecasts, UK, 2011-2014

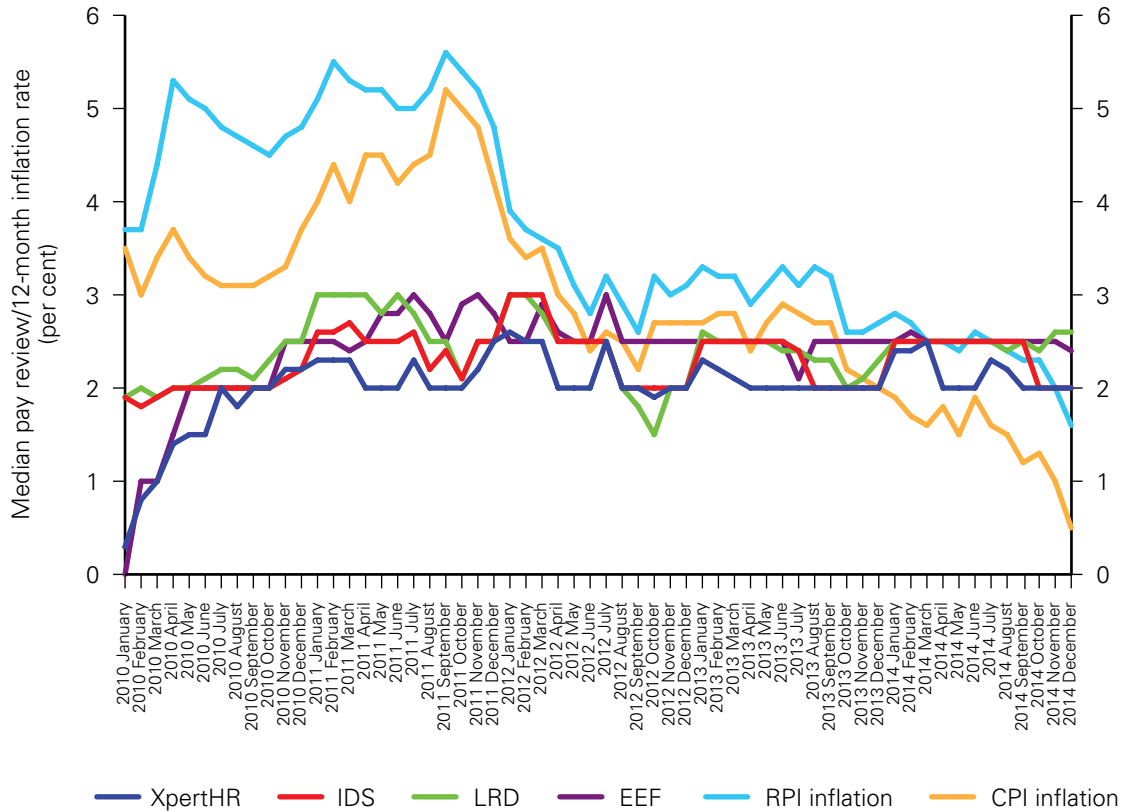


Source: ONS, CPI (D7G7), RPI (CZBH) quarterly, not seasonally adjusted, UK, Q1 2012-Q4 2014; Bank of England (2013), Office for Budgetary Responsibility (2013b); HM Treasury (2013a and 2014b).

1.28 The impact of the fall in oil prices and the appreciation of sterling continued to the end of 2014. Using the CPI measure of inflation, prices rose by just 0.9 per cent in the fourth quarter of 2014. The electricity and gas price rises in late 2013 dropped out of the annual comparison combined with falls in oil and food prices, led to inflation slowing to as low as 0.5 per cent in December 2014. Inflation on the RPI measure was also subdued, with prices rising by 1.9 per cent in the fourth quarter of 2014, and by 1.6 per cent in December. These factors have been accompanied by an absence of underlying wage pressures.

1.29 Despite falling inflation, pay settlement medians, as shown in Figure 1.4, remained stable over 2014, in the 2.0-2.5 per cent range, in line with expectations at the start of the year. IDS (2015a and b) reported that median pay settlements had been at 2.5 per cent for most of the year but had fallen to 2.0 per cent in the fourth quarter of 2014 under the influence of lower pay awards in the low-paying sectors. Indeed, the median pay award in the low-paying sectors was 2.0 per cent for the whole of 2014, with most settlements at 1.1-2.0 per cent. In contrast, for the whole economy most settlements were at 2.1-3.0 per cent. The increase in the NMW of 3.0 per cent was not implemented across the board. Many companies applied increases of around 2.0 per cent to the majority of their staff, but gave 3.0 per cent to the lowest paid in order to comply with the statutory minimum. October continued to be a key month, with around a fifth of all pay awards becoming effective.

Figure 1.4: Median Pay Settlements and Price Inflation, UK, 2010-2014

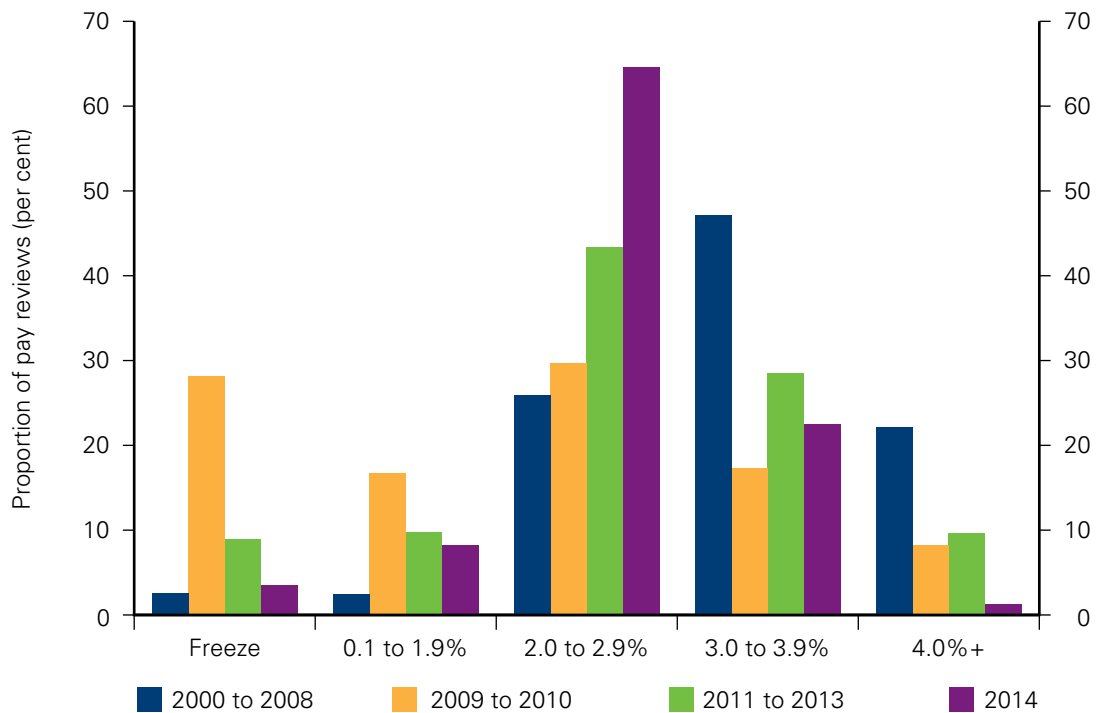


Source: XpertHR (previously Industrial Relations Services), Incomes Data Services (IDS), Labour Research Department (LRD), and EEF, the manufacturers’ organisation, pay databank records, three-month medians; ONS, annual change in RPI (CZBH), monthly, not seasonally adjusted, UK, 2005-14.

Note: Pay settlement medians for the three months to the end of month shown.

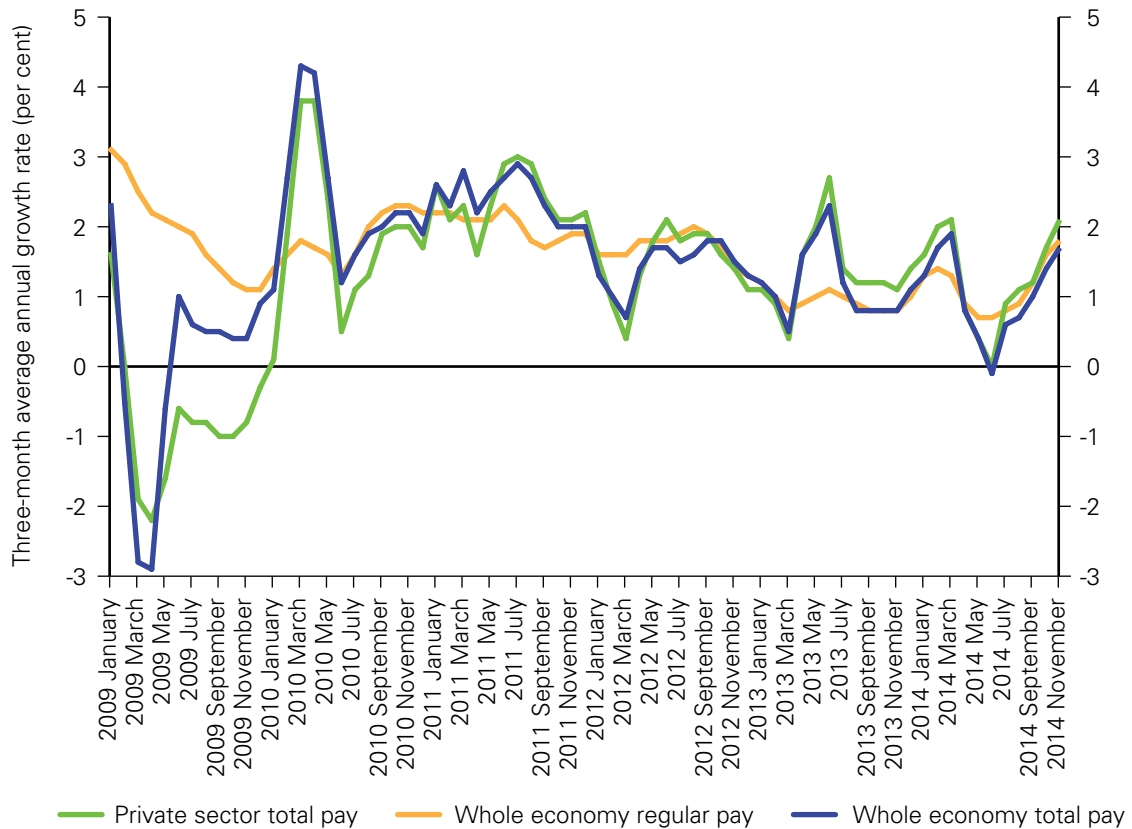
1.30 The number of pay freezes, as shown in Figure 1.5, continued to fall, to below 4 per cent of private sector settlements monitored by IDS in 2014, and is now back close to the levels observed before the crisis. During the recession and its immediate aftermath (2009-10), 28 per cent of pay awards were freezes but this fell to 9 per cent in 2011-13. In 2014, around 7 per cent of manufacturing pay settlements measured by EEF were freezes, compared with 10 per cent in 2013, reflecting the steadily increasing strength of the economy. However, there were few pay rises at 4 per cent or above, suggesting that the distribution of pay awards had not resumed its previous shape.

Figure 1.5: Distribution of Private Sector Pay Settlements, UK, 2000-2014



Source: IDS, UK, 2000-14.

1.31 The gap between pay settlements and average earnings growth (as recorded by AWE) remained in 2014, continuing the unprecedented period of negative pay drift, as average earnings growth remained subdued throughout 2014, as shown in Figure 1.6. The pattern of total pay growth was distorted by the changes to the tax regime in April 2013, while regular pay growth remained close to 1 per cent throughout the year. Pay growth on this measure was well below the forecasts at the time of our 2014 Report, which had suggested the long-expected pick-up in productivity, and hence earnings, would see wage growth of 2-3 per cent in 2014.

Figure 1.6: Average Weekly Earnings Growth, GB, 2009-2014

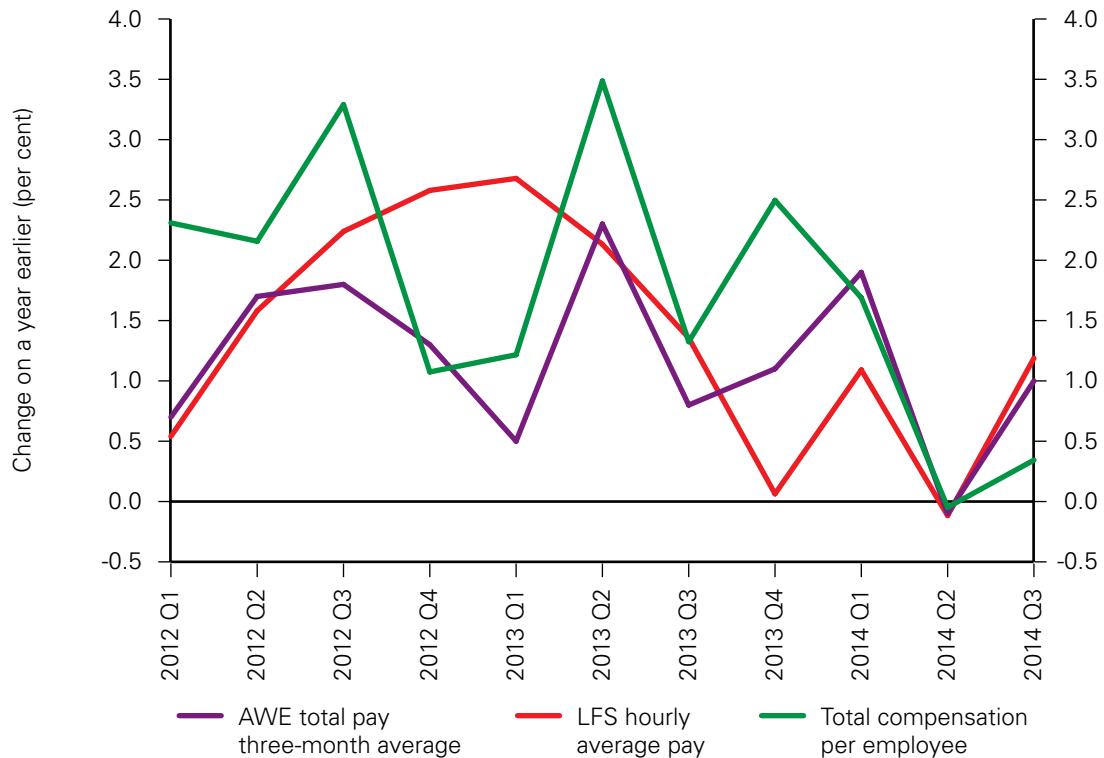
Source: ONS, Average Weekly Earnings (AWE) regular pay (KAI9), AWE total pay (KAC3), AWE private sector total pay (KAC8), three-month average, monthly, seasonally adjusted, GB, 2009-14; and annual change in RPI (CZBH) and CPI (D7G7), monthly, not seasonally adjusted, UK, 2009-14.

- 1.32** Indeed, the latest data for the more comprehensive measures of earnings from ASHE showed even weaker wage growth than that suggested by AWE in 2014. ASHE had suggested that wage growth had picked up between 2012 and 2013. It may be that tax changes affected wage growth around the beginning of the tax year in 2013/14, the time at which the ASHE surveys are conducted. The 2014 ASHE data indicated that average (mean) gross weekly wages for all workers actually fell by 0.1 per cent between April 2013 and 2014, while growth in median weekly earnings was a little stronger at 0.6 per cent. This weakness in wage growth was also reflected in hourly earnings, with both median and mean gross hourly earnings excluding overtime increasing by just 0.1 per cent over the year to April 2014. The increase in median hourly earnings for those aged 21 and over was 0.4 per cent.
- 1.33** Trends in earnings are central to our deliberations. So, a recurrent puzzle facing us in recent years has been divergences between different sources and, in particular, why average earnings growth across the whole economy has been persistently low, and below pay settlements. One explanation is that it is a measurement effect. The official measure of earnings growth, Average Weekly Earnings, has been criticised by Blanchflower (2014) and IDS (2014c) among others, for excluding employees in small firms (who are more likely to be low-paid) and the self-employed, making it an upward biased estimate of wage growth. Georgiadis and Manning (2014) pointed to the high level of volatility in this series. Additional work by ONS (2014c) has confirmed this volatility. Alternative sources of earnings data, such as the Labour Force Survey

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and the measure of total compensation per employee in the National Accounts, however, give a similar picture on recent earnings growth, as shown in Figure 1.7.

Figure 1.7: Alternative Measures of Earnings Growth, GB and UK, 2012-2014



Source: LPC estimates based on ONS data: Average Weekly Earnings total pay for the whole economy (KAC3), monthly, seasonally adjusted, GB, 2012-14; total compensation per employee is total compensation (DTWM) divided by total number of employees (MGRN), annual growth rate, quarterly, seasonally adjusted; and Labour Force Survey, average hourly earnings, quarterly, seasonally adjusted, UK, 2011-2014.

1.34 Indeed, if we look at wage growth over the period from April 2012 to April 2014, it is similar across most earnings measures, as shown in Table 1.3. The estimates of annual wage growth in 2014 range from -0.6 per cent using LFS full-time weekly earnings, to 0.7 per cent on the AWE total pay measure. But looking across both years, annual nominal average earnings growth is more similar, averaging 1.0-1.5 per cent. Thus, it remains much lower than that suggested by pay settlements and is low in historical terms, as shown by Hardie, Jowett and Taylor (2014).

Table 1.3: Measures of Wage Growth Compared, 2012-2014

Earnings Measure (period including April)		Earnings Growth (%)		
		2012-13	2013-14	2012-14
Annual Survey of Hours and Earnings (ASHE)	Mean gross weekly	2.0	-0.1	2.0
	Median gross weekly	2.3	0.6	3.0
Average Weekly Earnings (AWE)	Regular pay	1.0	0.7	1.7
	Total pay	1.8	0.4	2.2
Labour Force Survey (LFS)	Mean full-time weekly	3.0	-0.6	2.4
	Mean hourly	2.1	-0.1	2.0
National Accounts	Wages per employee job	2.3	-0.2	2.1
	Wages per worker	2.4	0.6	2.9
	Compensation per employee job	3.6	-1.8	1.7
	Compensation per employee	3.6	-0.0	3.5

Source: LPC estimates based on ONS data: Average Weekly Earnings total pay (KAB9); Average Weekly Earnings basic pay (KAI7), monthly, seasonally adjusted, GB, 2012-14. Total compensation per employee is total compensation (DTWM) divided by total number of employees (MGRN); total compensation per employee is total compensation (DTWM) divided by total number of employee jobs (BCAJ); wage per worker is wage and salaries (ROYJ) divided by total employment (MGRZ); wage per employee job is wages and salaries (ROYJ) divided by total employment (MGRN); quarterly, seasonally adjusted; and Labour Force Survey, average hourly earnings, quarterly, seasonally adjusted, UK 2012-14. ASHE: median and mean hourly pay, 2010 methodology April 2012-14, standard weights, UK, 2012-14.

Note: ASHE is conducted in April each year. The AWE data is for the three-month period to May. The LFS data and National Accounts are for the second quarter.

- 1.35** There is strong evidence that average earnings growth, on all the various measures, has been affected by compositional change in the labour market. A number of stakeholders have argued that measured wage growth is being depressed by the changing make-up of the jobs market and workforce. However, recent analysis by Gardiner and Whittaker (2014) found that for most of the period 2006-14, the compositional effect of changes in the workforce on wage growth had been positive, not negative; that is, during 2008-12, job losses among less experienced and lower-qualified workers actually raised average pay. Earnings growth, low over this period, would have been even lower without it.
- 1.36** They reported that the compositional effect reversed in 2014, with recent growth in lower-skilled occupations and a sharp increase in employment generally dragging down AWE. A higher proportion of employees have been in work for just a few months and there has been significant employment growth among those aged in their 20s, both of which have reduced the level of average earnings. These downward effects have outweighed those from increased working hours and qualifications that have worked in the opposite direction.
- 1.37** Overall, therefore, low earnings growth in the post-recession period has been due to weak growth within sectors and groups, with compositional factors tending to prop up wages. While the compositional effect turned negative in 2014, such that AWE is likely to understate wage growth in 2014, the size of impact is small. Gardiner and Whittaker (2014) estimated that without the composition effects, real wage growth (measured using CPI) would have been 0.1 per cent in first half of 2014, modest at best, rather than falling by 0.8 per cent.

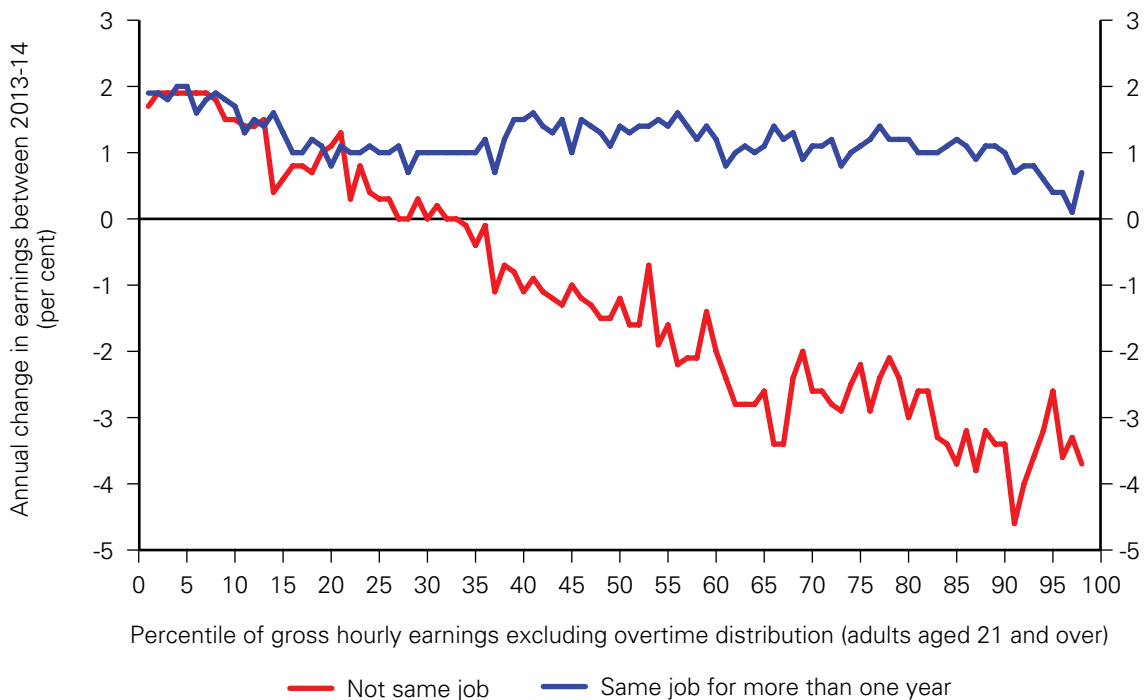
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- 1.38** IDS (2014c) also looked at this issue, considering the whole period from 2008 and concluded that there had been a shift away from high-paying sectors towards low-paying sectors, particularly in hospitality, as well as a shift from full-time to part-time work.
- 1.39** The self-employed may have also been a factor in slow average wage growth. Self-employment has accounted for two-thirds of the net change in employment since May 2008. Despite this increase, total earnings of the self-employed have fallen. Unfortunately, the data on earnings is not as timely as that on employment and the latest available takes us up to March 2013. According to HMRC (2015), in 2012/13, there were 5.5 million people with self-employment income who in total earned £80.6 billion in 2012/13, an average of about £14,650. But, according to Flip Chart Fairy Tales (2015) that compares with, in 2007/08, 4.9 million people with self-employment income earning a total of £88.4 billion, an average of about £18,040. This represents a fall of nearly 19 per cent in the average incomes of the self-employed and one that does not take account of inflation. ONS (2014b), using the Family Resources Survey, did take account of inflation and found that the median real income from self-employment had fallen by 22 per cent since 2008/09 to £207 per week in 2012/13. Gardiner (2015) suggested that as the economy picks up, these low-earning self-employed workers will move into better paid, but still low-paying, employee jobs. Indeed, self-employment has fallen since June 2014 as vacancies have risen sharply. Thus she concluded that, just as the exclusion of the self-employed from official statistics such as AWE and ASHE may have under-estimated the squeeze on pay in the recession, it could now understate the pace of recovery.
- 1.40** Similar evidence from the ONS (2014d) on the effect of the changing composition of employment on earnings growth comes from the Annual Survey of Hours and Earnings (ASHE). This shows just 0.1 per cent growth in median full-time earnings in the year to April 2014 – even lower than the AWE figure of 0.8 per cent. Average hourly earnings for all employees (full and part-time) increased by 0.1 per cent. Breakdowns of this data indicate the significance of compositional change: median full-time weekly earnings grew by 1.0 per cent in the public sector, and by 0.7 per cent in the private sector. Substantially greater employment growth in the (lower-paid) private sector must have driven whole economy earnings growth down to 0.1 per cent.
- 1.41** ONS (2014d) provides evidence that headline figures might disguise polarised wage growth experiences for different groups. There appears to be a difference depending on job tenure (between those remaining in their jobs and new entrants). As shown in Figure 1.8, earnings growth for those in continuous employment over the year (the same job with the same employer) was 4.1 per cent in ASHE, compared with 0.1 per cent for all employees, and it has been persistently higher for these employees since 2005. IDS (2014c) found that those in ‘discontinuous employment’, who were surveyed in either the 2012 ASHE or the 2013 ASHE, but not both, accounted for around a fifth of all employees. Further, they estimated that the mean hourly wage of those who only appeared in the ASHE 2013 survey was 3.9 per cent lower than for those who were only in the 2012 ASHE survey.
- 1.42** However, this disparity is not a new phenomenon: those continuously employed in the same job have experienced wage growth of around 4 per cent a year since 2009, reflecting that pay increases with experience and those in this position are likely to be a select, more highly

educated group. Cribb and Joyce (2015) argued that “this measure of earnings growth is always likely to look relatively favourable, and there is little evidence that the degree to which it looks more favourable has changed since the crisis”. What may have changed are the fortunes of those not in the same job – notably in 2014. It is these employees who are holding down pay growth overall.

- 1.43** Using ASHE, we find that the median hourly pay increase was 1.4 per cent for those that stayed in the same job between 2013 and 2014, whereas median hourly pay fell by 1.2 per cent for other employees. It also did not apply across the earnings distribution. Figure 1.8 shows that, up to the 25th percentile, pay growth among the ‘continuously employed’ and ‘discontinuously employed’ was similar, at around 1-2 per cent.

Figure 1.8: Annual Growth in Hourly Earnings for Employees Aged 21 and Over, by Percentile, UK, 2014



Source: LPC estimates based on ASHE, 2010 methodology, standard weights, including those not on adult rates of pay, UK, April 2013 and 2014.

- 1.44** However, for those in the top half of the earnings distribution, remaining in the same job was relatively much better rewarded. At the upper quartile (the 75th percentile), wages were about 3 per cent lower than in 2013 for those in ‘discontinuous employment’, whereas they were around 1 per cent higher for those remaining in the same job.
- 1.45** This analysis also suggested that if pay is broken down by low-paying sectors, the part of the economy of most interest to us, there is no continuous employment pay growth advantage relative to the discontinuously employed. Indeed, in the low-paying sectors, the growth in wages between 2013 and 2014 was greater at the mean and median for those who were not continuously employed (around 1.3-1.4 per cent) than those continuously employed (about 1.1 per cent). This is consistent with wider evidence on limited pay progression in some low-paying sectors, although Bryan and Taylor (2006), and D’Arcy and Hurrell (2013 and 2014) provide evidence that there is some progress for low-paid workers.

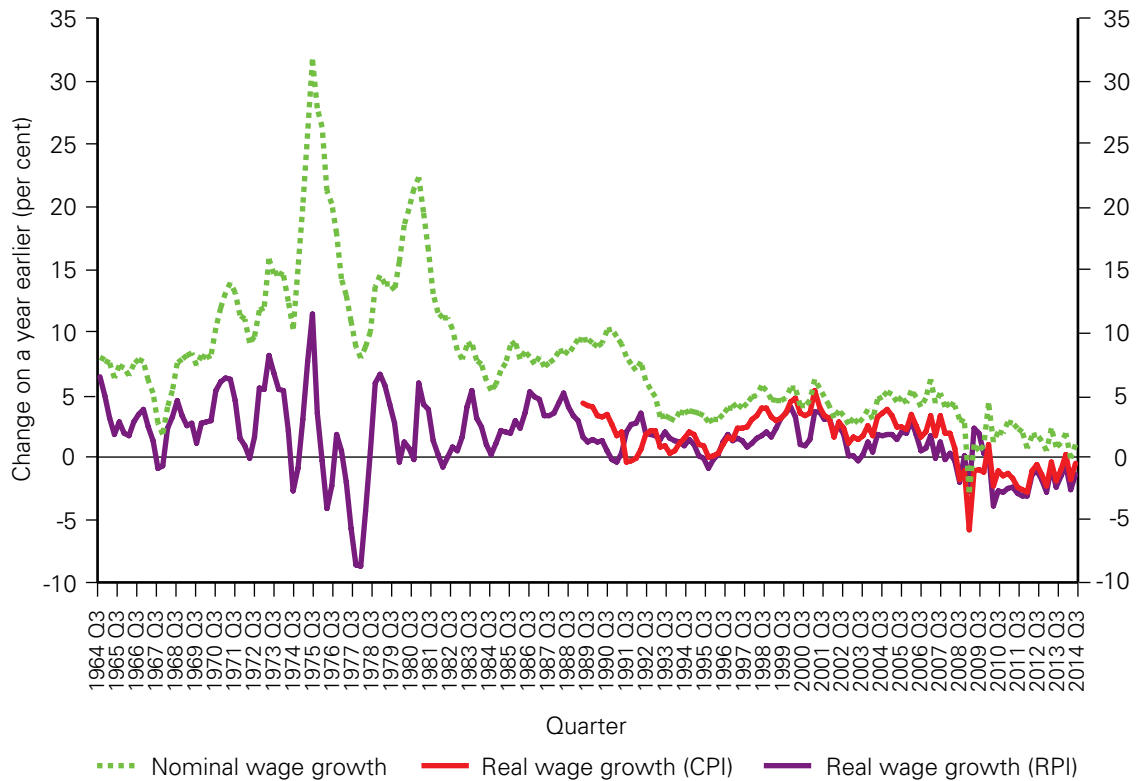
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- 1.46** Overall then, pay growth in 2014 was lower than the forecasts and slightly lower than our expectations, which had assumed some overestimation. Neither measurement issues, nor correcting for compositional effects, change significantly the overall picture of weak median wage performance. One consequence is the relative value of the NMW is likely to have increased as a result of the upratings implemented in October 2014. Lower than expected inflation also has implications for the real value.

Real Wages

- 1.47** The weakness in nominal wage growth has led to an unprecedented period of falling real wages – a phenomenon we have noted in successive recent reports. Figure 1.9 shows that nominal wage growth has slowed after each recession since the 1970s. Nominal wage growth averaged about 15 per cent in the 1970s, fell to around an average of 10 per cent after the 1980s recession, then dropped sharply after the 1990s recession to around 4 per cent, where it remained until the onset of the recession in 2008. Since then nominal wage growth has averaged just 1.5 per cent.
- 1.48** In the 40 years prior to 2010, there had been few episodes of falling real wages and none had persisted for long. The large real wage reductions in the 1970s were short-lived, generally followed by strong bounce-backs. However, wage growth, as measured by Average Weekly Earnings total pay, has been below both the CPI and RPI in every quarter since the first quarter of 2010 with the exception of the first quarter of 2014, when earnings growth was greater due to the reduction in the higher rate of income tax in April 2013 and the consequent delay in payments of bonuses in that year. This led to measured wage growth of around 1.9 per cent in the first quarter of 2014, slightly above CPI inflation (1.7 per cent) but still below RPI inflation (2.6 per cent). In the second and third quarters of 2014 nominal wage growth again fell back to below both measures of inflation.

Figure 1.9: Growth in Nominal and Real Wages, UK, 1964-2014



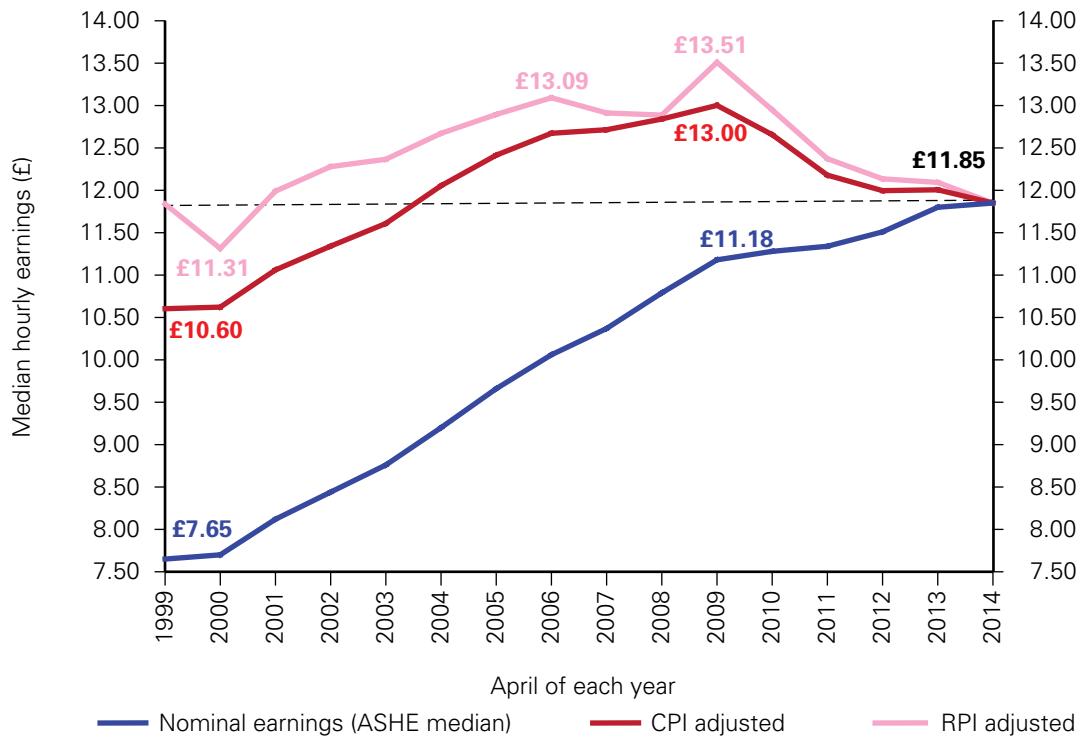
Source: LPC estimates based on ONS data: annual change in CPI (D7G7), Q1 1989-Q3 2014, and RPI (CBZH), Q1 1964-Q3 2014, quarterly, not seasonally adjusted, UK; annual change in AEI including bonuses (LNNC), Q1 1964-Q4 2000, and AWE total pay (KAC3), Q3 1964-Q3 2014, monthly, seasonally adjusted, GB.

1.49 However, the most recent monthly data reveal some improvement in real wage growth since the end of the summer. While inflation has continued to fall, average earnings wage growth has picked up. Thus, the latest data suggest that CPI inflation was 0.9 per cent and RPI inflation was 1.9 per cent in the fourth quarter of 2014. Over the three months to November 2014, measured annual AWE total pay growth was 1.7 per cent, while measured annual AWE regular pay growth was 1.8 per cent. Although both of these are still below the increases in the most commonly used inflation statistic for pay bargaining purposes, RPI, they are above the increases in CPI, which is the National Statistic on inflation.

1.50 While a welcome development, recent real pay growth represents only a small step to restoring the value of real pay. This is apparent if we consider another indicator of trends in real wages: how the median hourly wage has changed relative to price changes. Figure 1.10 shows that between April 1999 and April 2014, median hourly wages excluding overtime for employees aged 22 and over increased by nearly 55 per cent from £7.65 to £11.85 an hour.² That was an increase of about 3.7 per cent on average each year.

² In this section, when referring to median hourly earnings or wages, this will mean the median hourly earnings excluding overtime for all employees aged 22 and over.

Figure 1.10: Growth in Nominal and Real Median Hourly Wages for those Aged 22 and Over, UK, 1999-2014



Source: LPC calculations based on ONS data: RPI (CZBH) and CPI (D7G7), monthly, not seasonally adjusted, UK, 1999-2014. ASHE median hourly pay: without supplementary information, April 1997-2004; with supplementary information, April 2004-06; 2007 methodology, April 2006-11; and 2010 methodology April 2011-14, standard weights, UK. Note: ASHE data have been adjusted to take account of methodology changes to provide a consistent time series.

- 1.51** Over the same period, RPI increased by just under 55 per cent. Thus, the real median hourly wage in April 2014 was more or less back to its value in 1999, when it was worth £11.83 in 2014 RPI prices. In other words, there has been no cumulative growth in real terms over the entire 15-year period. In contrast, CPI increased by only 39 per cent over the period, suggesting that real wages on this measure have risen about 12 per cent, an increase of about 0.8 per cent a year on average.
- 1.52** However, looking overall at 1999-2014 conceals two distinctly different periods – before and after the recession. Between April 1999 and April 2009, median hourly wages increased by 46 per cent, an average of 4.6 per cent a year. But since then, they have increased by just 6 per cent in total, an average increase of just 1.2 per cent a year between April 2009 and April 2014. Price inflation has followed the opposite trajectory. It was lower than wage growth in the earlier period, with CPI growing by 19 per cent and RPI by 28 per cent. However, since 2009 it has risen relatively sharply, with CPI increasing by 16 per cent and RPI by 21 per cent between April 2009 and April 2014. These patterns help explain significant real wage increases up to 2009, followed by significant falls.
- 1.53** Figure 1.10 also shows that in real 2014 terms, adjusted for RPI inflation, the median hourly wage increased by around 19 per cent, at an annual average of 1.9 per cent, from £11.31 an hour in 2000 to peak at £13.51 in 2009. Since then, real wages have fallen by over 12 per cent to £11.85 an hour, an average annual fall of 2.5 per cent.

- 1.54** Using CPI, between April 1999 and April 2009, real median earnings increased by 22.6 per cent from £10.60 an hour to £13.00 an hour, an average annual increase of 2.3 per cent. Real hourly earnings then fell by 8.9 per cent over the next five years, to £11.85, a fall of 1.8 per cent a year on average. This fall in real wages means that real median hourly earnings, in CPI terms, are now below the level they were in 2004. In RPI terms, the real median wage is, as already noted, more or less back to its 1999 level.
- 1.55** What has caused this unprecedented squeeze on real wages? Fernandez-Salgado, Gregg and Machin (2014) argued that there were three important drivers. First, wages appeared much more sensitive to changes in unemployment in this recession than in previous ones. Indeed, Pessoa and Van Reenan (2014) had identified that the labour market had proven much more flexible than in previous recessions. Second, sluggish productivity growth had reduced the scope for real wage increases. Average wages have historically tracked productivity growth. Rising real wages create incentives for firms to invest in labour-saving technologies which in turn enable further wage rises. However, low wage growth has made labour more attractive and restricted these investment opportunities. This has been good for jobs but not for productivity. Third, there has been a divergence between wage growth and productivity that pre-dated the recession. Wages were no longer matching productivity gains as firms contributed more of the total compensation package to pensions for current workers and already retired workers. Further, the highest paid 1 per cent have been taking a higher proportion of any productivity gains, so that there was less room for wage increases for other workers. Bell and Van Reenan (2014) analyse this in more depth. Productivity issues are explored later in this chapter and in Chapter 6 when we consider whether the conditions are in place for real wages to increase. In addition to these factors, benefit changes had increased incentives to get a job. Increased labour supply, as we discuss in more detail in the next section, has also exerted downward pressure on wages.

Employment and Unemployment

- 1.56** As many commentators have noted, the continued absence of real wage growth may have helped to increase employment levels and reduce unemployment. At the start of 2014, forecasters – OBR (2013b) and the HM Treasury Panel (2014b) – had expected employment growth to be around 1.1-1.4 per cent in 2014 as the improvement in GDP growth fed through to the labour market. They also expected this job growth to lead to a sharp fall in ILO unemployment (those looking for work and available to start) to around 6.9-7.1 per cent (from around 7.6 per cent at the end of 2013) and some reduction in the claimant count albeit remaining above 1.1 million. But as in previous years, these forecasts under-estimated the remarkable strength of the labour market.
- 1.57** Table 1.4 shows that the total number of people in employment increased by 1.9 per cent between October 2013 and October 2014 to 30.8 million, over 1.0 million higher than it was at the start of the recession in May 2008. During 2014, employment increased at its fastest rate since 1988. The number of jobs, a different indicator of labour market performance, showed even greater growth. The number of workforce jobs (comprising employee jobs, self-employment jobs, the Armed Forces and government-supported training scheme jobs) in the UK increased by 4.0 per cent between 2013 and 2014 to 33.4 million. Over the same

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period, the number of employee jobs increased by 3.3 per cent to 28.6 million. Both of these were the fastest growth in jobs recorded since records began in 1959.

- 1.58** The latest data, shown in Table 1.4, suggest that the growth in workforce jobs slowed in the third quarter of 2014 but picked up for employee jobs to 3.5 per cent. There were nearly 1 million more employee jobs in the UK in September 2014 than in September 2013.

Table 1.4: Change in Employment, Jobs, Hours and Unemployment, UK, 2008-2014

	October 2014	Change (Oct 2013-Oct 2014)		Change (May 2008-October 2014)	
		000s	%	000s	%
Employment	30,796	588	1.9	1047	3.5
Full-time employment	22,542	560	2.5	315	1.4
Part-time employment	8,254	28	0.3	732	9.7
Number of employees	26,029	400	1.6	372	1.4
Full-time employees	19,223	421	2.2	7	0.0
Part-time employees	6,807	-20	-0.3	366	5.7
Contract type					
Permanent employees	24,341	306	1.3	104	0.4
Temporary employees	1,688	94	5.9	268	18.9
Self-employment	4,535	239	5.6	679	17.6
Full-time self-employment	3253	160	5.2	312	10.6
Part-time self-employment	1282	80	6.7	367	40.1
ONS Workforce Jobs					
Workforce jobs	33,492	1,212	3.8	1309	4.1
Employee jobs	28,793	974	3.5	572	2.0
Hours worked					
Total hours worked	991,600	22,500	2.3	40,400	4.2
Full-time hours in main job	847,579	21,056	2.5	22,958	2.8
Part-time hours in main job	132,889	1,273	1.0	15,546	13.2
Unemployment					
ILO unemployment	1,938	-450	-18.8	328	20.4
Claimant count	927	-378	-29.0	112	13.8

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), total weekly hours worked (YBUS), ILO unemployment for 16-64 year olds (LF2I) and Claimant count (BCJD), monthly, seasonally adjusted, UK, 2008-14.

Note: ONS workforce jobs data are for September 2014, change on September 2013 and change between June 2008 and September 2014.

- 1.59** The composition of that employment growth has changed over the last year. Since the onset of recession (in May 2008), just under two-thirds of the increase in employment has been due to self-employment (much of which was part-time) and nearly all of the rest part-time employees. In contrast, the number of full-time employees has only just recovered to its levels before the onset of recession, around 19.2 million. Over the year to October 2014, strong growth in self-employment, up 5.6 per cent, and temporary employment, up 5.9 per cent, has continued.

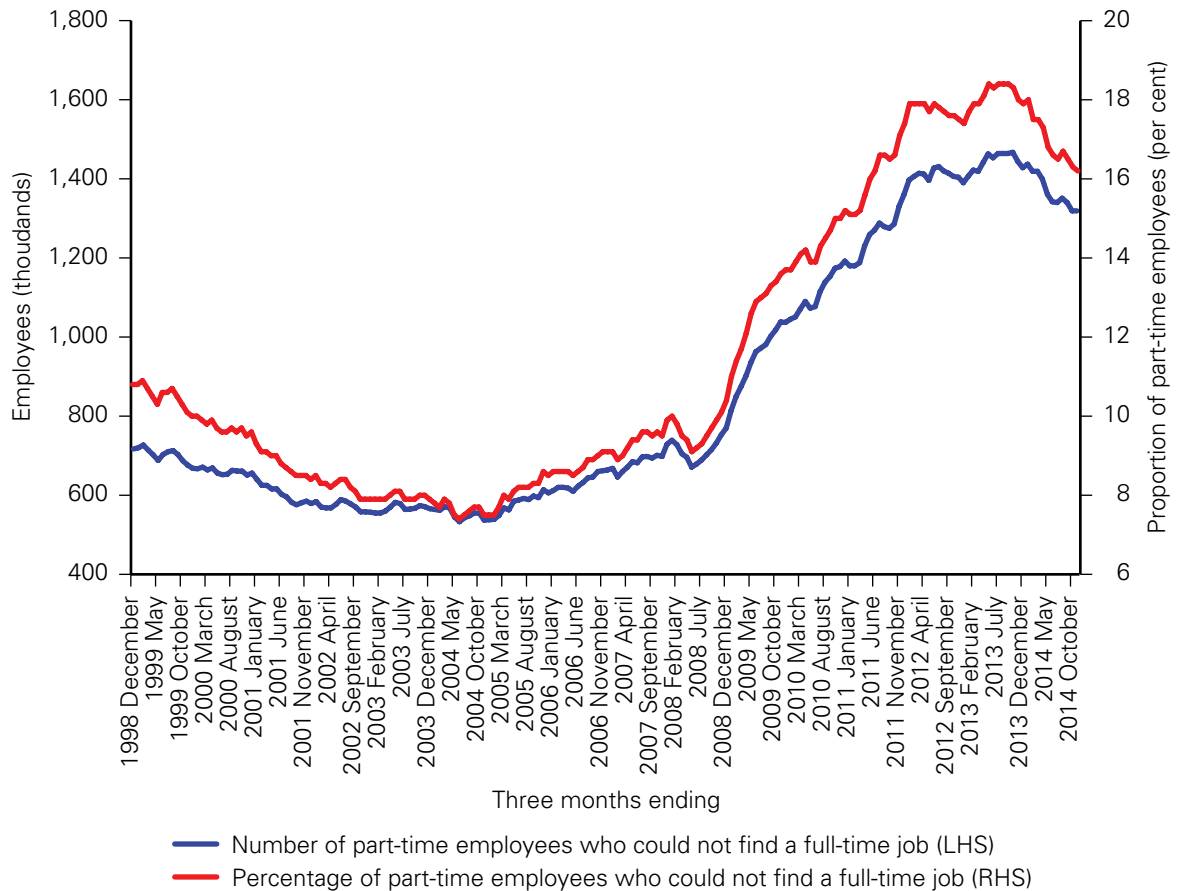
However, employment growth over the same period has also been strong with full-time employment up by 2.5 per cent, and the number of full-time employees up by 2.2 per cent.

- 1.60** We noted in our 2014 Report that the population had grown since 2008 and that the working age employment rate had not returned to its pre-recession (May 2008) level. We also commented that this was mainly due to the weak employment performance of young people, who had not benefitted greatly from the upturn in job growth. Welcome news for this report is that the working age employment rate reached 73.0 per cent in October 2014, back to its level in May 2008. However, young people have still not recovered. The employment rate for those aged 18-24 was 59.9 per cent, still well below its level in May 2008, 64.6 per cent. It is unclear to what extent this is entirely cyclical: the employment rate for those under 25 had been declining prior to the recession as more young people chose to stay in education.
- 1.61** Employment fell across all the regions and countries of the UK during the recession. England, Scotland and Wales all experienced falls in employment of 2-3 per cent. Northern Ireland was the most badly affected, losing 6.3 per cent of its jobs between May 2008 and July 2009. The least affected was the East Midlands with a loss of 0.4 per cent of its jobs. Since July 2009, the labour market in the UK has recovered led by London, with employment up by 10.9 per cent, and the East of England, up by 4.6 per cent. With the exception of Wales, all the other countries of the UK and all the regions of England have more than recovered the jobs lost in the recession. Over the year to November 2014, regional employment growth has become more balanced, growing fastest in the South West (3.2 per cent) and the North East (up 3.1 per cent). However, Wales has continued to lose jobs with employment falling by 3.1 per cent. Employment growth across all sizes of firm has also been more balanced over the year to the third quarter of 2014, with employment growing relatively strongly in small, medium-sized and large firms.
- 1.62** A further measure of labour market performance is the number of hours worked. The number of hours worked in the UK increased by around 2.3 per cent between October 2013 and October 2014, roughly in line with the increase in employment and jobs. The number of hours worked increased faster for full-time workers than for part-time ones.
- 1.63** This stronger than expected growth in employment, jobs and hours has driven bigger reductions in unemployment than predicted in the forecasts. Instead of falling to 7.0 per cent by the end of 2014 from 7.6 per cent in the third quarter of 2013, it in fact stood at 6.0 per cent by October 2014. This equates to 1.9 million people, a fall of 450,000 year-on-year. This positive picture was also confirmed by the claimant count. Over the year to October 2014, the claimant count had fallen by 378,000 to 927,000, well below the 1.10-1.26 million forecast by the HM Treasury Panel and OBR.
- 1.64** This strong employment growth might suggest that the labour market should be tightening, resulting in increased wage pressure. However, we have already shown that, as yet, there seems little sign that this has occurred. Wages have continued to stagnate even as many more people have found work. It appears to be the case that a falling unemployment rate is only one indicator of tightness in the labour market. There are other factors not captured in this measure such as the extent of underemployment (those wishing to work more hours but unable to do so) in the economy and the increase in labour supply.

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- 1.65** Figure 1.11 shows that the working age unemployment rate has fallen sharply since the end of 2011 from 8.5 per cent to 6.1 per cent in October 2014, and is now close to its pre-recession level, albeit still one percentage point above the 5.0 per cent it averaged from 2001-2005. However, underemployment (as measured by the proportion of those in part-time jobs who would like full-time jobs) remains much higher than the levels recorded prior to the recession. It was over 16 per cent in October 2014 – down from its peak of more than 18 per cent in mid-2013 but still approaching double the 8-10 per cent range observed prior to the recession.
- 1.66** The greater use of variable hours contracts, including zero hours contracts, may also be indicative of potential underemployment. ONS (2013), using the Labour Force Survey, had shown how the number of zero hours contracts had fallen from 225,000 in 2000 to 108,000 in 2004, before rising steadily back to reach 250,000 in 2012. Since then there has been greater publicity surrounding zero hours contracts and the numbers recorded as working on this type of contract has increased sharply. Chandler (2014) estimated that 622,000 people were employed on zero hours contracts between April and June 2014. These types of jobs were mainly part-time and were most common in accommodation and food, and health and social work. It estimated that, using its business survey, there were around 1.4 million jobs in January 2014 that did not guarantee a minimum number of hours. These ‘no guarantee hours’ jobs were more likely in large firms.

Figure 1.11: Underemployment and Unemployment, UK, 1998-2014



Source: LPC estimates based on ONS data: number of part-time employees who could not find a full-time job (YCCX); and percentage of part-time employees who could not find a full-time job (YCDA), monthly, seasonally adjusted, UK, 1998-2014.

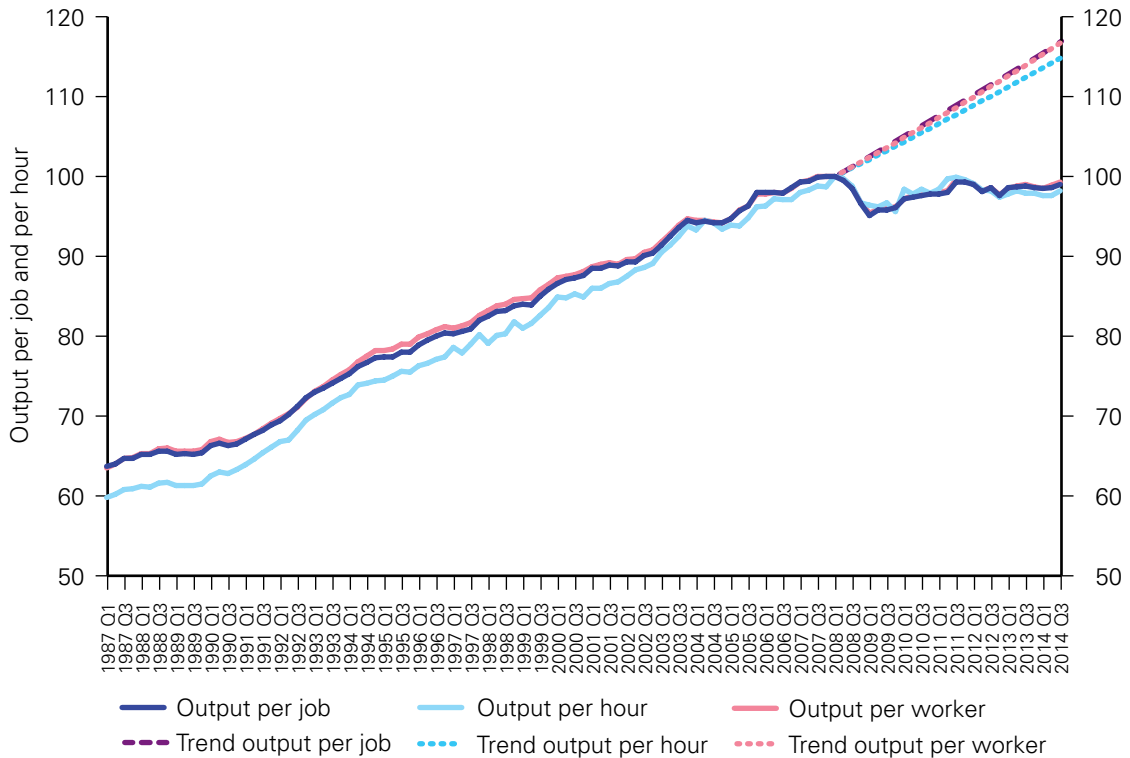
- 1.67** Alongside underemployment, and closely related to it, labour supply has grown sharply in recent years. There have been four major sources of growth. First, more people are working beyond the State Pension Age than previously. The number of those aged 65 and over in paid employment has increased by 66 per cent from 689,000 in May 2008 to 1.14 million in October 2014. This compared with just a 2.1 per cent increase in working age employment over the same period.
- 1.68** Second, there has also been an increase in female labour market participation with more women entering and staying in work, in part driven by the State Pension Age for women moving from 60 to 65 and wider changes to the benefit system. The female economic activity rate increased from 70.5 per cent in May 2008 to 72.3 per cent in October 2014. In contrast that of males fell from 83.8 per cent to 83.2 per cent.
- 1.69** Third, stricter eligibility and less generous entitlement to out-of-work benefits may have encouraged those previously on benefits to look for work in greater numbers. One group particularly affected has been lone parents, most of whom are women. The number of lone parents claiming Income Support as an out-of-work benefit has fallen from 739,000 in May 2008 to 475,000 in May 2014. In contrast, the total claimant count rose from 815,000 to 1.08 million over the same period.
- 1.70** Fourth, immigration has also increased the supply of labour. Net migration averaged just over 60,000 a year in the 1990s. This rose to around 150,000 in the early 2000s but since the accession of the EU8 countries, it has risen to average 239,000 a year between 2004 and 2014. The latest data suggest that net migration in the year to the second quarter of 2014 had increased further to 262,000, albeit not all of these will be labour market participants.
- 1.71** In summary, the labour market has again out-performed forecasts with stronger job growth and greater falls in unemployment. However, this strong labour market performance has not been reflected in upwards wage pressure in part because of spare capacity. And it has had other implications – not least its consequences for productivity.

Productivity

- 1.72** The obverse of strong employment growth combined with the sluggish recovery has been a weak productivity performance for the UK. Productivity can be measured as output per job, per worker or per hour. On all three measures, the UK's productivity performance has been very poor in recent years. Having all peaked in the first quarter of 2008, output per worker and per job had fallen by nearly 5 per cent by the first quarter of 2009, and output per hour over 4 per cent by the fourth quarter of 2009. From those nadirs, productivity then picked up on all measures, with output per hour growing by an average of 0.6 per cent a quarter between the fourth quarter of 2009 and the third quarter of 2011. This matched the pre-crisis performance. Growth in output per job and per worker was slightly less, averaging 0.4 per cent between the first quarter of 2009 and the third quarter of 2011. Since then, as shown in Figure 1.12, productivity on all measures has stalled and in the third quarter of 2014 remained below its pre-recession level. However, the latest data did show some pick-up in productivity on all measures since the beginning of 2014 with output per worker up 0.8 per cent, output

per job up 0.5 per cent, and output per hour up 0.6 per cent between the first and third quarters of 2014.

Figure 1.12: Productivity, UK, 1987-2014



Source: ONS, output per job (LNNN), output per worker (A4YM) and output per hour (LZVB), for the whole economy, quarterly, seasonally adjusted, UK, Q4 1979-Q3 2014.

1.73 The long-term trend puts this performance in perspective. Between the second quarter of 1960, when current records began, and the first quarter of 2008, output per worker and output per job both increased by 0.6 per cent a quarter on average (or 2.4 per cent a year). Growth in output per hour, between the first quarter of 1972 when records began and the first quarter of 2008, was slightly lower at just over 0.5 per cent a quarter on average (or 2.1 per cent a year). Over that same period, output per job and per worker was the same over the quarter (0.5 per cent) but slightly lower over the year (1.8 per cent). Productivity per job and per worker would have been around 17.5 per cent higher than it was in the third quarter of 2014 if these trends had continued. The finding is only slightly less stark using output per hour, where productivity on this measure would have been 16.6 per cent higher. Much has been written about the ‘productivity puzzle’, with many theories proposed to explain it. It remains the central challenge for the UK labour market and economy.

- 1.74** Bryson and Forth (forthcoming) summarises the literature that looks at possible explanations of the puzzle. They consider: the role of the finance sector; the lack of a 'cleansing effect'; incentives to innovate; labour hoarding; the impact of the flexible labour market; declining real wages; capital shallowing; sectoral differences; and measurement error. They note that most of the decline in productivity had been within sector and within firm. Thus the decline in productivity could not be accounted for by sector-specific shocks or credit constraints. In analysis using the Workplace Employment Relations Survey, they found some evidence of a cleansing effect. The worse performing firms were the most likely to have closed. However, this poor performance effect related to profitability rather than productivity.
- 1.75** They also found clear evidence of labour intensification but this increased effort did not appear to have increased workplace productivity. There were widespread pay freezes and cuts that led to declining wages. It was possible that wage pressures from trade unions, and recruitment and retention were weaker than in previous recessions. Labour supply had increased and they found evidence that immigration may have also played a role. They found some evidence of high-skilled labour hoarding but little impact on the rate of innovation, although innovation in processes and products had been limited by demand. Capital shallowing appears to have played only a very limited role in declining labour productivity. What matters more is the efficiency with which factors of production have been deployed (total factor productivity): this appears to have declined quite markedly, raising real concerns about longer-term labour productivity trends.
- 1.76** Although the UK's productivity performance has been weaker than that of other major economies except Italy, Weale (2014) emphasised the similarities in the productivity performance across countries rather than the 'puzzle' being particular to the UK. He found that market structures and other indicators of the economic environment failed to explain productivity differences. He concluded that the recovery in productivity might remain weak. The Bank of England (2014c) expects productivity growth to pick up as resources are allocated more efficiently within companies and across the economy, while the OBR (2014b) expects productivity to rise as spare capacity closes.

Revised Forecasts for 2014 and 2015

- 1.77** We noted that ONS has made methodological changes to the National Accounts data this year and has significantly revised the GDP series. Forecasters had made upward revisions to GDP growth during 2014 but the data series was revised again in December 2014, leading to slightly lower growth. The latest OBR and HM Treasury Panel forecasts will not have taken account of these latest changes. Given those revisions, GDP growth in 2014 is now likely to be around 2.6 per cent. However, the continued strength of the labour market has led to the forecasts for employment growth being revised upwards and those for unemployment downwards. We know that workforce jobs grew by 4.0 per cent in 2014 and that employment growth continues to be strong. The ILO unemployment rate was 6.0 per cent in October 2014 and the claimant count was 900,000 in November 2014.

Table 1.5: Revised Economic Forecasts, UK, 2014-2015

Per cent	Forecasts used in 2014 Report (January 2014)				Latest forecasts available (January 2015)			
	Median of independent forecasts (November 2013 and January 2014)		OBR forecasts (December 2013)		Median of independent forecasts (January 2015)		OBR forecasts (December 2014)	
	2014	2015	2014	2015	2014	2015	2014	2015
GDP growth (whole year)	2.6	2.4	2.4	2.2	2.6	2.6	3.0	2.4
Average earnings growth (whole year)	2.2	-	2.6	3.4	1.1	2.5	1.1	2.0
Inflation RPI (Q4)	3.0	3.1	3.0	3.5	2.0	2.0	2.1	2.5
Inflation CPI (Q4)	2.3	2.2	2.3	2.1	0.9	1.0	1.1	1.5
Employment growth (whole year)	1.4	-	1.1	0.3	2.3	1.2	2.3	1.4
ILO unemployment (Q4)	6.9	6.8	7.1	6.8	5.9	5.5	5.7	5.2
Claimant count (millions, Q4)	1.13	1.26	1.26	1.21	0.9	0.8	0.9	0.8

Source: HM Treasury (2013a, 2014b and 2015) and OBR forecasts (2013b and 2014b) 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); 2014-15.

Note: '-' denotes not available.

- 1.78** The inflation and wage growth forecasts available in January 2014 have proven to be too high and have been revised down substantially over the year. Those revised forecasts suggest that there will still not be much, if any, real wage growth by the end of 2014. However, that is likely to be reversed in 2015 as the impact of recent oil price falls lowers inflation and boosts real wages.

Conclusion

- 1.79** Since we met to discuss our recommendations in January 2014, ONS has made substantial revisions to the data for economic output. These revisions showed that the recession was shallower than previously thought, with output falling by 6 per cent. The economy is still recovering strongly and in line with forecasts. The latest output data also suggest that economic growth in 2014 has been around the level forecast, 2.6 per cent. However, the UK economy still underwent its longest and deepest recession since at least the Second World War and the recovery remains the slowest on record. Output is over 15 per cent below what it would have been had the long-run trend growth (1955-2008) continued from 2008 onwards. Thus, full economic recovery still has a long way to go.

- 1.80** The labour market has continued to perform remarkably strongly in terms of jobs and hours, with job growth greater than forecast. Indeed the number of jobs increased faster than at any point since records began in 1959, and the increase in employment was its fastest since 1989. As a consequence, the reductions in unemployment and the claimant count have also been greater. However, much of the increase in employment since the onset of recession has been among self-employment and the proportion of part-time workers who would like to work full-time remains almost double its pre-recession level. There have also been increases in the use of variable hours contracts, particularly in the low-paying sectors. In conjunction with increasing labour supply from older workers, more women in work, greater conditionality for benefits claimants, and immigration this means that strong employment growth appears to have put little pressure on wages. Higher employment combined with the sluggish recovery has had significant adverse consequences for the UK's productivity performance. Since 2011, productivity (whether measured by output per worker, per job or per hour) has stalled and remains below what it was in the first quarter of 2008.
- 1.81** In the face of continued low productivity and spare capacity, wage growth for 2014 will turn out lower than forecast. Average wage growth is expected to be around 1.1 per cent with CPI inflation at 0.9 per cent and RPI inflation at just 1.9 per cent in the fourth quarter of 2014. Low wage growth is in part a reflection of the changing composition of the workforce. But, even allowing for this, the overall picture remains one of sluggish performance. Despite this, falling inflation means there may have been a modest increase in real pay – the first since 2009 – at the end of 2014.
- 1.82** The weak out-turn in pay has important implications for the National Minimum Wage. The NMW increased by 3.0 per cent in October 2014. This is much higher than average wage growth, measured by ASHE or AWE, suggesting an increase in the relative value of the NMW. It is also much higher than the increase in CPI or RPI inflation suggesting an increase in real value of the NMW. 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 economic context to the most recent upratings to the National Minimum Wage (NMW) was considered in Chapter 1. We now examine the impact of the minimum wage so far. Since the minimum wage was introduced, we have monitored and assessed its impact in a series of reports presenting evidence collected by undertaking: in-depth analysis; commissioning research; consulting with our stakeholders; and visiting employers and workers around the UK. We have again used information gathered from these sources to inform our deliberations and make our recommendations for the rates of the NMW from October 2015 onwards. We review and summarise that evidence in this and subsequent chapters.
- 2.2** It is still too early to assess fully the impact of the minimum wage increases that took effect on 1 October 2014. However, we now have enough information to undertake an initial evaluation of the changes to the NMW that took effect a year earlier, on 1 October 2013. The adult rate of the NMW was then increased by 1.9 per cent from £6.19 to £6.31 an hour. We recommended a lower increase of around half of this level for the two youth rates. This meant an increase of 1.0 per cent in the Youth Development Rate from £4.98 to £5.03 per hour and a 1.1 per cent increase in the 16-17 Year Old Rate from £3.68 to £3.72 per hour. The Apprentice Rate also increased by 1.1 per cent from £2.65 to £2.68 an hour. This chapter focuses on the impact of the adult rate of the NMW. Chapter 3 considers the impact of the youth rates and the Apprentice Rate.
- 2.3** In this chapter, we start by looking at minimum wage jobs, investigating the types of jobs and the people that are employed to undertake them. We then identify the impact of the adult rate of the NMW on: individual earnings; pay settlements; and pay structures. The impact on employment and hours is then assessed before we conclude the chapter by looking at the impact on profits, prices, productivity and business start-ups and failures. As well as examining the consequences of the NMW in aggregate, we explore the impact on those firms and groups of workers that are most likely to be affected by the minimum wage: particularly those in low-paying sectors, and the small firms most affected by changes in the rate. We start by looking at those jobs and workers.

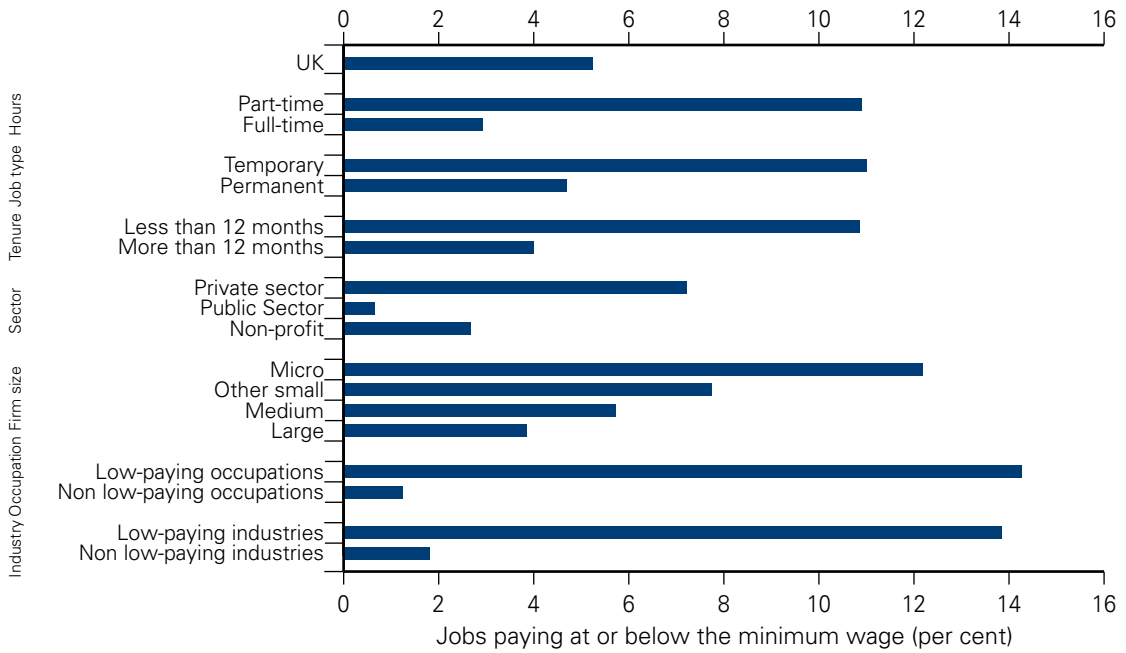
National Minimum Wage Workers and Jobs

- 2.4** As in our previous reports, we use the Annual Survey of Hours and Earnings (ASHE), previously the New Earnings Survey (NES), as the main data source for the analysis of earnings because it is regarded by the Office for National Statistics (ONS) as the best source of information on individual earnings in the UK. ASHE 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 (all those with a National Insurance number ending in the same two digits). Information on earnings and hours collected in the ASHE survey is reported by employers from their records and covers an individual's gender, age, industry, occupation, home postcode, work postcode and size of firm. However, ASHE does not contain information on personal characteristics such as ethnicity, qualifications or disability. For analysis of these factors in relation to minimum wage workers, we use the Labour Force Survey (LFS). The LFS is a household survey, but its 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. More information on ASHE and the LFS is given in Appendix 4.
- 2.5** The latest available ASHE data were collected in April 2014, when the adult rate of the minimum wage was £6.31 an hour. We use hourly pay excluding overtime as our measure of earnings, as that is the wage measure in ASHE closest to the legal definition of the National Minimum Wage (NMW).
- 2.6** In this section we have defined a minimum wage job as one that was paid up to five pence above the age-related minimum wage rate in April 2014. In addition, as the 2014 ASHE data contain new information on apprentices, we can for the first time separately identify apprentice minimum wage jobs. These are those held by an apprentice and paid up to five pence above the appropriate minimum wage rate according to the apprentice's age and their duration on the apprenticeship. That means jobs that in April 2014 paid: less than £6.36 an hour held by an adult aged 21 and over (or less than £2.73 if that job is an apprenticeship in its first year); less than £5.08 an hour held by an 18-20 year old (or less than £2.73 if that job is an apprenticeship in its first year or is held by an apprentice under the age of 19); and less than £3.77 an hour held by a 16-17 year old (or less than £2.73 if it is an apprenticeship).
- 2.7** Around 5.3 per cent of all jobs were minimum wage jobs, totalling 1.4 million, made up of 40,000 jobs held by 16-17 year olds; 139,000 held by 18-20 year olds and 1.21 million held by those aged 21 and over. Excluding apprentices, around 5.1 per cent of all jobs were minimum wage jobs, totalling 1.3 million, made up of 28,000 jobs held by 16-17 year olds; 109,000 held by 18-20 year olds and 1.2 million held by those aged 21 and over.
- 2.8** We start with an overview of the characteristics of NMW jobs, look at how the composition of minimum wage jobs compares with jobs in general, and then consider how the distribution of NMW jobs varies by sector, firm size and country as well as region.

Characteristics of Minimum Wage Jobs

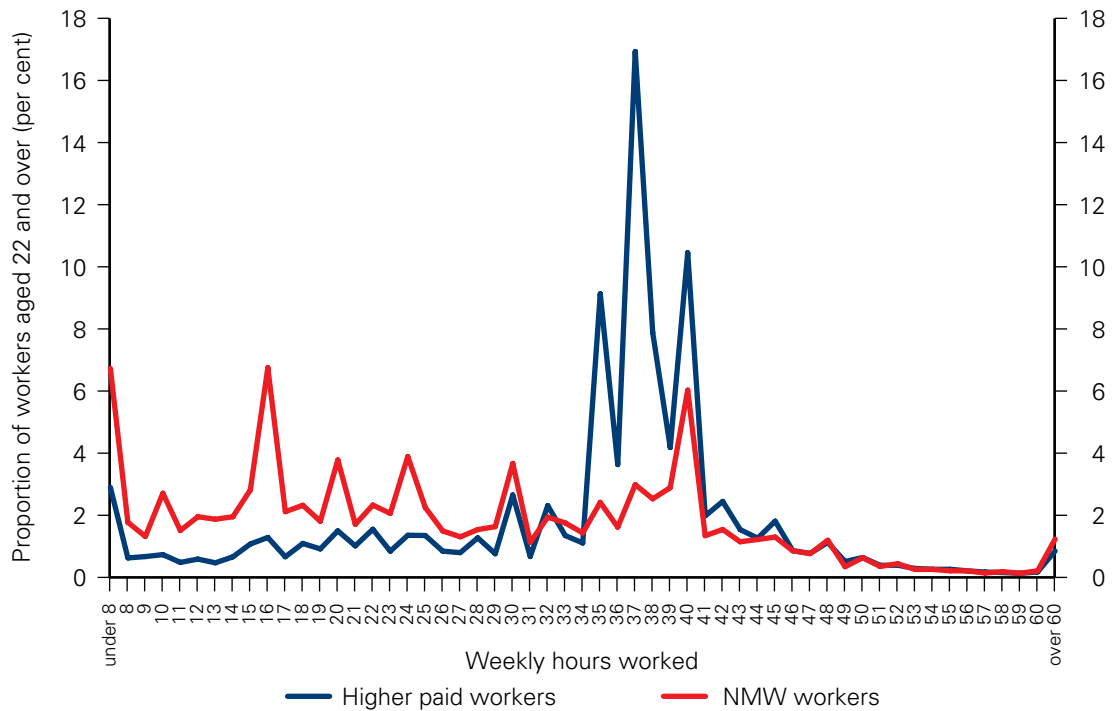
- 2.9** Only a small minority of jobs were paid at the minimum wage in April 2014: 5.3 per cent on our definition. But as Figure 2.1 shows some kinds of jobs were much more likely than others to fall into this category, notably those that were part-time, temporary and newly held. Around 11 per cent of part-time jobs; temporary jobs; and for jobs held for less than a year were minimum wage jobs, compared with 3 per cent of full-time jobs; 5 per cent of permanent jobs and 4 per cent of jobs held for a year or more. The proportion of minimum wage jobs was also much higher in the private sector (7.2 per cent) than in the public sector (0.7 per cent) and in the non-profit sector (2.7 per cent).
- 2.10** Defining a large firm as one with 250 or more employees, a medium-sized firm as one with 50-249 employees and a small firm as one with less than 50 employees, Figure 2.1 shows that there was a strong relationship between size of firm and the proportion of jobs that are minimum wage. Disaggregating small firms further into micro firms (1-9 employees) and other small firms (10-49 employees), we can see more clearly that jobs in smaller firms were more likely to be minimum wages jobs, increasing from 4 per cent of jobs in large firms through 6 per cent in medium-sized firms and 8 per cent in other small firms to 12 per cent of jobs among micro firms. The NMW is a policy instrument that disproportionately affects small and medium-sized enterprises (SMEs).
- 2.11** Low-paying sectors are those with a large number of minimum wage jobs and/or a high proportion of minimum wage jobs (full definitions of each low-paying occupation and industry can be found in Appendix 4). Our occupational definition can more precisely cover minimum wage jobs as our industry definition includes all jobs in an industry, including managerial, and supervisory ones. However, data on employment (and productivity) are more readily available by industry than by occupation. Figure 2.1 shows that around 14 per cent of jobs in the low-paying industries were minimum wage jobs compared with only 2 per cent in the non low-paying industries. Similarly, the proportion of minimum wage jobs among low-paying occupations (14 per cent) was much greater than the 1 per cent of such jobs in the non low-paying occupations.

Figure 2.1: Characteristics of Minimum Wage Jobs, UK, 2014



Source: LPC estimates based on ASHE, 2010 methodology, low-pay weights, including those not on adult rates of pay, UK, April 2014. Note: Minimum wage jobs are defined as those held by adults (aged 21 and over) earning less than £6.36 an hour (or less than £2.73 if an apprentice in their first year); those aged 18-20 earning less than £5.08 an hour (or less than £2.73 if an apprentice under the age of 19 or in their first year); and 16-17 year olds earning less than £3.77 an hour (or less than £2.73 if an apprentice) in April 2014.

2.12 Unsurprisingly given that part-time jobs were much more likely to be minimum wage jobs, minimum wage workers work fewer hours on average (26.2 hours) than higher-paid workers (33.4 hours). Figure 2.2 shows that the distribution of hours worked by adult minimum wage workers was also very different to those worked by higher-paid workers. It is bimodal with peaks at 16 and 40 hours. By contrast, hours worked by higher-paid workers were concentrated around 35-40 hours with the mode at 37 hours a week.

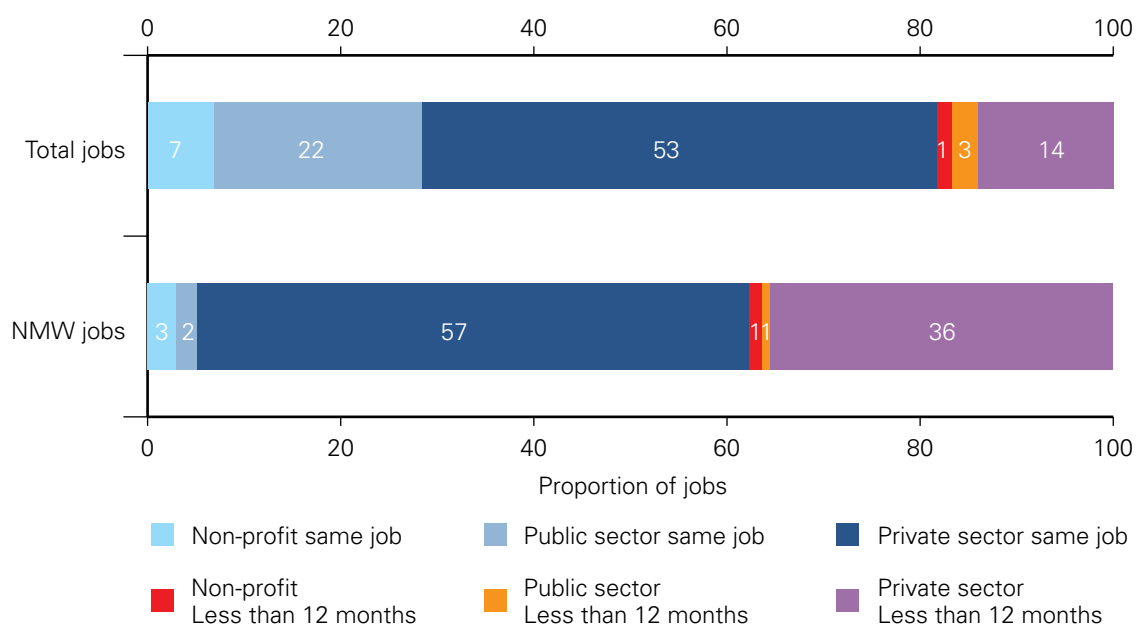
Figure 2.2: Distribution of Hours Worked, UK, 2014

Source: LPC estimates based on ASHE, 2010 methodology, low-pay weights, including those not on adult rates of pay, UK, April 2014. Note: Minimum wage workers are defined as adults (aged 21 and over) earning less than £6.36 an hour (or less than £2.73 if an apprentice in their first year); those aged 18-20 earning less than £5.08 an hour (or less than £2.73 if an apprentice under the age of 19 or in their first year); and 16-17 year olds earning less than £3.77 an hour (or less than £2.73 if an apprentice) in April 2014.

- 2.13** We have noted that part-time jobs, short tenure and temporary jobs were much more likely to be paid at or below the minimum wage. But what about the make-up of the stock of minimum wage jobs? Part-time jobs also accounted for the majority of the minimum wage workforce (60 per cent) compared with just 29 per cent of all jobs.
- 2.14** Similarly in relation to job tenure, Figure 2.3 shows around 38 per cent of minimum wage jobs had tenure of less than 12 months compared with 18 per cent of such jobs in the whole workforce. The private sector also made up the vast majority of minimum wage jobs (93 per cent), compared with 4 per cent and 3 per cent of minimum wage jobs respectively from the public and non-profit sectors. For comparisons, over two-thirds of all jobs (68 per cent) came from the private sector with the remaining 24 per cent from the public sector and 8 per cent from non-profit organisations.³

³ These data differ from those published by ONS in its Public Sector Employment Statistical Bulletin. Public sector employment accounted for 17.7 per cent of total employment in June 2014. However, that data include the self-employed. Using employees only, we estimate that the public sector accounted for 20.6 per cent of all employee jobs.

Figure 2.3: Proportion of All Jobs and Minimum Wage Jobs, by Sector and Tenure, UK, 2014



Source: Low Pay Commission (LPC) estimates based on ASHE, 2010 methodology, low-pay weights, including those not on adult rates of pay, UK, April 2014.

Note: Minimum wage jobs are defined as those held by adults (aged 21 and over) earning less than £6.36 an hour (or less than £2.73 if an apprentice in their first year); those aged 18-20 earning less than £5.08 an hour (or less than £2.73 if an apprentice under the age of 19 or in their first year); and 16-17 year olds earning less than £3.77 an hour (or less than £2.73 if an apprentice) in April 2014.

2.15 Combining job tenure and sector, Figure 2.3 also shows that around 57 per cent of minimum wage jobs had a tenure of one year or less and in the private sector, slightly higher than the share of such jobs in all jobs (53 per cent). Private sector jobs with tenure of one year or less accounted for 36 per cent of all minimum wage jobs, more than double the share of such jobs (14 per cent) in all jobs. In contrast, public sector jobs with tenure of over one year made up only 2 per cent of the minimum wage workforce despite such jobs accounting for over one-fifth of all jobs.

2.16 In terms of job types, around 17 per cent of minimum wage jobs were temporary, more than double their share of all jobs (8 per cent). While the majority of minimum wage jobs were therefore permanent (81 per cent), the share of such jobs among minimum wage jobs was 10 percentage points lower than that in all jobs (91 per cent).

Minimum Wage Jobs by Low-paying Sector

- 2.17** Table 2.2 shows just over three-quarters of minimum wage jobs were in low-paying industries. Broken down by sector, those with the most minimum wage jobs were hospitality and retail, between them accounting for just over 45 per cent of minimum wage jobs. Social care, cleaning, and employment agencies each accounted for between 6 and 7 per cent of minimum wage jobs. A further 10 per cent of minimum wage jobs were in the other low-paying industries. Among these other industries, agriculture and textiles accounted for the smallest proportions of minimum wage jobs, less than 1 per cent for each sector. Around 30 per cent of all jobs in hairdressing and cleaning were minimum wage jobs but they respectively accounted for just 2 per cent and 7 per cent of all minimum wage jobs. The next highest was in hospitality where 25 per cent of jobs were minimum wage and the sector accounted for a quarter of minimum wage jobs. The second largest low-paying sector, retail, had around one in ten jobs that were minimum wage jobs. It should be noted that – as we observed last year – around a quarter of all minimum wage jobs were not in the low-paying sectors.
- 2.18** As we have already explained, and Table 2.1 shows, the proportion of all jobs covered by our definition of low-paying occupations was greater than for our definition of low-paying industries. Over four-fifths of all minimum jobs were in our low-paying occupations. Again we find that these minimum wage jobs were concentrated in hospitality, retail and cleaning, which together made up about 55 per cent of minimum wage jobs in the UK. The other low-paying occupations accounted for about 29 per cent of all minimum wage jobs, leaving around 229,000 (or 16 per cent) of minimum wage jobs outside our classification of low-paying occupational sectors.

Table 2.1: Number and Proportion of Minimum Wage Jobs,^a by Low-paying Industry and Occupation, UK, 2014

Industry/occupation	Industry ^b			Occupation ^c		
	Number (000s)	Percentage of all NMW jobs (%)	Percentage of jobs that were NMW jobs in each sector (%)	Number (000s)	Percentage of all NMW jobs (%)	Percentage of jobs that were NMW jobs in each sector (%)
All	1,395	100.0	5.3	1,395	100.0	5.3
Non low-paying sectors	342	24.5	1.8	229	16.4	1.2
All low-paying sector	1,054	75.5	13.8	1,166	83.6	14.3
Hospitality	345	24.7	24.6	292	21.0	24.5
Retail	288	20.6	9.7	271	19.4	12.5
Cleaning	91	6.5	31.2	199	14.2	23.8
Social care	89	6.4	8.9	64	4.6	8.2
Employment agencies	89	6.4	14.5	-	-	-
Leisure, travel and sport	48	3.5	10.6	30	2.1	10.5
Hairdressing	28	2.0	28.8	27	1.9	26.1
Food processing	28	2.0	7.3	50	3.6	15.1
Childcare	28	2.0	14.3	44	3.1	12.1
Agriculture	13	0.9	9.3	14	1.0	8.0
Textiles and clothing	6	0.4	9.4	5	0.4	9.0
Office work	-	-	-	32	2.3	7.2
Non-food processing	-	-	-	30	2.1	7.6
Storage	-	-	-	64	4.6	11.1
Transport	-	-	-	44	3.2	9.6

Source: LPC estimates based on ASHE, 2010 methodology, low-pay weights, including those not on adult rates of pay, UK, April 2014. Notes:

- Minimum wage jobs are defined as those held by adults (aged 21 and over) earning less than £6.36 an hour (or less than £2.73 if an apprentice in their first year); those aged 18-20 earning less than £5.08 an hour (or less than £2.73 if an apprentice under the age of 19 or in their first year); and 16-17 year olds earning less than £3.77 an hour (or less than £2.73 if an apprentice) in April 2014.
- The low-paying industries are defined using the Standard Industrial Classification (SIC) 2007. More detail is given in Appendix 4 of this report.
- The low-paying occupations are defined using the Standard Occupational Classification (SOC) 2010. More detail is given in Appendix 4 of this report.
- '-' denotes not available.

Minimum Wage Jobs by Firm Size

2.19 As previously noted in Figure 2.2, the proportion of minimum wage jobs is highest for the smallest firms: it falls as the size of firm increases. Table 2.2 shows that, in April 2014, it ranged from 3.8 per cent in large firms to 12.2 per cent in micro firms. Micro and other small firms together accounted for 20.8 per cent of the total workforce, but they made up 36.8 per cent of all minimum wage jobs – approaching double their share. Medium-sized firms accounted for 14.1 per cent of total employee jobs, but a slightly higher proportion of all NMW jobs (15.4 per cent). In contrast to those smaller firms, large firms made up just under half of minimum wage jobs (47.6 per cent), despite employing the majority of the workforce according to ASHE (65.0 per cent).

Table 2.2: Number and Proportion of Minimum Wage Jobs,^a by Firm Size, UK, 2014

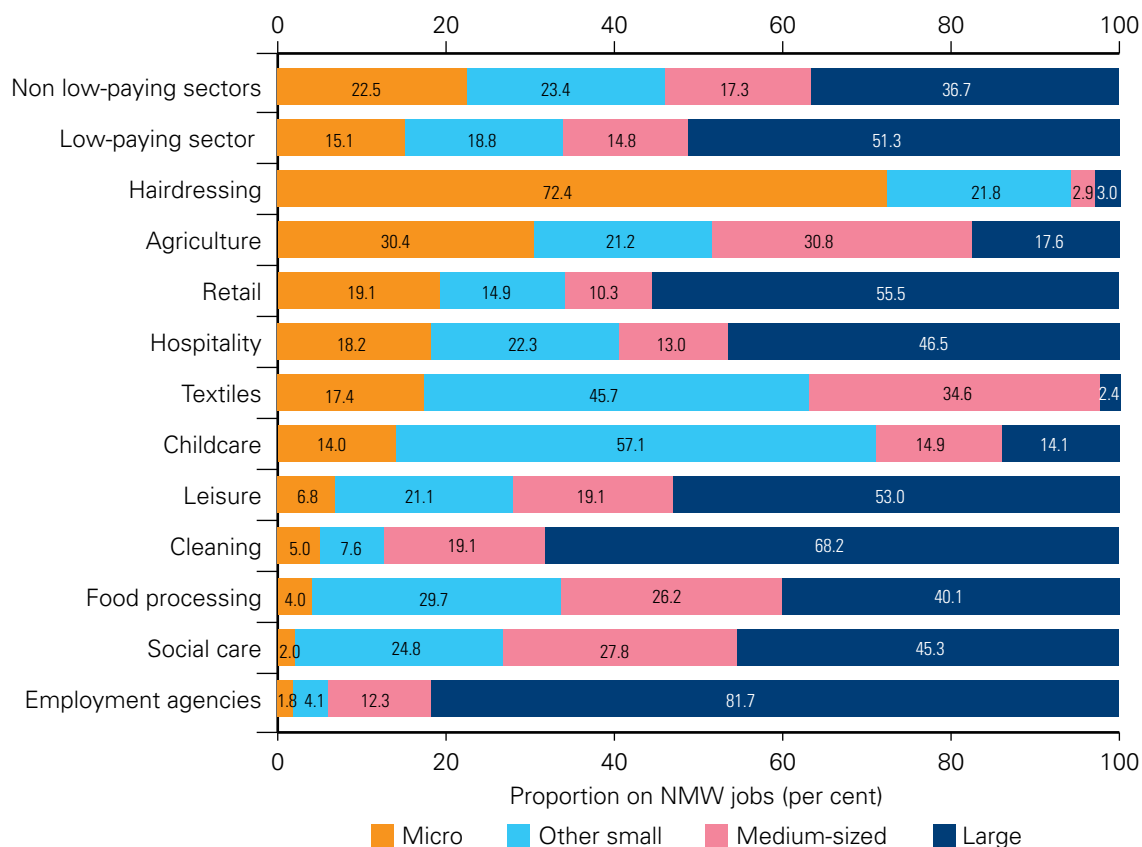
	Number of NMW jobs	Proportion of jobs that were NMW jobs for each firm size (%)	Proportion of all NMW jobs (%)	Proportion of all jobs (%)
Micro	236	12.2	16.9	7.3
Other small	278	7.8	20.0	13.5
Medium-sized	214	5.7	15.4	14.1
Large	665	3.8	47.7	65.1
Total^b	1,395	5.3	100	100

Source: LPC estimates based on ASHE, 2010 methodology, low-pay weights, including those not on adult rates of pay, UK, April 2014. Notes:

- Minimum wage jobs are defined as those held by adults (aged 21 and over) earning less than £6.36 an hour (or less than £2.73 if an apprentice in their first year); those aged 18-20 earning less than £5.08 an hour (or less than £2.73 if an apprentice under the age of 19 or in their first year); and 16-17 year olds earning less than £3.77 an hour (or less than £2.73 if an apprentice) in April 2014.
- There were 0.1 per cent of employee jobs with no reported firm size, and these were excluded from this analysis.

2.20 The distribution of NMW jobs by industry and firm size suggests there were significant differences between sectors. Figure 2.4 shows micro firms (15.1 per cent) and other small firms (18.8 per cent) had lower proportions of minimum wage jobs in all the low-paying industries than their non low-paying counterparts (22.5 per cent and 23.4 per cent respectively). However, the share of minimum wage jobs by firm size varied greatly by industry. Minimum wage jobs in hairdressing predominantly came from small firms, among which micro firms and other small firms respectively accounted for 72 per cent and 22 per cent of minimum wage jobs in this sector. Small firms also made up the majority of minimum wage jobs in childcare (71 per cent), textiles (63 per cent) and agriculture (52 per cent). In contrast, only around 6 per cent of minimum wage jobs in employment agencies and 13 per cent in cleaning were in small firms.

Figure 2.4: Share of Minimum Wage Jobs,^a by Industry and Firm Size, UK, 2014



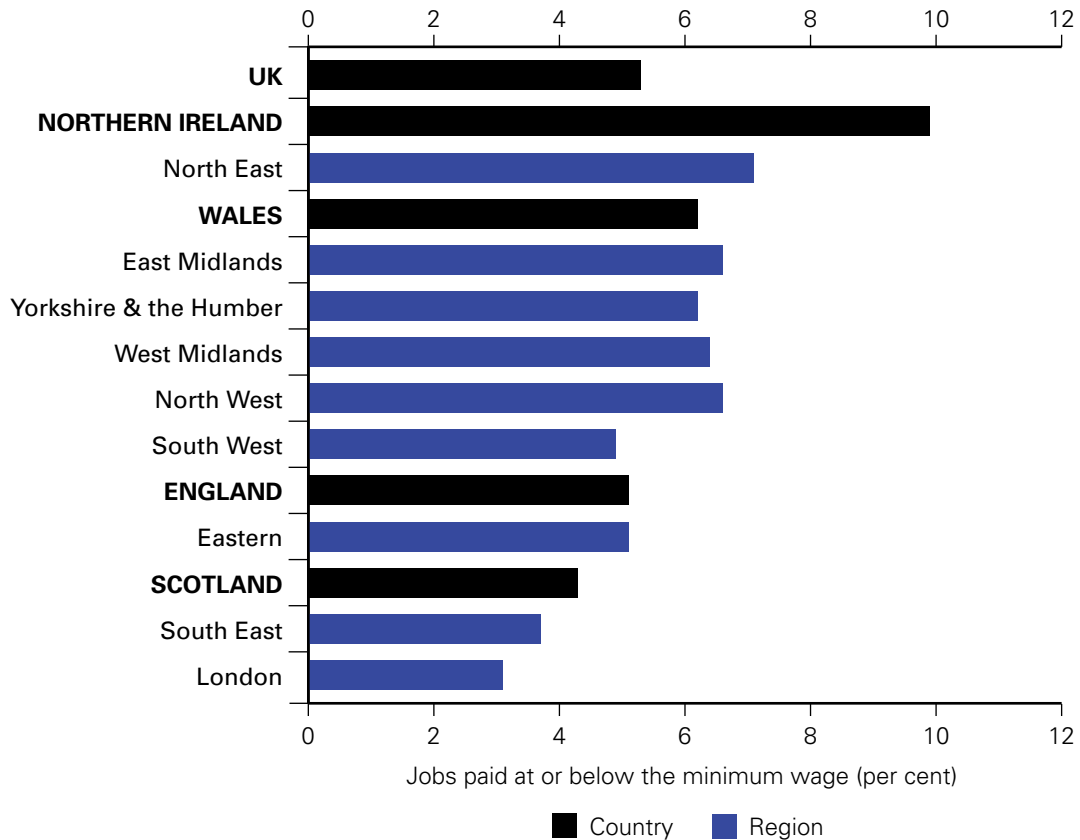
Source: LPC estimates based on ASHE, 2010 methodology, low-pay weights, including those not on adult rates of pay, UK, April 2014. Notes:

- a. Minimum wage jobs are defined as those held by adults (aged 21 and over) earning less than £6.36 an hour (or less than £2.73 if an apprentice in their first year); those aged 18-20 earning less than £5.08 an hour (or less than £2.73 if an apprentice under the age of 19 or in their first year); and 16-17 year olds earning less than £3.77 an hour (or less than £2.73 if an apprentice) in April 2014.
- b. Those with no reported firm size were excluded from this analysis.

Minimum Wage Jobs by Country and Region

2.21 The distribution of minimum wage jobs also varied greatly by region and nation across the UK. Figure 2.5 shows that, in April 2014, around 9.9 per cent of all jobs in Northern Ireland were minimum wage jobs, the highest proportion across the countries of the UK, followed by 6.2 per cent in Wales and 5.1 per cent in England. Scotland was the country with the lowest proportion of minimum wage jobs (4.3 per cent).

Figure 2.5: Minimum Wage Jobs, by Country and Region, 2014



Source: LPC estimates based on ASHE, 2010 methodology, low-pay weights, including those not on adult rates of pay, UK, April 2014. Note: Minimum wage jobs are defined as those held by adults (aged 21 and over) earning less than £6.36 an hour (or less than £2.73 if an apprentice in their first year); those aged 18-20 earning less than £5.08 an hour (or less than £2.73 if an apprentice under the age of 19 or in their first year); and 16-17 year olds earning less than £3.77 an hour (or less than £2.73 if an apprentice) in April 2014.

2.22 These differences were reflected in how these minimum wage jobs were shared geographically. England accounted for 82.1 per cent of all minimum wage jobs in the UK, and Scotland 7.2 per cent – lower than the proportions of all jobs accounted for by those countries (83.8 and 8.9 per cent respectively). By contrast, Northern Ireland (5.4 per cent) and Wales (5.2 per cent) had a greater share of minimum wage jobs than their share of total jobs. Northern Ireland has 2.9 per cent of all jobs in the UK, and Wales 4.5 per cent.

2.23 The proportion of jobs paid at or below the minimum wage also varied substantially by English region, ranging from 3.1 per cent in London to 7.1 per cent in the North East. However, because many more people work in London than in the North East, there were more minimum wage jobs there (about 125,000) than there were in the North East (73,000) in April 2014. There were about the same number of minimum wage jobs in the North East and Wales (73,000) and slightly more in Northern Ireland (76,000). As presented in our 2014 Report, the North West was the English region with the highest number and share of minimum wage jobs in the UK (186,000 or 13.3 per cent), followed by the West Midlands (146,000 or 10.5 per cent) and Yorkshire and the Humber (131,000 or 9.4 per cent). Although London has 15.0 per cent of all employee jobs (4.0 million), more than anywhere else, it only accounted for 9.0 per cent of minimum wage jobs. The broader south eastern part of England including the South East, Eastern and London together accounted for more than a quarter of minimum wage jobs (around 356,000 or 25.5 per cent).

National Minimum Wage

2.24 There has been some policy discussion of regional minimum wages. Table 2.3 shows that the proportion of jobs that were minimum wage jobs varied greatly within regions and countries. London had a wide spread, varying from 0.5 per cent in the City of London to 8.4 per cent in Sutton. The biggest variation, however, was in the North West, where the proportion of jobs that were minimum wage jobs ranged from 1.0 per cent in Copeland to 21.4 per cent of jobs in West Lancashire.

Table 2.3: Minimum Wage Jobs,^a by Country and English Region, Highest and Lowest Local Authority within Each Area, 2014

Country/Region	Percentage of NMW jobs (%)	Highest (%)	Lowest (%)
England	5.1	West Lancashire (21.4)	Mole Valley (0.3)
Northern Ireland	9.9	-	-
Scotland	4.3	South Ayrshire (9.2)	Falkirk (1.8)
Wales	6.2	Merthyr Tydfil (10.4)	Monmouthshire (4.4)
North East	7.1	Hartlepool (12.8)	Sunderland (5.0)
North West and Merseyside	6.6	West Lancashire (21.4)	Copeland (1.0)
East Midlands	6.6	North East Derbyshire (13.3)	Rutland (3.0)
West Midlands	6.4	Wolverhampton (10.1)	Worcester (3.2)
York & Humber	6.2	North East Lincolnshire (9.6)	Calderdale (3.0)
Eastern	5.1	Tendring (9.4)	Broxbourne (1.9)
South West	4.9	West Somerset (15.1)	Christchurch (3.0)
South East	3.7	Woking (13.4)	Mole Valley (0.3)
London	3.1	Sutton (8.4)	City of London (0.5)

Source: LPC estimates based on ASHE, 2010 methodology, low-pay weights, including those not on adult rates of pay, UK, April 2014. Notes:

- a. Minimum wage jobs are defined as those held by adults (aged 21 and over) earning less than £6.36 an hour (or less than £2.73 if an apprentice in their first year); those aged 18-20 earning less than £5.08 an hour (or less than £2.73 if an apprentice under the age of 19 or in their first year); and 16-17 year olds earning less than £3.77 an hour (or less than £2.73 if an apprentice) in April 2014.
- b. '-' denotes not available.

2.25 The South West also contained very different areas with very different concentrations of minimum wage jobs, ranging from 3.0 per cent in Christchurch to 15.1 per cent in West Somerset. At the other extreme, Wales had the smallest variation ranging from 4.4 per cent in Monmouthshire to 10.4 per cent in Merthyr Tydfil. The spread was also relatively small in the North East, ranging from 5.0 per cent in Sunderland to 12.8 per cent in Hartlepool.

Characteristics of National Minimum Wage Workers

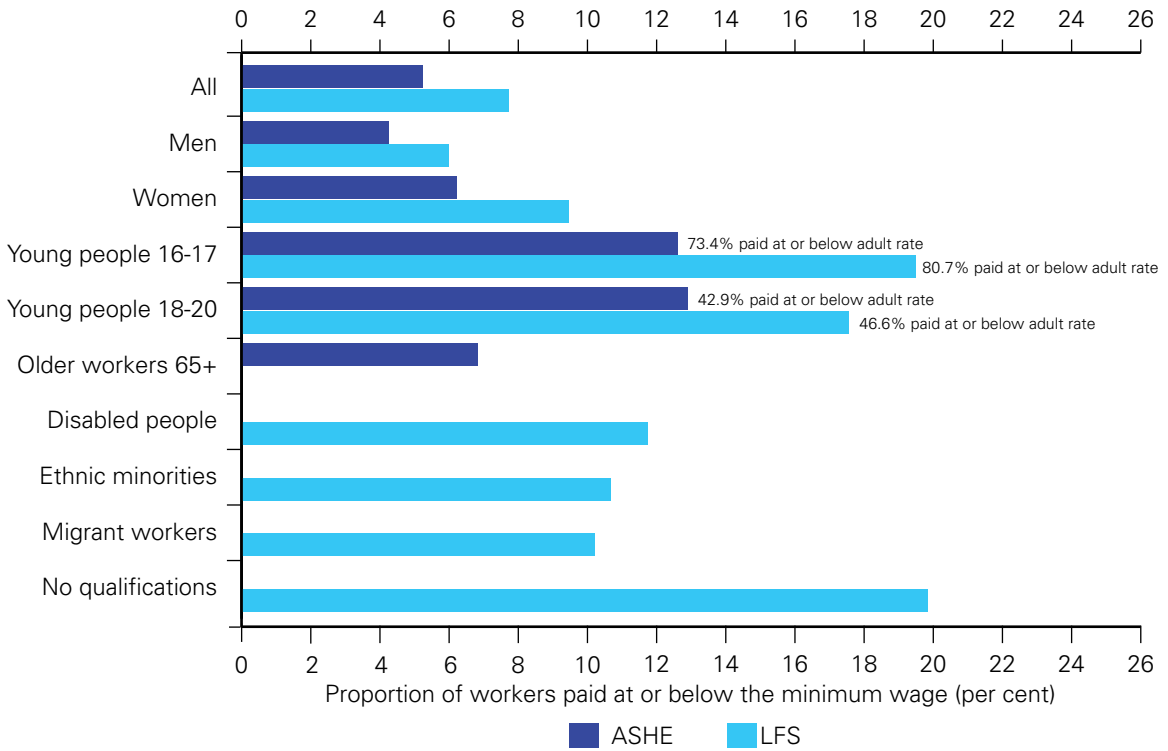
2.26 Having looked at the characteristics and locations of minimum wage jobs, we move on to explore the kinds of workers who hold these jobs. Those groups of workers that were more likely to have minimum wage jobs include: women; young workers; older workers; disabled people; ethnic minorities; migrant workers and those with no qualifications.

2.27 Earnings data from ASHE are only available for age and gender, so we draw here on LFS data for other groups. As noted above, these are self-reported and not regarded as reliable as those derived from ASHE: apart from having a larger sample size, ASHE is based on employer records whereas derived hourly earnings from LFS are estimated according to self-reported earnings and hours of work, often including unpaid hours. This has led to estimates of hourly earnings derived from LFS being lower than those derived from ASHE. A methodology has been developed by ONS to improve the quality of the LFS data and we use that approach in our analysis. However, LFS estimates of numbers of minimum wage jobs still tend to be higher than those from ASHE: around 7.7 per cent of jobs recorded by the LFS were minimum wage jobs, compared with 5.3 per cent in ASHE. More detail on the methodology can be found in Appendix 4.

Minimum Wage Workers by Age

2.28 Figure 2.6 shows the groups of workers that were more likely to be in minimum wage jobs compared with the overall working population. Young people and those with no qualifications were the groups most likely to have minimum wage jobs in the second quarter of 2014. According to ASHE, around 73 per cent of jobs held by those aged 16-17 paid at or below the adult rate of the minimum wage. This was even higher using the LFS (about 81 per cent). The proportion of young people aged 18-20 in jobs that paid at or below the adult rate of the minimum wage was also high, at around 43 per cent, according to ASHE, and up to 47 per cent using the LFS. The pattern also holds if we restrict our analysis to the age-related minimum wage rates, young people still had higher likelihoods of being in those age-related minimum wage jobs than older age groups. According to ASHE, around 13 per cent of jobs held by 16-17 and 18-20 year olds were paid at or below their age-related minimum wage rates. If we exclude apprentices from this analysis, the proportions of minimum wage jobs were lower, at 10.2 per cent for 16-17 year olds and at 11.7 per cent for 18-20 year olds. Using LFS, the proportions were higher (nearly 20 per cent and just over 18 per cent respectively). The coverage of older workers aged 65 and over was much lower than for younger people, although with around 7 per cent in minimum wage jobs estimated using ASHE, was still higher than the national average (5 per cent).

Figure 2.6: Minimum Wage Workers, by Groups of Workers, UK, 2014

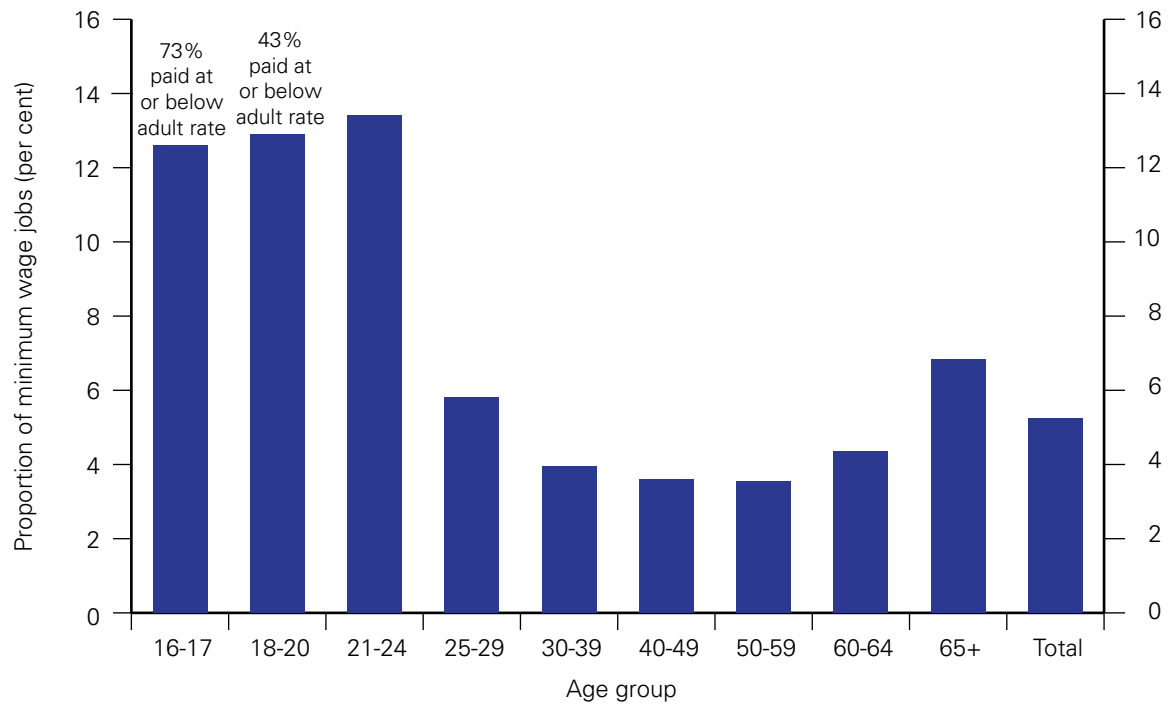


Source: LPC estimates based on ASHE, 2010 methodology, low-pay weights, including those not on adult rates of pay, UK, April 2014 and LFS Microdata, income weights, quarterly, not seasonally adjusted, UK, Q2 2014.

Note: Minimum wage workers are defined as adults (aged 21 and over) earning less than £6.36 an hour (or less than £2.73 if an apprentice in their first year); those aged 18-20 earning less than £5.08 an hour (or less than £2.73 if an apprentice under the age of 19 or in their first year); and 16-17 year olds earning less than £3.77 an hour (or less than £2.73 if an apprentice) in April 2014.

2.29 Turning to the distribution of NMW jobs by age, this generally follows a u-shape, with jobs held by younger and older age groups more likely to be paid at or below the minimum wage. Figure 2.8 shows that the proportion of age-related minimum wage jobs was actually highest among 21-24 year olds, at 13.4 per cent, followed by 12.9 per cent among 18-20 year olds and 12.6 per cent among 16-17 year olds. The proportion of minimum wage jobs then fell to 4.0 per cent for 30-39 year olds, 3.9 per cent for 40-49 year olds and to a low of 3.5 per cent for 50-59 year olds. Thereafter it rose, covering 4.4 per cent of 60-64 year olds and 6.8 per cent for those aged 65 or above.

Figure 2.7: Minimum Wage Workers, by Age, UK, 2014

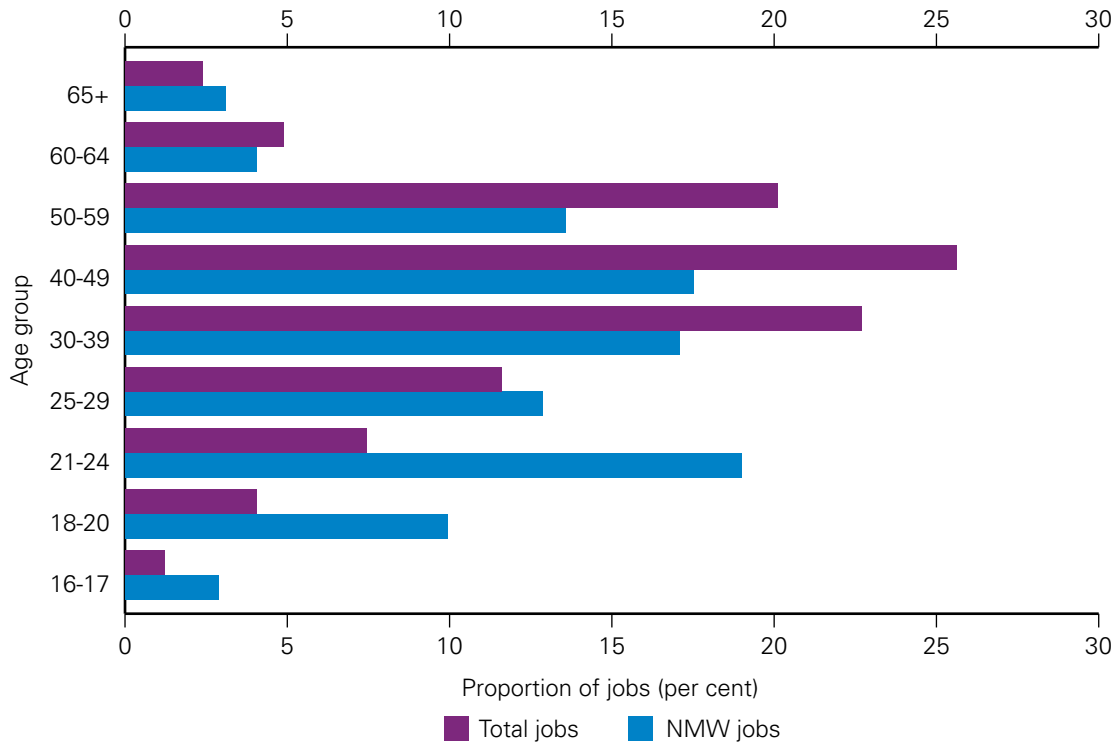


Source: Low Pay Commission (LPC) estimates based on ASHE, 2010 methodology, low-pay weights, including those not on adult rates of pay, UK, April 2014.

Note: Minimum wage workers are defined as adults (aged 21 and over) earning less than £6.36 an hour (or less than £2.73 if an apprentice in their first year); those aged 18-20 earning less than £5.08 an hour (or less than £2.73 if an apprentice under the age of 19 or in their first year); and 16-17 year olds earning less than £3.77 an hour (or less than £2.73 if an apprentice) in April 2014.

2.30 Because younger and older age groups were more likely to be paid at or below the minimum wage than middle-age groups, younger and older workers tended to account for greater proportions of minimum wage jobs than their shares of all jobs. Figure 2.8 shows jobs held by 16-17 and 18-20 year olds respectively accounted for 3 per cent and 10 per cent of the total minimum wage workforce, greater than their respective shares of 1 and 4 per cent of all jobs. Despite holding only around 7 per cent of all jobs, 21-24 year olds accounted for 19 per cent of minimum wage jobs, the highest share of any age group. The share of minimum wage jobs was lower for those aged 25-29, at 13 per cent, a little higher than this age group’s share of all jobs (12 per cent). For age groups between age 30 and the State Pension Age (65), this pattern is reversed. The shares of these age groups in the minimum wage workforce were lower than their corresponding shares of all jobs. For those who had reached the State Pension Age, the share of the minimum wage workforce was around 3 per cent, 1 percentage point higher than their share of all jobs.

Figure 2.8: All Workers and Minimum Wage Workers, by Age, UK, 2014



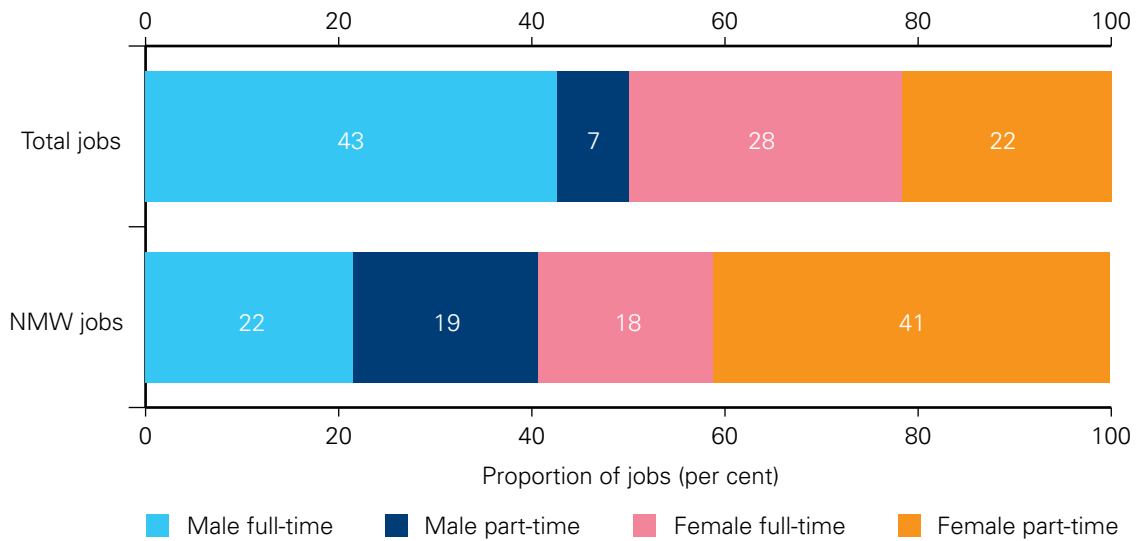
Source: Low Pay Commission (LPC) estimates based on ASHE, 2010 methodology, low-pay weights, including those not on adult rates of pay, UK, April 2014.

Note: Minimum wage workers are defined as adults (aged 21 and over) earning less than £6.36 an hour (or less than £2.73 if an apprentice in their first year); those aged 18-20 earning less than £5.08 an hour (or less than £2.73 if an apprentice under the age of 19 or in their first year); and 16-17 year olds earning less than £3.77 an hour (or less than £2.73 if an apprentice) in April 2014.

Minimum Wage Workers by Gender

2.31 An important aspect of the social make-up of the NMW is that women were 50 per cent more likely than men to be in minimum wage jobs. Around 6 per cent of jobs held by women were paid at or below the minimum wage compared with 4 per cent of jobs held by men. Consequently, women made up the majority of the minimum wage workforce (59 per cent), higher than their share of the total workforce (50 per cent), as shown in Figure 2.9. Looking at the gender split by hours worked, around 41 per cent of minimum wage jobs were held by female part-time workers, almost twice as high as their share of all jobs. A further 18 per cent of minimum wage jobs were held by female full-time workers. The remaining 41 per cent of minimum wage jobs were held by men. These were fairly evenly split between full-time (22 per cent) and part-time (19 per cent).

Figure 2.9: All Jobs and Minimum Wage Jobs, by Gender and Hours, UK, 2014



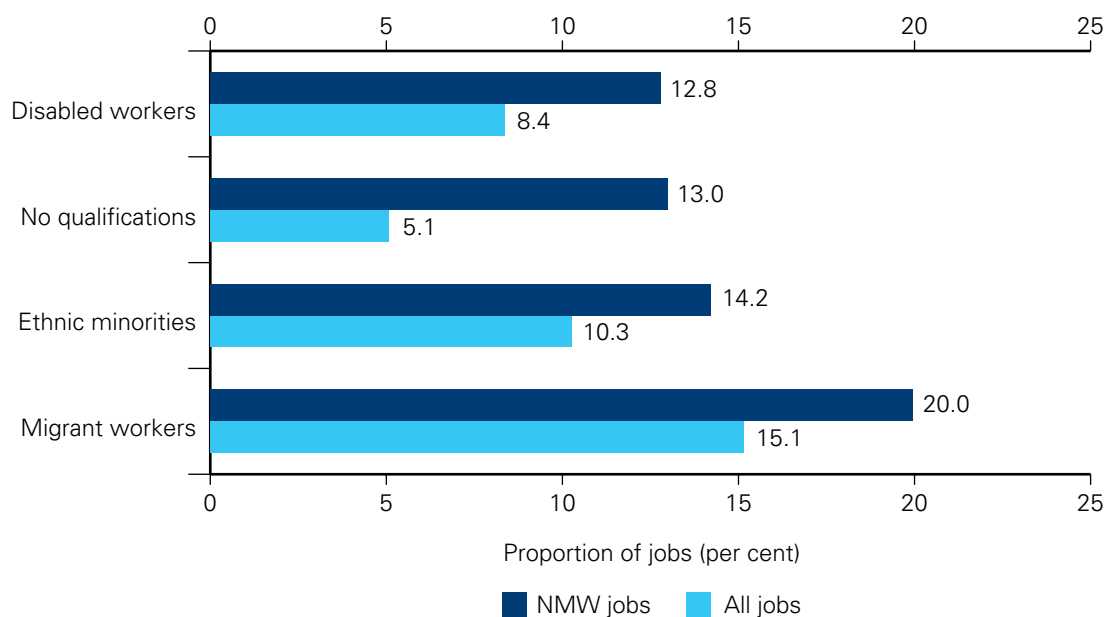
Source: Low Pay Commission (LPC) estimates based on ASHE, 2010 methodology, low-pay weights, including those not on adult rates of pay, UK, April 2014.

Note: Minimum wage jobs are defined as those held by adults (aged 21 and over) earning less than £6.36 an hour (or less than £2.73 if an apprentice in their first year); those aged 18-20 earning less than £5.08 an hour (or less than £2.73 if an apprentice under the age of 19 or in their first year); and 16-17 year olds earning less than £3.77 an hour (or less than £2.73 if an apprentice) in April 2014.

Minimum Wage Workers by Ethnicity, Country of Birth, Disability and Qualification

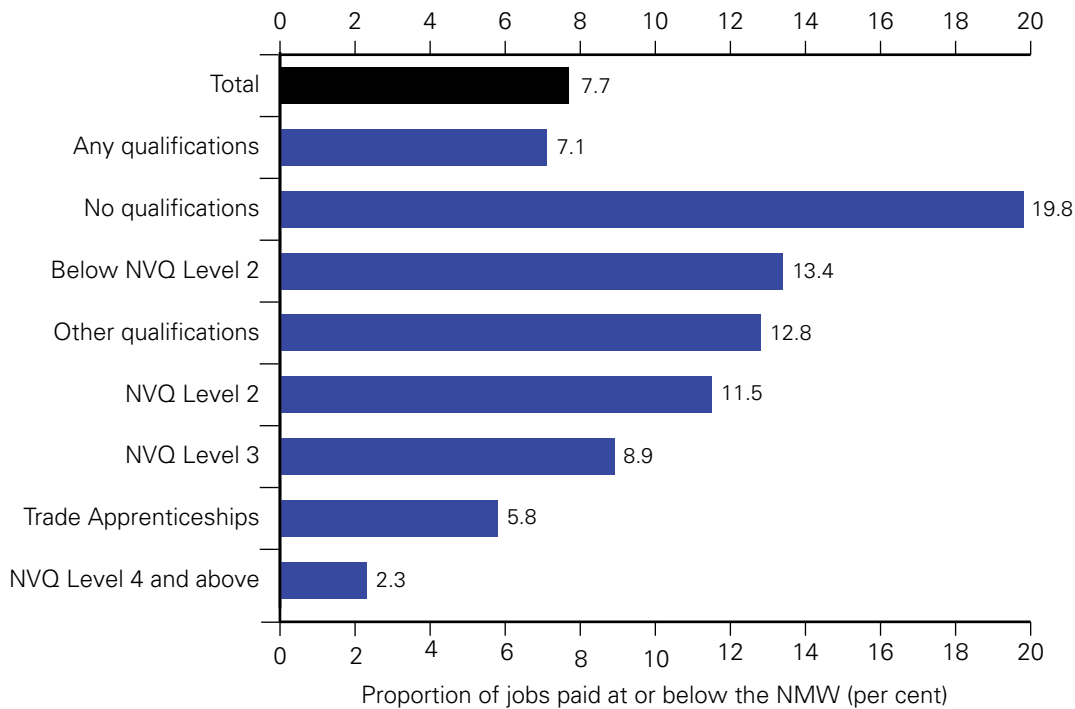
- 2.32** Beyond age and gender, other personal characteristics including ethnicity, country of birth, disability and qualifications have a bearing on the likelihood of being minimum wage workers.
- 2.33** Ethnic minorities, migrants, disabled workers and those with no qualifications were more likely to be in a minimum wage job than their respective comparators, and proportions of minimum wage jobs held by these groups were also higher than their share of the workforce, as shown in Figure 2.10. Around 11.7 per cent of jobs held by disabled workers were minimum wage jobs compared with 7.3 per cent for non-disabled workers. Disabled workers in turn held 12.8 per cent of all minimum wage jobs, despite accounting for 8.4 per cent of total employee jobs.
- 2.34** About one in five minimum wage workers were born outside the UK, compared with 15 per cent of the total workforce. Just over one in ten jobs (10.2 per cent) held by migrant workers were paid at or below the minimum wage compared with 7.3 per cent for UK-born workers.

Figure 2.10: All Workers and Minimum Wage Workers, by Group of Workers, UK, 2014



Source: LPC estimates based on LFS Microdata, income weights, quarterly, not seasonally adjusted, UK, Q2 2014.
 Note: Minimum wage workers in LFS are defined as adults (aged 21 and over) earning less than £6.36; youths (aged 18-20) earning less than £5.08; and 16-17 year olds earning less than £3.77 in April 2014.

- 2.35** Around 10.7 per cent of jobs held by ethnic minority groups were minimum wage jobs compared with 7.4 per cent for White workers. Accordingly 14.2 per cent of minimum wage jobs were held by ethnic minority groups, higher than their share of all jobs (10.3 per cent). However, presenting ethnic minority and migrant worker groups as an aggregate hides large variations between them. The proportions of Black workers (7.1 per cent) and Indian workers (7.9 per cent) in minimum wage jobs were lower than or similar to that of White workers (7.4 per cent). In contrast, 20.4 per cent of Pakistani/Bangladeshi workers were in minimum wage jobs, the highest proportion among all ethnic groups.
- 2.36** There remains a steep skills gradient in minimum wage jobs. According to the LFS, people with no qualifications held 13.0 per cent of minimum wage jobs, although they only accounted for just 5.1 per cent of all jobs. Figure 2.11 shows that the lower the qualification the higher the proportion of minimum wage jobs held. Around 19.8 per cent of people with no qualifications held minimum wage jobs compared with 7.1 per cent of those with qualifications.

Figure 2.11: Minimum Wage Workers, by Qualification, UK, 2014

Source: LPC estimates based on LFS Microdata, income weights, quarterly, not seasonally adjusted, UK, Q2 2014.

Note: Minimum wage workers in LFS are defined as adults (aged 21 and over) earning less than £6.36; youths (aged 18-20) earning less than £5.08; and 16-17 year olds earning less than £3.77 in April 2014.

2.37 The proportion of minimum wage jobs increased from 2.3 per cent of those qualified at NVQ level 4 (the equivalent of a university undergraduate degree) and above to 19.8 per cent for those with no qualifications. Only 5.8 per cent of jobs held by those with a trade apprenticeship were minimum wage jobs.

2.38 This chapter has 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. In addition, this section has shown that a higher proportion of women, young workers, older workers, ethnic minorities, migrant workers, disabled workers 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

2.39 When the National Minimum Wage (NMW) was introduced in the UK, there were concerns that it would lead to adverse outcomes in the economy. First, some argued that it would lead to higher price inflation, as workers paid above the minimum wage attempted to maintain differentials putting upward pressure on wage costs that were then passed onto consumers. Second, some were worried it would lead to a loss of jobs, as employers reduced demand for labour in response to the resultant higher labour costs. In assessing the impact of the NMW, and whether these two main concerns have been borne out, we first investigate the impact of the introduction and subsequent increases in the minimum wage on earnings (and labour costs). If the minimum wage had no impact on earnings, then it would be unlikely to have consequent effects on employment.

National Minimum Wage

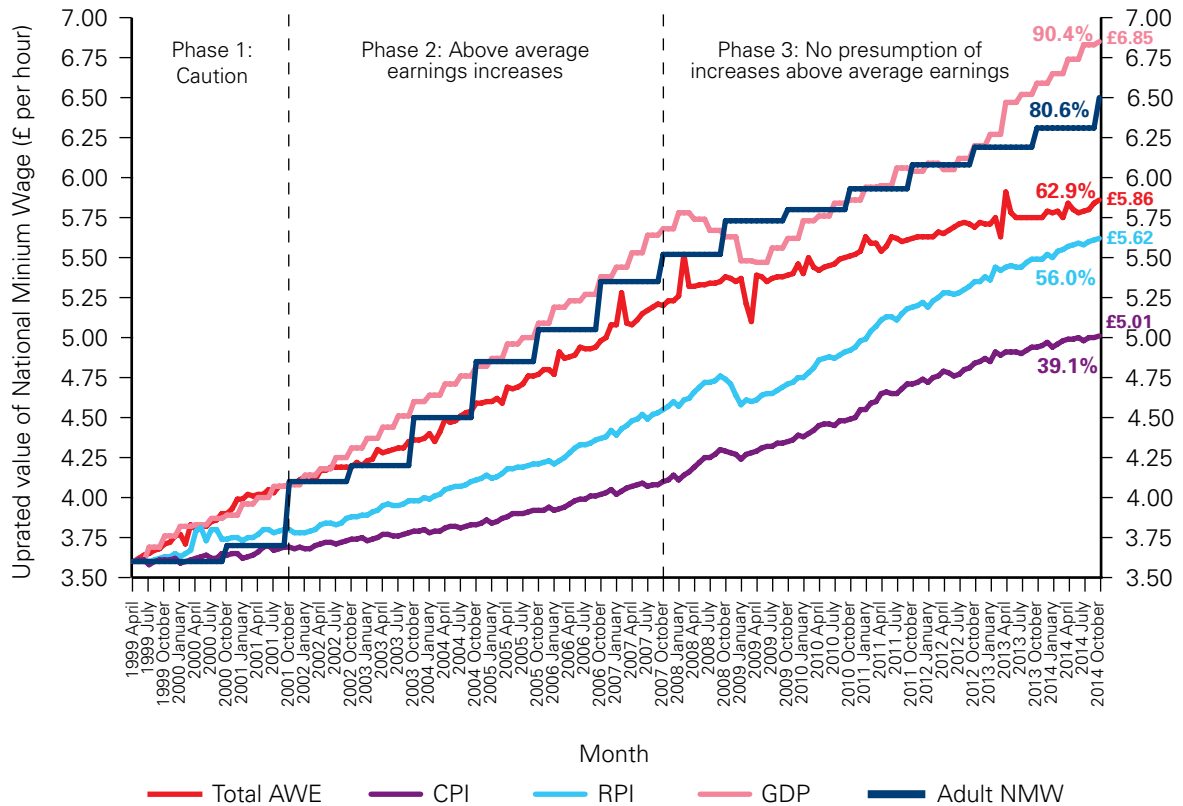
- 2.40** In order to do this, we mainly use official data sources such as the Annual Survey of Hours and Earnings (ASHE) and the Labour Force Survey (LFS), but we also consider information from various pay research organisations as well as findings from our commissioned research and that of other organisations.
- 2.41** We begin with an overview of how the adult rate of the NMW has increased in comparison with general price inflation, and changes to average earnings and economic output. We then look in more detail at: the impact of the adult rate of the NMW on earnings; pay settlements; and pay structures.

National Minimum Wage Relative to Prices and Earnings

- 2.42** The NMW has increased by nearly 81 per cent since it was introduced on 1 April 1999, from £3.60 an hour to £6.50 an hour. That rate of increase, as shown in Figure 2.12, has been faster than both price inflation and average earnings growth but has not quite kept up with the growth in nominal output. Between April 1999 and October 2014, average earnings grew by around 62.5 per cent, more than 18 percentage points less than the increase in the NMW – a gap of more than 1 percentage point a year. As measured by the two main price inflation measures used for pay bargaining and pay-setting – the Retail Price Index (RPI) and the Consumer Price Index (CPI) – price inflation over that period increased even more slowly. RPI went up by around 56 per cent and CPI by around 39 per cent. The consequence of these increases lagging the increases in the NMW is that the real value of the NMW increased significantly between April 1999 and October 2014. However, the increase in the value of the economy was higher over this period, with nominal gross domestic product increasing by just over 90 per cent.
- 2.43** We recommend the adult rate of the NMW. If the NMW had instead been based on a simple formula related to average earnings growth, it would have risen to £5.85 an hour by October 2014 – 65 pence lower than the actual level of the NMW in October 2014. If that formula had instead been based on simple measures of price inflation, the NMW would now be £5.62 an hour using RPI or £5.00 an hour using CPI. That would be 88 pence or £1.50 below its current level. In contrast, increasing the NMW in line with nominal GDP would have meant that it was 35 pence higher than its current level, at £6.85 an hour.
- 2.44** Figure 2.12 also shows that there have been three distinct phases in the evolution of the NMW. The first, introductory phase saw the NMW introduced at a relatively cautious level and updated roughly in line with CPI price inflation in its first 18 months, while the Commission awaited the outcome of research on employment and wage impacts. The second, more expansive, phase came after this research and analysis suggested that the NMW had not had a significant adverse effect on jobs or the economy. This phase was characterised by increases in NMW that were above average earnings growth (and well above price inflation). Again, both research and in-house analysis conducted found little impact on jobs, hours or the economy, outside of a few specific groups at key times in the development of the NMW. However, the onset of recession and a downturn in the low-paying sector jobs market led to a third phase that has been characterised by NMW increases around average wage increases but below price inflation. In our 2014 Report,

we discussed whether we might start to enter a fourth phase characterised by faster growth in the NMW. We continue those discussions in this report.

Figure 2.12: Increases in the Real and Relative Value of the National Minimum Wage, UK, 1999-2014

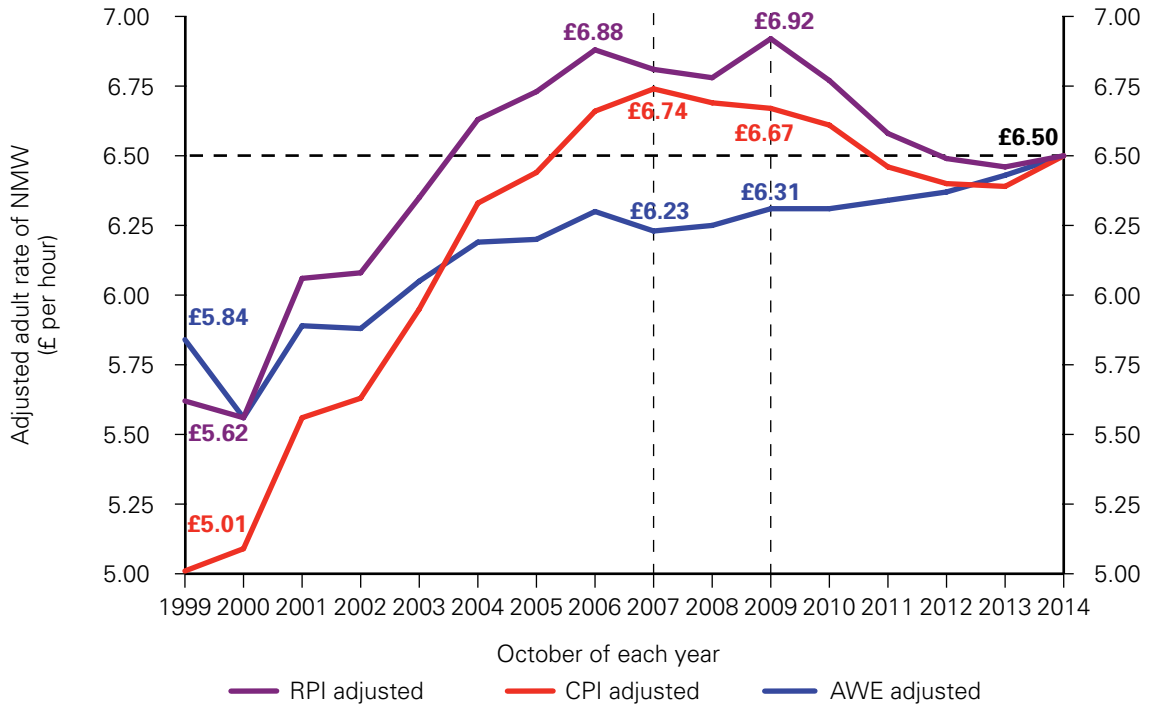


Source: LPC estimates based on ONS data: AEI including bonuses (LNMQ), 1999, AWE total pay (KAB9), 2000-14, CPI (D7BT), 1999-2014, and RPI (CHAW), 1999-2014, monthly; and nominal GDP (YBHA), 1999-2014, quarterly, seasonally adjusted (AWE, AEI and GDP only), UK (GB for AWE and AEI).

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 2014.

2.45 These phases are also evident in Figure 2.13, which shows the real and relative value of the adult rate of NMW since 1999 (the comparable chart for median hourly wages is Figure 1.10 in Chapter 1). When looking at the real value of the NMW, it shows two distinct periods: before and after the onset of recession. Using CPI as the measure of inflation, the real value of the NMW (in 2014 prices) increased sharply from £5.01 an hour in 1999 to £6.74 an hour in 2007, an average annual increase of 4.3 per cent. Since then the real value of the NMW has declined, falling to £6.39 in October 2013, a total loss of 5.1 per cent, or 0.9 cent each year, since 2007. However, the recent increase of 3 per cent in the NMW in October 2014 has begun to restore some of that lost value, with the real value of the NMW increasing by 1.7 per cent since October 2013. Against CPI, it has therefore recovered around a third of its lost value.

Figure 2.13: The Real and Relative Value of the National Minimum Wage, UK, 1999-2014



Source: LPC estimates based on ONS data: AEI including bonuses (LNMQ), 1999, AWE total pay (KAB9), 2000-13, CPI (D7BT), 1999-2014, and RPI (CHAW), 1999-2014, monthly; and nominal GDP (YBHA), 1999-2014, quarterly, seasonally adjusted (AWE, AEI and GDP only), UK (GB for AWE and AEI).

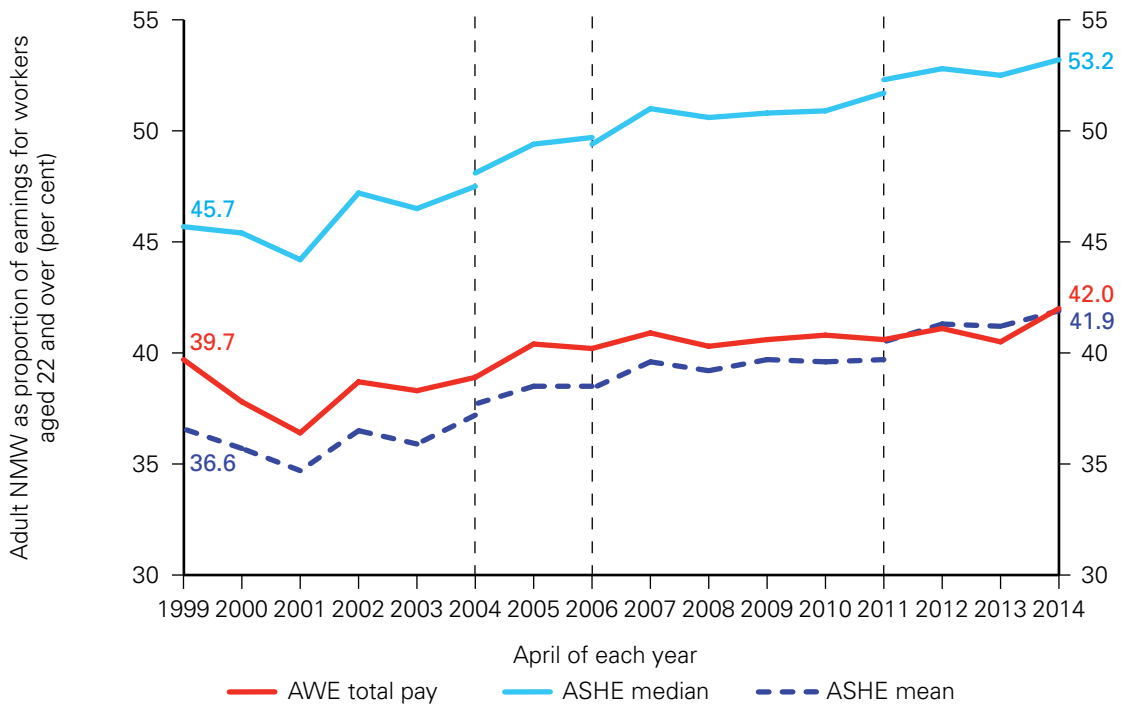
Note: The AWE series began in January 2000 and the AEI series ended in July 2010. Our earnings series is estimated using AEI (including bonuses) from April 1999-January 2000 and AWE (total pay) from January 2000-October 2014.

2.46 Using RPI instead of CPI reveals a similar pattern, although the real value of the NMW peaks in 2009 on this measure rather than 2007 using CPI. The sharp fall in interest rates led to the RPI measure of inflation becoming negative for much of 2009, leading to an increase in the real value of the NMW, despite the NMW increasing by only 1.2 per cent in nominal terms. Between 2000 and 2006, the real value of the NMW increased by 23.8 per cent, or 4.0 per cent each year on average. The real value then plateaued before peaking in October 2009 at £6.92 in 2014 prices. It then fell back sharply in the aftermath of the recession to £6.46 in October 2013, a loss of 6.7 per cent, or 1.7 per cent each year. As with the CPI measure, the real value of the NMW rebounded a little in 2014, up 0.7 per cent, as the increase in the NMW outstripped RPI inflation. Against RPI, it has therefore recovered around a ninth of its lost value.

2.47 Falls in the real value of the NMW reflect a series of recommendations that sought to avoid pricing workers out of jobs at a time when inflation has been running above average wage growth. But, as noted briefly in Chapter 1, they were accompanied by continued increases in the relative value of the NMW. Figure 2.13 also shows that between 2000 and 2006, the relative value of the NMW increased sharply, by 13.3 per cent (or 2.2 per cent each year). Between 2007 and 2014, the relative value increased by 5.0 per cent (or 0.7 per cent each year) – a slower pace but a continued rise. Indeed, the value of the NMW relative to average earnings was at its highest ever in October 2014, at £6.50.

- 2.48** A consequence of the relative increase in the value of the NMW has been an increase in the bite of the minimum wage (its value relative to median or mean earnings), which has grown over time. The bite at the median for those aged 21 and over is 53.9 per cent, up from 53.0 per cent in 2010 and 53.1 per cent in 2013. In order to consider changes over time before 2010, we restrict the analysis to those aged 22 and over. Figure 2.14 shows that the bite at both the median and the mean for these employees reached new peaks in April 2014. The bite at the ASHE median increased from 45.7 per cent in 1999, when the NMW was introduced, to 53.2 per cent in April 2014. This was higher than that recorded in 2013, 52.5 per cent, and higher than the previous peak in 2012, at 52.8 per cent.
- 2.49** The other main source of pay data, Average Weekly Earnings (AWE), presents a similar trend, although it covers all workers not just those aged 22 and over. It is not possible to calculate a median using AWE. We can, however, calculate a mean hourly wage by dividing it by the average number of weekly hours worked according to the Labour Force Survey (LFS). Using this derived AWE measure, the bite at the mean hit a new peak of 42.0 per cent in April 2014. It fell from 39.7 per cent in 1999, when the NMW was introduced, to 36.4 per cent in 2001. It then increased gradually up to 2012, when it reached 41.1 per cent, before falling back in 2013 to 40.5 per cent, and now jumping to its current peak. A similar pattern results if we use the ASHE mean instead of the AWE mean.

Figure 2.14: Bite of the National Minimum Wage Using Different Earnings Measures, UK, 1999-2014



Source: LPC estimates based on ONS data: AEI including bonuses (LNMW), 1999-2000, AWE total pay (KAB9), GB, average actual weekly hours of work (YBUV), UK, monthly, seasonally adjusted, April, 2000-14, and ASHE: without supplementary information, April 1999-2004; with supplementary information, April 2004-06; 2007 methodology, April 2006-11; and 2010 methodology, April 2011-April 2014, standard weights, including those not on adult rates of pay, UK.

Note: The AWE total pay series is not available before January 2000 on a consistent basis, so AEI is used for 1999-2000.

National Minimum Wage

2.50 On data from both the main sources of data on pay then, the bite at the mean was at its highest on record in April 2014. Indeed Table 2.4 shows a similar pattern in the change in bite across the earnings distribution, with the bite at its highest whether that is compared at the lowest decile, lowest quartile, upper decile or upper quartile.

2.51 Importantly, this only takes into account the 1.9 per cent increase in the NMW in October 2013. If wages in general continue to be reasonably subdued, then the 3 per cent increase in October 2014 is likely to lead to a further increase in the relative value of the NMW and a new highest bite being recorded across the distribution when the ASHE earnings data for April 2015 become available.

Table 2.4: Bite of the National Minimum Wage at Various Points on the Earnings Distribution for those Aged 22 and Over, UK, 1999-2014

	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	91.7	74.7	52.8	41.3	34.7	24.0
	2013	6.19	91.7	74.4	52.5	41.2	34.8	24.1
	2014	6.31	91.8	75.6	53.2	41.9	35.3	24.4

Source: LPC estimates based on ASHE: without supplementary information, April 1999-2004; with supplementary information, April 2004-06; 2007 methodology, April 2006-11; and 2010 methodology April 2011-14, standard weights, including those not on adult rates of pay, UK.

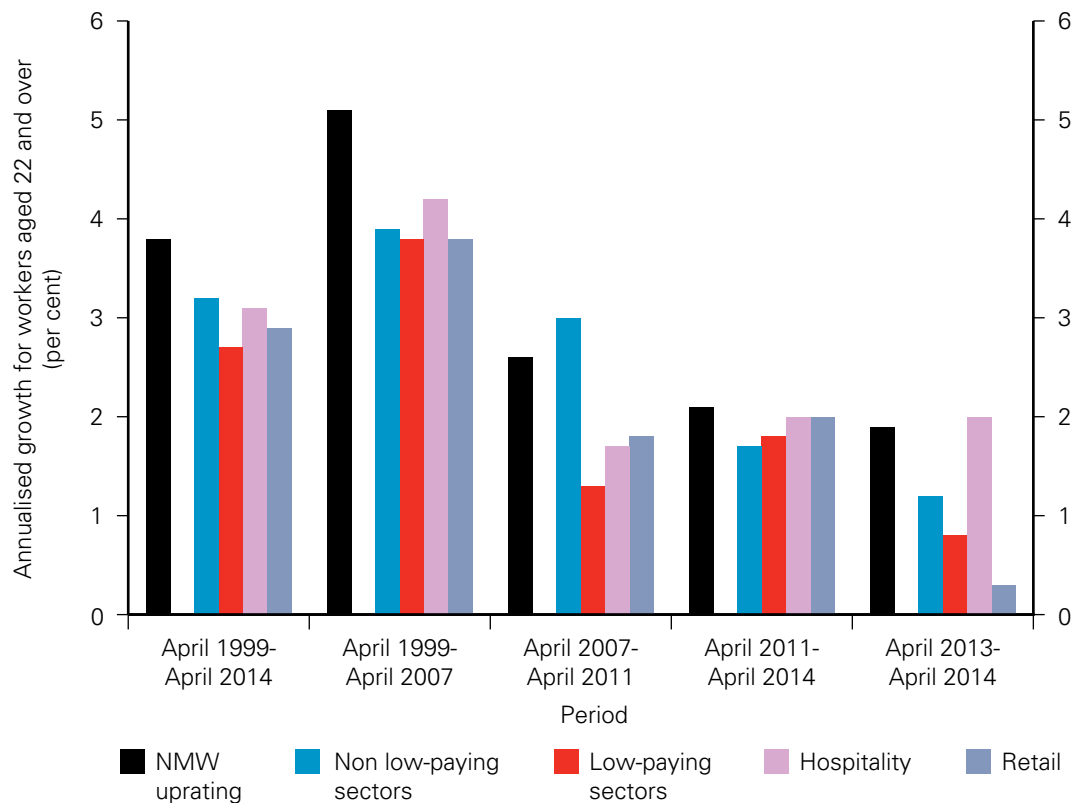
Note: Direct comparisons before and after 2004, before and after 2006, and before and after 2011 should be made with care due to changes in the data series.

2.52 As we reported at the start of this chapter, a higher proportion of jobs in the low-paying occupations and industries, and small firms (micro and other small firms), are minimum wage jobs. The minimum wage has a higher bite in the low-paying sectors and smaller firms than elsewhere in the economy, so it is an instrument that disproportionately affects these businesses. We need to pay additional attention to its impacts. In this section, we first

analyse earnings growth and the bite in the low-paying sectors before going on to consider the size of firm. Figure 2.15 shows that between 1999 and 2014, earnings grew slightly slower in the low-paying sectors than in the rest of the economy (though wage growth in retail and hospitality has been faster than the rest of the economy).

2.53 Again these data conceal divergences over that time. Between 1999 and 2007, average annual wage growth was similar across the economy, with growth in the non low-paying sectors only marginally faster than growth in the low-paying sectors. By contrast, during the recession and the first part of the recovery, earnings growth was much lower in the low-paying sectors (2007-11). Between 2011 and 2014 the pattern changed again with median earnings growth higher in the low-paying sectors than elsewhere as they rebounded from the downturn. But in 2014, that trend appears to have been reversed with earnings growth in the non low-paying sectors outpacing the low-paying sectors. Weaker earnings growth in the low-paying sectors itself disguises divergent experiences: wage growth continued to be strong in hospitality but weakened significantly in retail.

Figure 2.15: Annualised Growth in the National Minimum Wage and Median Earnings for those Aged 22 and Over, by Sector, UK, 1999-2014

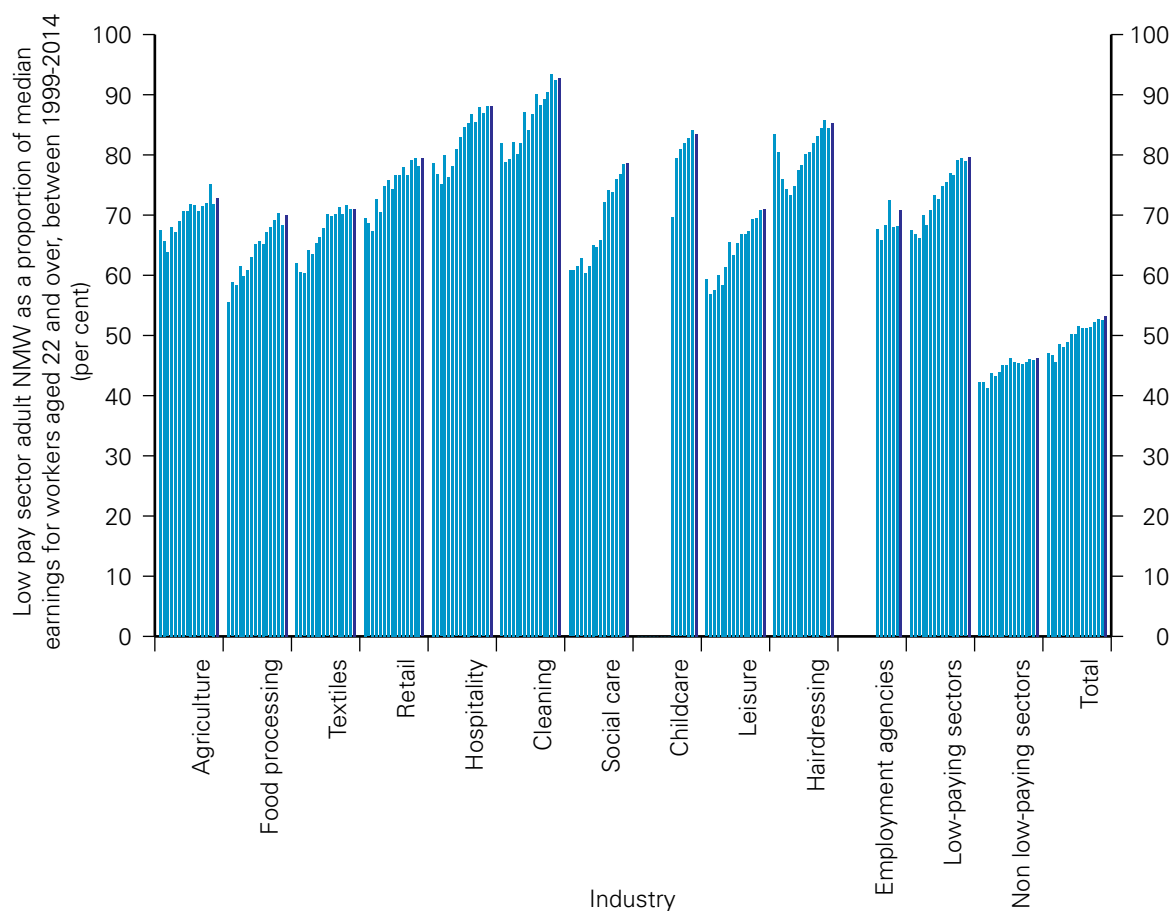


Source: LPC estimates based on ASHE: without supplementary information, April 1999-2004; with supplementary information, April 2004-06; 2007 methodology, April 2006-11; and 2010 methodology April 2011-14, standard weights, including those not on adult rates of pay, UK.

Note: Earnings data have been adjusted to account for the discontinuities in the ASHE data.

2.54 These differences in earnings growth have implications for the bite in the low-paying sectors. Figure 2.16 shows that in general the bite has increased over time and across all the low-paying industries since the NMW was introduced in 1999.

Figure 2.16: Bite of the National Minimum Wage for Workers Aged 22 and Over, by Low-paying Industry, UK, 1999-2014



Source: LPC estimates based on ASHE: without supplementary information, April 1999-2003; with supplementary information, April 2004-05; 2007 methodology, April 2006-10; and 2010 methodology April 2011-14, standard weights, including those not on adult rates of pay, UK.

Notes:

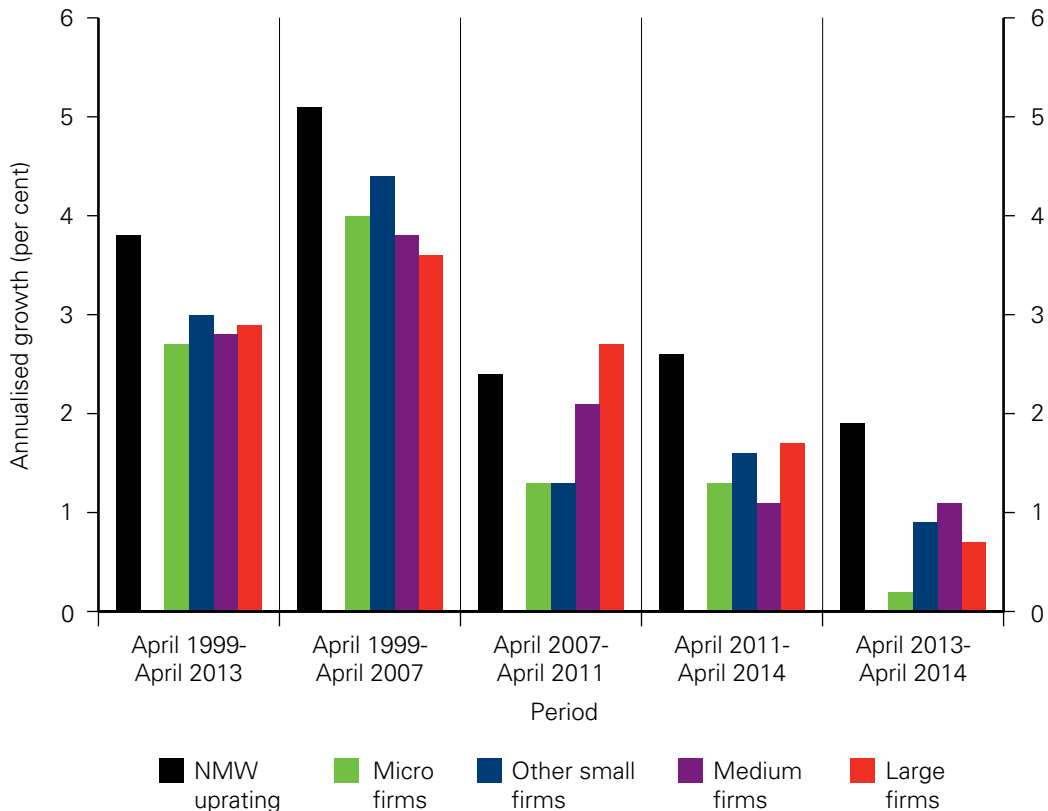
- Definitions for the low-paying industries are based on Standard Industrial Classification (SIC) codes. Data from 1999-2007 are based on SIC 2003 codes. Data from 2008-12 are based on SIC 2007 codes. Because of this change in methodology direct comparisons before and after 2007 should be made with care.
- Data on childcare and employment agencies industries were not available before 2008.
- Earnings data have been adjusted to account for the discontinuities in the ASHE data.

2.55 For the low-paying sectors as a whole the bite has increased from a low of 66.1 per cent in 2001 to 79.7 per cent in 2014, its highest ever level. In the rest of the economy, it increased from 41.2 per cent in 2001 to 46.2 per cent in 2014, also a peak. Among the low-paying industries the bite in 2014 ranged from around 70 per cent in food processing (70.0 per cent), employment agencies (70.9 per cent), leisure, sport and travel (71.0 per cent), manufacture of textiles (71.0 per cent) and agriculture (72.9 per cent); through around 80 per cent in social care (78.7 per cent), retail (79.4 per cent) and childcare (83.5 per cent); to over 85 per cent in hairdressing (85.3 per cent), hospitality (88.1 per cent) and cleaning (92.7 per cent).

2.56 Despite the bite being at its highest in April 2014 for the economy and the low-paying sectors as a whole, it was only at its sectoral peak in social care (78.7 per cent), and leisure, sport and travel (71.0 per cent). For most other low-paying industries, the bite was slightly higher in 2012.

2.57 Employees in small firms have experienced a broadly similar pattern of wage growth to those in the low-paying sectors. Over the whole period from 1999 to 2014 earnings growth across firms of different sizes varied little, at around 3 per cent on average a year. But, as shown in Figure 2.17, this again disguises at least two distinct periods, with a significant divergence occurring around the onset of the recession. Between 1999 and 2007, annual median wage growth was actually slightly higher for small firms (micro and other small firms) than for medium-sized and large firms, over 4 per cent compared with under 4 per cent.

Figure 2.17: Annualised Growth in the National Minimum Wage and Median Earnings for those Aged 22 and Over, by Firm Size, UK, 1999-2014



Source: LPC estimates (adjusted earnings) based on ASHE: without supplementary information, April 1999-2004; with supplementary information, April 2004-06; 2007 methodology, April 2006-11; and 2010 methodology April 2011-14, standard weights, including those not on adult rates of pay, UK.

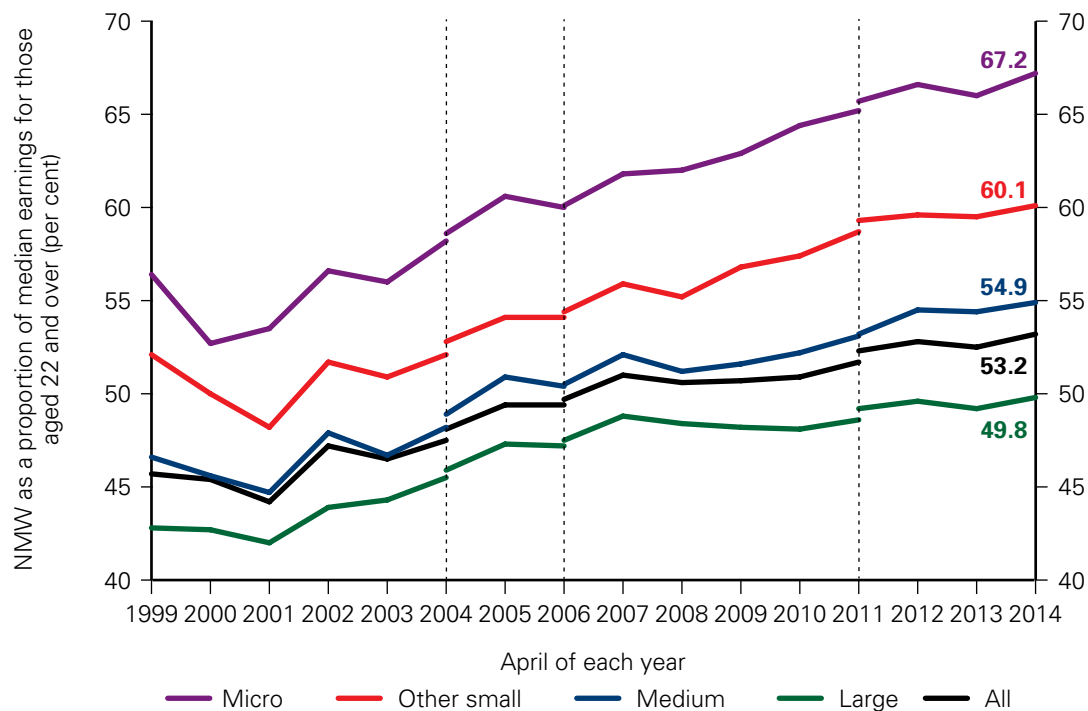
Note: Earnings data have been adjusted to account for the discontinuities in the ASHE data.

2.58 But wage growth slowed across all sizes of firm between 2007 and 2011. Indeed, annual average wage growth for employees in small firms was just 1.3 per cent, compared with 2.1 per cent for medium-sized firms and 2.7 per cent for large firms. Wage growth then became similar across all sizes of firm between 2011 and 2014, with annualised wage growth around 1.3-1.6 for small firms, and 1.1-1.7 per cent for medium-sized and large firms. Over the last year, between April 2013 and April 2014, this trend continued for larger small firms, medium-sized firms and large firms, with wage growth of around 0.9 per cent. But it has been particularly weak among micro firms. In those firms with fewer than ten employees, median wage growth was just 0.2 per cent in the year to April 2014.

National Minimum Wage

2.59 The consequences of that slow growth is that the bite of the NMW is at its peak across all sizes of firm, but is particularly high for micro firms. Figure 2.18 shows that the bite among micro firms increased by 1.2 percentage points over the last year to 67.2 per cent in 2014, its highest level since the introduction of the NMW. Among micro firms, the bite has now increased by a striking 13.6 percentage points since its low of 53.6 per cent in 2000. For other small firms (those with 10-49 employees), the bite has increased from 49.6 per cent in 2001 to 60.1 per cent in 2014.

Figure 2.18: Bite of the National Minimum Wage at the Median for those Aged 22 and Over, by Firm Size, UK, 1999-2014



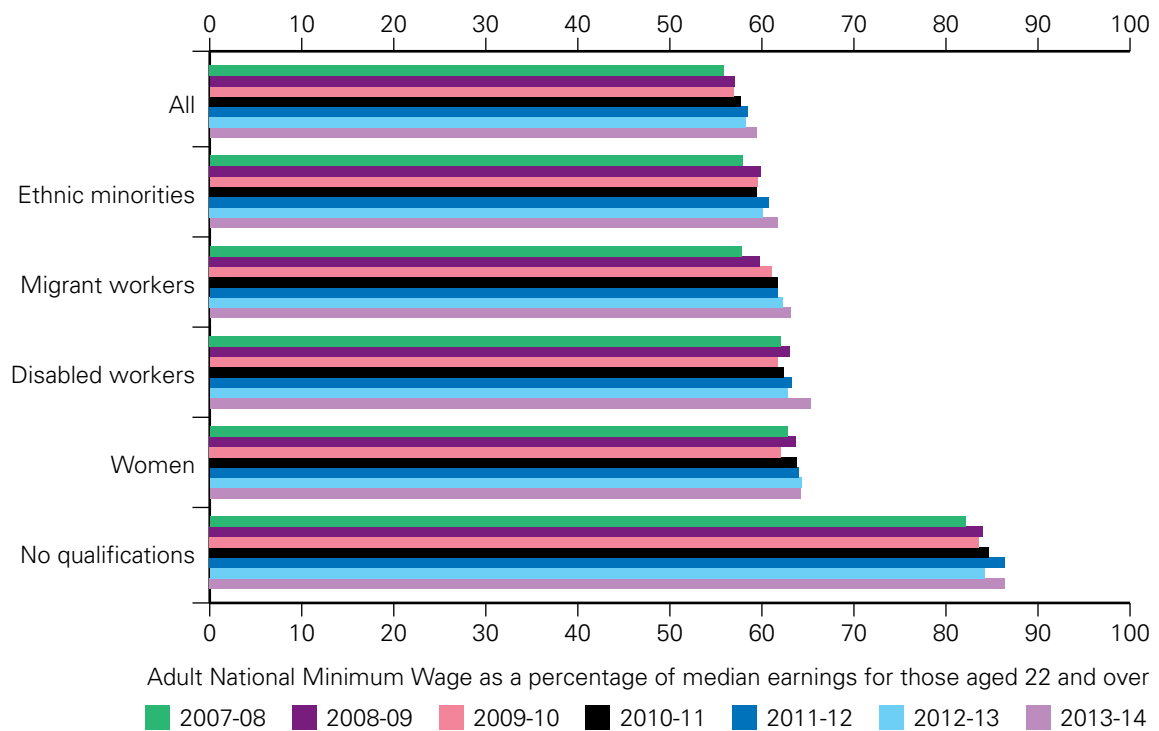
Source: LPC estimates (adjusted earnings) based on ASHE: without supplementary information, April 1999-2004; with supplementary information, April 2004-06; 2007 methodology, April 2006-11; and 2010 methodology April 2011-14, standard weights, including those not on adult rates of pay, UK.

Note: Earnings data have been adjusted to account for the discontinuities in the ASHE data.

2.60 Among medium-sized firms the increase in bite has been similar, rising from 45.6 per cent in 2001 to 54.9 per cent in 2014. Although the bite for large firms also peaked in 2014, at 49.8 per cent, it has increased relatively slowly since 2007, when it was 48.1 per cent. Prior to 2007, the pace of the increase in the bite was similar across all firm sizes.

2.61 We turn next to low-paid workers, the bites for whom are depicted in Figure 2.19. As with firm size and low-paying sector, there has been a general rise in the bite in recent years as the increase in the minimum wage has outpaced the growth in wages. Because, as noted already, ASHE does not record many characteristics of workers we once again use LFS data to consider the impact of the minimum wage on different groups of workers. As noted earlier, ONS regards data from the LFS to be less precise in its estimate of hourly wages. This is reflected in the fact that for those aged 22 and over the bite at the median was 59.4 per cent, much higher than the bite estimated using ASHE, 53.2 per cent.

Figure 2.19: Bite of the National Minimum Wage at the Median for those Aged 22 and Over, by Group of Workers, UK, 2007/08-2013/14



Source: LPC estimates based on LFS Microdata, income weights, quarterly, four-quarter averages, UK, Q4 2007-Q3 2014.

Note: Due to changes in the data series, the estimates from 2011/12 onwards are not directly comparable with estimates for earlier years.

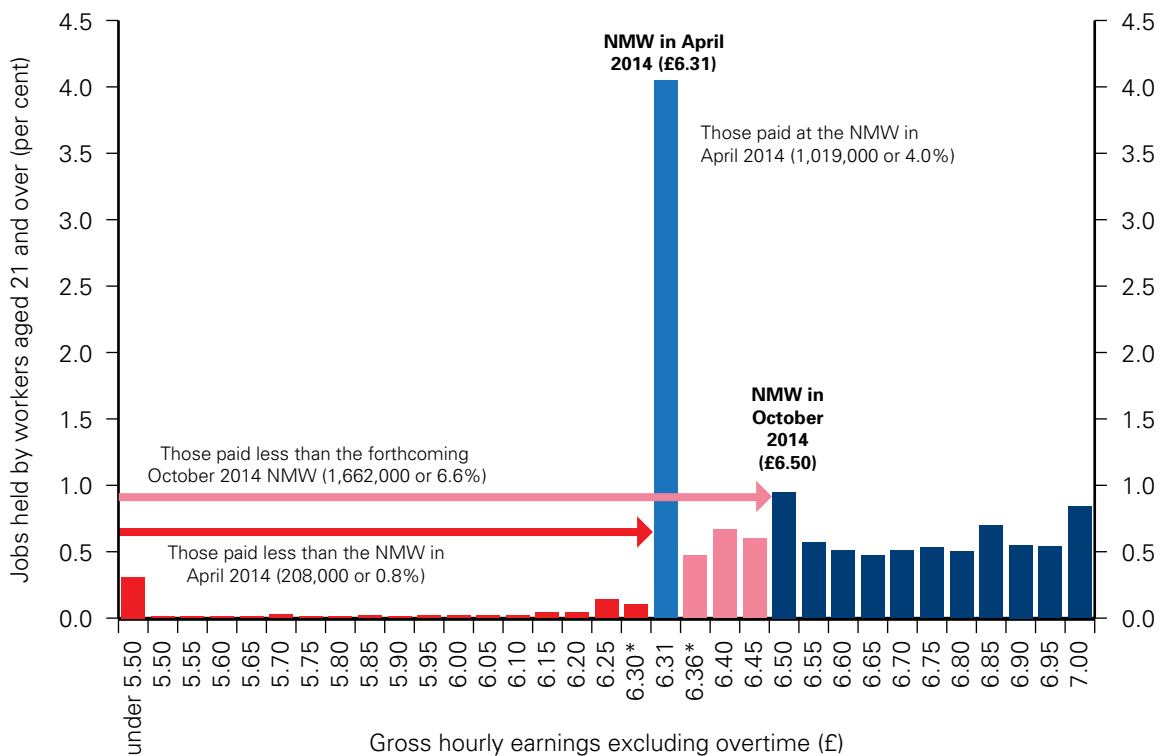
2.62 Figure 2.19 shows that the bites at the median for women, ethnic minorities, disabled workers, migrants and those with no qualifications are much higher than those for the working population as a whole and these bites have generally increased over time, from 2007/08 to 2013/14. The bite for each of these low-paid groups of workers, except women, peaked in 2013/14. The highest bite among these groups was for those with no qualifications at 86.4 per cent. For those with disabilities it reached 65.3 per cent. The bite at the median in 2013/14 was 61.7 per cent for ethnic minorities and 63.1 for migrant workers, up from just under 58 per cent for both groups in 2007/08. The bite for women fell marginally in 2013/14, but remained close to its peak.

2.63 Presenting ethnic minority groups as an aggregate hides large variations among them. Between 2012/13 and 2013/14, the bite at the median increased for all ethnic groups except for White. The bite for White workers fell slightly to 58.0 per cent in 2013/14, from 58.4 per cent in the previous year. In contrast, the bite for all minority ethnic groups increased from 60.1 per cent in 2012/13 to 61.7 per cent in 2013/14. Although the bite at the median is lowest for Indian workers, it increased by 2.7 percentage points to 53.6 per cent in 2013/14. There were increases of up to 5 percentage points among those ethnic groups with the highest bites – Pakistani and Bangladeshi workers (76.2 per cent and 78.6 per cent respectively). The bite for Black workers rose to 63.1 per cent.

Earnings Distributions

- 2.64** Overall then, the NMW has been increasing its value relative to average earnings. What impact has this had on coverage, non-compliance and the earnings distribution?
- 2.65** The impact of the minimum wage can clearly be seen in Figure 2.20 which shows a spike in the hourly earnings distribution for those aged 21 and over in April 2014 at £6.31, the adult rate of the NMW at that time. Around 1.02 million employees (about 4.0 per cent) were paid the NMW. This was the first time that ASHE had recorded more than a million employees paid at the adult rate of the NMW, with the previous highest number paid the NMW around 961,000 in April 2012.
- 2.66** Although not necessarily evidence of non-compliance, a further 208,000 employees (about 0.8 per cent) were paid less than the minimum wage in April 2014. This was the same as the percentages observed in 2012 and 2013 (around 0.8 per cent). Those who may legitimately be paid less than the adult rate of the minimum wage include some apprentices; those living in accommodation provided by their employer; and in some circumstances those on Fair Piece Rates.

Figure 2.20: Hourly Earnings Distribution for Employees Aged 21 and Over, by Five Pence Band, UK, 2014



Source: LPC estimates based on ASHE, 2010 methodology, low-pay weights, including those not on adult rates of pay, UK, April 2014. Note: * Five pence bands except where stated otherwise (bands labelled by minimum pay amount).

- 2.67** Figure 2.20 also shows that in April 2014, about 1.66 million employees (6.6 per cent) were paid less than the then forthcoming minimum wage rate of £6.50 an hour, which came into effect in October 2014. This was significantly higher than the coverage of recent minimum wage increases. In April 2011, April 2012 and April 2013, around 5.5-5.8 per cent (or 1.2-1.4 million) were paid less than the then forthcoming NMW rates.

- 2.68** The analysis above was based on 5 pence bands of the minimum wage and earnings data used were for those aged 21 and over. Table 2.6 shows the trends since the minimum wage was introduced in the numbers paid less the NMW, at the NMW and below the forthcoming rate. For consistency with years prior to 2004, the numbers are given in ten pence bands and are for those aged 22 and over. There are two main reasons for this. First, the adult rate was extended to cover 21 year olds in October 2010. Thus, comparisons over time from 1999 to 2014 need to be restricted to those aged 22 and over. Second, there are concerns about the quality of the data for smaller pay bands before 2004.
- 2.69** Using this definition, we can see from Table 2.5 that the number of jobs paid at the NMW and held by those aged 22 and over was 1.1 million or 4.5 per cent in April 2014. This was an increase of about 90,000 on April 2013, and was the highest number and proportion recorded since the introduction of the National Minimum Wage. Table 2.6 also shows several distinct phases in the coverage of NMW workers. Between 2000 and 2006, the number of employees in NMW jobs fluctuated between 400,000 and 650,000 (1.8-2.8 per cent), before increasing to around 700,000 (about 3.0 per cent) from 2007 to 2010. Since then it has risen above 1.0 million (or 4.0-4.5 per cent).
- 2.70** Apart from the period of the introduction of the NMW (460,000 or 2.1 per cent) and in the immediate aftermath of the largest uprating of the NMW in October 2001 (290,000 or 1.3 per cent), the numbers paid less than the NMW appear relatively stable, having fallen from around 230,000 (1.0 per cent) from 2004-07 to around 200,000 (0.9 per cent) from 2008-2010. Since then it has fallen below 190,000 (or 0.8 per cent). However, this needs cautious interpretation, particularly in drawing any inferences about non-compliance. Chapter 5 considers this issue in more detail, but in summary while 0.8 per cent is a low figure it does not capture those paid less than the minimum wage in the grey economy. It implies non-compliance is lower than appears to be the case if estimates from other surveys focused on different groups like social care workers, apprentices and interns are aggregated. This ASHE percentage paid less is in any event those paid less than the minimum wage as a proportion of the whole labour force, which is arguably not the right comparator for considering non-compliance, but those who could be paid the NMW.
- 2.71** The numbers covered by the forthcoming adult rate of the NMW are influenced by the size of the forthcoming increase. Table 2.5 shows that the coverage of the forthcoming rate was lower in 2009 and 2010 when the forthcoming increases were more modest than in other years. It also shows that coverage was much higher when the minimum wage increases were large, such as in 2001 and 2004. The 3 per cent increase in October 2014 was the biggest for some time and unsurprisingly the resultant coverage was also high. Indeed, it was the first time that more than 1.5 million employees had been paid less than the forthcoming rate. The proportion matched its previous peak, in 2004.

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Table 2.5: Jobs Held by those Aged 22 and Over, Paid At and Below the Existing National Minimum Wage and the Forthcoming National Minimum Wage, UK, 1999-2014

	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	186	0.8	992	4.2	6.19	1,204	5.0
	2013	6.19	181	0.7	1,013	4.2	6.31	1,280	5.3
	2014	6.31	188	0.8	1,104	4.5	6.50	1,535	6.2

Source: ONS central estimates using ASHE without supplementary information and LFS, UK, 1999-2004; LPC estimates based on ASHE: with supplementary information, April 2004-06; 2007 methodology, April 2006-11; 2010 methodology, April 2011-14, low-pay weights, including those not on adult rates of pay, UK.

Notes:

- 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.
- 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.

2.72 The aggregate data hide marked 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 2.6 shows that about 4.8 per cent of all employees were paid at or below the NMW of £6.31 an hour in April 2014, higher than in April 2013 (4.5 per cent). Unsurprisingly, this coverage was higher in the low-paying industries (13.9 per cent), ranging from 7.3 per cent in food processing to 32.7 per cent in cleaning. It was also particularly high in hospitality (26.1 per cent) and hairdressing (24.7 per cent).

2.73 The proportions paid at or below the NMW were also higher in small firms than large ones. Around 11.7 per cent of employees in micro firms and 6.9 per cent in other small firms were paid at or below the NMW, compared with 5.3 per cent in medium-sized firms and just 3.6 per cent of employees in large firms.

Table 2.6: Proportion of Jobs Held by those Aged 21 and Over, Paid At or Below the National Minimum Wage, by Sector and Firm Size, UK, 2013-14

Per cent Industry/ Occupation/ Size of firm	April 2013					April 2014				
	Paid < NMW (£6.19)	Paid at NMW ^a (6.19)	Paid < £6.31	Paid < £6.50	Paid < £7.00	Paid < NMW (£6.31)	Paid at NMW ^a (6.31)	Paid < £6.50	Paid < £7.00	Paid < £7.50
Agriculture	1.2	5.6	8.6	10.3	20.5	1.3	8.2	11.2	18.8	31.2
Food processing	0.6	6.4	8.7	12.6	23.2	0.5	6.8	10.4	21.6	31.5
Textiles	0.6	10.8	12.8	16.4	24.6	0.5	8.9	13.0	26.0	33.9
Retail	1.5	7.7	11.8	17.8	35.0	1.5	8.1	13.6	31.8	44.6
Hospitality	2.7	23.4	30.5	36.5	49.7	2.7	23.4	31.8	46.9	58.1
Cleaning	1.9	29.4	35.8	42.0	56.9	2.4	30.3	38.5	54.3	64.2
Social care	0.8	8.2	12.0	18.6	32.9	1.1	8.0	15.4	29.3	40.9
Childcare	3.3	10.0	17.3	24.5	42.9	3.4	9.6	20.0	38.6	50.7
Leisure	1.8	8.2	12.6	17.6	26.0	0.9	9.0	14.2	23.4	31.0
Hairdressing	4.2	19.7	27.8	31.2	43.4	5.2	19.5	29.1	41.7	54.2
Employment agencies	0.7	13.4	15.8	18.8	25.6	1.0	14.3	17.8	26.2	34.6
Office Work	1.0	5.8	8.0	11.8	21.1	1.4	5.6	9.4	19.0	29.8
Non-food processing	0.5	5.9	7.8	11.2	20.8	0.8	7.0	10.2	19.9	30.7
Storage	1.0	9.0	12.0	15.4	25.8	1.2	10.4	14.4	25.7	37.0
Transport	1.3	6.1	9.0	11.6	20.7	1.8	7.3	11.7	21.0	30.1
All low-paying industries	1.6	11.9	16.3	21.9	36.0	1.6	12.3	18.4	33.3	44.7
Micro	2.8	8.2	13.2	15.5	22.7	2.8	8.9	14.3	22.2	29.2
Other small	1.0	5.5	7.8	9.9	16.5	1.1	5.8	8.9	15.4	21.9
Medium	0.6	4.5	6.3	8.4	13.9	0.6	4.7	7.1	12.8	18.8
Large	0.6	2.8	4.3	6.4	11.7	0.6	3.0	5.2	10.7	15.7
Whole economy	0.8	3.7	5.6	7.7	13.3	0.8	4.0	6.6	12.4	17.9

Source: LPC estimates based on ASHE, 2010 methodology, low-pay weights, including those not on adult rates of pay, UK, April 2013 and 2014.

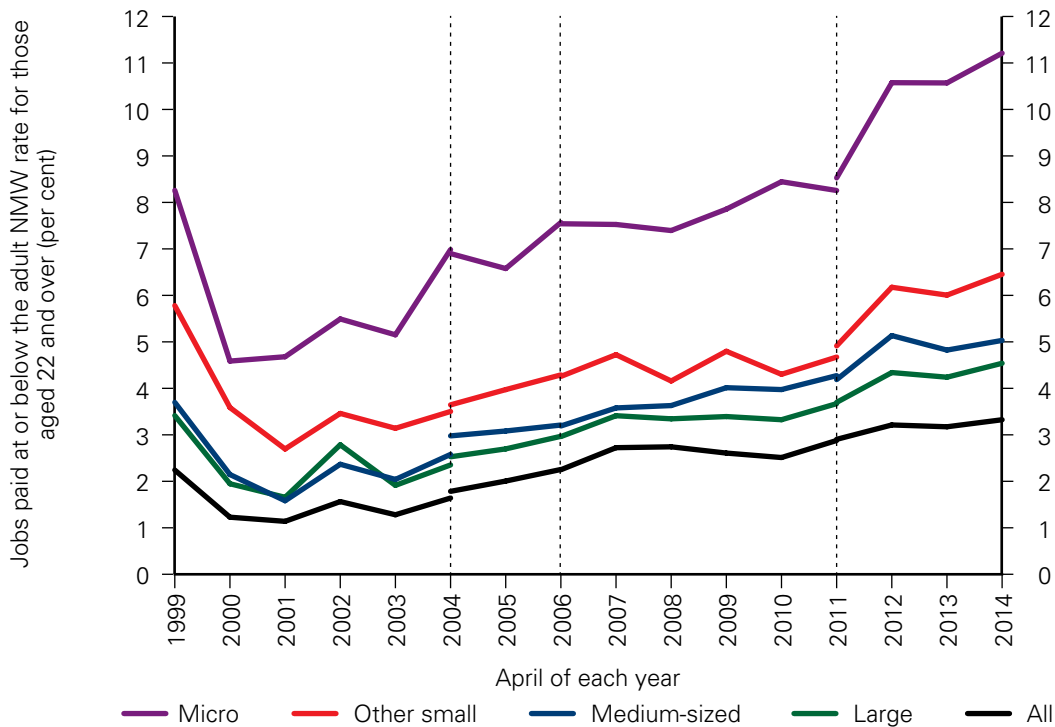
Notes:

- a. Based on a five pence band.
- b. Office work, Non-food processing, Storage and Transport are defined using Standard Occupational Classifications (SOC) 2010. The other sectors are based on Standard Industrial Classifications 2007. See Appendix 4 for more detail.

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- 2.74** Table 2.6 also shows that, in April 2014, around 6.6 per cent of jobs in the whole economy were paid less than £6.50 an hour, the then forthcoming rate of the NMW. In the low-paying sectors as a whole, around 18.4 per cent were paid less than this rate. This ranged from 10.2 per cent in non-food processing to 38.5 per cent in cleaning. Again, it was also high in hospitality (31.8 per cent) and hairdressing (29.1 per cent). These three industries – cleaning, hospitality and hairdressing – also had the highest proportions paid less than £7.00 and less than £7.50 an hour.
- 2.75** There was also a clear relationship between the size of firm and the percentage of employees paid less than the then forthcoming NMW rate of £6.50 an hour. Once again smaller firms are affected more. It covered around 14.3 per cent of employees in micro firms, compared with just 5.2 per cent in large firms. This relationship was also maintained when looking at those paid less than £7.00 an hour and those paid less than £7.50 an hour.
- 2.76** Between 2013 and 2014, the proportion of employees paid at or below the adult rate of the NMW increased among all the low-paying sectors except for hospitality and leisure, where it remained about the same level, and the manufacture of textiles and childcare. It also increased across all sizes of firm except for other small firms (those employing 10-49 employees).
- 2.77** Figure 2.21 shows that the proportion of minimum wage workers aged 22 and over in micro firms has more than doubled since 2000, rising from 4.6 per cent in 2000 to 11.2 per cent in 2014, the highest among different sizes of firm. The proportion of adult minimum wage workers among other small firms has also largely followed an upward trajectory since 2001, up from 2.7 per cent in 2001 to 6.5 per cent in 2014. Over the same period, the proportion of adult workers paid at or below the NMW rose from 1.7 per cent to 5.0 per cent in medium-sized firms, and from 1.1 per cent to 3.3 per cent among large firms in 2014.

Figure 2.21: Proportion of Employee Jobs Held by those Aged 22 and Over Paid At or Below the National Minimum Wage, by Firm Size, UK, 1999-2014



Source: LPC estimates based on ASHE: without supplementary information, April 1999-2004; with supplementary information, April 2004-06; 2007 methodology, April 2006-11; and 2010 methodology April 2011-14, standard weights, including those not on adult rates of pay, UK.

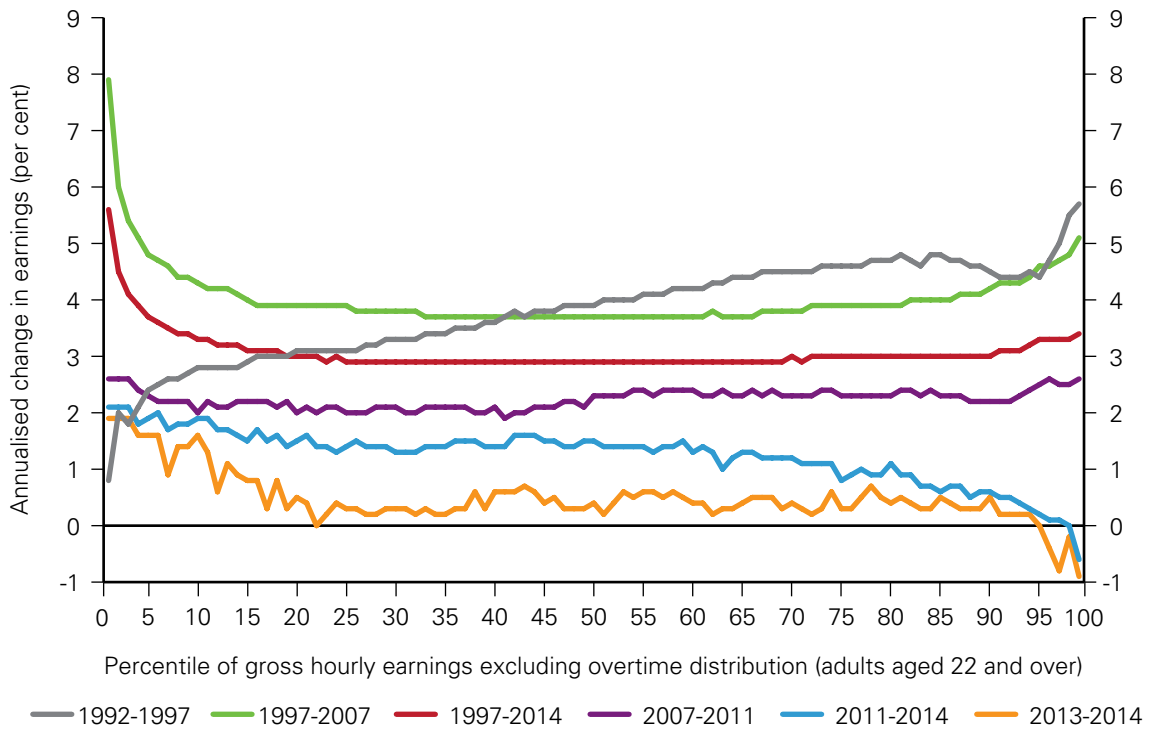
Notes:

- 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.

2.78 So the relative value and coverage of the NMW have increased. Figure 2.22 considers what this has meant for the whole of the earnings distribution over time. We have ranked employees by their earnings, splitting them into 100 equally sized groups (percentiles), and then ordered them from the lowest paid to the highest paid. It 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 3 per cent), whereas those in the upper part of the distribution had higher wage rises (about 4-6 per cent). Those in the middle, around the median, received pay rises of about 4 per cent.

2.79 Since 1997, 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 1997 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. Since 2004, the increases at the bottom have moderated significantly (and especially since 2008), growing on average by 3-4 per cent a year. However, this remains greater than for the rest of the distribution which has experienced annual average wage growth of less than 3 per cent.

Figure 2.22: Annualised Growth in Hourly Earnings for Employees Aged 22 and Over, by Percentile, UK, 1992-2014



Source: LPC estimates based on New Earnings Survey (NES), April 1992-1997, and ASHE: without supplementary information, April 1997-2004; with supplementary information, April 2004-06; 2007 methodology, April 2006-11; and 2010 methodology April 2011-14, 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.

- 2.80** Between 2007 and 2011, earnings growth across the distribution was fairly flat at around 2.0-2.5 per cent a year, with those in the top half of the distribution tending to get slightly higher wage rises than those between the lowest decile and the median. Surprisingly by comparison with previous recessions, where the least well paid have seen relative wage falls, those in lowest paid decile got increases similar to those in the top half over this period.
- 2.81** This broadly progressive pattern has continued since. Over the last three years, wage growth, though low, held up for those at the bottom of the distribution, growing by around 1.5-2.0 per cent. By contrast, those in the top half fared badly, with wage growth of 0.0-1.5 per cent. Over the last year, between 2013 and 2014, those in the bottom quintile had higher increases in earnings than those in the rest of the earnings distribution. Those in the top decile suffered falls in nominal wages, while the bottom deciles saw wages increase.
- 2.82** This is in stark contrast to what has happened previously. Table 2.7 shows the changes in hourly wages across the earnings distribution since 1975, broken down into phases of the economic cycle. Prior to the introduction of the NMW in 1999, the lowest paid generally received relatively smaller wage increases in both recessions and boom times. The exception to that was in the late 1970s, when an incomes policy that helped protect the lowest paid was in place. In the recessions of 1979-82 and 1989-92 the wages of the lowest paid fell relative to both the mean and the median. During the recoveries of the 1980s and 1990s the pay of those at or above the median rose faster than that of the lowest paid.

2.83 Since the introduction of the NMW the picture has changed radically. The lowest paid have received the largest increases in earnings relative to the median. Between 1997 and 2008, the hourly pay of the lowest paid increased much faster than the pay of those higher up the earnings distribution. During the recession, hourly pay growth was around 2.0 per cent across the distribution, albeit a little higher for the lowest paid. Since 2011, wage growth has been weak across the earnings distribution but it has been strongest for those at the bottom.

Table 2.7: Earnings Growth by Selected Percentile, UK, 1975-2014

Annual hourly wage growth (%)	Mean	Percentile					
		5th	10th	25th	Median (50th)	70th	90th
1975-79	13.5	14.3	12.9	13.3	13.4	13.6	13.9
1979-82	15.5	13.6	13.7	14.3	15.2	16.3	17.1
1982-89	7.7	6.8	6.8	7.1	7.7	8.1	8.7
1989-92	8.5	7.5	8.0	8.2	8.3	9.0	9.5
1992-97	3.2	2.4	2.7	2.8	3.3	3.6	3.7
1997-04	4.1	4.9	4.2	3.5	3.5	3.6	4.2
2004-08	3.7	4.4	3.9	3.9	3.6	3.4	3.4
2008-11	2.2	2.4	2.0	1.9	1.9	2.0	2.0
2011-14	1.0	1.9	1.9	1.4	1.5	1.2	0.6

Source: LPC estimates based on NES, April 1975-1997 and ASHE: without supplementary information, April 1997-2004; with supplementary information, April 2004-06; 2007 methodology, April 2006-11; and 2010 methodology April 2011-14, standard weights, including those not on adult rates of pay, UK.

Notes:

a. Shaded periods are recessions.

b. The 5th percentile generally has covered those on the NMW since 1999.

Pay Gaps

2.84 As we showed earlier (and highlighted in Figure 2.6), 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.

2.85 Since the introduction of the NMW, the gender pay gap has generally been falling. Indeed, as shown in Table 2.8, it has more than halved at the lowest decile from 12.9 per cent in 1998 to 5.5 per cent in 2014. Similarly, the gender pay gap at the median has fallen from 15.9 per cent in 1998 to 8.5 per cent in 2014. Likewise, the gender pay gap at the mean, which is often the measure used for international comparisons has also fallen from 20.1 per cent in 1998 to 14.5 per cent in 2014. Changes at the upper decile have been less noticeable with the gender pay gap actually wider in 2013 than in 1998. However, it did fall to its lowest level in 2014, as males at the top end of the earnings distribution experienced nominal wage decreases.

2.86 In 2011, there was a change in the methodology and weighting used to take account of ONS's new occupational classifications, SOC 2010. Table 2.8 shows that the resulting revisions to the data led to a large downward revision of female earnings, but had little effect

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on estimates of male earnings. Thus, the measured gender pay gap at the median in 2011 increased from 8.3 per cent to 9.6 per cent. In 2014, the growth in female earnings has been much higher than the growth in male earnings across the earnings distribution. This has resulted in completely reversing the widening of the gender pay gap that we observed in 2013 at the lowest decile, the median, mean and the upper decile.

Table 2.8: Hourly Gender Pay Gap of Full-time Workers Aged 22 and Over, UK, 1997-2014

	Data year (April)	£ per hour				Per cent			
		Men		Women		Gender pay gap			
		Median	Mean	Median	Mean	Lowest decile	Median	Mean	Upper decile
ASHE without supplementary information	1997	8.51	10.38	7.17	8.38	13.1	15.8	19.2	19.6
	1998	8.84	10.93	7.43	8.73	12.9	15.9	20.1	20.5
	1999	9.15	11.37	7.78	9.17	11.8	15.0	19.4	19.7
	2000	9.21	11.66	7.97	9.47	10.7	13.4	18.8	19.7
	2001	9.65	12.39	8.38	10.05	11.1	13.2	18.9	20.7
	2002	10.07	13.05	8.76	10.55	11.1	13.0	19.1	20.6
	2003	10.41	13.43	9.09	10.91	10.0	12.7	18.7	20.1
	2004	10.89	13.88	9.64	11.50	8.9	11.5	17.1	19.8
ASHE with supplementary information	2004	10.75	13.63	9.51	11.35	8.3	11.5	16.8	18.8
	2005	11.22	14.33	9.98	11.96	7.8	11.1	16.5	18.6
	2006	11.65	14.96	10.42	12.41	7.3	10.6	17.1	20.2
ASHE 2007 methodology	2006	11.56	14.86	10.26	12.26	7.7	11.2	17.5	20.5
	2007	12.02	15.39	10.72	12.77	7.8	10.8	17.0	20.5
	2008	12.56	16.11	11.13	13.26	7.3	11.4	17.7	21.6
	2009	13.01	16.49	11.59	13.75	7.3	10.9	16.6	20.5
	2010	13.00	16.64	11.89	14.08	6.0	8.6	15.4	19.3
	2011	13.13	16.84	12.04	14.27	4.7	8.3	15.3	19.8
ASHE 2010 methodology	2011	13.13	16.82	11.87	14.07	5.0	9.6	16.3	21.1
	2012	13.25	16.84	12.12	14.32	5.6	8.5	14.9	19.0
	2013	13.56	17.25	12.28	14.48	5.9	9.5	16.1	20.6
	2014	13.59	17.16	12.43	14.68	5.5	8.5	14.5	18.5

Source: ONS central estimates using ASHE without supplementary information and LFS, UK, 1997-2004; LPC estimates based on ASHE: with supplementary information, April 2004-06; 2007 methodology, April 2006-11; 2010 methodology, April 2011-14, low-pay weights, including those not on adult rates of pay, UK.

Notes:

- 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.
- 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.

2.87 The gender pay gap at the lowest decile fell from 5.9 per cent in 2013 to 5.5 per cent in 2014. However, the gender pay gap at the lowest decile was as low as 5.0 per cent in 2011. The gender pay gap at the median fell from 9.5 per cent in 2013 to 8.5 per cent in 2014. Only in 2011, under the old occupational classification has it been narrower.

- 2.88** Although the mean gender pay gap in 2013 rose by 1.2 percentage points to 16.1 per cent and the upper decile gender pay gap rose to 20.6 per cent, they both fell in 2014 to reach the narrowest gaps on record – 14.5 and 1.5 per cent respectively.
- 2.89** Table 2.9 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. This measure of the gender pay gap fell to 17.2 per cent in 2013/14, down from 19.1 per cent in 2012/13, and is at its lowest since 2007/08.

Table 2.9: Hourly Pay Gaps for Particular Group of Workers Aged 22 and Over, UK, 2007/08-2013/14

Per cent							Median
	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
No qualifications	34.4	35.3	34.9	34.6	34.3	33.7	34.0
Women	19.5	19.5	17.6	19.1	17.4	19.1	17.2
Disabled people	11.1	11.7	9.9	9.5	8.9	8.3	12.1
Migrant workers	3.9	5.5	8.2	7.8	6.1	7.0	8.7
Ethnic minorities	3.9	5.3	5.0	3.4	4.0	2.9	5.9
of which							
Indian	-10.6	-13.2	-6.7	-8.1	-12.6	-14.8	-8.3
Other non-white	4.4	5.3	5.5	2.9	3.3	1.0	3.8
Black	2.2	8.9	3.3	4.3	8.4	4.0	8.1
Pakistani	24.3	22.1	26.8	18.0	10.2	18.3	23.9
Bangladeshi	24.8	24.3	31.8	26.6	23.2	21.7	26.2

Source: LPC estimates based on LFS Microdata, income weights, quarterly, not seasonally adjusted, UK, Q4 2007-Q3 2014.

Note: Comparators for the groups are respectively those with qualifications, men, those not disabled, non-migrants, and the White ethnic group. Individual ethnic groups are all compared with the White ethnic group.

- 2.90** Other than for those with no qualifications (where the pay gap increased to 34.0 per cent in 2013/14), the pay gaps for other groups of workers were generally smaller than the gender pay gap. The disability pay gap and the migrant worker pay gap increased in 2013/14. Ethnic minority pay also fell relative to that of White workers in 2013/14, increasing the pay gap to 5.9 per cent. This hides wide variation among ethnic groups. The pay gap with White workers was greatest among those from a Pakistani or Bangladeshi background, but was actually negative for Indian workers.

Pay Settlements and Pay Structures

- 2.91** In addition to 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 reviewing pay settlements and consider whether the NMW influences pay settlements in the economy as a whole or in low-paying sectors in particular. IDS (2015a) found lower pay settlement levels in low-paying sectors than in private services and across the economy as a whole.⁴ Table 2.10 shows that the median pay settlement in the low-paying sectors for 2014 was 2.0 per cent,

⁴ Low-paying sectors in this analysis included: care services and housing; fast food, pubs and restaurants; hotels; leisure; retail.

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compared with 2.5 per cent in private services and the whole economy. The upper quartile was stronger in the private services and the whole economy, excluding the low-paying sectors. However, the lowest quartile was 2.0 per cent across the whole economy, including low-paying sectors.

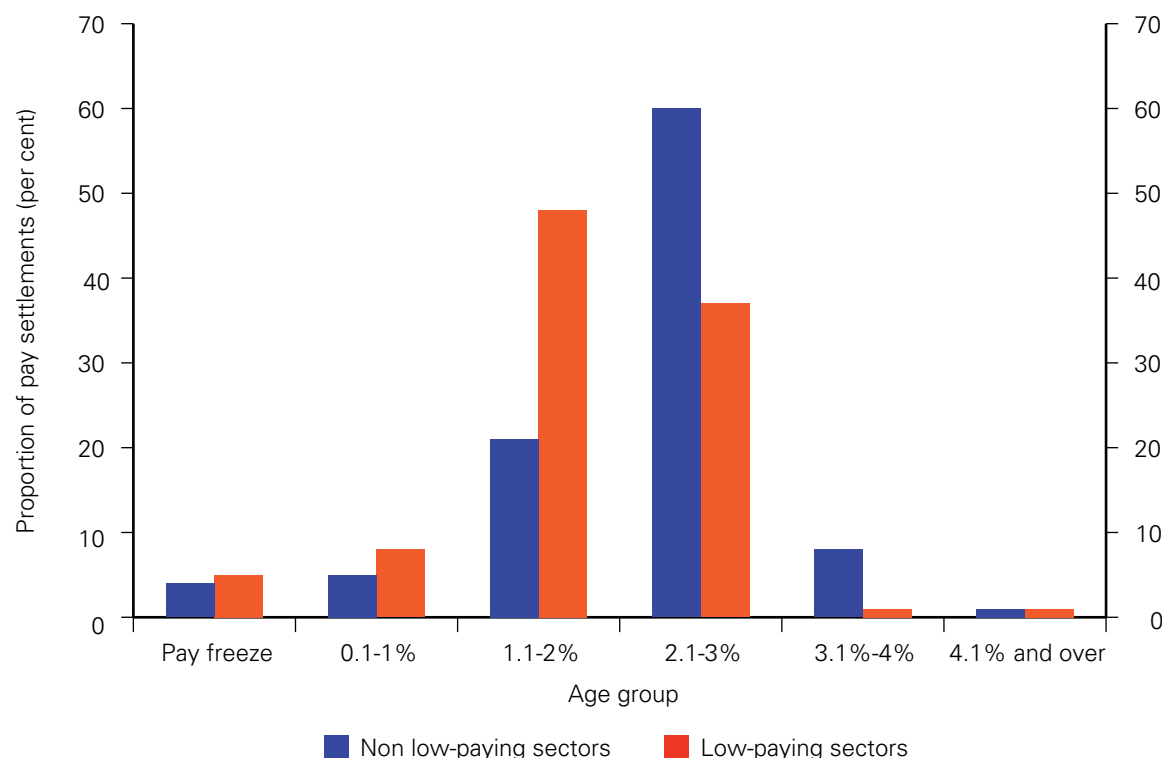
Table 2.10: Headline Pay Settlement Levels, 2014

Pay Settlement Measure	Whole economy	Whole economy exc. low-paying sectors	Private services	Low-paying sectors
Lower quartile	2.0	2.0	2.0	2.0
Median	2.5	2.5	2.5	2.0
Average	2.3	2.4	2.4	2.1
Upper quartile	2.8	2.9	2.7	2.5

Source: IDS (2015a and b).

2.92 An analysis of the distribution of pay settlements, as shown in Figure 2.23, shows that there were also fewer higher-end pay settlements in low-paying sectors in 2014, although low-paying sectors were no more likely to have a pay freeze. Just over 35 per cent of pay awards in the low-paying sectors were in the range 2.1-2.9 per cent with few above that. The compared with 60 per cent of pay awards in that range for the rest of the economy and around 8 per cent of awards that were 3.1-3.9 per cent.

Figure 2.23: Distribution of Pay Settlements, UK, 2014



Source: IDS (2015a and b).

2.93 The median pay settlement level for the whole economy remained stable at 2.5 per for most of 2014, falling only in the fourth quarter to 2 per cent, reflecting the influence of lower level awards in low-paying sectors. Table 2.11 shows that, using data from IDS, this is the fourth year in which pay settlements in low-paying sectors have lagged the rest of the economy.

2.94 IDS (2015a and b) found that the higher uplift in the NMW in 2014 did not straightforwardly feed through to pay settlements, since many companies awarded less than 3 per cent across the board, while still complying with the higher uplift for their lowest-paid staff. However, some firms did award 3 per cent across the board, and for many of these, this represented a higher basic pay award than in 2013. Examples include Sainsbury's (up from 2.5 per cent in 2013), Halfords and Argos (both up from 2 per cent in 2013). Moreover, these are relatively large employers.

Table 2.11: Annual Median Pay Settlement, by Sector, UK, 2000-2014^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	2.1	2.0	..	2.5	2.0
2012	2.5	2.0	1.5	..	2.3	2.0
2013	2.5	2.0	2.0	..	2.0	2.0
2014	2.5	2.0	2.0	..	2.1	2.0

Source: IDS (2015a and b).

Notes:

- The annual data are for the calendar year from 1 January to 31 December. IDS did not disaggregate pay settlement by individual sector prior to 2008.
- Where the sample size is too small to produce an estimate it is denoted by '..'.
- '-' denotes not applicable.
- The table has been updated since last year, and there have been some revisions.

Research on Earnings and Pay

2.95 Many research studies have investigated how the National Minimum Wage has affected earnings; pay settlements; pay structures; and household and family incomes. They have included both quantitative and qualitative research. In our 2014 Report, we gave a detailed overview of all the main research projects that had been undertaken in this area at that time. We now give a brief summary of those findings.

2.96 Bryson and Lucchino (2014), using the 2011 Workplace Employment Relations Survey, found that the National Minimum Wage influenced pay-setting, although it lagged financial performance (affordability) and changes to the cost of living as the most important factors.

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They also found that the NMW played a greater role where trade unions played no role in pay-setting. IDS (2011a and 2014b) also found evidence of the NMW having an influence. It showed that pay settlements in the low-paying sectors had followed similar trends to those in the whole economy. The one notable difference was that during the recession and its immediate aftermath fewer pay freezes were observed in the low-paying sectors, as minimum wage increases gave little scope for employers to freeze pay at the bottom of the pay distribution.

2.97 There is also clear evidence that the NMW has affected the timing of pay reviews. A series of commissioned research reports for the Commission, most notably IDS (2011a and 2014b), have showed that October had become a more common pay settlement date in the low-paying sectors. In 1999 fewer than 5 per cent of pay settlements across the economy and in the low-paying sectors were in October. By 2013, October pay settlements had remained similar for the whole economy, around 5 per cent, but had increased to over 20 per cent in low-paying sectors.

2.98 We have commissioned several studies to investigate how firms have attempted to cope with the minimum wage through their pay structures. IDS (2011a) found little impact from the introduction of the NMW as many firms had already adjusted their pay structures in anticipation but the subsequent large upratings between October 2001 and October 2006 had led to further adjustments. Pay structures had been changed with the number of hierarchies or geographic pay zones reduced. Pay differentials had narrowed, as those paid above the minimum wage received smaller pay increases than those on the minimum wage. In addition, firms had reduced pay premia for: overtime and unsocial hours; and restricted non-wage benefits such as subsidised meals and transport, annual leave, pensions, and staff discounts. Grimshaw and Carroll (2002); Cronin and Thewlis (2004); Denvir and Loukas (2006); and various Commission surveys of employers and stakeholder evidence found similar effects on the remuneration package and pay structures. IDS (2014b) found that low-paid employees continued to receive premium payments for working unsocial hours, although it monitored a trend away from paying premiums on Sunday and reducing premiums for bank holidays. This trend had begun before the recession but continued through 2007-12, particularly in the retail sector. Sunday working was increasingly paid at basic pay, while bank holidays still attracted premiums but these were generally less generous than previously. In contrast, using an econometric methodology, Gregg and Papps (2014) found no statistically significant evidence that the minimum wage had affected workers' levels of: incentive pay; shift pay; overtime pay; or eligibility for a pension.

2.99 As well as investigating the impact of the NMW on the composition of the pay package, Gregg and Papps (2014) also looked at the impact of the minimum wage on hourly, weekly and annual pay. They found that employers responded to increases in the minimum wage by raising the wages of affected workers to be compliant. This occurred before and after the recession and across the three minimum wage age groups. However, for those who remained with the same employer, increases in the minimum wage did lead to a statistically significant but small reduction in hours. A ten pence increase in the NMW led to a fall in the average working week by eight minutes. They also found that increases in the minimum wage were offset by reductions in weeks worked when considering annual pay.

- 2.100** In a descriptive analysis comparing 1992-97 with 1998-2003, Butcher (2005) showed that there was a change in the relative pay of the lowest paid compared with pay at the median when the minimum wage was introduced and that the relative improvement had continued with subsequent upratings in the NMW. Consistent with the findings of IDS (2011a), he found an impact on differentials but that this appeared weak and did not reach far up the earnings distribution. This issue of the impact of the NMW on the wages of those paid just above the minimum wage, known in the literature as spill-over effects, has been investigated using more sophisticated econometric techniques.
- 2.101** Covering the period up to 2007, Stewart (2009) explored various methodologies to assess the impact of the NMW on differentials and concluded that spill-over effects were generally small and limited, typically reaching no further up the earnings distribution than the fifth percentile. Extending that to 2009, Dolton, Rosazza Bondibene and Wadsworth (2010) found evidence that the minimum wage had squeezed differentials at the bottom of the earnings distribution. Dickens, Riley and Wilkinson (2012), using data from 1994-2010, found that the minimum wage had led to significantly higher wage growth for low-paid workers, particularly when the NMW was introduced. They found a large impact on pay inequality across areas as the NMW compressed wages at the bottom of the distribution, especially in the period prior to the recession. Those areas with the lowest pay prior to the introduction of the NMW had the greatest reductions in inequality. Butcher, Dickens and Manning (2012) also found that the NMW had affected wage inequality, but in contrast to many previous studies, they identified evidence of more significant spill-over effects that reached up to the 25th percentile, about 40 per cent above the NMW. These spill-over effects were larger in low-paying sectors and regions.
- 2.102** Dickens, Riley and Wilkinson (2012) found that during the recession years, 2008-10, there had been some restoration of wage differentials. This was consistent with the findings of earlier research, such as Swaffield (2009) and Dolton, Lin, Makepeace and Tremayne (2011) that when minimum wage increases were lower than average earnings, low-paid workers tended to get smaller pay rises than the average, and vice versa. In their analyses of company level pay, IDS (2011a and 2014b) also found that there had been some slight restoration of differentials between 2008 and 2010, when minimum wage increases were much smaller than in the years of the large upratings.
- 2.103** It has been argued that the minimum wage is not particularly well-targeted at the lowest income households. Indeed, NMW workers tend to be in the third to sixth deciles of the household income distribution but those households in the lowest deciles tend to have few workers, as they comprise mainly of pensioners and those on out-of-work benefits. 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 households, removing pensioner and workless households, then NMW workers were concentrated in the bottom two deciles. Brewer and De Agostini (2013) found a similar picture when analysing family income distributions. 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.

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- 2.104** As in that previous research, Bushe, Kenway, MacInnes, Tinson and Withers (2015) found that minimum wage workers tended to be towards the bottom of the household income distribution, although around a quarter were in the top two quintiles. Brewer, May and Phillips (2009), which looked at households, and Brewer and De Agostini (2013), which looked at families, had investigated the interaction of the minimum wage with the tax and benefit system. In work that complemented that previous research, Bushe, Kenway, MacInnes, Tinson and Withers (2015) used a spreadsheet model of different family and housing tenure types, to compare the relationship between net income (after housing costs) and hours worked in order to assess the impact of the introduction of Universal Credit. They found it was generally smoother under Universal Credit, with fewer cliffs at particular thresholds, and net income was generally higher although there were some exceptions. They found that most minimum wage earners did not receive benefits or tax credits, although working adults receiving housing benefit were most likely to earn at or close to the NMW. Part of the explanation was that young people under 25 are not entitled to Working Tax Credits unless they have children.
- 2.105** In their case study analysis of employers in low-paying sectors, little evidence was found of employers adjusting pay rates to take advantage of the tax and benefits system. However, employers were aware of employees requesting to work certain numbers of hours per week. In line with the previous research we had commissioned, the researchers concluded that low-paid workers claiming benefits and tax credits received little increase in overall income when the NMW rises under the current benefit system but added that Universal Credit should generally improve the situation for low-paid workers, although there remained some concerns about its effect on particular groups and for particular hours worked.

Views on Earnings and Pay

- 2.106** As in previous years, stakeholders representing business generally reported a cumulative adverse impact on pay structures from increases in the NMW, particularly on differentials and the ability to afford pay increases for non-minimum wage staff; although some employer bodies suggested there was less of an impact from recent NMW upratings, and a group of companies responding to our consultation this year saw room for much higher upratings (see Stakeholder Views on in Chapter 6 for more detail). Those representing workers argued that increases in the NMW had been affordable to businesses affected by the NMW, reflected in strong employment growth in low-paying sectors. They also emphasised that the relatively small increases in the NMW in recent years had an adverse impact on the income of the lowest paid and higher NMW rises were needed to restore its value.
- 2.107** Employers in retail, the largest of the low-paying sectors, pointed to an impact on differentials. Survey findings from the British Retail Consortium (BRC) suggested that the impact of the 1.9 per cent increase in the NMW in October 2013 was felt across the entire wage structure for shop workers. BRC said that the proportion of food employees paid close to the minimum wage had doubled since its 2013 survey, though the proportion remained higher among non-food workers. The British Independent Retailers Association (BIRA) said the gap between the NMW and higher earners could be as low as 29 pence among BIRA's departmental store members and that 42 per cent of its members had to increase their

wages, above the lowest paid, to ensure differentials remained for other staff. In the hospitality sector, the second largest of the low-paying sectors, similar arguments were made. The Association of Licensed Multiple Retailers (ALMR) pointed out the NMW has an inflationary effect beyond NMW workers alone: pressure to increase rates of pay for higher grade staff remained as the joint second most frequently cited response, for the third year in a row, when members were asked about the impact of the increase in the minimum wage.

2.108 We heard detailed evidence from employers about the impact of the NMW on staff pay during our various visits around the UK. A wholesaler on the south coast, advised that increases in the minimum wage had squeezed differentials between supervisors and packing staff. The CBI told us that evidence from its members had revealed that increases in the NMW led them to re-evaluate the fringe benefits they were able to offer their employees.

“The NMW has generally been absorbed but has put pressure on differentials. The concern is that it undermines the pay banding approach which rewards experience, tenure and skills”

Premier Inn, Commission visit to Leeds and York

2.109 In manufacturing, the Food and Drink Federation (FDF) stated that since its introduction in 1999, the NMW had been increased at a rate which was well in excess of the rate of inflation or the level of pay settlements that have been reported by FDF members over this period. As a result, FDF thought that the NMW has had a direct impact on pay levels and the structure of remuneration for its members. In textiles and clothing, the UK Fashion and Textile Association (UKFT) said the impact of the 3 per cent increase in the NMW again reduced differentials as nationally agreed settlements across the sector ranged between 1.5 and 2.25 per cent.

2.110 The National Farmers’ Union (NFU) commented that following the abolition of the Agricultural Wages Board in England and Wales, the NMW was a useful indicator for wage negotiations, although adding that for Grade 1 workers in horticulture (who were paid just above the NMW), a rise in the minimum wage would add upward pressure on the cost base. In oral evidence, the Association of Labour Providers (ALP) additionally highlighted the impact of the Living Wage in their sector where employers were being pressured to pay this benchmark. It said communications work was needed by government to ensure that external stakeholders clearly differentiated between the NMW and the Living Wage.

2.111 The National Hairdressers’ Federation (NHF) said its sector remained characterised by stagnant turnover and low pay, adding that the difference in pay between those on the NMW, especially apprentices, and fully qualified and experienced junior stylists, was small. Therefore, NHF argued any increase in the NMW was likely to lead to increases in the wages of other salon staff in order to maintain those differentials, bringing further pressure on overall wage costs.

2.112 We consider the impact of the NMW on adult social care sector in Chapter 5. However, in oral evidence the National Care Association (NCA) highlighted the need to be able to reward additional skills and responsibilities. It remained a challenge for the sector to keep ahead of the NMW. With respect to childcare, the National Day Nurseries Association (NDNA) told us

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it was difficult for nurseries to afford any increase in their overall budget for staff and that this was predominantly spent on their response to NMW increases, limiting discretionary awards to recognise performance and extra responsibilities by staff.

- 2.113** Among those representing smaller employers, the sector particularly exposed to changes in the minimum wage, the Federation of Small Businesses (FSB) told us that for member businesses responding to its survey and which employed one or more staff on the NMW (37 per cent of all responding businesses which employed staff), 42 per cent said the latest uprating of the NMW would have a negative impact. Most of these businesses would expect to have to either absorb the increase or make adjustments to employment hours or prices, however, 12 per cent said they may have to freeze or reduce the pay of higher staff. While overall only 16 per cent of members responding to the survey, and who employed staff, said the uprating would have a negative effect, this was more likely for businesses in hospitality (39 per cent) or retail (26 per cent).
- 2.114** Evidence from some employer bodies suggested recent increases in the NMW were having less impact and could be accommodated by business. EEF, the manufacturers' organisation, thought our 3 per cent recommended rise in October 2014 had weighed up future risks and importantly the ability of all employers in all sectors and regions to pay the wage. In addition, as stated above, there was a group of companies which responded to this year's consultation that did see considerable headroom for an increase in the NMW – although it is unclear what proportion of them employed NMW staff themselves.
- 2.115** Trade unions told us that there had so far been no evidence that the minimum wage has had an adverse impact on the UK economy or employment and that higher pay couldn't be afforded. Unite said that its introduction and subsequent increases have not had any adverse effects on the labour market, while it has benefited millions of low-paid workers. It pointed to its recent bargaining experience, with many pay deals agreed at above 3 per cent, the level of the last NMW uprating.
- 2.116** Unions also contrasted recent increases in the NMW with the high level of inflation experienced by low-paid workers. Unite, citing research by 'Which?', argued that the poorest households faced more rapidly increasing costs than the richest households. It said that looking since 2008, the impact on households suffering high inflation was equivalent to additional costs of £450 a year, compared to households experiencing the lowest inflation rates. The Union of Shop, Distributive and Allied Workers (Usdaw) told us the last two NMW increases were below the increase in energy prices that took place in 2014. Citizens Advice Scotland noted that the rise in the NMW in October 2014 represented the first above-inflation rise since 2008 and had the potential to benefit over 1 million workers, but it thought more needed to be done to ensure the value of the minimum wage was maximised and level of in-work poverty reduced. The GMB was

“Staff highlighted the difficulties they were experiencing as pay had not increased in line with the cost of living. Many were turning to pay-day loans to meet essential expenses and consequently falling into debt. There was a widely-held perception that they would be better off not working and relying entirely on benefits.”

Retail staff, Commission visit to Liverpool

concerned that although the NMW was an important first step in tackling the problem of low pay, in many cases it had become the maximum millions of workers could hope to earn rather than a stepping stone to higher pay. It said that in many sectors the minimum wage had become a ceiling on pay settlements, rather than a base level from which to secure better pay.

Summary on Earnings and Pay

2.117 In summary, the adult rate of the NMW in October 2014 was over 80 per cent higher than when it was introduced in April 1999 at £3.60 an hour. This is greater than the increase in average earnings or prices over the same period. However, with the economy in recession and recovering slowly, the real value of the NMW had fallen as increases in both CPI and Retail Price Index (RPI) inflation had been greater than the increases in the NMW. Between October 2007 and October 2013, the real value of the NMW, deflated by CPI in 2014 prices, fell by 5.1 per cent. However, the recent increase of 3 per cent in the NMW in October 2014 has begun to restore some of that lost value, with the real value of the NMW increasing by 1.7 per cent since October 2013.

2.118 In contrast, the value of the NMW relative to average earnings had never been higher than it was in October 2014. 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 now at its highest level since the NMW was introduced. It is also at its highest across all sizes of firm, particularly for micro and small, and in the low-paying sectors as a whole.

Impact on the Labour Market

2.119 Having established that the minimum wage has had a significant effect on the bottom of the earnings distribution, we now turn to how firms have coped with the higher wage costs that have resulted from the introduction and subsequent increases in the NMW. In the face of these increased costs, employers have a number of options to limit the wage bill. Employers can attempt to absorb these costs by changing their pay structures and cutting other aspects of the remuneration package – some evidence for which was provided in the previous section. Firms can also alter employment by adjusting the number of workers employed or the number of hours worked. Firms can also seek to improve the productivity of their workforce through various means like investment in training and capital, or reorganising work. Alternatively, firms may respond by trying to pass the increased wage costs onto customers through higher prices, or by absorbing those costs in reduced profits. The magnitude of these adjustments will determine the extent of adverse impacts from increases to the minimum wage. The remainder of this chapter focuses on these adjustments to assess how firms and workers have coped with minimum wage increases. We start by considering the impact on employment and jobs.

2.120 In assessing employment, we consider two main official data sources: the Labour Force Survey (LFS) and the ONS Workforce Jobs series (WFJ). The LFS samples households and estimates employment by counting the number of people in employment. On the other hand, the WFJ series surveys businesses and counts the number of jobs in the economy.

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It includes employee jobs, HM Armed Forces, the self-employed and government-supported training schemes. These employment counts differ as they are derived from different samples and a person can have more than one or two jobs (official statistics would count a job share as two jobs).⁵ Further, due to the sampling frame, the LFS is less likely to pick up jobs performed by migrant workers who have been in the UK for under a year. ONS (2012) gives a more detailed explanation of the differences between the two data sources.

Employment and Employee Jobs

- 2.121** We first assess the impact on employment and jobs by looking at the labour market data for the whole economy. The UK economy has proved successful in creating a large number of jobs since the introduction of the National Minimum Wage. Between March 1999 and September 2014, as shown in Table 2.12, the number of workforce jobs, including the self-employed, has increased by 4.4 million or 15.0 per cent, and the number of employee jobs by 3.3 million or 12.8 per cent. That is annual growth of around 1 per cent a year, despite the loss of 843,000 workforce jobs (2.6 per cent) and 1.01 million employee jobs (3.6 per cent) during the recession.
- 2.122** The growth in the number of people in employment has been similar to that of jobs over the same period. Between March 1999 and September 2014, the number of people in employment increased by 13.9 per cent or 3.8 million. The growth in the number of employees was slightly weaker at 10.9 per cent or 2.6 million. Again these increases occurred despite a fall of 709,000 people in work (2.4 per cent) and 797,000 employees (3.1 per cent) during the downturn and its aftermath.
- 2.123** Given the depth of the recession and the subsequent sluggish growth, the labour market, as we noted in our 2014 Report, has been remarkably resilient. After the previous recessions of the 1980s and 1990s, which had been less severe in terms of loss of output, it had taken around eight years after the onset of recession for employment to return to its pre-recession levels and even longer for hours.

⁵ In the Labour Force Survey, an individual can have up to two jobs – a main job and a second job – but no more. In the Workforce Jobs Series, all jobs are counted.

Table 2.12: Change in Employment, Jobs and Hours, UK, 1999-2014

		Workforce jobs	Employee jobs	Employment	Employees	Hours worked (Millions)
Mar 1999- Sept 2014	000s	4367	3266	3757	2554	99.6
	%	15.0	12.8	13.9	10.9	11.2
Sept 2013-Sept 2014	000s	1212	974	695	455	21.7
	%	3.8	3.5	2.3	1.8	2.2
Sept 2012- Sept 2013	000s	470	442	345	324	16.9
	%	1.5	1.6	1.2	1.3	1.8
Sept 2011- Sept 2012	000s	215	127	476	281	22.6
	%	0.7	0.5	1.6	1.1	2.4
Sept 2010- Sept 2011	000s	255	40	-108	-139	-0.2
	%	0.8	0.1	-0.4	-0.6	0.0
Sept 2009- Sept 2010	000s	-131	-228	316	104	11.7
	%	-0.4	-0.8	1.1	0.4	1.3
Sept 2008- Sept 2009	000s	-677	-775	-511	-564	-30
	%	-2.1	-2.7	-1.7	-2.2	-3.2
Sept 2007- Sept 2008	000s	105	136	160	186	2.1
	%	0.3	0.5	0.5	0.7	0.2
Sept 2006- Sept 2007	000s	256	206	237	169	11.3
	%	0.8	0.7	0.8	0.7	1.2
Sept 2005- Sept 2006	000s	391	283	255	145	2.3
	%	1.2	1.0	0.9	0.6	0.2
Sept 2004- Sept 2005	000s	477	440	410	352	17.6
	%	1.5	1.6	1.4	1.4	1.9
Sept 2003- Sept 2004	000s	185	251	262	323	3.6
	%	0.6	0.9	0.9	1.3	0.4
Sept 2002- Sept 2003	000s	371	118	321	5	4.4
	%	1.2	0.4	1.1	0.0	0.5
Sept 2001- Sept 2002	000s	191	103	220	205	-1
	%	0.6	0.4	0.8	0.8	-0.1
Sept 2000- Sept 2001	000s	354	379	160	151	8.9
	%	1.2	1.4	0.6	0.6	1.0
Sept 1999- Sept 2000	000s	364	449	337	371	1.2
	%	1.2	1.7	1.2	1.6	0.1
Sept 1998- Sept 1999	000s	537	542	384	389	7.2
	%	1.9	2.1	1.4	1.7	0.8

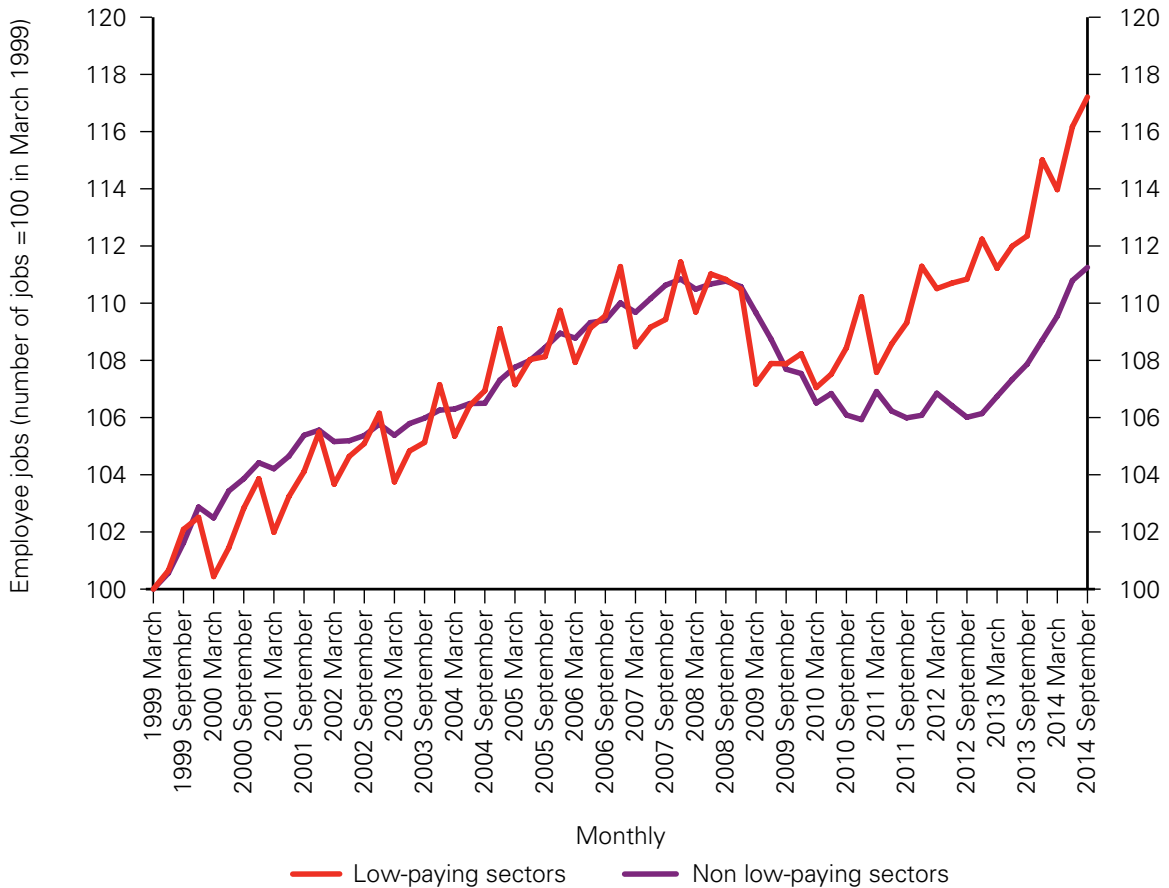
Source: ONS, workforce jobs (DYDC) and employee jobs (BCAJ), quarterly; total employment (MGRZ), employees (MGRN) and total weekly hours (YBUS), monthly, seasonally adjusted, UK, 1999-2014.

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- 2.124** After the recent recession, it had taken less than five years for both employment and hours to rebound to their pre-recession levels. This strength has continued in 2014, as we reported in Chapter 1, albeit there remain considerations of quality such as growth in zero hours contracts, and high levels of underemployment.
- 2.125** Over the last year, job and employment growth has again been very strong across a whole range of measures. In the year to September 2014, the number of workforce jobs increased by 3.8 per cent; the number of employee jobs by 3.5 per cent; the number of people in employment by 2.3 per cent; and the number of employees by 1.8 per cent. These are the highest annual (September-September) increases in employment and jobs that we have observed since the introduction of the National Minimum Wage. Indeed, in the year to June 2014, workforce jobs growth was at record levels (at 4.0 per cent). In the year to the second quarter of 2014, both employment growth and employee job growth were at their fastest since 1989.
- 2.126** However, as we noted when we discussed the impact of the National Minimum Wage on earnings, any effect on employment and jobs is most likely to show up in the low-paying sectors, small firms and low-paid workers. The increase in the adult rate of 1.9 per cent in October 2013 from £6.19 to £6.31 an hour would be expected to have most effect on those jobs and workers. Although this turned out to be a relative increase, as average wage growth remained subdued, it was still a fall in the real value of the NMW as the uprating in October 2013 was again less than both CPI and RPI inflation.
- 2.127** There were around 28.1 million employee jobs in Great Britain in September 2014.⁶ About 34 per cent of them, 9.7 million, were in what we define as our low-paying industries. Figure 2.24 shows how employee jobs have changed since the introduction of the minimum wage by comparing employee jobs in the low-paying sectors with those in the rest of the economy. Since September 1998, just prior to the introduction of the NMW, the number of employee jobs across the whole economy in Great Britain has increased by 3.4 million, or 13.6 per cent, but the number of employee jobs in the low-paying industries has increased faster, by 15.8 per cent. This relatively better performance is a surprisingly recent phenomenon.

⁶ In this and following paragraphs we use data for Great Britain (GB) rather than the 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 2.24: Change in Employee Jobs, by Sector, GB, 1999-2014



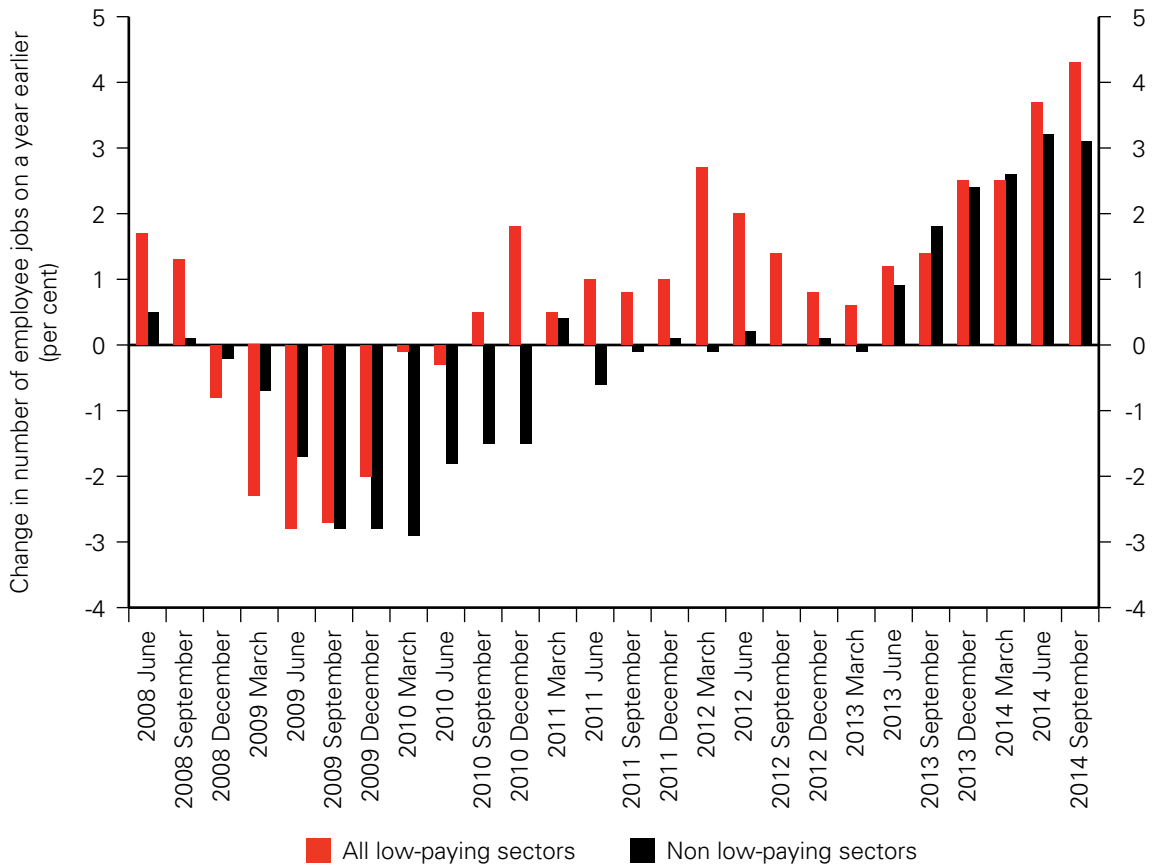
Source: LPC estimates based on ONS employee jobs series, every three months, not seasonally adjusted, GB, 1999-2014.

- 2.128** Job growth in the low-paying sectors was similar to that in the rest of the economy from 1999 through the onset of recession until the end of 2010. Since then, job growth in the low-paying sectors has been far higher. For the first part of the period March 1999 to September 2008, employee job growth was 10.8 per cent in both the low-paying sectors and the rest of the economy. Between September 2008 and March 2010, the number of employee jobs in the low-paying sectors fell by 312,000 (or 3.4 per cent), but this was followed by rapid growth not shared by the rest of the economy. The consequence was that the number of low-paying sector employee jobs had returned to its pre-recession levels by September 2012, a point from which it has continued to grow. By September 2014, the number of employee jobs in the low-paying sectors was 1.4 million or 17.2 per cent higher than it was in March 1999.
- 2.129** In contrast, the number of employee jobs in the rest of the economy fell by 801,000 (4.7 per cent) between September 2008 and December 2010 to around 17.5 million, and remained around this level until the end of 2012. Growth has since picked up, although the number of employee jobs did not recover to its pre-recession level until June 2014. By September 2014, the number of employee jobs in the rest of the economy was 1.9 million or 11.2 per cent higher than in March 1999.

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2.130 The relative performance of the two sectors since the onset of the recession is shown in another form in Figure 2.25. Going into the recession, job growth was stronger in the low-paying sectors than the rest of the economy. However, the low-paying industries appeared to be more sensitive to the onset of the downturn as consumption spending fell and world trade collapsed. But jobs in the low-paying industries recovered much more quickly in the aftermath of the recession. Between September 2010 and September 2014, the number of jobs in the low-paying industries increased by around 8.1 per cent, compared with 6.0 per cent in the whole economy.

Figure 2.25: Annual Change in Employee Jobs, by Sector, GB, 2008-2014



Source: LPC estimates based on ONS employee jobs series, every three months, not seasonally adjusted, GB, 2007-14.

2.131 Over the year to September 2014, the number of employee jobs in the low-paying sectors grew faster, around 4.3 per cent, than those in the rest of the economy, 3.1 per cent – all this despite a higher relative NMW, though one of lower real value.

- 2.132** 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 combines domiciliary care with non-primary school childcare activities. Residential social care is identified separately.
- 2.133** Between September 1998, just before the NMW was introduced, and September 2014 there was strong growth in employee jobs across nearly all of the low-paying sectors with the exception of the period of the recession and, in the rest of the period, low-paying sectors where international trade is important. Table 2.13 shows that growth was strongest in social care and childcare (up 47 per cent), followed by business-to-business services (up 34 per cent), and then those dependent on consumers (up 15 per cent). By contrast, those industries facing international competition saw jobs fall by over 34 per cent over the same period. However, these industries had experienced a long-term decline in employment well before the minimum wage was introduced.
- 2.134** As we noted above, many employee jobs were lost in the recession, with the low-paying sectors initially faring worse before recovering earlier than the rest of the economy. However, specific sectors dependent on consumer spending or international trade have not fared as well. Table 2.13 shows that there were still 148,000 fewer employee jobs in retail (excluding the motor trade) in September 2014 than there were in September 2008. The strong growth observed in 2012 had weakened in 2013 and 2014. There were also fewer employee jobs in textiles and clothing. Nonetheless the overall picture remains positive: these were the only two low-paying sectors that had not recovered fully from the effects of the recession.

Table 2.13: Change in Employee Jobs, by Low-paying Industry, GB, 1998-2014

	2014	Change on 2013		Change on 2007		Change on 1998	
	September	September	September	September	September	September	September
	000s	000s	%	000s	%	000s	%
All industries	28,073	959	3.5	743	2.7	3,371	13.6
Non low-paying industries	18,408	558	3.1	102	0.6	2,049	12.5
All low-paying industries	9,665	401	4.3	641	7.1	1,322	15.8
Consumer services	5,911	178	3.1	203	3.6	773	15.0
Retail	3,214	24	0.8	-93	-2.8	88	2.8
Retail (excluding motor)	2,696	-22	-0.8	-107	-3.8	77	2.9
Hospitality	2,035	132	6.9	213	11.7	449	28.3
Leisure, Travel and Sport	536	21	4.1	78	17.0	189	54.5
Hairdressing	126	1	0.8	5	4.1	47	59.5
Business-to-business	1,441	85	6.3	190	15.2	366	34.0
Cleaning	669	7	1.1	64	10.6	73	12.2
Employment agencies	772	78	11.2	126	19.5	293	61.2
Trade-dependent	655	50	8.3	-10	-1.5	-348	-34.7
Food processing	352	14	4.1	-5	-1.4	-78	-18.1
Agriculture	227	42	22.7	18	8.6	-41	-15.3
Textiles, clothing	76	-6	-7.3	-23	-23.2	-229	-75.1
Government-dependent	1,658	88	5.6	258	18.4	531	47.1
Residential care	689	11	1.6	44	6.8	183	36.2
Domiciliary care/ childcare	969	77	8.6	214	28.3	348	56.0

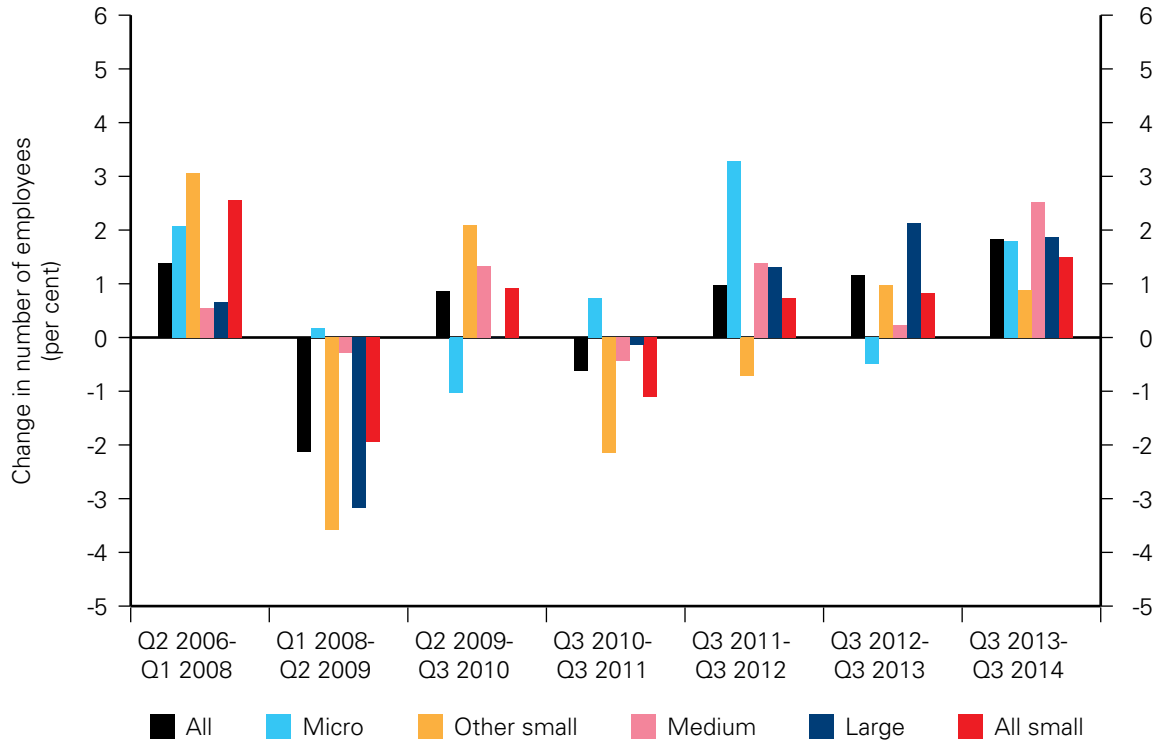
Source: LPC estimates based on ONS employee jobs series, three-monthly, not seasonally adjusted, GB, 1998-2014.

- 2.135** The short-term trend has also been encouraging with employee job growth very strong across the broad low-paying sectors in the year to September 2014. The number of employee jobs in business-to-business services; international trade-dependent; and government-dependent services all increased faster than jobs in the rest of the economy, with growth in the number of jobs in consumer services increasing a little more slowly.
- 2.136** The recent performance in trade-dependent sectors is striking given the long-term decline in such jobs, with 348,000 fewer jobs in September 2014 than in September 1998. In September 2014, there were 10,000 more employee jobs in the international trade-dependent low-paying sectors than in September 2008. Over the year to September 2014, jobs increased by 50,000 or 8.3 per cent. These jobs were mainly in agriculture but food processing also experienced increases.

- 2.137** There has also been strong job growth in the last year in business-to-business services and, perhaps surprisingly given reductions in state spending, government-dependent services. An extra 85,000 net jobs were created in the business-to-business services sector between September 2013 and September 2014, mainly in employment agencies. In addition, a further 88,000 were added to government-dependent services, mainly in the domiciliary care and childcare sector. Between September 2008 and September 2014, the number of employee jobs in government-dependent services have increased by nearly 18 per cent. There were 172,000 more domiciliary care and childcare jobs and 79,000 more residential care jobs.
- 2.138** Over the year to September 2014, the very strong employee job growth in the consumer services low-paying sectors, up 3.1 per cent, was driven by hospitality (up 6.9 per cent), and leisure, travel and sport (up 4.1 per cent). The trend has been less encouraging for hairdressing and retail which were flat. Indeed, if the motor trade is excluded, then jobs in retail actually fell, reflecting the widely rehearsed problems facing food retailers as well as structural change driven by the Internet.
- 2.139** This section has examined the evidence for any effect of increases in the minimum wage on overall employment in the low-paying sectors, and found little sign of employment loss except in textiles and food processing, which have been shedding labour for a period that started well before the introduction of the minimum wage; and retail, which is the largest low-paying sector. Job growth in retail has been slower than in other low-paying sectors since 2012. We also noted earlier that wage growth in this sector had also been much more subdued than in hospitality over the last year or so.
- 2.140** We turn now to the impact on small and medium-sized firms which, as noted earlier in the chapter, are particularly exposed to changes in the minimum wage. According to the LFS, over the year to the third quarter of 2014 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).⁷ The growth in employment by size of firm as shown in Figure 2.26 appears quite volatile. However, certain patterns do emerge.

⁷ Respondents to the LFS are asked the size of their workplace. It is self-reported and will not be as precise as other measures of firm size from different data sources. This is likely to underestimate the size of firm as firms can consist of many workplaces. Indeed, LFS estimates of employment in small firms (48 per cent) are much higher than the 35 per cent reported in the BIS Business Population Estimates (BPE) or the 21 per cent in ASHE.

Figure 2.26: Change in Employment, by Firm Size, UK, 2006-2014



Source: LPC estimates based on LFS Microdata, quarterly, not seasonally adjusted, UK, Q2 2006-Q3 2014.

- 2.141** 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 initially held up while 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 to the third quarter of 2011 saw a reversal of those trends, as other small firms and medium-sized firms shed jobs while micro firms increased employment rapidly. Employment in large firms was generally flat when considering taking the periods of recovery together.
- 2.142** Over the last year, the UK has experienced strong employment growth, led by micro firms, medium-sized firms and large firms. Other small firms experienced weaker increases in employment. Our analysis of earnings from ASHE showed that the strongest growth in wages had been among the larger firms.
- 2.143** Our analysis in an earlier section of this chapter suggested that the minimum wage had had a greater effect on micro firms than others, reflected in its record bite. It also showed that wage growth between 2013 and 2014 had been much lower for employees in micro firms than for those in larger ones. The solid performance apparent in 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 quite as strong.

- 2.144** As well as looking at the low-paying sectors and small firms, 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 2.14 shows that over the long term, taking the period as a whole from 1999-2014, those groups who are most likely to have been minimum wage workers have performed better in terms of employment than others.
- 2.145** Over the period, employment rates for working age females have increased (up 2.8 percentage points) while those for males have fallen (down 0.9 percentage points). Older workers increased their employment rates by 5.0 percentage points, compared with an increase of 1.0 percentage points for all those of working age. The ethnic minority group as a whole experienced a 5.3 percentage point increase in its employment rates compared with an increase of 1.6 percentage points for the White group. Similarly, migrants have also experienced higher employment rate growth (up 7.2 percentage points) compared with counterparts born in the UK (down 0.5 percentage points).
- 2.146** Employment rates for disabled people have risen much more strongly than for those without disabilities, up by 7.2 percentage points compared with 0.5 percentage points for the latter group. However, young people and those without qualifications have not done as well. Employment rates for those without qualifications, admittedly an ageing and shrinking group, have fallen by over 7 percentage points to 43.5 per cent. The employment rates for 16-17 year olds have fallen by 26.5 percentage points and for 18-20 year olds by 13.5 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.

Table 2.14: Employment Rates, by Group of Workers, UK, 1999-2014

(Rates: per cent; changes: percentage points)	2014 Q3	Change on:		
		2013 Q3	2008 Q2	1999 Q1
Working age	72.6	1.2	-0.3	1.0
Men	77.5	1.3	-1.4	-0.9
Women	67.7	1.1	0.8	2.8
16-17 year olds	21.5	-0.2	-12.4	-26.5
18-20 year olds	47.7	0.7	-8.8	-13.5
Older workers (65+)	10.0	0.5	2.9	5.0
White	74.3	1.2	-0.3	1.6
All ethnic minorities	61.3	1.7	0.9	5.3
Black	61.4	0.5	-2.2	0.3
Indian	71.4	0.8	2.8	8.4
Pakistani/Bangladeshi	51.2	2.3	5.6	12.8
Other non-white	61.0	2.7	-0.7	4.0
With Qualifications	75.5	0.8	-2.7	-2.9
No qualifications	43.5	1.3	-4.2	-7.3
Not disabled (16-59/64)	79.5	1.1	-1.1	-0.4
Disabled people (16-59/64)	42.3	0.3	2.0	4.6
UK born	73.0	0.9	-0.6	0.5
Non-UK born	69.5	1.8	1.6	7.2

Source: LPC estimates based on LFS Microdata, quarterly, four-quarter moving average, UK, Q2 1998-Q3 2014.

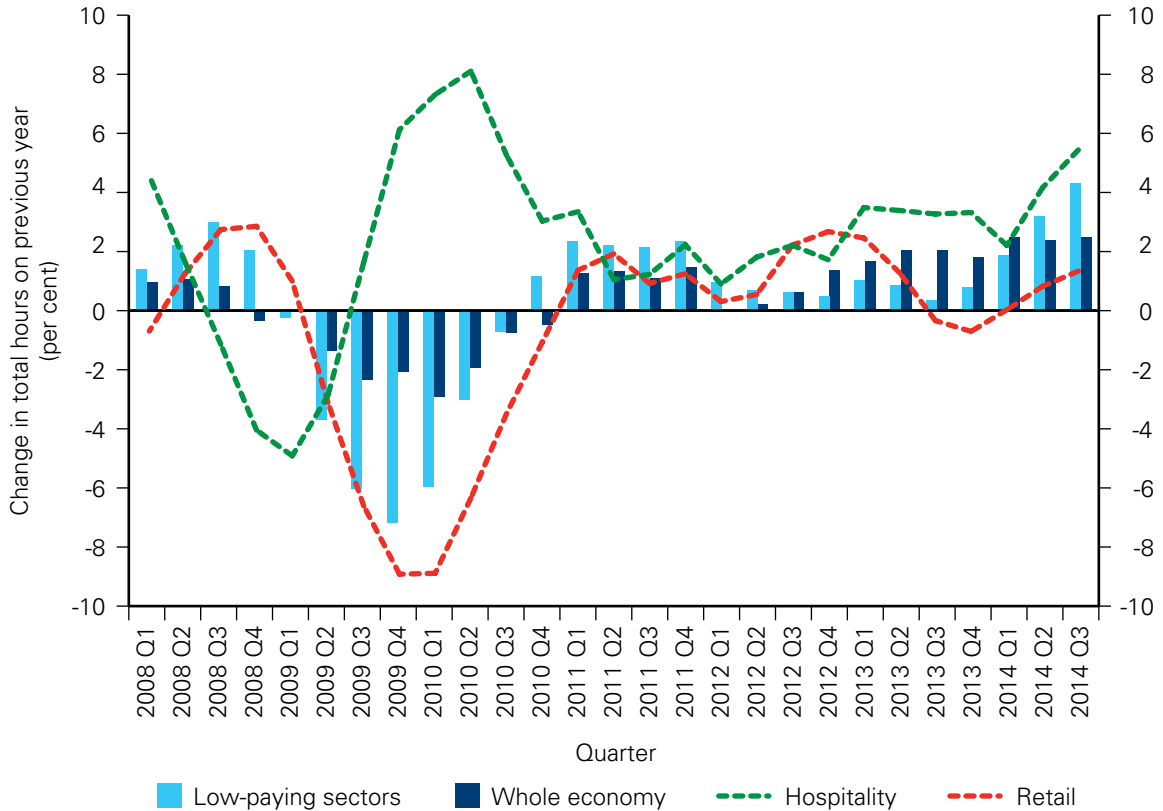
Note: Working age, unless otherwise stated.

- 2.147** Taking the period since the recession began (the second quarter of 2008), a similar picture emerges with women, older workers, those with disabilities, ethnic minorities, and migrants performing better than other groups. In contrast, employment rates have not recovered for young people and those with no qualifications.
- 2.148** As Chapter 3 sets out in more detail, over the year to the third quarter of 2014, employment rates for 16-17 year olds have fallen to 21.5 per cent. For 18-20 year olds, their employment rate increased but lagged the general increase in the working age population. However, these overall data disguise a more positive performance in both groups among those not in full-time education.
- 2.149** Meanwhile, over the year to the third quarter of 2014, there was an upturn for those with no qualifications, with employment rates rising by 1.3 percentage points to 43.5 per cent. Minority ethnic groups and migrants born outside the UK also experienced strong growth in their employment rates over the last year, both increasing by around 1.7-1.8 percentage points. Although ethnic minorities as a whole performed better than their White counterparts, there was some divergence between groups, with strong increases in the employment rates of those from Pakistani/Bangladeshi backgrounds and other non-white groups. Employment rates for the Black and Indian groups increased but at a slower rate than for the White group. Individuals with disabilities also performed less well over the last year compared with those without disabilities.

Hours

- 2.150** As we noted above, instead of changing employment, it is also possible for employers to try to cope with the minimum wage by adjusting 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 955.1 million in March 2008). It then fell in the recession by nearly 5 per cent, reaching a nadir of 910.7 million in August 2009, before recovering and by the spring of 2013 it had returned past its previous peak (955.3 million in May 2013). In October 2014, 991.6 million hours were worked in the UK each week, nearly 12 per cent more than when the minimum wage was introduced.
- 2.151** Figure 2.27 shows a trend for low-paying sectors similar to that seen in employment. As with jobs in low-paying industries during the recession, the fall in hours was greater in the low-paying industries than for the economy as a whole. But, once again, as the economy began to recover, hours worked picked up faster in the low-paying industries than in the economy as a whole.
- 2.152** Using quarterly data, total hours worked were 2.5 per cent lower in the fourth quarter of 2010 than in the second quarter of 2008. For the low-paying sectors total hours worked were about 5.4 per cent lower. However, between the fourth quarter of 2010 and the fourth quarter of 2012 hours rose by 3.0 per cent in the low-paying sectors compared with 2.8 per cent in the whole economy. The pick-up in the economy from the end of 2012 is characterised by weaker growth in hours in the low-paying sectors than in the rest of the economy up to the end of 2013 followed by stronger growth in 2014. Overall, since the end of 2012, hours have grown by 4.6 per cent in the low-paying sectors and 3.5 per cent in the rest of the economy.

Figure 2.27: Annual Change in Hours Worked, by Sector, UK, 2008-14



Source: LPC estimates based on LFS Microdata, quarterly, four-quarter moving average, UK, Q2 2006-Q3 2014.

2.153 The low-paying sectors have also broadly held their share of hours. They accounted for about 26.7 per cent of all hours in the second quarter of 2008, falling to 25.7 per cent in the fourth quarter of 2009, but rising to 26.3 per cent by the third quarter of 2014.

2.154 Amidst the overall positive trend, 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. Retail has not yet fully recovered. 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 increased by 4.0 per cent in retail and by 13.0 per cent in hospitality between the third quarter of 2010 and the third quarter of 2014. This compares with an increase of 4.1 per cent in the whole economy. Although hours worked in hospitality in the third quarter of 2014 are 18.7 per cent above the number of hours worked in the second quarter of 2008, they are still 5.1 per cent below in retail. Hours in the whole economy are 3.2 per cent above that level.

Vacancies and Redundancies

2.155 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. Both suggest a reasonably strong recovery, although with some sectoral differences. The stock of unfilled vacancies peaked in February 2008 at 695,000 but then fell sharply before bottoming out at 430,000 in May and June 2009. Since then vacancies have recovered to

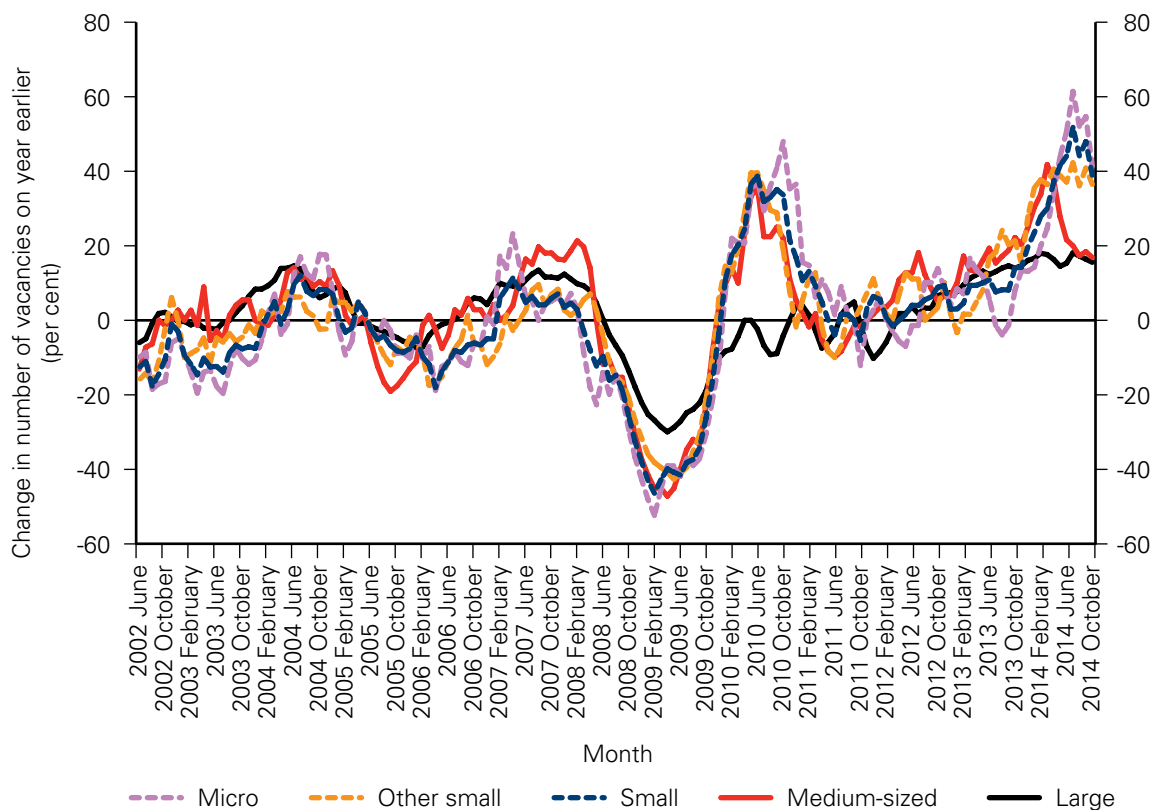
690,000 in October 2014, up 125,000 on the previous October and almost back to its pre-recession peak, 696,000 in February 2008.

2.156 A similar picture appears for the hospitality and distribution (which comprises the wholesale and retail) sectors. Vacancies in both low-paying sectors peaked in February 2008 (at 135,000 in distribution and 67,000 in hospitality) before falling throughout the recession (to lows of 76,000 in April 2009 in distribution, and 40,000 in hospitality in May 2009). Vacancies in both sectors have since grown, reaching 132,000 and 75,000 respectively in October 2014. Although vacancies in retail were still slightly below their pre-recession peak of 141,000, vacancies in hospitality were at a record high.

2.157 Figure 2.28 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.

2.158 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 and this upturn has continued into 2014. It should be noted that the growth in vacancies in 2014 has been strongest in small firms, especially micro ones.

Figure 2.28: Annual Change in Vacancies, by Firm Size, UK, 2002-14



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, 2001-14.
 Note: Micro is 1-9 employees, Other small is 10-49 employees, Small is 1-49 employees, Medium-sized is 50-249 employees, and Large is 250 or more employees.

National Minimum Wage

2.159 Redundancies had fallen gradually from over 207,000 in the three months to February 1999 to fewer than 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. The sluggishness of the economy in 2011 and redundancy programmes in the banking and public sectors then led to redundancies climbing to reach a peak of 174,000 by the three months to February 2012. They have since fallen back as the economy has started to recover. There were 102,000 redundancies in the three months to October 2014, well below the numbers prior to the recession, but higher than the 91,000 recorded in the three months to September 2014. There appeared to be similar trends among hospitality and retail to those observed for the whole economy.

Unemployment and Inactivity

2.160 As well as possible effects on jobs or hours, any negative impact of the minimum wage could be reflected in increased unemployment or inactivity. We showed earlier in this chapter that in fact employment rates for many of the groups expected to be most affected by the minimum wage have increased since its introduction. Table 2.15 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.

Table 2.15: Unemployment and Inactivity Rates, by Groups of Workers, UK, 1999-2014

(Rates: per cent; changes: percentage points)	Unemployment				Inactivity			
	Change on:				Change on:			
	2014 Q3	2013 Q3	2008 Q2	1999 Q1	2014 Q3	2013 Q3	2008 Q2	1999 Q1
Working age	6.7	-1.2	1.4	0.4	22.2	-0.3	-0.8	-1.4
Men	7.0	-1.4	1.4	0.0	16.6	-0.1	0.3	1.0
Women	6.4	-1.1	1.4	0.9	27.7	-0.4	-2.0	-3.7
16-17 year olds	35.0	-2.5	8.8	14.9	67.0	1.7	12.9	27.0
18-20 year olds	21.5	-2.8	5.5	6.8	39.3	1.3	6.6	11.0
Older workers (65+)	2.3	0.2	0.6	-0.5	89.7	-0.6	-3.0	-5.1
White	6.0	-1.1	1.2	0.2	21.0	-0.3	-0.7	-1.8
All ethnic minorities	11.9	-2.0	1.3	-1.5	30.5	-0.3	-2.0	-4.9
Black	16.1	-1.0	3.3	1.2	26.9	0.3	-0.3	-1.4
Indian	6.6	-2.7	-0.4	-2.6	23.6	1.4	-2.7	-7.0
Pakistani/ Bangladeshi	15.8	-3.3	1.4	-4.4	39.1	-0.3	-7.5	-12.7
Other non-white	10.6	-1.7	0.9	-1.7	31.7	-1.8	0.1	-3.3
With qualifications	6.3	-1.1	1.5	0.7	19.5	0.1	1.6	2.4
No qualifications	15.8	-2.6	4.0	3.3	48.4	0.0	2.4	6.4
Not disabled (16-59/64)	6.0	-1.3	1.2	0.3	15.4	-0.1	0.1	0.2
Disabled people (16-59/64)	14.7	-0.9	2.9	1.7	50.4	0.2	-4.0	-6.2
UK born	6.5	-1.2	1.5	0.5	21.9	0.0	-0.5	-0.9
Non-UK born	7.6	-1.6	0.6	-1.0	24.7	-0.7	-2.2	-7.1

Source: LPC estimates based on LFS Microdata, quarterly, four-quarter moving average, UK, Q2 1998-Q3 2014.

Note: Working age, unless otherwise stated.

2.161 In contrast to the rise in inactivity rates for men, those for women have fallen since 1999, while men have fared better in terms of unemployment rates. The male unemployment rate in the third quarter of 2014 was the same as it was in the first quarter of 1999 and the fall in the rate over the last year, to the third quarter of 2014, has been larger for men. Again, as seen earlier in this chapter, it is a different story for young workers and those with no qualifications who have generally seen their unemployment and inactivity rates rising.

2.162 Over the last year, to the third quarter of 2014, the picture has reversed a little with unemployment rates falling faster for those with no qualifications and for 16-17 year olds and 18-20 year olds. Older workers were the only group whose unemployment rate went up, albeit by only 0.2 percentage points. Unemployment rates for migrants and ethnic minorities as a whole fell faster than for the working age population on average. Their inactivity rates also fell.

2.163 Since the onset of recession, young people and those with no qualifications have fared worse than others, although they did experience the largest improvement over the year to the third quarter of 2014. Individuals of Black ethnic origin and those with disabilities have also fared worse in terms of their unemployment experience. Other ethnic minorities and migrants have generally performed better than average.

Research on Employment, Hours and Unemployment

2.164 Most of the research that has been conducted on the minimum wage in the UK has looked at some aspect of its impact on employment and hours. Our 2014 Report provided a detailed overview of that research. In addition to summarising those findings, we also report on the findings of our commissioned research for this report.

2.165 Researchers have adopted a number of different methods and approaches to address this issue. These have included the analysis of: aggregate and sectoral time series data; individual data; the geographic variation in bite and coverage; industry and business data; and case studies. De Linde Leonard, Doucouliagos and Stanley (2014) attempted to summarise 16 of those UK studies by using meta-analysis (a study of studies). They found no overall significant adverse employment effect but noted that some negative impact could be found in the residential home care industry. This is similar to the conclusions that we have drawn in our previous reports.

2.166 The analysis of time series data across samples of countries has generally found that minimum wages have a statistically negative impact on employment (OECD 1998; Neumark and Wascher, 2004 and 2008). However, research undertaken in the UK has questioned these findings. Dolton and Rosazza Bondibene (2011 and 2012) found that the results were dependent on the specification of the model and definition of the minimum wage, though they did find a consistent and strong negative impact on the employment of young workers. 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.

2.167 Researchers have also used data on individuals to assess the impact of the introduction and subsequent upratings in the minimum wage on employment and unemployment but these studies have also generally found little adverse impact of the minimum wage on employment. For example, Stewart (2004a and 2004b) investigated the impact of the introduction of the minimum wage; while Dickens and Draca (2005); Dickens, Riley and Wilkinson (2009); Mulheirn (2008); Bryan, Salvatori and Taylor (2012 and 2013) and Dolton, Rosazza Bondibene and Stops (2012) have focused on subsequent upratings. All of these studies found no significant and consistent adverse effects on employment. Where negative employment effects have been found, these have generally been insignificant or not robust. For example, 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, while Gregg and Papps (2014) found significant negative effects on job retention but their analysis did not take account of any increased job entry as a result of higher wages.

- 2.168** Spatial analysis, taking advantage of variations in pay across the country, has also been used to investigate the impact of the minimum wage on employment. The probability of employment or employment growth in the lowest wage areas has been compared 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) investigated the introduction; Dickens, Riley and Wilkinson (2009) the 2001-06 upratings; Dolton, Rosazza Bondibene and Wadsworth (2009) used data from 1997-2007; Dolton, Rosazza Bondibene and Stops (2012) and Dickens, Riley and Wilkinson (2012) used data from 1999-2011. They all found no adverse effects on employment. Using data up to 2012, Bryan, Salvatori and Taylor (2013) 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).
- 2.169** In contrast to all these previous findings and adopting a slightly different approach 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.
- 2.170** As well as employment, researchers have also investigated the impact of the minimum wage on hours. There appears to be more evidence of adverse effects with regards to hours than employment, although the estimated reductions in hours have not generally been sufficient to reduce weekly earnings. 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) found reductions in hours, particularly among young workers. However, Bryan, Salvatori and Taylor (2013) updated their earlier analysis and concluded that they could find no systematic effect of the NMW on hours worked by adults across time or even during the recession. Gregg and Papps (2014), in their analysis of weekly pay using ASHE, also found that the minimum wage reduced hours worked among those who remained with their employer, albeit that reduction was small and not sufficient to reduce weekly pay.
- 2.171** Several case studies of various industries, such as hairdressing (Druker, Stanworth and White, 2002), textiles (Gray and Hayes, 1999), hospitality and clothing (Lucas and Langlois, 1999) and horse racing (Winters, 2001), investigated the introduction of the National Minimum Wage. These, in general, concluded that there had been no employment effects from minimum wage increases. However, Machin, Manning and Rahman (2003), Machin and Wilson (2004), and Georgiadis (2006) investigated the impact of the minimum wage in residential care homes and all found that the wage structure had been affected by the NMW but only moderate employment effects had resulted. Care homes may have absorbed

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increased costs through a reduction in profits, as found by Draca, Machin and Van Reenen (2011), rather than employment. In a follow-up study, Georgiadis (2013) found evidence to suggest that the NMW may have acted as an efficiency wage, in that increases in the minimum wage had been partly offset by reductions in supervisory staffing.

- 2.172** Recent US research has contributed to the debate about minimum wage effects on employment. Belman and Wolfson (2014) conducted a meta-study of US research looking at the impact on employment more generally but found no statistically significant negative employment effects. That study built on previous meta-study work by Doucouliagos and Stanley (2009) that had looked at the impact of minimum wages on teenage employment in the US and had concluded that minimum wage increases had led to insignificant employment effects. In contrast, Neumark and Wascher (2006) had found significant adverse effects in their qualitative review of the international research since the 1990s. In other recent studies in the US, Allegretto, Dube, Reich and Zipperer (2013) found the employment effects were small when looking at the impact of the minimum wage on teenagers and fast food workers. However, Dube, Lester and Reich (2013), in a study of teenagers and restaurant workers, found a sizable negative impact on flows (separations, hires and turnover rates) but not on stocks (the level of employment). Brochu and Green (2011) using Canadian data from 1979-2008 also investigated flows looking at quits, lay-off and hiring rates. They found that higher minimum wages are associated with lower hiring rates but also lower separation rates. As these effects offset each other for older workers, they resulted in little impact on the employment rate.
- 2.173** D’Arcy and Hurrell (2014) revisited the issue of whether low-paid jobs acted as stepping stones on the career path to better-paid jobs or whether they are part of a cycle between no work and low-paid work. If minimum wage jobs generally were transitory and provided a platform for climbing the career ladder it would be less of a concern than if we found that minimum wage workers continually between unemployment and a variety of short-term minimum wage jobs. Unlike previous research focused on NMW workers, D’Arcy and Hurrell considered low-paid workers more broadly defined, those earning less than two-thirds of the hourly median. They looked at those who were low paid in 2001 and followed their progress over the next decade. They found that a quarter had exited the labour market due to death or retirement or become permanently detached from work. Another 55 per cent were regarded as cyclers moving in and out of low-paid jobs, around two-thirds of whom were mainly in work with the other third mainly out of work. Only 14 per cent had escaped from low pay, while 7 per cent remained in low pay for the entire period. Jones, Jones, Latreille, Murphy and Sloane (2007) had found that fewer than five per cent of minimum wage workers remained in such jobs for more than two years. However, Bryan and Taylor (2006) found that although minimum wage jobs were transitory for most workers, up to 40 per cent of those who had been in minimum wage jobs had moved between such jobs and out of the labour market over the five-year period in their analysis.
- 2.174** Turning to the findings of new research commissioned for this year’s report, Bewley and Wilkinson (2015) used the Annual Survey of Hours and Earnings (ASHE) and the Labour Force Survey (LFS) to look at the impact of the minimum wage on employment, unemployment and hours using analysis of both individuals and local areas. In common with the findings from

Dickens, Riley and Wilkinson (2012), their analysis using ASHE found that NMW upratings had led to a fall in the likelihood that female part-time employees remained in employment. Bewley and Wilkinson (2015) also found a lower rate of employment retention for male full-time employees in the years from 2010 onwards. That was also consistent with the negative employment effects for this group found in some specifications by Dickens, Riley and Wilkinson (2012). Papps and Gregg (2014) had also found negative effects on employment retention for all employees. The findings were reasonably robust using ASHE, although there was some evidence that the estimates of the negative effects on employment retention which emerge over time may have been overstated. However, the researchers found no evidence of the NMW having any impact on employment retention when using the LFS, casting some doubt on the robustness of those negative effects.

- 2.175** Bewley and Wilkinson (2015) also analysed job entry from unemployment and the impact on hours. They found that in response to NMW upratings, the probability of entering employment from unemployment appeared higher for men after 2010. They also found that job entry for women from unemployment did not appear affected by increases in the NMW. In common with some previous research, such as Dickens, Riley and Wilkinson (2009 and 2012) and Bryan, Salvatori and Taylor (2012), they found some evidence that NMW increases had led to reductions in hours. In this research these negative effects appeared confined to female full-time employees since 2010. However, using alternative specifications and sensitivity tests, these negative hours effects were shown not to be robust. Like Bryan, Salvatori and Taylor (2013), the researchers concluded that there was only limited evidence of an impact on hours.
- 2.176** Exploiting the geographic variations in pay by local area, Bewley and Wilkinson (2015) found that the NMW did not appear to have an impact on the employment rate for adult workers. There was also no strong evidence that the NMW had influenced the total number of hours worked by men and women.
- 2.177** Riley and Rosazza Bondibene (2015) in their analyses using firm-level and industry-level data found that increases in labour productivity had not resulted from reductions in employment.

Views on Employment and Hours

- 2.178** Evidence over time from employers has tended to express concern that increases in the NMW has adversely affected employment and hours. Although a number of business representatives continued to submit similar evidence for this report, others told us that for many employers the recent upratings had been absorbed in some other way, rather than through a reduction in hours or jobs (see sections on earnings and pay and competitiveness). Our on-line consultation survey found a fairly even split between employer views as to whether they would be able to cope with 2014 NMW upratings. Trade unions submitted that there was little evidence that the minimum wage had a negative impact on employment, and indeed that in the low-paying sectors, where the NMW is most likely to have an impact, the position on jobs was more positive than in the rest of the economy.

2.179 The CBI referred to recent research which indicated that during the recession, firms absorbed the cost of an increase in the NMW by reducing hours worked rather than making employees redundant. The British Hospitality Association, British Beer and Pub Association, Business in Leisure and Association of Licensed Multiple Retailers (BHA, BBPA, BIL and ALMR) thought that the 2013 NMW upratings were moderate and reflected their industry's concern not to choke off employment growth. This did not mean, however, that no employer had to cut back on total employee hours – individual operations in all parts of the industry had run into difficulties even though the general position had been positive. Nevertheless they thought it would be hard to say that the upratings had an adverse impact on employment in the past year. By contrast, they thought the impact of the 2014 upratings on the sector's total costs was at the top end of what could be afforded without damaging side-effects on employment.

2.180 In the retail sector, the Association of Convenience Stores (ACS) said that its annual survey of members showed that 94 per cent of retailers responding had been impacted by increases in employment costs and, of these, 88 per cent had reduced staff hours. Seventeen per cent of retailers responding to the survey expected to decrease the number of paid staff hours over the next year. ACS added that there was a clear correlation between increases in the NMW and a reduction in paid working hours and staff numbers. The British Retail Consortium (BRC) expressed a similar view to ACS, saying that the three per cent uprating of the adult NMW rate in October 2014 was likely to result in fewer hours offered to staff. The British Independent Retailers Association (BIRA) reported that 38 per cent of respondents to a members' survey said that they had reduced the number of staff employed in order to comply with the NMW.

"In terms of the impact of the NMW we are seeing a trend whereby employers are taking on more of the work to cut the pay bill. This may include laying off business managers and/or paying themselves rates below the NMW."

Scottish Licensed Trade Association, Commission visit to Glasgow

2.181 In the hairdressing sector, the National Hairdressers Federation (NHF) said that for many salons the after-effects on the recession continued so any increase in labour costs brought risks of reduced hours or other staff cutbacks. However, in the textiles and clothing sector, the UK Fashion and Textile Association (UKFT) said that because of increased activity and consequent better recovery of overheads, most companies had managed to absorb the 3 per cent increase in 2014 without the need for redundancies; but would be alarmed at any future real terms increases in the NMW.

2.182 In the childcare sector the National Day Nurseries Association (NDNA) said statutory regulations, such those controlling the minimum ration of staff to children, meant nurseries were limited in the action they could take in relation to staffing to reduce costs; though some reported to NDNA that they had introduced short-time working, held off recruiting and made redundancies.

2.183 Trade unions emphasised there was little evidence that the NMW had a detrimental effect on employment. For example, the Union of Shop Distributive and Allied Workers (Usdaw) pointed out that according to data from the Labour Force Survey (spring 2014) the numbers of employees in retail had risen by 14 per cent compared with a year earlier. Usdaw said that the fact that the numbers employed in retailing are increasing further showed the sector was doing well.

2.184 The Trades Union Congress (TUC) pointed to strong employment growth in 2014 with the employee workforce as a whole growing by 1.5 per cent and the low-paying sectors growing faster at 2.5 per cent. The TUC added that agriculture, food processing and building services all saw increases in the number of employees that topped 10 per cent on the LFS main jobs measure, whilst the number of hospitality employees increased by 89,000 (8.9 per cent). Weaker employment growth in other low paid sectors was not connected with the NMW. The TUC concluded that there were no signs that the minimum wage was constraining the creation of jobs in the low-paying sectors.

2.185 Other union organisations, such as Unite, also advised that there was no evidence to suggest an adverse impact from the NMW on employment. Indeed it believed the evidence continued to show that the NMW has had a positive effect in the last year on employment levels. The Communications Workers Union (CWU) also pointed to a strengthening position on employment. It said employment rates had continued to improve, with the unemployment rate falling to 6.4 per cent for April to June 2014, the lowest rate since late 2008. For April to June 2014, there were 167,000 more people in work than for January to March 2014 and 820,000 more than a year earlier. Much of this job creation had been in low-paying industries, with the number of jobs created in food and beverage services and services to building and landscaping industries growing by around a quarter (a net increase of 277,000 jobs) over the last five years.

“There has been previous concern about the NMW decreasing levels of employment within the UK’s low-paying sectors... However, since the introduction of the NMW this has not proven to be the case. In fact employment in the low-paying sectors within the UK has increased by 1,144,000 or 17.2 per cent. In the last year employment in the low-paying sectors has increased by 228,000 or 3.0 per cent.”

Unite evidence

Conclusion on Employment and Hours

2.186 Despite the increased level of the bite of the NMW, total employment has continued to grow in the economy as a whole and in the low-paying sectors. Indeed the growth in both workforce jobs and employee jobs in 2014 is the fastest on record. The growth in total employment and hours worked in the year to the second quarter was the fastest since the late 1980s. Moreover, although the bite in the low-paying sectors has grown even more than in the economy as a whole since 2007, the number of jobs in the low-paying sectors has increased at a faster rate than the number in the whole economy (4.3 per cent over the last year compared with 3.1 per cent for other sectors). Employment growth has also generally been strong across all firm sizes. Further, the employment performance of those groups of workers most affected by the minimum wage – women, older workers, disabled workers, ethnic minorities, and migrants – has generally been better, since the onset of the recession, than that of others not so affected by the NMW. However, there are two groups whose experience has been worse: young people and those with no qualifications, although it is important to note that the employment rates of those aged 18-20 not in full-time education and those with no qualifications have increased over the last twelve months.

Impact on Competitiveness

2.187 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

2.188 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 had not been reflected in the annual change in unit costs of wages and labour, as productivity had also fallen. Figure 2.29 shows that the annual change in both unit wage costs and unit labour costs have generally followed similar trends over time. That suggests increases in wage costs and non-wage costs, such as employers' National Insurance contributions and pension provisions, have been comparable. Over the recession the annual change in unit wage costs increased from about 1-2 per cent in early 2008 to over 6 per cent in the middle of 2009. Unit labour costs also increased from 2 per cent to over 6 per cent, as the fall in employment was less than the loss of output. As output recovered after the second quarter of 2009 and into 2010, growth in unit wage costs slowed, becoming negative through much of 2011. The sluggish output growth between the third quarter of 2010 and the beginning of 2013, combined with the large increases in employment that we have already noted, led to an increase in unit wage and labour costs, with annual growth reaching around 3 per cent between the third quarter of 2012 and the second quarter of 2013. Since then, the economy has become stronger, although employment growth has also been strong. Alongside this pick-up in output growth, wage growth has remained subdued leading to falls in the growth of unit wage costs to close to zero for most of 2014. However, growth in unit

labour costs has only fallen back towards 1-2 per cent, possibly reflecting the impact of pension reforms and the introduction and roll out of auto-enrolment. These data do not allow detailed sectoral analysis.

Figure 2.29: Annual Change in Unit Wage and Labour Costs, UK, 1998-2014



Source: ONS, unit wage costs (LOJE) and unit labour costs (DMWN), quarterly, seasonally adjusted, UK, Q1 1998-Q3 2014.

2.189 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

- 2.190** 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 four main sources of detailed information on consumer, producer and business-to-business prices. The CPI and RPI collate information on prices to consumers, the producer price index (PPI) looks at factory prices, while the Services Producer Price Index (SPPI) collects information on business-to-business transactions. Since the introduction of the minimum wage in April 1999, SPPI has increased by 33 per cent, while CPI and RPI have risen faster, by 40 and 57 per cent respectively. For the most part, it appears that firms may have found it easier to increase the prices of minimum wage goods and services (those produced by firms in low-paying sectors with a high proportion of minimum wage workers) to consumers rather than to other businesses. Table 2.16 suggests that since the introduction of the minimum wage the prices of selected consumer goods and services have risen much faster than prices in general. Between 1999 and 2014, 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.
- 2.191** In contrast, prices for many business-to-business minimum wage goods and services had typically increased much less than general price rises, for example, industrial cleaning, dry cleaning and hotels. The exceptions to this were canteens and catering, and employment agencies, where prices to business had gone up slightly more than the general increase in business-to-business prices since 1999. However, considering increases over the whole period from 1999-2014 disguises changes that have occurred within this period.
- 2.192** Since the onset of recession, firms appear to have been much less able to pass on price rises to consumers although there is a difference between trends measured on a CPI and RPI basis. Between 2007 and 2013, the price rises in selected minimum wage goods and services for consumers were generally below the general increase in CPI prices. The price rises in selected minimum wage goods and services using the RPI continued to increase at least as fast as the general increase in the RPI. However, over the last year, this has reversed and we can see that prices in all of those CPI selected goods and services grew faster than the general price rise. In contrast, for the selected RPI goods and services, only take-aways and snacks, and licensed wine and sprit sales grew faster than the general price rise.

Table 2.16: CPI, RPI and SPPI Price Inflation for Selected Goods and Services, UK, 1999-2014

		Percentage change				
		1999 Q1- 2004 Q3	2004 Q3- 2007 Q3	2007 Q3- 2013 Q3	2013 Q3- 2014 Q3	1999 Q1- 2014 Q3
CPI	All items	7.0	6.7	20.8	1.4	40.0
	Restaurants and cafes	17.2	10.0	22.9	2.4	62.2
	Canteens	28.8	11.6	17.6	1.7	72.1
	Dry cleaning	18.0	13.8	16.3	2.7	60.4
	Domestic and household services	38.5	14.4	14.0	2.9	85.9
	Hairdressing	31.1	12.2	14.8	1.5	71.4
RPI	All items	14.5	10.5	21.1	2.4	56.9
	Restaurant meals	19.1	9.0	22.4	2.4	62.6
	Canteen meals	32.0	11.9	16.9	0.5	73.4
	Take-aways and snacks	18.2	9.2	21.3	2.5	60.5
	Beer on-sales	16.4	11.4	24.0	1.8	63.8
	Wine and spirits on-sales	18.0	9.3	26.8	3.2	68.8
	Domestic services	35.0	15.5	17.7	2.4	88.0
	Personal services	32.7	14.3	24.5	2.1	92.8
SPPI	Net sector	10.6	8.7	8.6	1.4	32.8
	Hotels	9.7	13.2	-8.5	5.7	20.0
	Canteens and catering	8.1	9.1	11.9	2.2	34.8
	Employment agencies	20.7	7.6	4.0	0.8	36.2
	Industrial cleaning	4.2	8.0	4.8	1.6	19.8
	Commercial washing and dry cleaning	8.4	5.6	4.4	1.1	20.8

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); industrial cleaning (K8YQ); commercial washing and dry cleaning (K8ZM), quarterly, not seasonally adjusted, UK, Q1 1999-Q3 2014.

Note: SIC 2007-based SPPI net sector (transactions between business services and other sectors excluding business services) data are only available from Q1 2003 onwards. On the SIC 2003 basis they are available from Q1 1998-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 from Q2 2010-Q3 2014. All other SPPI figures are on the SIC 2007 basis.

2.193 Overall, price rises for business-to-business transactions between 2007 and 2013 again appeared much more constrained than price rises to consumers, with the exception of canteens and catering – affected by the large increases in the price of food. Business-to-business prices generally remained subdued in 2014, except for hotels whose rates rebounded strongly in 2014 and canteens and catering again.

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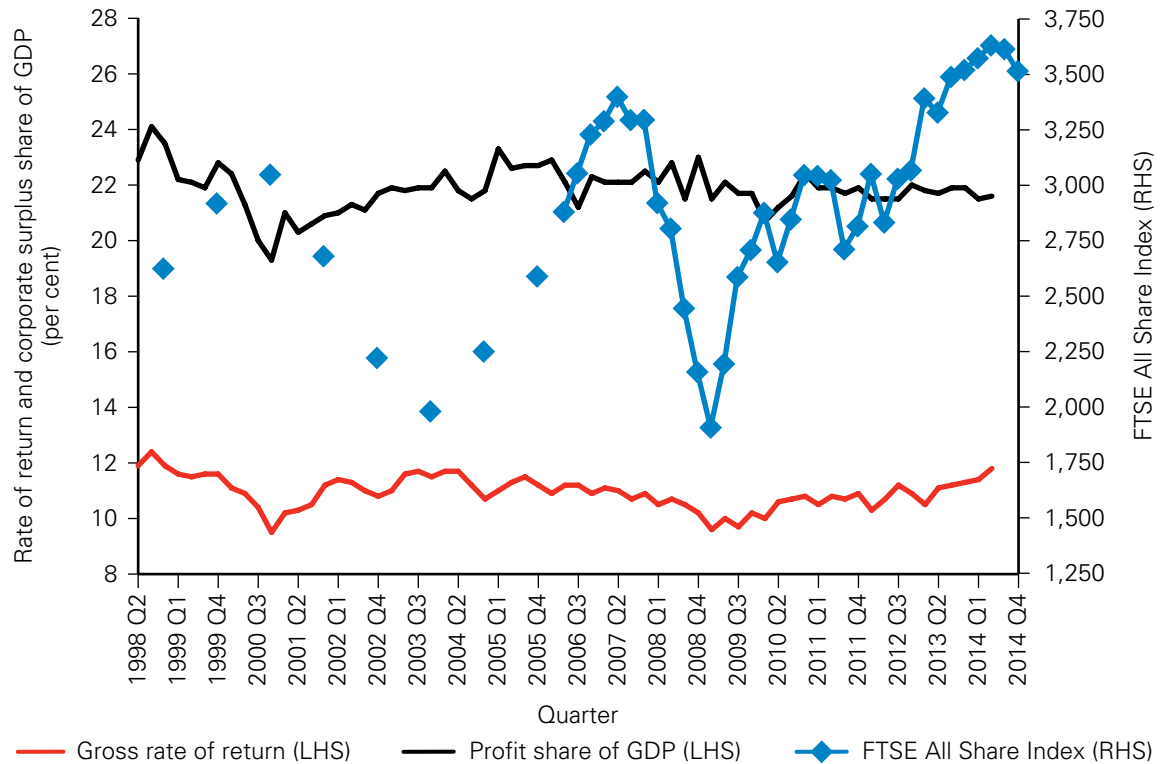
2.194 Another indicator of inflation for businesses is provided by the Producer Price Index (PPI), which measures the price changes of goods bought and sold by UK manufacturers. These measures also tend to suggest that inflationary pressures have been weak. Factory gate prices, prices for those goods produced by UK manufacturers, fell by 0.8 per cent in the year to December 2014 – the sixth consecutive month to show a fall in factory gate prices. For food products, the fall was 2.5 per cent. In contrast, prices rose by 2.3 per cent for clothing, textile and leather. Core factory gate prices, excluding the effects of petrol and food, rose by 0.8 per cent. Input prices have fallen sharply over the year to December 2014 by 10.7 per cent, driven by the fall in crude oil prices of 35.7 per cent and home-produced food by 12.3 per cent. Core input prices, excluding fuel and food, fell by 1.9 per cent. These producer price inflation measures show that there is little pressure on costs from input prices.

Profits

2.195 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. Profitability, as measured by gross trading profits for UK non-oil corporations, initially held up during the recession, growing at 3.0 per cent in 2008. It then collapsed, falling by 6.9 per cent in 2009. Thereafter, gross profits have increased, returning to their pre-recession level by the third quarter of 2011. They rose by 11.0 per cent in 2013, and despite a blip in the first quarter of 2014, when they fell by 5.0 per cent, they have since grown strongly. In the third quarter of 2014, they were 17.7 per cent higher than in the third quarter of 2013.

2.196 Gross operating surplus has followed initially similar trends, though without the same recent sharp rise. When expressed as a proportion of GDP, it is often referred to as 'the profit share'. Figure 2.30 shows that the profit share had fallen from nearly 27 per cent in the first quarter of 1997 to around 22 per cent of GDP, when the minimum wage was introduced, to about 19 per cent at the beginning of 2001. It then embarked on a general upward trend that peaked at 23.3 per cent in the second quarter of 2005. Having fluctuated just below this level, it reached 23.0 per cent at the beginning of 2009. It has since fallen back, remaining at 22.0 per cent or less in every quarter bar two – the third quarter of 2009 and the first quarter of 2011. In the third quarter of 2014, it was 21.6 per cent, similar to its share in the third quarters of 2012 (21.7 per cent) and 2013 (21.5 per cent). Indeed, the profit share has been little changed since the second quarter of 2009.

Figure 2.30: Selected Profit Measures, UK, 1998-2014



Source: ONS, Gross rate of return (LRX0) and profit share of GDP (IHXM), quarterly, seasonally adjusted and FTSE All Share Index, UK, Q1 1998-Q4 2014.

2.197 The gross rate of return on capital employed can also be used as a measure of profits. Using this measure, Figure 2.30 suggests that the profit rate has been gradually increasing since the second quarter of 2009. It is now at its highest, 11.8 per cent in the third quarter of 2014, since the fourth quarter of 1998, when it was 11.9 per cent. 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 10.9 per cent to 7.5 per cent between the second quarter of 2008 and the second quarter of 2009, profits in manufacturing recovered to over 10 per cent in the first half of 2011, but then fell back towards 8 per cent in the financial year 2012/13. The rate of return has since picked up and by the third quarter of 2014 was 11.1 per cent, its highest since the first quarter of 2006. Profits in services fell by less during the 2008-09 recession (from 13.1 per cent in the first quarter of 2008 to 12.2 per cent in the fourth quarter of 2009), but have since picked up more strongly than in manufacturing and stood at 15.4 per cent in the third quarter of 2014.

2.198 Share prices offer an alternative measure of (future) profitability. Figure 2.30 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 more or less remained until the fourth quarter of 2012. It then rose and, as we noted in our 2014 Report, reached 3,500 in the third quarter of 2013, above its pre-recession peak. Over the year since then it increased further, reaching 3,600 in May 2014 but has since fallen back to end the year, where it started, around 3,500. Most broad low-paying sectors, however, appeared to have performed better than that.

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According to the Performance by Sector, provided in the Daily Telegraph, shares increased at least 6 per cent in 2014, compared with 2013, in Travel and Leisure; General Retailers, Beverages, Food Producers and Household Goods and Home Construction. In contrast, in the sector that covers supermarkets, Food and Drug Retailers, share prices fell by nearly 40 per cent.

2.199 The above data on profitability present a broadly positive picture, but it should be noted that it is at an aggregate level, with most of it relating to the behaviour of large firms. Anecdotal evidence, including accounts we heard during our visits around the UK, suggests small firms and certain low-paying sectors may have faced smaller profit margins than large firms. In its most recent biennial survey of small businesses conducted in 2012, BIS (2013c) found that just 72 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 (86 per cent), compared with 75 per cent of other small firms and 71 per cent of micro firms. The survey also found that only marginally more businesses made a profit than in the previous survey undertaken in 2010 (up 1 percentage point overall).

2.200 Other data give a more positive view. Business Population Estimates for the UK showed that between the start of 2013 and start of 2014, annual turnover of all firms increased by over 7 per cent. Turnover in micro firms increased by nearly 10 per cent and around 5 per cent for other small firms. However annual turnover for medium-sized firms fell by nearly 3 per cent. Annual turnover also grew strongly for large firms, up by just over 10 per cent. Small firms (micro and other small firms) accounted for 37 per cent of all employees but just 28.5 per cent of the revenue generated. Turnover per worker at the beginning of 2014 was lowest for those with no employees (£53,100) and increased with firm size – Micro firms had a turnover per worker of £108,200; other small firms £135,200; medium-sized firms £155,100; and large firms £186,100. Compared with the previous year, among all firms with employees, turnover per worker increased by 4.2 per cent and increased fastest among micro firms and large firms, up 4 per cent and over 8 per cent respectively. Turnover per worker actually fell over the course of 2013 for medium-sized firms by over 5 per cent.

2.201 In every quarter between the third quarter of 2001 and second quarter of 2013, private non-financial corporations (PNFCs) were net lenders, building up their financial balances by an average of around £10 billion a quarter. These financial surpluses have been used to purchase assets or pay down debt. They arose because earnings outpaced expenditure, such as taxes, dividends and capital spending. However, since the second quarter of 2013, these balances have been run down, with net borrowing of over £10 billion by the third quarter of 2014.

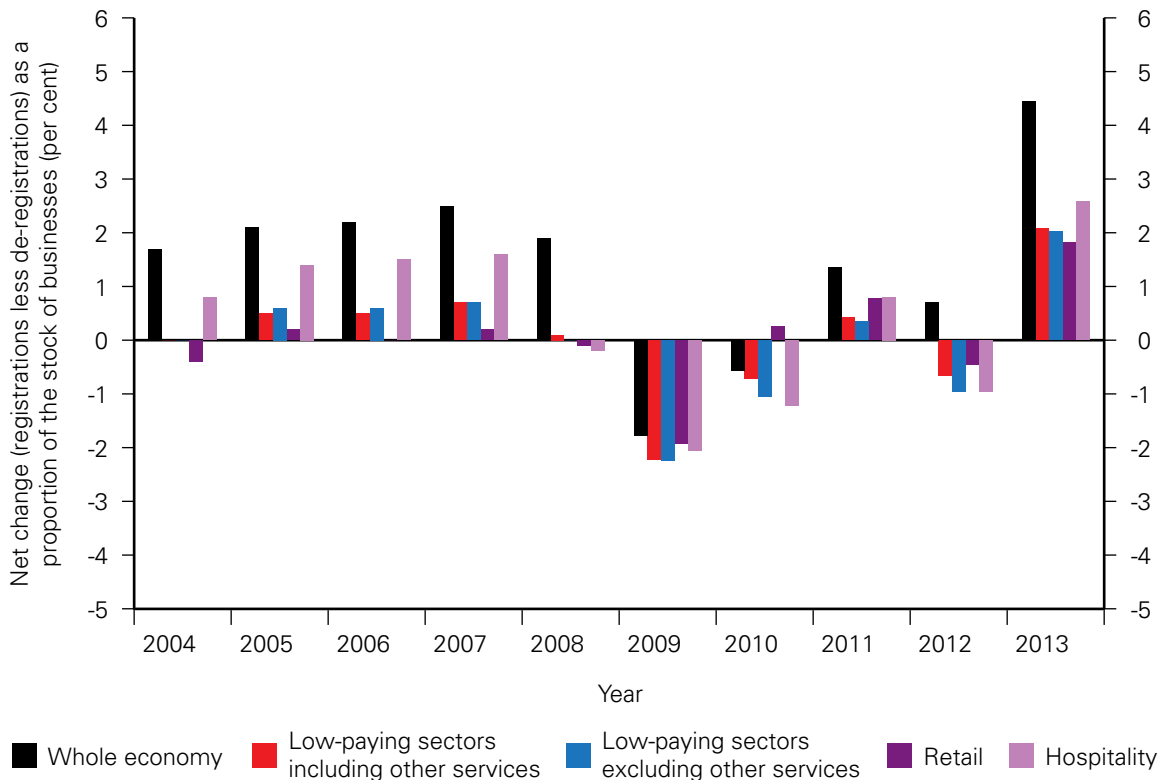
Births and Deaths of Firms

2.202 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 deaths of existing businesses (failures). It should be noted that many factors can affect this, in particular consolidation due to mergers and acquisitions, which is likely to be important in the low-paying sectors. 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.

- 2.203** 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 2013, suggested that the stock of enterprises has now increased for three consecutive years, with growth strongest in 2013. 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 in 2011 and 2012 to 270,000. In 2013, that growth continued and at a much faster rate. The number of new firms was 346,000. In contrast, 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. However, the number of firm deaths rose to 255,000 in 2012 as the recovery weakened, but fell back again (to 238,000) as the recovery picked up momentum in 2013. The net growth in the number of firms in 2013 was over 108,000. Although the number of business births was much greater than their pre-recession levels, the number of business deaths remained higher.
- 2.204** Although the stock of firms in the whole economy increased by nearly 2 per cent in 2008, Figure 2.31 shows it was at a similar level 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. As the economy picked up in 2010 and into 2011, net firm creation was greater across the whole economy than in the low-paying industries. Although the number of new firms increased across the economy, the loss of momentum in the recovery was reflected in an increase in the number of firm deaths in 2012. This was most noticeable among the low-paying sectors, which experienced a fall in the stock of firms.
- 2.205** As the economic recovery picked up in 2013, the net change in the stock of firms across the whole economy grew by 4.4 per cent and by 2.1 per cent in the low-paying industries. But the composition has also changed. Following a period of hospitality being more negatively affected than retail, the net change in the stock of firms in 2013 was higher in the former (up 2.6 per cent) than in that latter (up 1.8 per cent) and in the low-paying industries as a whole (up 2.1 per cent).
- 2.206** These data on business creation and destruction contrast strikingly 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 between 2010 and 2013. However, the increase in the number of jobs in hospitality is reflected to some extent in the growth in number of firms in the most recent data.

Figure 2.31: Net Change in Stock of Firms, by Selected Low-paying Industry, UK, 2004-2013



Source: LPC estimates based on ONS data; business demography, enterprise births, deaths and survivals, annual, not seasonally adjusted, UK, 2004-12.

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.

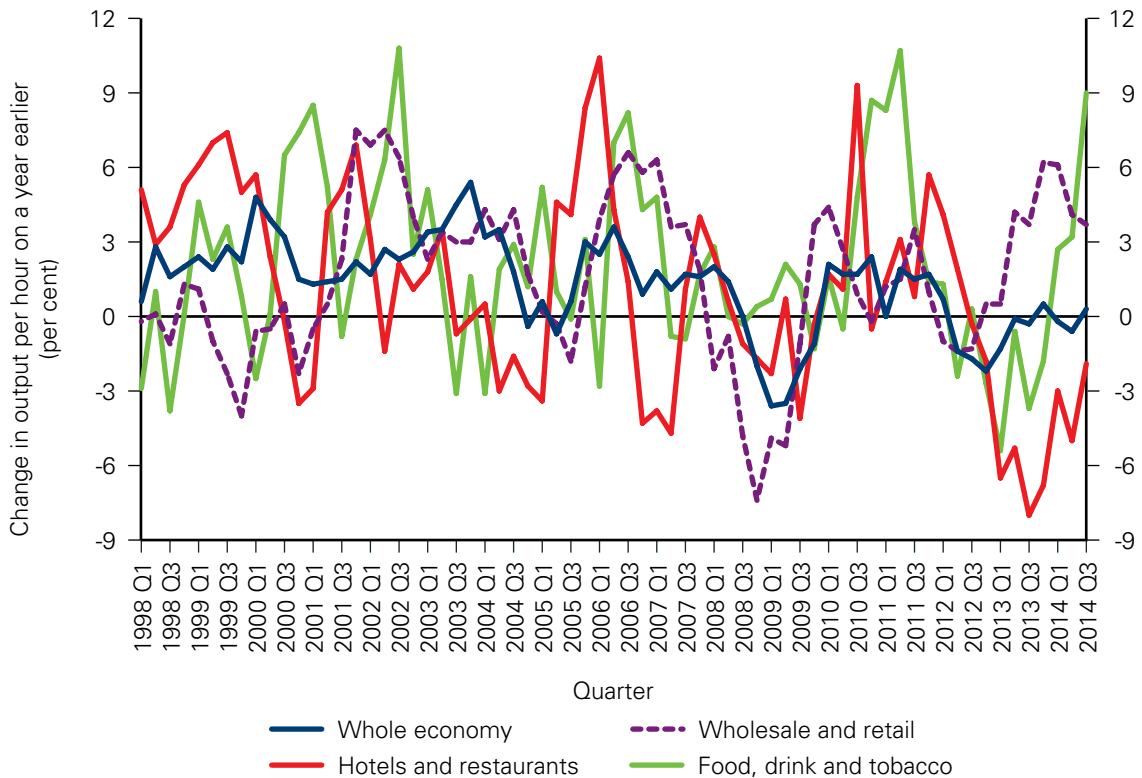
2.207 We can also analyse the stock of businesses by size of firm. Business Population Estimates suggest that the number of micro firms (those with 1-9 employees) in the UK economy increased between 2000 and 2013 by over 14 per cent, rising to 1.04 million firms by the beginning of 2014. The picture for other small firms (those with 10-49 employees) has been even stronger, growing by 19.5 per cent to around 195,000 firms. The number of medium-sized firms has increased at a similar pace to other small firms, rising by 17.5 per cent over the period, to 31,500 firms by the beginning of 2014. 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, falling by 5.6 per cent from 7,200 at the beginning of 2000 to 6,800 at the beginning of 2014.

2.208 During 2013, growth in the number of firms was strong, with the greatest growth among the smallest firms. The number of micro firms and other small firms increased by 5.8 per cent and 4.3 per cent respectively, while the number of large firms increased by 3.0 per cent. These findings qualify our concerns about uncertainty on small firm profitability, set out earlier in the chapter.

Productivity

- 2.209** Other than reducing employment and hours; passing on costs in higher prices to customers; or absorbing costs through a squeeze in profits, businesses can seek 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.
- 2.210** As noted in Chapter 1, official data showed productivity (whether measured per hour, per job or per worker) falling throughout the 2008-09 recession as losses in output were greater than the reductions in hours or employment. As the economy began to recover from mid-2009 and into 2011, productivity per hour, per job and per worker also picked up, returning to pre-recession levels by the third quarter of 2013 on all three measures. But between the end of 2011, as output growth stalled and employment and hours rose strongly, productivity on all three measures weakened again and stagnated despite the pick-up in output growth from the beginning of 2013. Since the first quarter of 2014, productivity on all three measures has shown modest signs of improvement, increasing by around 0.6 percentage points. But, productivity on all three measures was still well below pre-recession levels in the third quarter of 2014.
- 2.211** Looking at productivity by sector, there has been a clear divergence between the productivity performance in wholesale and retail; and in hotels and restaurants, with neither following the path of the economy as a whole. Figure 2.32 shows that productivity per hour in wholesale and retail, and in hotels and restaurants tracked the economy as a whole during the recession and initial stages of recovery, falling in 2008-09 then rising back towards pre-recession levels by 2011. However, since the third quarter of 2012 productivity per hour in wholesale and retail has increased strongly and is now 7 percentage points above its pre-recession level, whereas it is over 6 percentage points lower in hotels and restaurants. In 2014, productivity per hour in wholesale and retail has continued to increase, but has stagnated in hotels and restaurants. A similar picture emerges using productivity per job. This appears to be the obverse of sectoral trends in employment growth. Among these sectors, those with less strong jobs growth have had higher productivity, and vice versa.

Figure 2.32: Productivity per Hour, by Selected Low-paying Industry, UK, 1998-2014



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 2014.

2.212 Figure 2.32 also shows productivity in the food, drink and tobacco manufacturing sector, which held up reasonably well during the recession, and markedly improved towards in the second half of 2010 and the first half of 2011. As with the whole economy, it also slowed sharply towards the end of 2011 with productivity growth negative for much of 2012. However, productivity per hour in the food, drink and tobacco manufacturing has risen more strongly since the beginning of 2014. This positive performance is slightly weaker when looking at output per job.

Research on Competitiveness

2.213 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, reducing profit margins or improving productivity. The NMW may also affect the ability of firms to start new businesses or remain in business. Unfortunately, the data available to investigate many of these issues are not as comprehensive as those available to investigate employment and hours. However, researchers have used a variety of means and sources to attempt to assess the impact of the minimum wage on these competitiveness variables. In our 2014 Report, we summarised the findings of previous UK research on the impact of the NMW on: labour costs; prices; profits; business start-ups and failures; and productivity.

2.214 Riley and Rosazza Bondibene (2013) investigated the impact of the minimum wage on wage costs using data from the Annual Respondents Database (ARD) and Financial Analysis Made Easy (FAME). They found that 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.

- 2.215** In investigations of the impact of the minimum wage on prices, Wadsworth (2007 and 2008) 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.
- 2.216** Previous research looking at the impact of the minimum wage has generally found that the minimum wage has led firms to absorb increases through squeezed profits. Using data from FAME and ARD, Riley and Rosazza Bondibene (2013) also found some evidence that the NMW may have reduced firms' profitability and that these effects were more evident over the longer term (1999-2007). Draca, Machin and Van Reenen (2005) found that profits had fallen in the low-paying industries as a result of increases in the minimum wage. An extension of that analysis, Draca, Machin and Van Reenen (2011), found that the minimum wage had significantly reduced profits, particularly those in industries with less competition. 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. In contrast, Experian (2007), found no effects on profits resulting from the 2003 and 2004 upratings.
- 2.217** Any squeeze in profits may restrict investment and affect the long-run viability of a business. Crawford, Jin and Simpson (2013) found that 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. Riley and Rosazza Bondibene (2013) also 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.
- 2.218** 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. Riley and Rosazza Bondibene (2013) also found no evidence to suggest that the NMW had led to a change in company exit rates. However, Forth, Harris, Rincon-Aznar and Robinson (2009) did find some weak evidence that the minimum wage may have led to higher exit rates of firms.
- 2.219** The introduction of a minimum wage (and its subsequent increases) may reduce the attractiveness of starting a new business. There is some weak 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.
- 2.220** In general, previous research has found a small positive association between productivity and the minimum wage. Riley and Rosazza Bondibene (2013) 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 across data sources (FAME and the ARD). 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

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Croucher and Rizov (2011) using company account data from Financial Analysis Made Easy (FAME) all found evidence of a positive association of the minimum wage with productivity. In contrast, Forth, Harris, Rincon-Aznar and Robinson (2009) and Georgiadis (2006) found no such effects.

- 2.221** 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 source, finding no relationship between training and the minimum wage using data covering the introduction and first two upratings.
- 2.222** Research commissioned for this report built on much of this previous research, covering many of these issues as it investigated the impact of the minimum wage on firm behaviour since the introduction of the NMW and during the recession using data from the ARD and FAME. In line with the previous research, Riley and Rosazza Bondibene (2015) used treatment (low average wage firms) and control firms (firms with higher average wages) to explore wage effects for firms in all industries and for firms in low-paying industries as well as by size of firm. They found that the NMW led to increases in relative labour costs for low-paying firms on introduction, during the period of above-average wage increases (2001-06) and after the recession (although NMW increases were modest, most workers experienced real wage cuts). The NMW increases increased labour costs for low-paying firms across all firm sizes and industries. They were not confined to small firms and the low-paying sectors.
- 2.223** Riley and Rosazza Bondibene (2015) found that, like Galinda-Rueda and Pereira (2004), and Croucher and Rizov (2011), low-paying firms had coped with these increases in labour costs by raising labour productivity. Their findings suggested that these increases in labour productivity had not arisen due to reductions in employment but were associated with increases in total factor productivity. They suggested that this was consistent with efficiency wage theories and training responses to increases in minimum wages. It was possible that this was associated with increases in average hours, but it was not possible to verify this as the data were not available for individual firms.
- 2.224** In contrast to the findings of Draca, Machin and Van Reenen (2005 and 2011), they generally found no robust or statistically strong evidence that suggested that trends in profit margins differed substantially between lower and higher average labour cost businesses over any of the periods analysed. However, in models where they did find negative profit effects, these tended to be concentrated among low-paying small and medium-sized firms. They found no evidence that the NMW increased the rate of business exit.

Views on Competitiveness

- 2.225** A number of employer organisations advised us that increases to the NMW worsened cost pressures on them. The general message from business, providing evidence up to late 2014, was that despite improvements in the economy, trading was still difficult and that in parts of the economy, including some low-paying sectors and small/independent businesses, conditions had still not returned to their pre-recession levels. This had an adverse impact on the level of profits, productivity and the ability to pass on higher NMW costs through

increased prices to their customers. Orders had been softening in the last quarter of 2014. In contrast, as noted previously in this chapter, a large group of individual companies which responded to our consultation called for higher upratings, generally arguing that higher pay could be a way of improving productivity and business performance.

- 2.226** The CBI told us of low productivity, sluggish growth in prices charged by business and tight margins. In this context the increase in the NMW in October 2014 was already a significant step above average wage growth and inflation and there needed to be time for productivity to catch-up.
- 2.227** In the retail sector, the British Retail Consortium (BRC) told us that the improving economy masked the divergent fortunes of food and non-food retailers, with the former experiencing a significant decline in sales. The BRC also told us that deflationary shop prices and squeezed profit margins illustrated how competitive the retail sector was and should act as a warning against any unsustainable increase in business costs.
- 2.228** The Rural Shops Alliance (RSA), representing small rural retailers, said such businesses had virtually no ability to increase prices to pay for any increase in their costs, with most having no surplus to meet higher wage demands. The British Independent Retailers Association (BIRA) said 52 per cent of respondents to a members' survey reported the NMW had affected their profits. The Association of Convenience Stores (ACS) told us that while the convenience store sector continued to grow ahead of the rest of the market, and was projected to grow by over 30 per cent over the next 5 years, consumers continue to be driven by value, meaning retailers are forced to put more goods on promotion, squeezing profit margins.
- 2.229** NDNA said that rises in the NMW continued to have a direct impact upon fees charged to parents and margins for nursery businesses, which were struggling to maintain their sustainability in a tough economic climate, and where local authority funding did not cover the costs of free early years education. An individual employer within the childcare sector we met during our visit to Northern Ireland said that the previous year's NMW rise had impacted on their business, as it added significantly to their pay bill and they felt that we were getting to the limit to what parents/carers could/would pay in fees. However, the company said that they understood that staff needed a rise and added that they saw benefits in NMW rises generally, as they helped to drive efficiencies. In social care, the UKHCA advised us that constraints on care fees meant that increases in the NMW risked undermining the viability of services in many localities. As in previous years, the real issue was not the NMW per se but the lack of recognition of the actual costs of care by local authorities exercising their monopsony purchasing power.

“As any accountant will tell you an increase in productivity leads to an increase in profits... by increasing our staff remuneration so that they were taking home a living and sustainable wage we found that we were rewarded by increased staff loyalty, greater productivity and increased profits.”

**Individual employer respondent,
LPC consultation**

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- 2.230** However, the EEF, the manufacturers' organisation, thought the 2014 NMW uprating would not have any significant impact within its sector on employment, hours or profits. In addition, a group of individual businesses – about 80 in total – were supportive of larger increases. Many argued that past rises had been absorbed comfortably, and indeed could be a spur to productivity improvements, albeit it was not clear what proportion of the respondents had large numbers of NMW staff.
- 2.231** Half of employers responding to our own online survey agreed or strongly agreed that their business would cope with the 3 per cent increase: 47 per cent disagreed or strongly disagreed while 3 per cent did know.
- 2.232** In evidence from trade union bodies, the TUC highlighted that corporate reserves had been growing during the economic crisis, and stood at £650 billion; that business investment had picked up; and fixed investment was predicted to rise by 8.3 per cent in 2014, and continue to grow strongly in 2015 and beyond. Looking at profitability, it told us that rates of return of service sector organisations had held up and were now above 2001 levels. With respect to productivity, the TUC acknowledged in its written evidence the relatively weak headline figure, but pointed out that the Bank of England had put forward reasons to expect improvement as the recovery progresses and higher business investment was likely to support it. The TUC also said there were also promising signs in minimum wage sectors, with output per hour having risen in the past year by 1.4 per cent in hospitality, 1.2 per cent in retail, and 5.0 per cent in textiles and footwear.
- 2.233** Unite cited evidence that UK corporations made profits of £83.5 billion in the first quarter of 2014, up by £2.8 billion, or 3.5 per cent, from £80.7 billion in the same period in 2013. The Communication Workers Union referred to evidence that profitability in the service sector, where most NMW jobs are concentrated, held up well during the recession and has been steadily increasing in recent years. Net profits were 15 per cent in the first quarter of 2014 for service sector corporations and 11.9 per cent for all non-financial corporations. These figures, it said, suggested both that the NMW has not hindered economic performance and that companies could likely afford to pay their workers a higher NMW.

Summary on Competitiveness

- 2.234** Recent evidence on competitiveness is broadly encouraging with profitability up and a greater rate of firm birth than before the recession, albeit this is offset by higher deaths. Productivity however remains sluggish – up just 0.6 percentage points since the first quarter of 2014. It is stronger in retail, food, drink and tobacco manufacturing, but stagnating in hotels and restaurants.

Conclusion

- 2.235** Around 5.3 per cent of jobs are paid the minimum wage, defined as one with an hourly rate no more than five pence above the appropriate National Minimum Wage. Compared with other jobs, we find 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. In addition, a higher proportion of women, young workers, older workers, ethnic minorities, migrant workers, disabled workers and those with no qualifications are likely to hold these minimum wage jobs.
- 2.236** The adult rate of the NMW has increased by over 80 per cent since its introduction at £3.60 an hour in April 1999. This is greater than the increase in average earnings or prices over the same period. However, with the economy in recession and recovering slowly, the real value of the NMW had fallen as increases in both CPI and RPI inflation had been greater than the increases in the NMW. Using CPI to calculate the value of the NMW in real terms its value peaked in October 2007. By October 2013, it had fallen by 5.1 per cent. However, the recent increase of 3 per cent in the NMW in October 2014 has begun to restore some of that lost value, with the real value of the NMW increasing by 1.7 per cent since October 2013. Against CPI, it has therefore recovered around a third of its lost value, and is now above its real values in the years 2005 and 2011.
- 2.237** In contrast, the value of the NMW relative to average earnings had never been higher than it was in October 2014. 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 now at its highest level since the NMW was introduced.
- 2.238** Between 1999 and 2007, wage growth was similar across all sizes of firm, all age groups and broad sectors. Between 2007 and 2011, this changed. Small firms had lower employee earnings growth than large firms, and the smaller the firm the lower the growth in employee earnings. Similarly, wage growth among the low-paying sectors was lower than in the rest of the economy; and wage growth among the youngest workers was much lower than for those aged 21 and over. Since 2011, we have seen some reversal of this divergence. Wage growth between 2011 and 2014 was similar across all firm sizes and between low-paying sectors and the rest of the economy. However, wage growth among micro firms (those with fewer than ten employees) and in the low-paying sectors as a whole, lagged those of the rest of the economy between April 2013 and April 2014.
- 2.239** According to ASHE the increase in hourly wages in 2014 was less than the increase in the NMW in October 2013. This led to the bite of the NMW for employees aged 21 and over reaching 53.9 per cent in April 2014. Taking a longer-term comparison using adults aged 22 and over, the bite reached its highest in April 2014, at 53.2 per cent. This compares with a bite of 45.7 per cent on introduction in April 1999 and 50.9 per cent in April 2010. The bite was at its highest across all firm sizes, reaching 67.2 per cent for micro firms and was just under 80 per cent in the low-paying sectors as a whole. The coverage of the NMW is also at record levels, with over a million adults (22 and over) paid within 5 pence of the adult rate compared with 700,000 in 2010.

2.240 Despite the increased level of the bite of the NMW, total employment has continued to grow in the economy as a whole and in the low-paying sectors, with the year to September 2014 showing the highest annual (September-September) increases in employment and jobs since the introduction of the NMW, as well as strong growth in hours and vacancy levels.

Moreover, although the bite in the low-paying sectors has grown even more than in the economy as a whole since 2007, the number of jobs in the low-paying sectors has increased at a faster rate than the number in the whole economy (4.3 per cent over the last year compared with 3.1 per cent for other sectors). Employment growth has also generally been strong across all firm sizes, led in the last year by micro, medium-sized and large firms. Further, the employment performance of those groups of workers most affected by the minimum wage – women, older workers, disabled workers, ethnic minorities, and migrants – has generally been better, since the onset of the recession, than that of others not so affected by the NMW. However, there are two groups whose experience has been worse: young people and those with no qualifications, although it is important to note that the employment rates of those aged 18-20 not in full-time education and those with no qualifications have increased over the last twelve months.

2.241 We have commissioned around 140 research projects from external organisations that have investigated various aspects of the impact of the NMW. The conclusions of this previous research can be summarised as showing overall that the lowest paid had received higher than average wage increases, but there was little evidence of significant adverse effects of the minimum wage on employment. Firms appeared to have coped with these increased costs by adjusting pay structures; reducing non-wage costs; making small reductions in hours; increasing productivity; increasing some prices (particularly to consumers rather than business-to-business services); and some squeezing of profits although insufficient to lead to an increase in business failure. Recent evidence on competitiveness is broadly encouraging with profitability up and a greater rate of firm birth than before the recession, albeit this is offset by higher deaths. Productivity however remains sluggish – up just 0.6 percentage points since the first quarter of 2014. It is stronger in retail, food, drink and tobacco manufacturing, but stagnating in hotels and restaurants.

2.242 Our most recent research has helped shed further light on the impact of the NMW on employment and hours; the impact on businesses; and the impact on young people. It has also provided new insights into apprentice pay and the interaction of the NMW with the tax and benefit system. Using one data source, ASHE, the research on employment and hours found some strong negative effects on employment retention for female part-time employees and male full-time employees. However, this analysis using ASHE was limited to job outflow and did not investigate job entry, which would give a rounded picture of the impact of the NMW on employment. Furthermore, using an alternative data source – LFS – no such evidence was found of negative retention effects although that analysis found some positive impacts on job entry for low-wage men in the recovery period. They also found little evidence of an impact on hours or the employment rate when using local area analysis. The research on labour productivity found a positive association between the minimum wage and labour productivity, and that the increases in productivity had not resulted from reductions in employment. They found little evidence of the impact of the NMW on profits or firm exit.

Thus, our recent research has not greatly altered our previous conclusions but has helped provide additional support and a clearer understanding of the processes at work.

2.243 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 This chapter considers the labour market position of young people and apprentices. As in previous reports, it considers their employment, earnings, and prospects in the recovery. The review of the Apprentice Rate structure requested of us in this year's remit is treated separately in Chapter 4, though it draws on some of this chapter's findings. We consider enforcement issues in Chapter 5. Our recommendations for the rates, including those for young people and apprentices, are covered in Chapter 6. We begin with young people overall before turning to apprenticeship volumes, pay, non-compliance and the impact of the Apprentice Rate.

Young People

3.2 For many years, the overall trend for young people in the labour market has been one of long-term deterioration, which worsened with the onset of the recession in 2008. In our 2014 Report, we noted signs that the decline in young people's labour market position had slowed. We highlighted tentative signs of improving employment and unemployment rates for 18-20 year olds alongside earnings growth and, linked to this, a fall in the bite of the relevant National Minimum Wage (NMW) rate. There were fewer signs of recovery for 16-17 year olds although their labour market position had stabilised. The latest data, research and stakeholder views suggest these trends have continued.

Youth Rates

3.3 There are two rates of the minimum wage applicable to young people: the Youth Development Rate (YDR), applicable to 18-20 year olds, and the 16-17 Year Old Rate, applicable to those under 18 years of age and above the minimum school leaving age. These rose in October 2014 by 2 per cent; from £3.72 to £3.79 for the 16-17 Year Old Rate; and from £5.03 to £5.13 for the Youth Development Rate. Since the formation of the Commission, our general principle has been that the level of the minimum wage should be lower for young people than for older workers as they are more vulnerable to unemployment. Given the scarring effects of youth unemployment, apparent in wage rates into people's 40s (Gregg and Tominey, 2004), we have been careful not to jeopardise their labour market position. This view has been reflected in recommendations for smaller increases for younger people than for adults in 2011, 2013 and 2014 and – very reluctantly, in light of their poor labour market performance – a recommendation for a freeze in 2012. We have also noted

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that the employment of young people is generally more sensitive than that of adults to the economic cycle and that we expected to be able to recommend larger increases for them when economic conditions have eased. We have aimed to ensure minimum wage rates prevent exploitation of those in work, while not providing an incentive for young people to leave education or training that will improve their long-term prospects.

3.4 Table 3.1 gives an overview of the rates that applied in April of each year (the reference period for the Annual Survey of Hours and Earnings, ASHE, which we use for analysis throughout the chapter). Between April 1999 – when the NMW (for workers aged 22 and over) and the Youth Development Rate (initially for 18 to 21 year olds) were introduced – and April 2015, the adult rate will have increased more than the YDR (by 80.6 per cent compared with 71.0 per cent respectively). In line with the logic of protecting young people during the downturn via recommending smaller increases, much of this gap has opened since the downturn. Looking at the period since April 2011, the Apprentice Rate and adult rate both increased by over 9 per cent, but the two youth rates saw much smaller increases of just over 4 per cent.

Table 3.1: National Minimum Wage Hourly Rates, April, 1999-2015

Rate in April (ASHE reference period) of respective Year	16-17 Year Old Rate (£)	Youth Development Rate (£)	NMW (£)	Apprentice Rate (£)
1999	-	3.00	3.60	-
2000	-	3.00	3.60	-
2001	-	3.20	3.70	-
2002	-	3.50	4.10	-
2003	-	3.60	4.20	-
2004	-	3.80	4.50	-
2005	3.00	4.10	4.85	-
2006	3.00	4.25	5.05	-
2007	3.30	4.45	5.35	-
2008	3.40	4.60	5.52	-
2009	3.53	4.77	5.73	-
2010	3.57	4.83	5.80	-
2011	3.64	4.92	5.93	2.50
2012	3.68	4.98	6.08	2.60
2013	3.68	4.98	6.19	2.65
2014	3.72	5.03	6.31	2.68
2015	3.79	5.13	6.50	2.73
Increase since introduction (%)				
	26.3	71.0	80.6	9.2
Increase 2011-15 (%)				
	4.1	4.3	9.6	9.2

Source: Low Pay Commission (LPC).

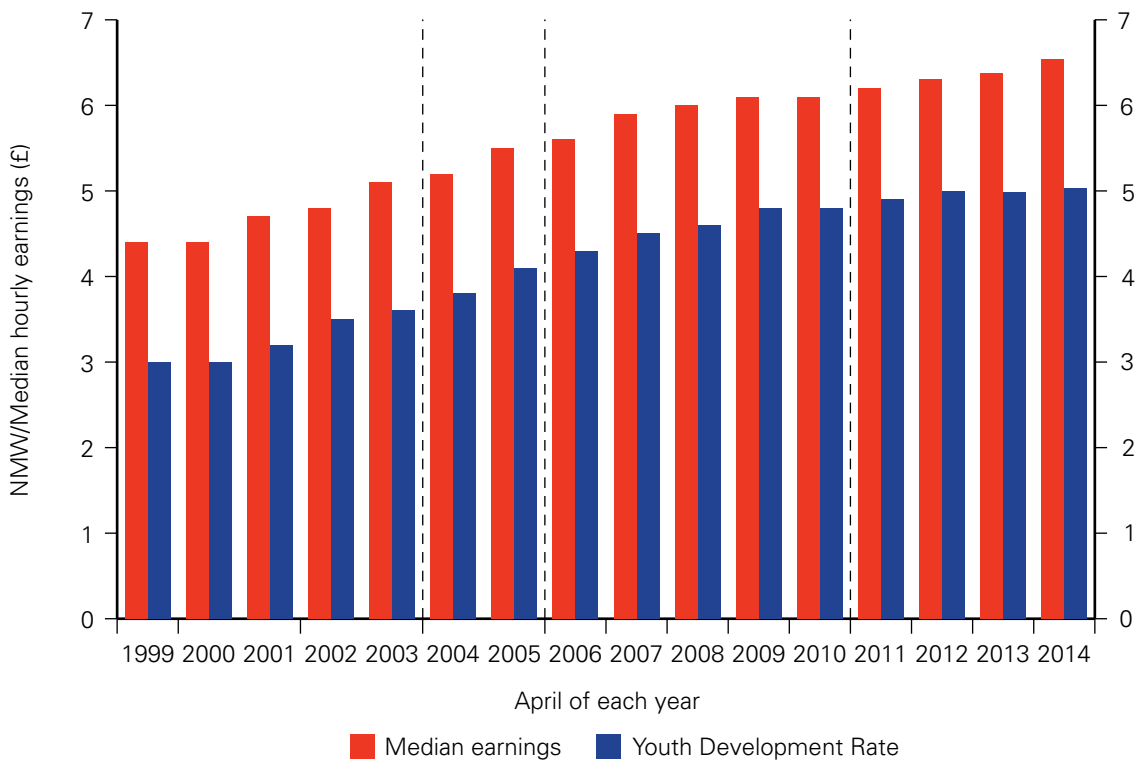
Note: From October 2010, those aged 21 have been covered by the adult rate. Previously they had been covered by the Youth Development Rate.

Earnings

3.5 We use data from the ASHE to look at the level and growth of earnings for employees. The latest ASHE data relate to April 2014, and cover the minimum wage rates introduced in October 2013.

3.6 Figure 3.1 shows that median earnings for 18-20 year olds increased to £6.54 between April 2013 and April 2014, up by 16 pence or 2.5 per cent – more than the 1.0 per cent increase in the YDR in October 2013. The increase was an acceleration in a trend of slowly increasing pay for 18-20 year olds since 2011, following stagnation between 2009 and 2011. The 2.5 per cent increase this year is in fact the largest nominal and percentage increase since 2007. The percentage increase exceeds that for both 16-17 year olds (0.6 per cent) and adult workers aged 21 and over (0.4 per cent).

Figure 3.1: Median Hourly Earnings and the Minimum Wage for 18-20 Year Olds, UK, 1999-2014

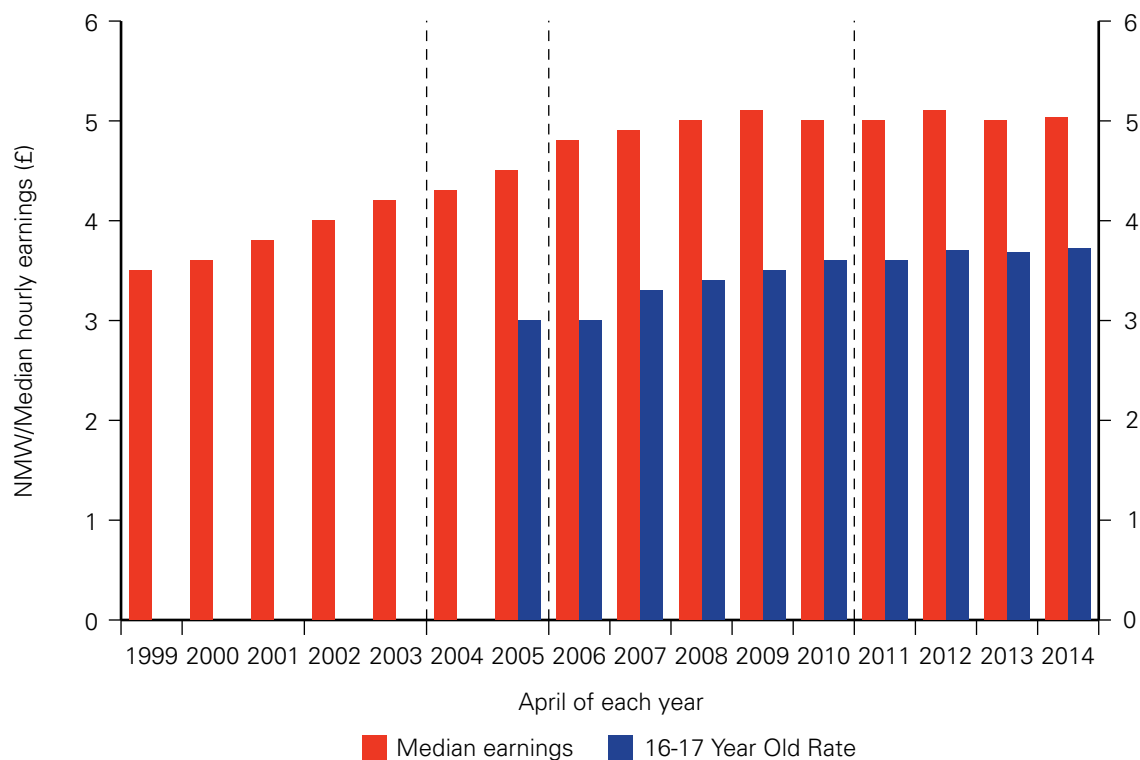


Source: Low Pay Commission (LPC) estimates based on ASHE: without supplementary information, April 1999-2003; with supplementary information, April 2004-2005; 2007 methodology, April 2006-2010; and 2010 methodology, April 2011-2014, standard weights, including those not on adult rates of pay, UK.

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.

3.7 By contrast median earnings for 16-17 year olds have remained flat, as shown in Figure 3.2. They have fluctuated around the £5.00 mark since 2008, with little improvement between April 2013 and April 2014. Median hourly earnings stood at £5.00 in April 2013 and £5.03 in April 2014 (an increase of just 0.6 per cent).

Figure 3.2: Median Hourly Earnings and the Minimum Wage for 16-17 Year Olds, UK, 1999-2014



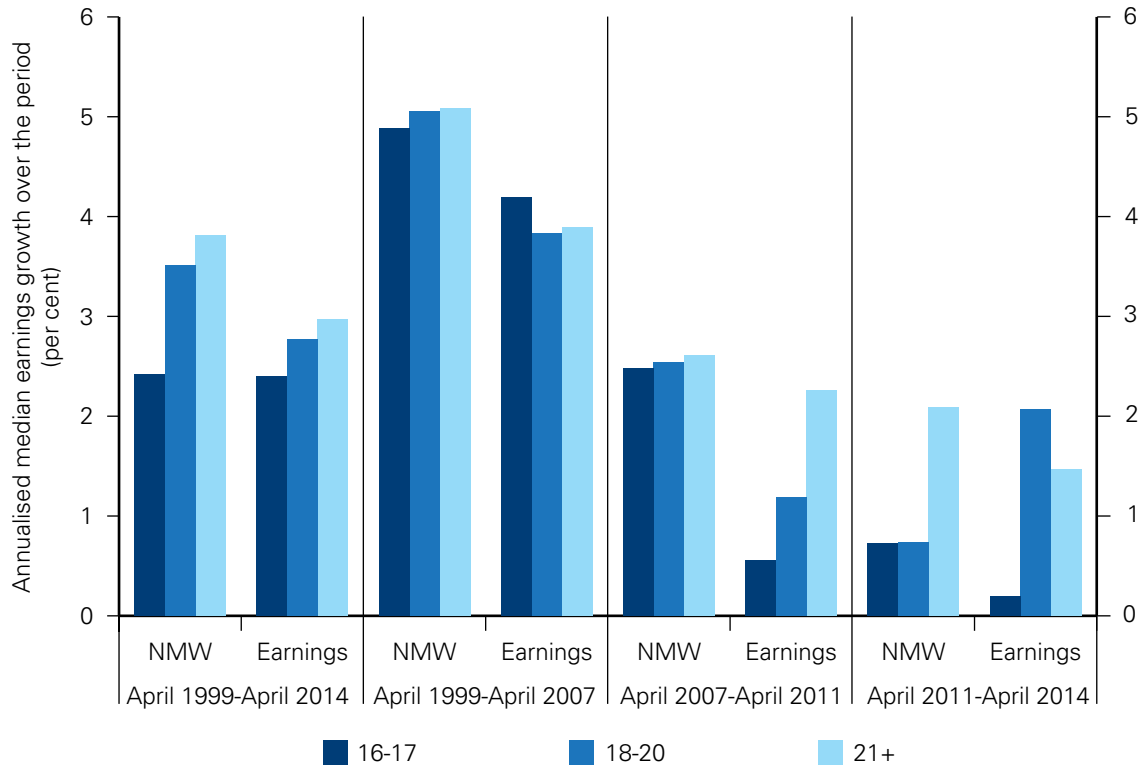
Source: Low Pay Commission (LPC) estimates based on ASHE: without supplementary information, April 1999-2003; with supplementary information, April 2004-2005; 2007 methodology, April 2006-2010; and 2010 methodology, April 2011-2014, standard weights, including those not on adult rates of pay, UK.

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.

3.8 Figure 3.3 displays the percentage increase in both the minimum wage and median earnings over four time periods. It shows that earnings growth for young people was similar to that for adults up to 2007 but was much lower from 2007 following the onset of recession and its aftermath. In the period from 2011 to 2014, 18-20 year olds saw higher annualised earnings growth than adult workers, although this was entirely due to their relatively high earnings growth of 2.5 per cent between April 2013 and April 2014 – this at a time of weak earnings growth for adults aged 21 and over (0.4 per cent).

3.9 Minimum wage increases show a distinct pattern: across the lifetime of the NMW they have outpaced growth in median earnings for 18-20 year olds and adults, but stayed broadly in line for 16-17 year olds. From 1999 to 2011, increases in the 16-17 Year Old Rate and the Youth Development Rate outpaced median earnings growth for those age groups, especially in the period between 2007 and 2011. But from 2011 to 2014, the minimum wage increased less rapidly relative to median earnings. The average earnings growth for 18-20 year olds (2.1 per cent annualised) exceeded the increase in the YDR (0.7 per cent) over the period.

Figure 3.3: Growth in the Minimum Wage and Median Earnings, by Age, UK, 1999-2014



Source: LPC estimates based on ASHE: Adjusted earnings without supplementary information, April 1999-2003; with supplementary information, April 2004-2005; 2007 methodology, April 2006-2010; and 2010 methodology, April 2011-2014, standard weights, including those not on adult rates of pay and apprentices, UK.

Notes:

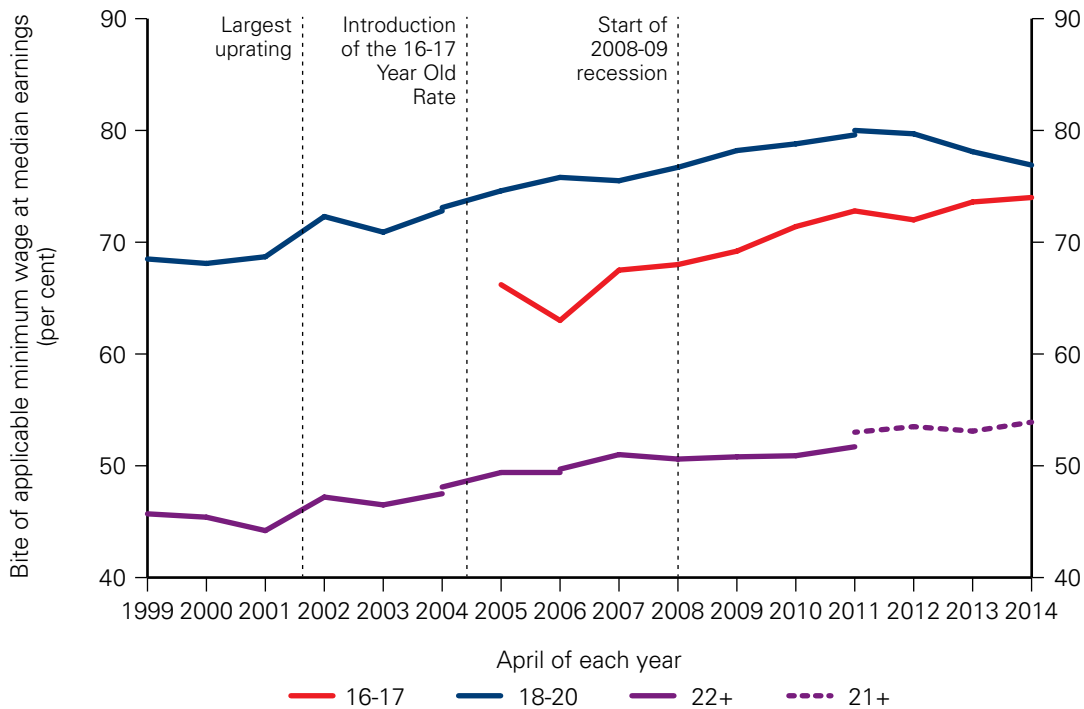
- a. The National Minimum Wage growth for 21 year olds and above is based on the adult minimum wage rate, which applied only to those aged 22 and over between 1999 and 2010.
- b. The 16-17 Year Old Rate was introduced in October 2004.

3.10 Figure 3.4 shows the change in the bite since 1999. The relatively strong median earnings growth of 2.5 per cent for 18-20 year olds between April 2013 and 2014, relative to the smaller increase of 1.0 per cent in the YDR during the same period, meant that the bite of the YDR (its value relative to median earnings) fell, for the third consecutive year, from 78.1 per cent in April 2013 to 76.9 per cent in April 2014.

3.11 The weak earnings growth between April 2013 and April 2014 for 16-17 year olds (0.6 per cent), relative to the increase of 1.1 per cent in the 16-17 Year Old Rate in October 2013, increased the bite of the 16-17 Year Old Rate by 0.4 percentage points, from 73.6 per cent to 74.0 per cent. This was the highest level since it was introduced in 2004. As discussed in detail in Chapter 1, the weak earnings growth of adult workers (0.4 per cent), relative to the 1.9 per cent increase in the National Minimum Wage (NMW) in October 2013, increased the bite of the NMW by 0.8 percentage points, from 53.1 per cent to 53.9 per cent – also a record high.

3.12 The decision in January 2013 to increase the NMW by 1.1 per cent, 1.0 per cent and 1.9 per cent respectively for 16-17 year olds, 18-20 year olds, and adults in October of that year, took account of projected earnings growth and macro-economic indicators at that time. The out-turn suggests that the projections and indicators were overly optimistic for 16-17 year olds and adults whose earnings growth fell short of expectations; and unduly pessimistic for 18-20 year olds whose earnings growth exceeded expectations.

Figure 3.4: Bite of the Minimum Wage at the Median, by Age, UK, 1999-2014



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 2011-2014, standard weights, including those not on adult rates of pay and apprentices, UK.

Notes:

- a. At the introduction of the NMW the adult rate applied only to workers aged 22 and over. From October 2010 eligibility for the adult NMW was extended to 21 year olds.
- b. Direct comparisons before and after 2004, 2006 and 2011 should be made with care due to changes in the data series.

3.13 We have speculated in previous reports that earnings estimates for young workers may be distorted to some extent by an increase in the number or proportion of young workers undertaking apprenticeships. The Apprentice Rate, currently set at £2.73 an hour, has been in force since 2010. It is applicable to apprentices in their first year and those aged 16-18. Apprentices aged 19 or over in their second or subsequent years of training should be paid the minimum wage applicable to their age, in common with other workers. Hence, an increasing number of apprentices could have a downward effect on estimates of young people’s earnings and earnings growth. Prior to 2013 it was not possible to establish from the ASHE data whether employees were apprentices. In 2013 the ONS tested new questions asking whether employees were apprentices, and the year in which they had started their apprenticeship, in order to improve the estimates of non-compliance. The questions were subsequently included in the 2014 ASHE and, as noted in Chapter 2, the first reliable estimates became available for this report.

- 3.14** Table 3.2 shows that estimates of young workers' median hourly earnings, annual earnings growth and the bite of the youth rates are significantly changed once apprentices are excluded. The main effect is that estimates of young people's annual hourly earnings growth appear higher, at 0.8 per cent for 16-17 year olds and a striking 3.0 per cent for 18-20 year olds (compared with 0.6 per cent and 2.5 per cent when apprentices are included). The bite of the 16-17 Year Old Rate is lower once apprentices, often the lowest paid, are excluded, at 72.2 per cent compared with what is otherwise its peak of 74.0 per cent; while the bite of the Youth Development Rate is lower at 75.9 per cent compared with 76.9 per cent.
- 3.15** However, the exclusion of apprentices makes very little difference to estimates for adult workers aged 21 and over. Hence, among non-apprentice workers, the median earnings growth of 16-17 years olds between 2013 and 2014 was twice that of adult workers (0.8 per cent compared with 0.4 per cent); and earnings growth of 18-20 year olds was more than seven times higher, in percentage terms, than their counterparts aged 21 and over (3.0 per cent, compared with 0.4 per cent).

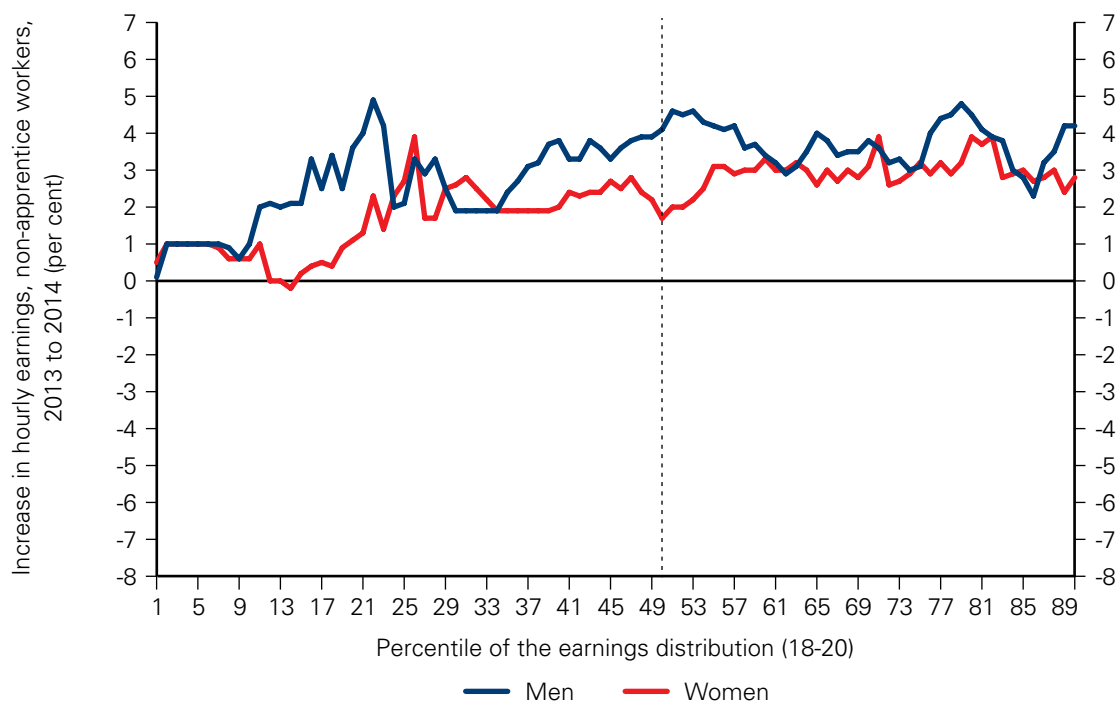
Table 3.2: Median Hourly Earnings, Earnings Growth and the Bite, Including and Excluding Apprentices, UK, 2013-14

	Earnings and Bite including and excluding apprentices	Median Hourly Earnings (£)		Earnings growth 2013-14		Bite of the NMW		
		2013	2014	(pence)	(%)	2013	2014	Change 2013-14 (pp)
16-17	Incl. Apprentices	5.00	5.03	3	0.6	73.6	74.0	0.4
	Excl. Apprentices	5.11	5.15	4	0.8	72.0	72.2	0.2
18-20	Incl. Apprentices	6.38	6.54	16	2.5	78.1	76.9	-1.1
	Excl. Apprentices	6.44	6.63	19	3.0	77.3	75.9	-1.5
21+	Incl. Apprentices	11.67	11.71	5	0.4	53.1	53.9	0.8
	Excl. Apprentices	11.68	11.74	5	0.4	53.0	53.8	0.8

Source: LPC estimates based on ASHE: 2010 methodology, April 2013-2014, standard weights, including those not on adult rates of pay, UK.

- 3.16** A further breakdown of earnings growth among non-apprentice workers highlights a striking phenomenon: earnings growth over the year to April 2014 was far greater among young men than young women, a trend which may reflect occupational segregation. Figure 3.5 shows earnings growth at each point of the earnings distribution for men and women aged 18-20 years. At the median, young women's hourly earnings growth was just 1.7 per cent, compared with 4.1 per cent for young men.

Figure 3.5: Percentage Growth in Hourly Earnings of Non-apprentice Workers Aged 18-20 Years, by Gender, UK, 2013-2014



Source: LPC estimates based on ASHE: 2010 methodology, April 2013-2014, standard weights, including those not on adult rates of pay, UK.

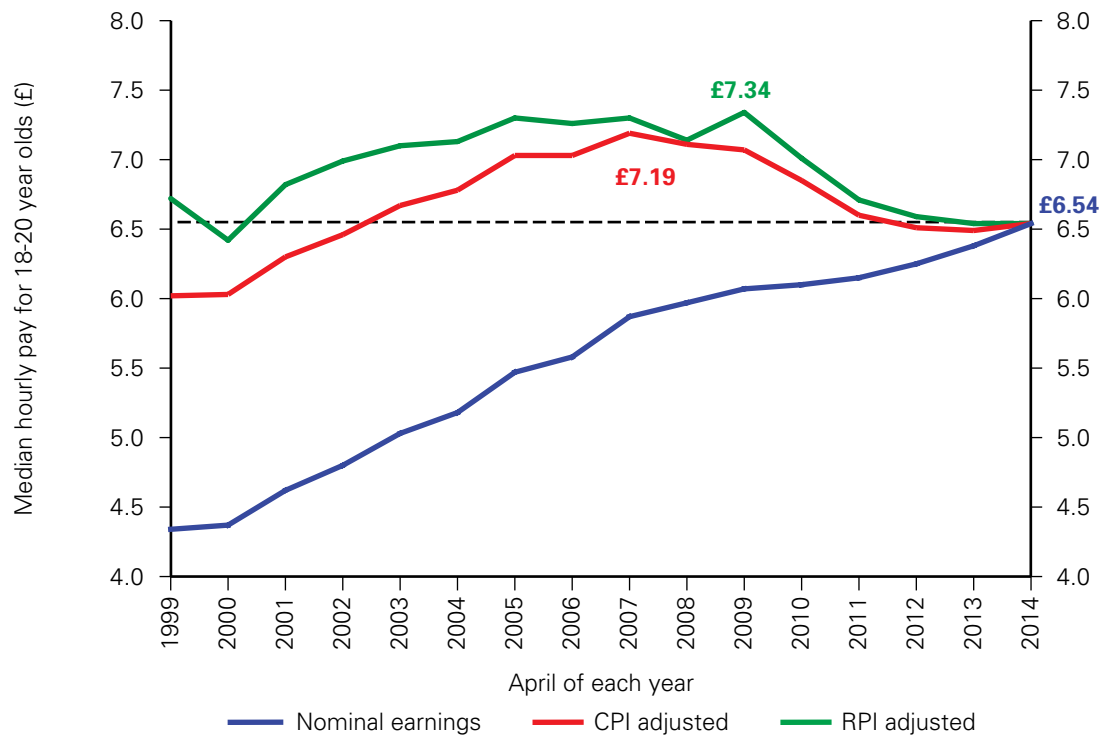
3.17 Analysis of earnings growth for 16-17 year old non-apprentice workers showed the same pattern of gender differentiation throughout the earnings distribution. At the median, young women’s hourly earnings fell by 1.0 per cent in the year to April 2014, compared with an increase of 6.2 per cent in young men’s hourly earnings.⁸ It is unclear what is driving this pattern of weaker pay growth for young female workers, but it is one we will continue to monitor.

Real Wages

3.18 Despite relatively high earnings growth in nominal terms for 18-20 year olds as a whole, real earnings growth has been much lower. Figure 3.6 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 median hourly earnings have remained at £6.54 in real terms since 2013. Nevertheless, 2014 marked the first year since 2009 in which real earnings had not fallen on this basis. Adjusting instead for CPI gives a more positive picture, with real earnings growth of 5 pence an hour (0.7 per cent), from £6.49 to £6.54, between 2013 and 2014. However, their real hourly wages are now only slightly above their level in 2002 on CPI (£6.46) and only slightly above their level in 2000 on RPI (£6.42). Furthermore, on both measures of inflation, median hourly earnings for 18-20 year olds remain considerably below their pre-recession heights in real terms – lower by 80 pence an hour (11 per cent) compared with the RPI high of £7.34 in 2009, and by 65 pence an hour (9 per cent) compared with the CPI high of £7.19 in 2007.

⁸ Data are not shown due to small sample sizes within percentiles.

Figure 3.6: Nominal and Real Level of Median Earnings for 18-20 Year Olds, by Price Index, UK, 1999-2014



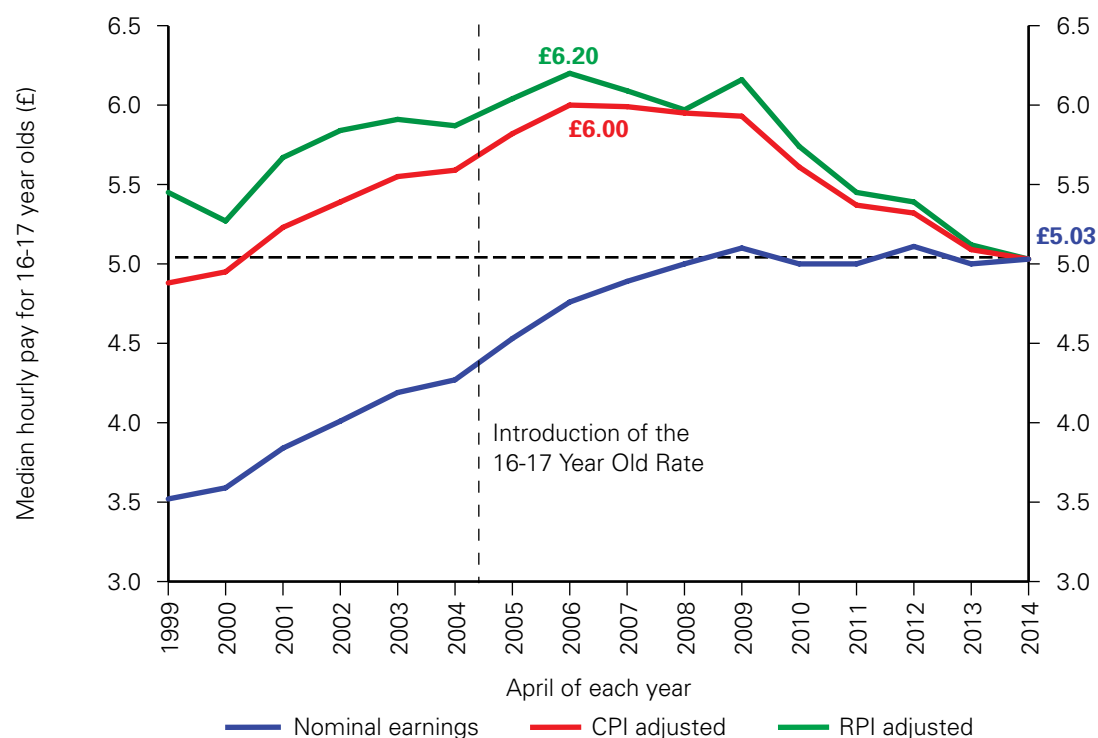
Source: LPC estimates based on ONS data, CPI (D7BT) and RPI (CHAW), April 1999-2014, monthly, and ASHE: without supplementary information, April 1999-2003; with supplementary information, April 2004-2005; 2007 methodology, April 2006-2010; and 2010 methodology, April 2011-2014, standard weights, including those not on adult rates of pay, UK.

Notes:

- Earnings data are adjusted for a consistent time series.
- Data include apprentices.

3.19 The picture is worse for 16-17 year olds. In real terms, median hourly earnings of 16-17 year olds have fallen since 2006 using CPI, and since 2009 using RPI, and they continued to fall over the last year. Figure 3.7 shows that real hourly wages for 16-17 year olds in the year to April 2014 fell by 6 pence an hour using the CPI measure of price inflation (from £5.09 in 2013), and fell by 9 pence an hour using the RPI measure (from £5.12 an hour in 2013). On both measures of inflation, real median hourly earnings for 16-17 year olds are now considerably below their pre-recession heights in 2006 – lower by £1.17 pence an hour (19 per cent) compared with the RPI high of £6.20, and by 97 pence an hour (16 per cent) compared with the CPI high of £6.00. Real wages for 16-17 year olds are now at their lowest level since 2001 when earnings are adjusted by CPI inflation, and lower than at any point in the last 15 years when adjusted by RPI inflation.

Figure 3.7: Nominal and Real Level of Median Earnings for 16-17 Year Olds, by Price Index, UK, 1999-2014



Source: LPC estimates based on ONS data, CPI (D7BT) and RPI (CHAW), April 1999-2014, monthly, and ASHE: without supplementary information, April 1999-2003; with supplementary information, April 2004-2005; 2007 methodology, April 2006-2010; and 2010 methodology, April 2011-2014, standard weights, including those not on adult rates of pay, UK.

Notes:

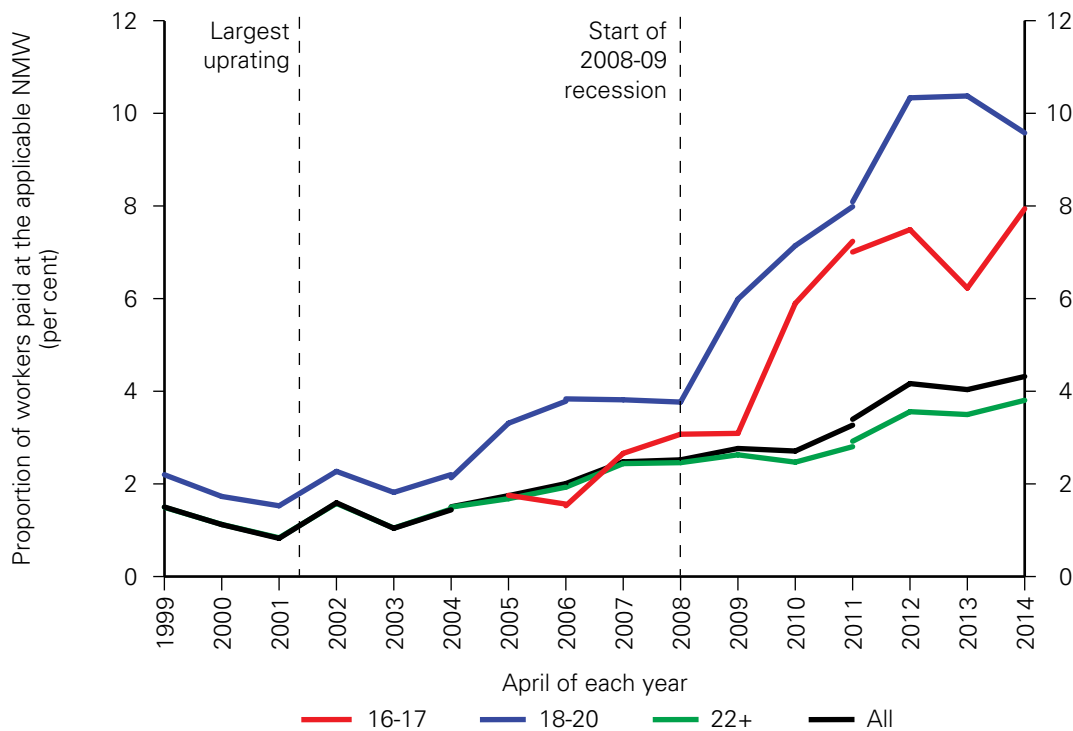
- a. Earnings data are adjusted for a consistent time series.
- b. Data include apprentices.

Coverage of the Youth Rates

3.20 Figure 3.8 shows the percentage of workers paid at their respective, age-applicable, minimum wage, using a 5 pence band. The proportion of 16-17 year olds paid at the 16-17 Year Old Rate increased from 2006 before falling for the first time in 2013. However, the latest data shows an increase of 1.7 percentage points (to 7.9 per cent) between 2013 and 2014, more than compensating for the fall of 1.3 percentage points in the previous year. In essence this means that in the two years between April 2012 and April 2014, the percentage paid at the 16-17 Year Old Rate has increased by 0.5 percentage points.

3.21 Figure 3.8 also shows that the percentage of 18-20 year olds paid at the Youth Development Rate, using a 5 pence band, increased sharply between 2011 (8.1 per cent) and 2012 (10.3 per cent) and then remained at the same level in 2013 (10.4 per cent) before falling in 2014 by 0.8 percentage points to 9.6 per cent.

Figure 3.8: Percentage Paid at their Age-related Minimum Wage Rate, by Age, UK, 1999-2014



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 2011-2014, low pay weights including those not on adult rates of pay, UK.

Notes:

- Based on a 5 pence band.
- Direct comparisons before and after 2004, 2006 and 2011 should be made with care due to changes in the data series.
- Data include apprentices.

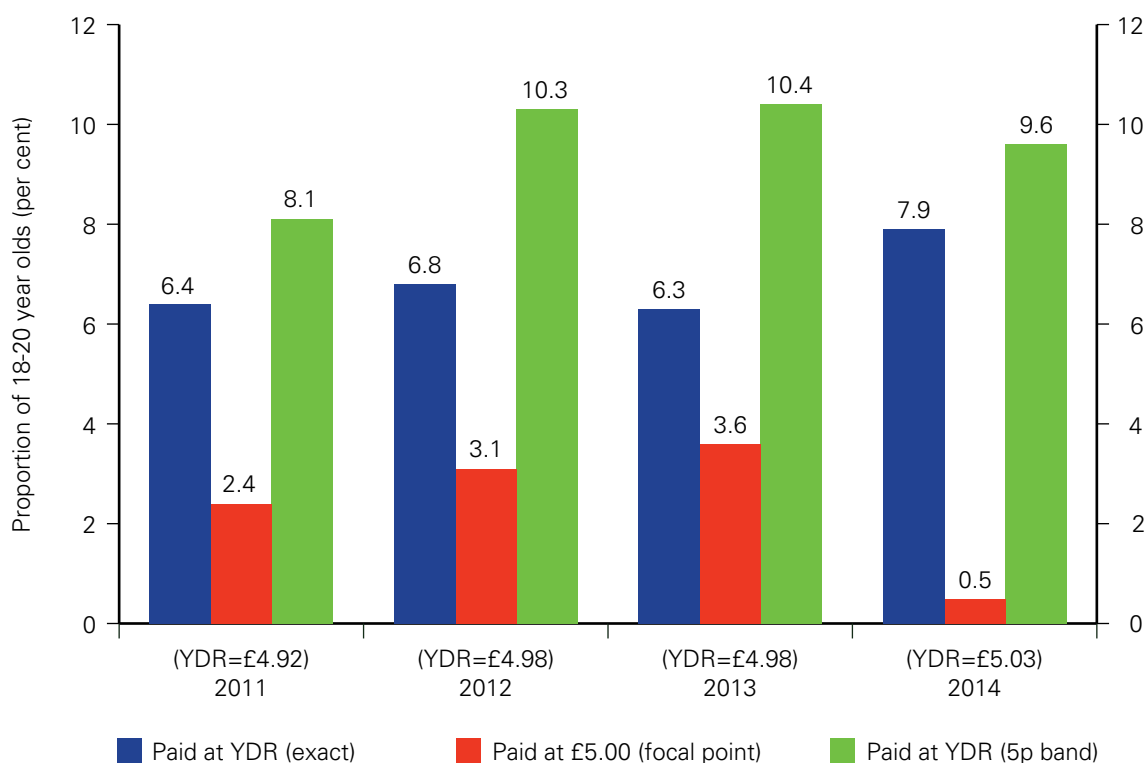
3.22 However, this effect was due largely to the setting of the Youth Development Rate (YDR) in 2012 – and freezing of the YDR in 2013 – at £4.98, just below the £5.00 focal point that many young workers are paid at. Applying a 5 pence band has meant that workers paid at £5.00 an hour came within the scope of those covered by the £4.98 rate. We have noted in previous reports that employers tend to pay workers at ‘focal points’ of rounded numbers, and £5.00 an hour is a common focal point.

3.23 Figure 3.9 shows the percentage of 18-20 year olds paid exactly at the YDR and exactly at the £5.00 focal point an hour in 2011, 2012, 2013 and 2014 respectively. The percentage of 18-20 year olds paid exactly at the YDR was fairly stable between 2011 and 2013 before rising in 2014 to 7.9 per cent. Looking at the percentage paid at the £5.00 focal point demonstrates that the slight fall in those paid exactly at the YDR between 2012 and 2013 (from 6.8 per cent to 6.3 per cent) was accompanied by an increase in the percentage paid at the focal point of £5.00 (from 3.1 per cent to 3.6 per cent). In essence, it appears that employers decided to pay 18-20 year olds at the focal point, 2 pence an hour higher than the YDR of £4.98.

National Minimum Wage

3.24 By contrast, in 2014, it was no longer possible to pay 18-20 year olds at the £5.00 focal point as this was below the legal minimum of £5.03 an hour. Hence the percentage paid at £5.00 an hour fell to 0.5 per cent and the percentage paid exactly at the YDR increased to 7.9 per cent. Figure 3.9 demonstrates how the coverage of the minimum wage moves in increments. The increase in the percentage of 18-20 year olds paid exactly at the YDR in 2014 reflects it passing the threshold for the £5.00 an hour focal point where lots of workers were clustered. They are now paid at the YDR of £5.03 an hour or at a pay point above the YDR.

Figure 3.9: Percentage of 18-20 Year Olds Paid at the Youth Development Rate (Exact and 5 Pence Band) and the £5.00 Focal Point, UK, 2011-2014

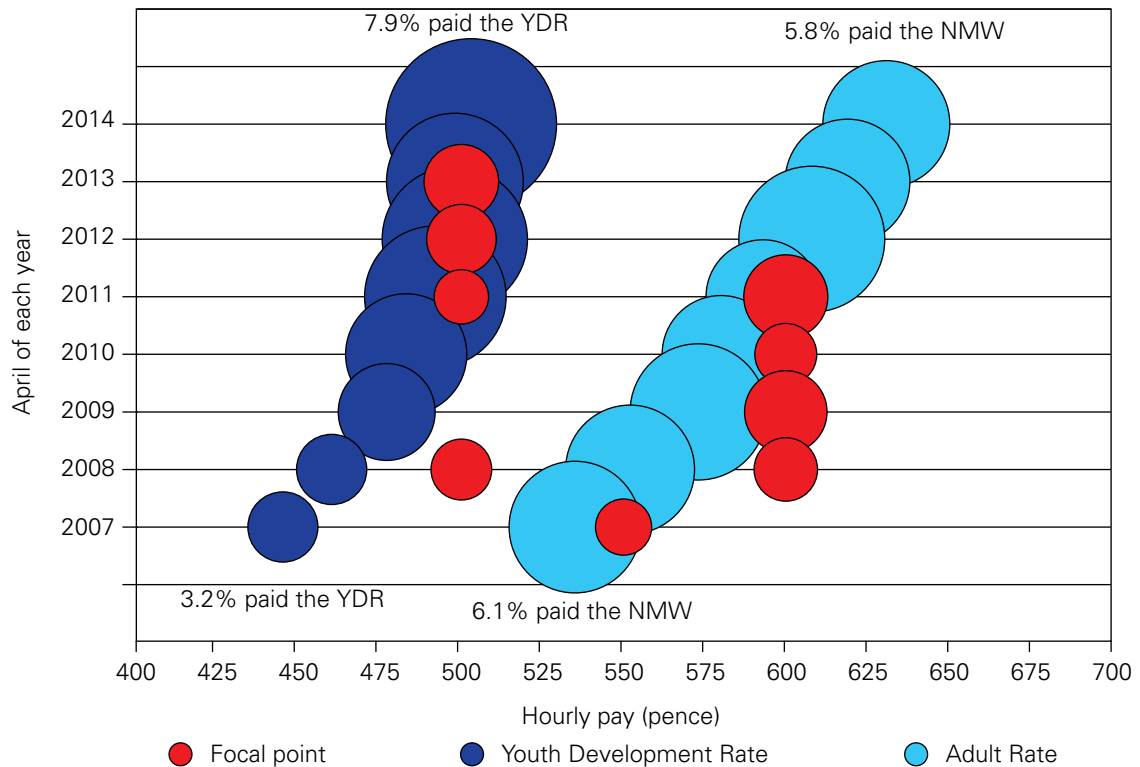


Source: LPC estimates based on ASHE: 2010 methodology, April 2011-2014, low pay weights including those not on adult rates of pay and apprentices, UK.

3.25 Figures 3.10 and 3.11 give a broader view of the pay distribution for young workers. They show the percentage of young workers paid exactly at their age-applicable NMW, or any other NMW, and the percentage paid at other focal points.

3.26 Figure 3.10 shows increasing use of the Youth Development Rate – contrary to last year where it had appeared to be reducing slightly from its peak, and a lot of anecdotal evidence that employers were making less use of it. Indeed, looking back to before the recession, the proportion of 18-20 year olds paid at the YDR more than doubled, from 3.2 per cent to 7.9 per cent, between April 2007 and 2014 (for comparison, around 3 per cent of adults were paid exactly at the NMW of £6.31 in 2014). The proportion of 18-20 year olds paid at the adult rate of the NMW increased from 6.1 per cent to 6.7 per cent between 2007 and 2012 but has since fallen back, accounting for 5.8 per cent of 18-20 year olds in April 2014. There were focal points at both £5.00 and £6.00 although the proportion of workers paid at these points were smaller than the proportions paid at a minimum wage rate.

Figure 3.10: 18-20 Year Old Earnings Distribution, by Minimum Wage Rate and Focal Point, UK, 2007-2014



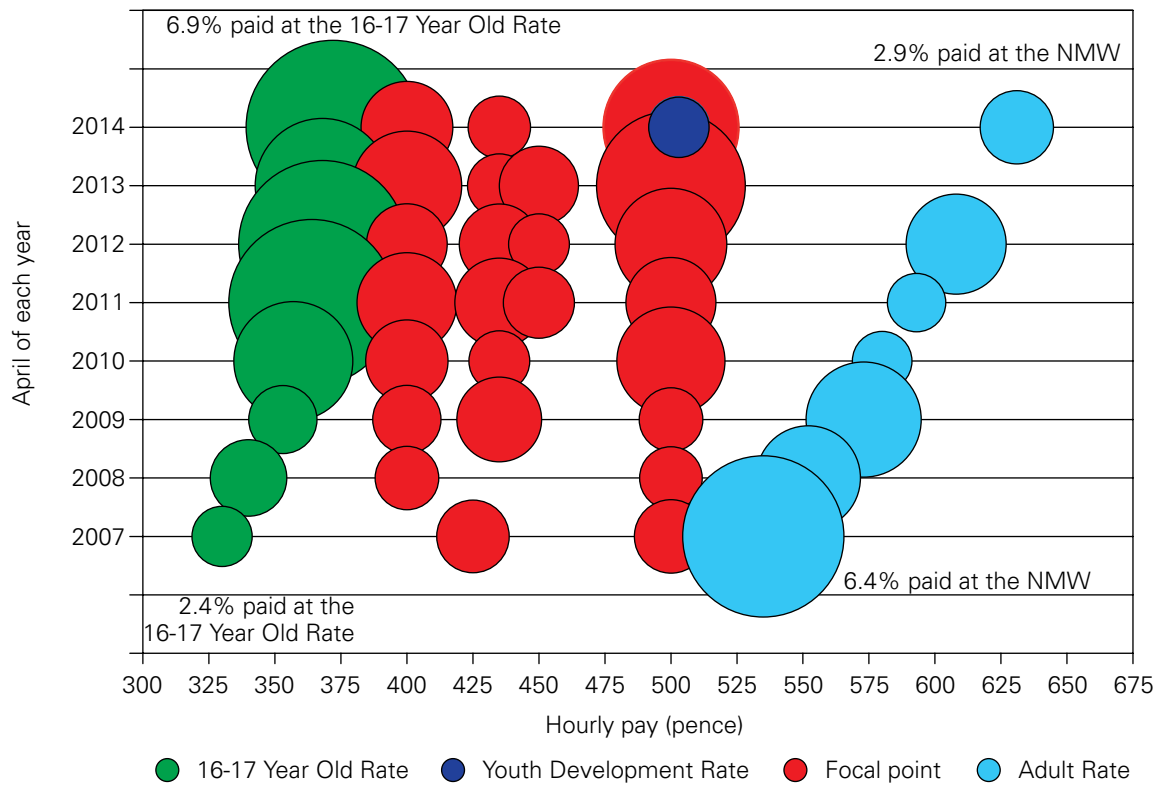
Source: LPC estimates based on ASHE: 2007 methodology, April 2007-2011; and 2010 methodology, April 2011-2014, low pay weights including those not on adult rates of pay and apprentices, UK.

Notes:

- a. Direct comparisons before and after 2011 should be made with care due to changes in the data series.
- b. Data show pay points at which 2.3 per cent or more of workers were paid.

3.27 Figure 3.11 shows the proportion of 16-17 year olds paid at a minimum wage or focal point from 2007. Again it suggests greater use of the rate. The percentage of 16-17 year olds paid at the 16-17 Year Old Rate has increased sharply over the last year to 6.9 per cent in April 2014, its highest proportion yet. Looking over the longer-term, it has almost trebled since 2007, rising from 2.4 per cent to the current level. Over the same period the proportion of 16-17 year olds paid at the adult rate of the NMW has halved, from 6.4 per cent to 2.9 per cent. The apparent increase in the proportion paid at the adult rate of the NMW between 2013 and 2014 is somewhat misleading. In 2013 the percentage of 16-17 year olds paid at the adult rate of the NMW of £6.19 was just 1.6 per cent, but a similar proportion (1.1 per cent) was paid at the focal point of £6.20. There were relatively large focal points at £4.00, £4.25, £4.50 and £5.00, with the proportion paid exactly at £5.00 rising from 2.9 to 5.4 per cent between 2007 and 2014, and a further 2.4 per cent paid at the YDR of £5.03 in April 2014.

Figure 3.11: 16-17 Year Old Earnings Distribution, by Minimum Wage Rate and Focal Point, UK, 2007-2014



Source: LPC estimates based on ASHE: 2007 methodology, April 2007-2011; and 2010 methodology, April 2011-2014, low pay weights including those not on adult rates of pay and apprentices, UK.

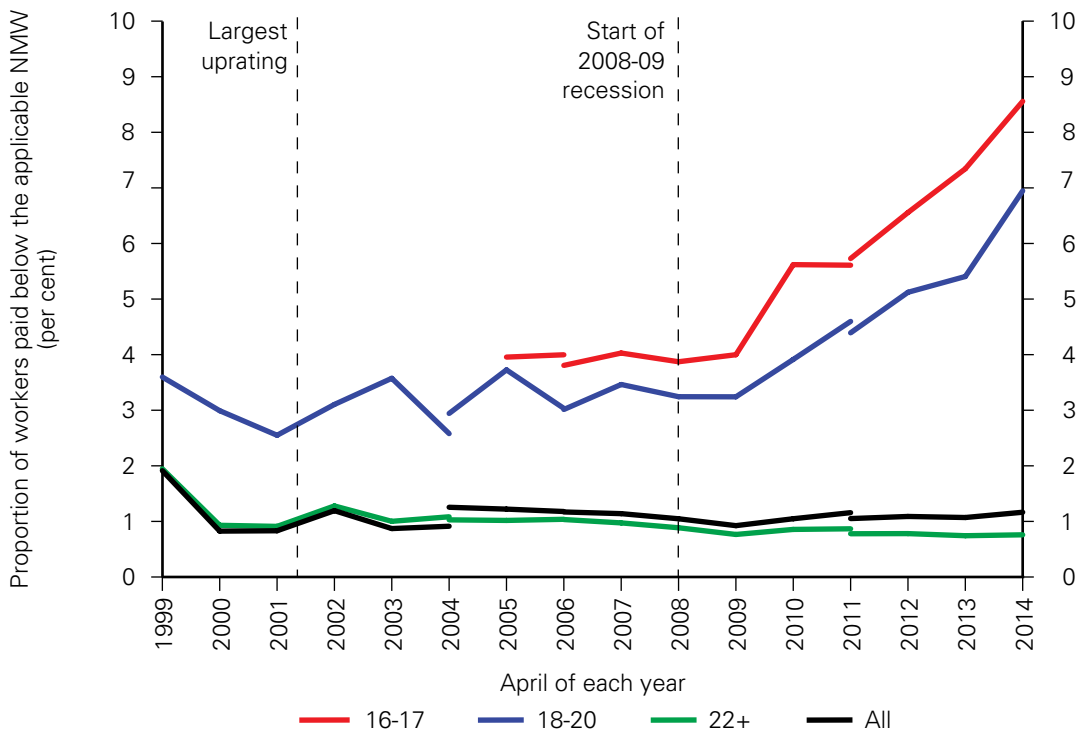
Notes:

- a. Direct comparisons before and after 2011 should be made with care due to changes in the data series.
- b. Data show pay points at which 2.3 per cent or more of workers were paid.

Non-compliance and Proportions Paid Below the Rates

3.28 As well as monitoring the use of the youth rates, we closely follow the percentage of workers paid below them. In previous reports we have noted the increasing proportion of young workers earning less than the youth rates. Figure 3.12 demonstrates that this proportion has continued to climb, reaching record highs of 8.6 per cent for 16-17 year olds and 6.9 per cent for 18-20 year olds in 2014. However, we hypothesised in the 2014 Report that this might not necessarily represent non-compliance with the youth rates – in particular, if it was attributable to an increasing number of young workers being employed as apprentices and paid the Apprentice Rate of the minimum wage rather than the youth rates.

Figure 3.12: Percentage Paid Below their Age-related Minimum Wage Rate, by Age, UK, 1999-2014



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 2011-2013, low pay weights including those not on adult rates of pay and apprentices, UK.

Notes:

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

3.29 Table 3.3 tests this hypothesis, using the new ASHE data on apprentices. It shows that the number of young workers covered by the NMW – those paid at or below the youth rates – falls dramatically once apprentices are excluded. The number of 16-17 year olds paid below the 16-17 Year Old Rate in 2014 falls from 27,000 (8.6 per cent) to just 4,000 (1.4 per cent) although this estimate should be treated with caution due to the small sample size. The number of 18-20 year old workers paid below the Youth Development Rate falls from 75,000 (6.9 per cent) to 16,000 (1.7 per cent). As a consequence, the percentage of young workers that are paid below the age-applicable NMW falls, as a proportion of all those covered by the NMW (those at or below the NMW), from around half to 14 per cent. Young workers are still more likely than adult workers (0.8 per cent) to be paid below the NMW but the gap between young workers and adults closes very considerably.

Table 3.3: Number of Young Workers Paid At or Below their Age-related Minimum Wage, Including and Excluding Apprentices, by Age, UK, 2014

Thousands	16-17 Year Olds		18-20 Year Olds	
	Including apprentices	Excluding apprentices	Including apprentices	Excluding apprentices
Paid at the NMW (5p band)	25	24	103	93
Paid below the NMW	27	4	75	16
Total covered by the NMW	53	28	178	109
Percentage of workers covered by the NMW (paid at and below) that were paid below their applicable NMW	51.9	14.2	42.0	14.5

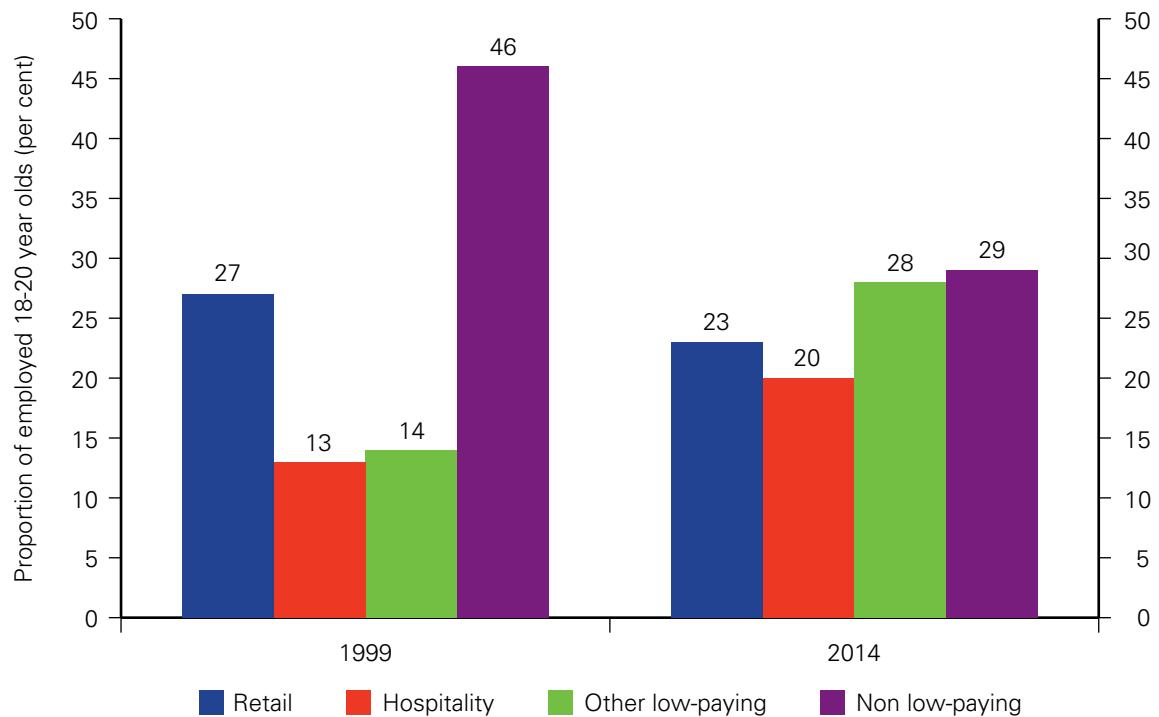
Source: LPC estimates based on ASHE: without supplementary information, 2010 methodology, April 2014, low pay weights including those not on adult rates of pay, UK.

Trends in Employment

3.30 Before moving on to look at the labour market performance of young people, it is useful to consider the types of work undertaken by young workers and any changes over time. This provides part of the explanation for the relatively weak earnings of young workers. Figure 3.13 illustrates significant shifts in the types of work undertaken by 18-20 year olds over the period between 1999 and 2014. The most striking transition is the change in the percentage of 18-20 year olds employed in occupations that are non low-paying – falling from 46 per cent of all 18-20 year olds in 1999 to 29 per cent in 2014. The percentage of 18-20 year olds working in retail occupations fell slightly, from 27 to 23 per cent, although it tended to fluctuate between 26 and 31 per cent throughout the 15 year period. The general trend has been for employment in occupations that are non low-paying to be replaced with employment in low-paying occupations, the latter increasing from 54 per cent to 71 per cent over the 15 year period.⁹ This may reflect changes to the characteristics of the young working population – i.e. that those young people who may have found it easier to access better-paying employment in the past are remaining in education. It could also partly reflect competition for better-paying work from older workers.

⁹ A reclassification of low-paying occupations in 2011 contributes to, but does not explain, the changing patterns. In 2011, security was removed from our definition of low-paying occupations and three others were added including Non-food Processing, Storage, and Transport. However, if these four occupational groups were excluded, the proportion of 18-20s employed in a low-paying occupation increased from 54 per cent to 64 per cent between 1999 and 2014.

Figure 3.13: Percentage of 18-20 Year Olds Working in Retail, Hospitality, Other Low-paying and Non Low-paying Occupations, UK, 1999 and 2014

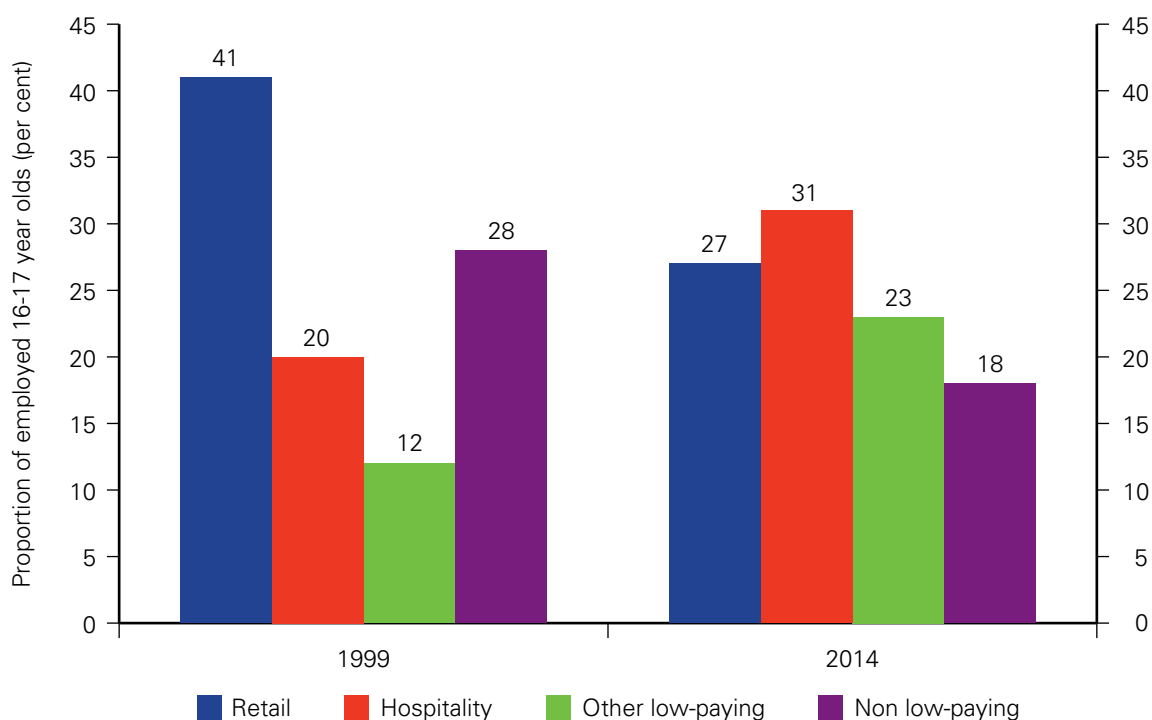


Source: LPC estimates based on ASHE: without supplementary information, April 1999; and 2010 methodology, April 2014, standard weights including those not on adult rates of pay and apprentices, UK.

3.31 Figure 3.14 shows a similar pattern for 16-17 year olds, with the percentage of young workers employed in non low-paying occupations falling. In 1999, around three in ten 16-17 year olds (28 per cent) were employed in a non low-paying occupation. By 2014, the percentage working in a non low-paying occupation had fallen to less than one in five (18 per cent). The types of low-paid work undertaken by 16-17 year olds also changed: the percentage employed in retail fell (from 41 per cent to 27 per cent), while the percentage in hospitality increased (from 20 per cent to 31 per cent). These changes partly explain the increase over time in the percentage of 16-17 year olds paid at the NMW, discussed above.¹⁰

¹⁰ The change to the classification of low-paying occupations explains some of the increase in the proportion in low-paying occupations, but not all; if the four occupational groups affected by the change are excluded, the proportion of 16-17 year olds employed in low-paying occupations still increased from 72 per cent to 77 per cent over the 15 year time period.

Figure 3.14: Percentage of 16-17 Year Olds Working in Retail, Hospitality, Other Low-paying and Non Low-paying Occupations, UK, 1999 and 2014



Source: LPC estimates based on ASHE: without supplementary information, April 1999; and 2010 methodology, April 2014, standard weights including those not on adult rates of pay and apprentices, UK.

Labour Market Position

3.32 Young people were hit harder than older workers in the recession. In this section we investigate trends in young people’s economic activity using data from the Labour Force Survey (LFS). We start by presenting the latest economic activity levels for the youth population aged 16-24, as published by the Office for National Statistics (ONS), before going on to present time-series data produced internally from the Labour Force Survey (LFS) micro-data.

3.33 In the three months to October 2014 there were 7.3 million people aged 16-24, consisting of 3.2 million in full-time education (FTE) and 4.1 million who were not in FTE (including some who were in part-time education or some form of training). Over half of the youth population (3.8 million) were in employment, with the majority of these not in FTE (2.9 million) and a smaller number in both employment and FTE (846,000). Just over three-quarters of a million (754,000) young people were unemployed but around a third of these were in FTE (248,000), bringing the number of young people not in FTE and seeking work down to just over half a million (506,000). Around 2.7 million young people were economically inactive but the majority of these were in FTE (2 million).

3.34 Our classifications of economic activity differ from those published by the ONS in that our measure of unemployment does not include full-time students who are seeking work. The rationale is that we are less concerned about students’ participation in work, and more concerned about young people who are not in education, employment or training (NEET).

Because of this, our estimates of the level of unemployment for young people are significantly lower than the total unemployment measure produced by the ONS.

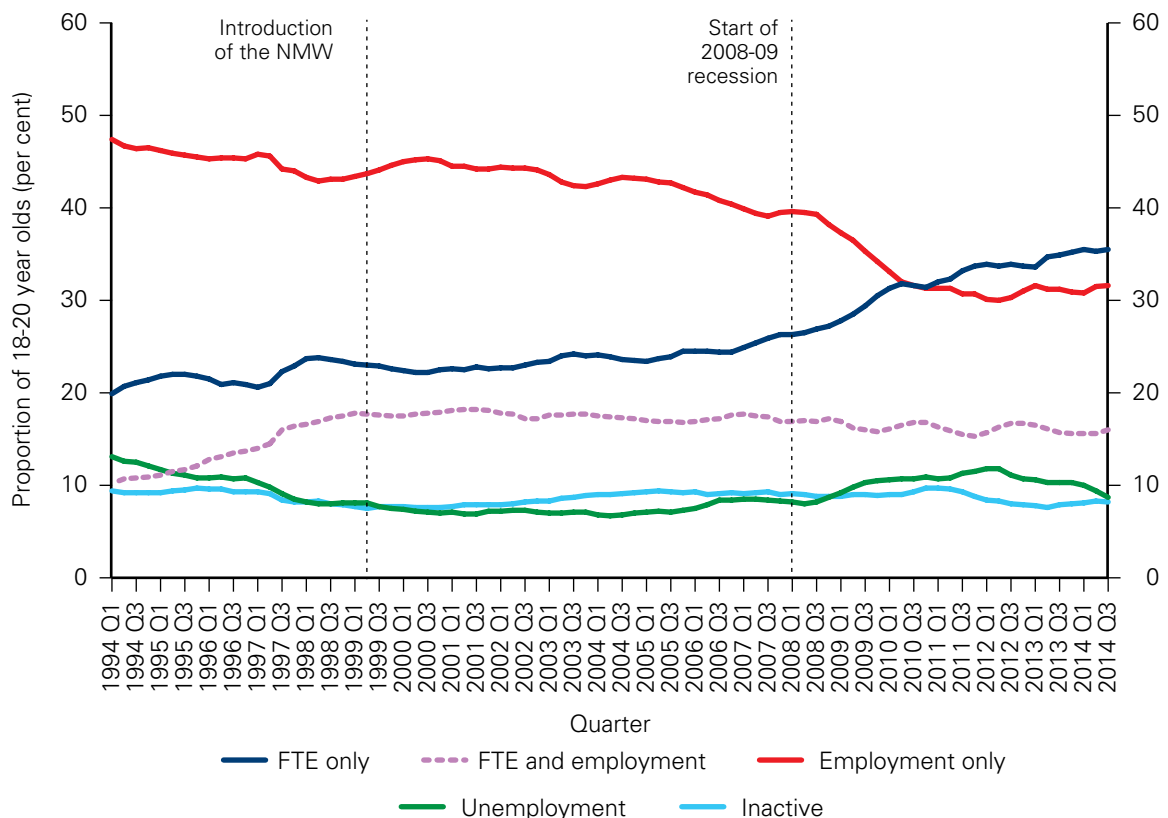
- 3.35** The long-term trend since before the Low Pay Commission was established has been a move of young people from employment into education, with increasing proportions of them choosing to stay in full-time education through their late teens and into their early twenties. This may reflect greater awareness among young people of the benefits of remaining in education, alongside recognition of the difficulty in entering the labour market and a desire to avoid unemployment and low-paying employment. It may also reflect changes to the benefits regime that have reduced the support – financial and otherwise – that is available to the youngest jobseekers.
- 3.36** A technical consequence of this change is a potential compositional effect: at the same time that the pool of young people active in the labour market is diminishing, the characteristics of those young people who are actively seeking work may also be changing, with the least work-ready exiting the education system while the most able young people remain in education. However, it is worth noting that educational levels have improved for all young people over recent decades: it is not therefore that those young people leaving education are less formally qualified than their counterparts in past decades. Nevertheless, they may possess fewer of the ‘employability’ attributes that employers are seeking. For example, they may be less likely than past cohorts to have obtained previous work experience, such as from ‘Saturday jobs’. The changing profile of the young economically active population should be borne in mind when considering changes over time in employment and unemployment rates. Other things being equal it is likely to drive a higher ILO unemployment rate.
- 3.37** Figures 3.15 and 3.16 show familiar long-term stories. We begin with change over the longer time period. The proportion of 18-20 year olds in work, excluding students, fell from nearly half in the early 1990s to under 40 per cent in 2008 before plummeting to 30 per cent in 2012. Meanwhile the proportion of 18-20 year olds in FTE, and not working, rose from around 20 per cent in the early 1990s to over 30 per cent in 2009. Education overtook a job as the most popular choice in 2010. The proportion of young people combining full-time education and part-time employment peaked in the early 2000s and has stagnated since. Inactivity peaked in 2010 at 10 per cent of the cohort and has fallen slightly since then. The proportion unemployed, never less than 7-8 per cent in the mid-2000s, rose to 12 per cent in 2012, before falling to 9 per cent in the third quarter of 2014.
- 3.38** The proportion of 16 and 17 year olds in education has risen since 1998, with sharp increases coinciding with the introduction of the Education Maintenance Allowance in September 2004 and the onset of recession in 2008. In contrast, the proportion in employment – whether alone or in combination with education – has slumped from the 1990s. The percentage of 16-17 year olds working while studying has almost halved since then, when around 30 per cent of 16-17 year olds were engaged in part-time work while studying. The percentage of 16-17 year olds in employment only has seen a similar decline – falling from around 20 per cent to just 5.6 per cent in the third quarter of 2014. Inactivity and unemployment proportions have been fairly flat.

National Minimum Wage

3.39 We turn now to the change over the last year to the third quarter of 2014. Over the last year, economic activity levels for 18-20 year olds have been stable, with very little movement on any indicator (most changed by less than 0.6 percentage points between the third quarter of 2013 and the third quarter of 2014). However, the overall pattern suggests that labour market conditions are improving for 18-20 year olds, with reductions in unemployment and inactivity alongside increases, albeit small, in employment.

3.40 The greatest change was in the proportion and number of 18-20 year olds unemployed and not in full time education, falling from 10.3 per cent to 8.7 per cent over the year to the third quarter of 2014; from 245,000 to 205,000, a reduction of around 40,000 unemployed 18-20 year olds. Other changes were of a smaller magnitude. The number of 18-20 year olds that were inactive and not in FTE also fell over the year, by 0.3 percentage points or around 5,000, to around 192,000 (8.2 per cent). The proportion in employment, excluding students, increased from 31.2 per cent to 31.6 per cent or around 1,000, remaining just over 743,000 in total. The percentage in FTE and employment also increased, from 15.7 per cent to 16.0 per cent, an increase of around 3,000, bringing the total number of students in employment to around 377,000 in the third quarter of 2014. The number of 18-20 year olds in FTE only, the largest group, increased by around 4,000 to reach 833,000 (35.5 per cent) in the third quarter of 2014, similar to the previous year.

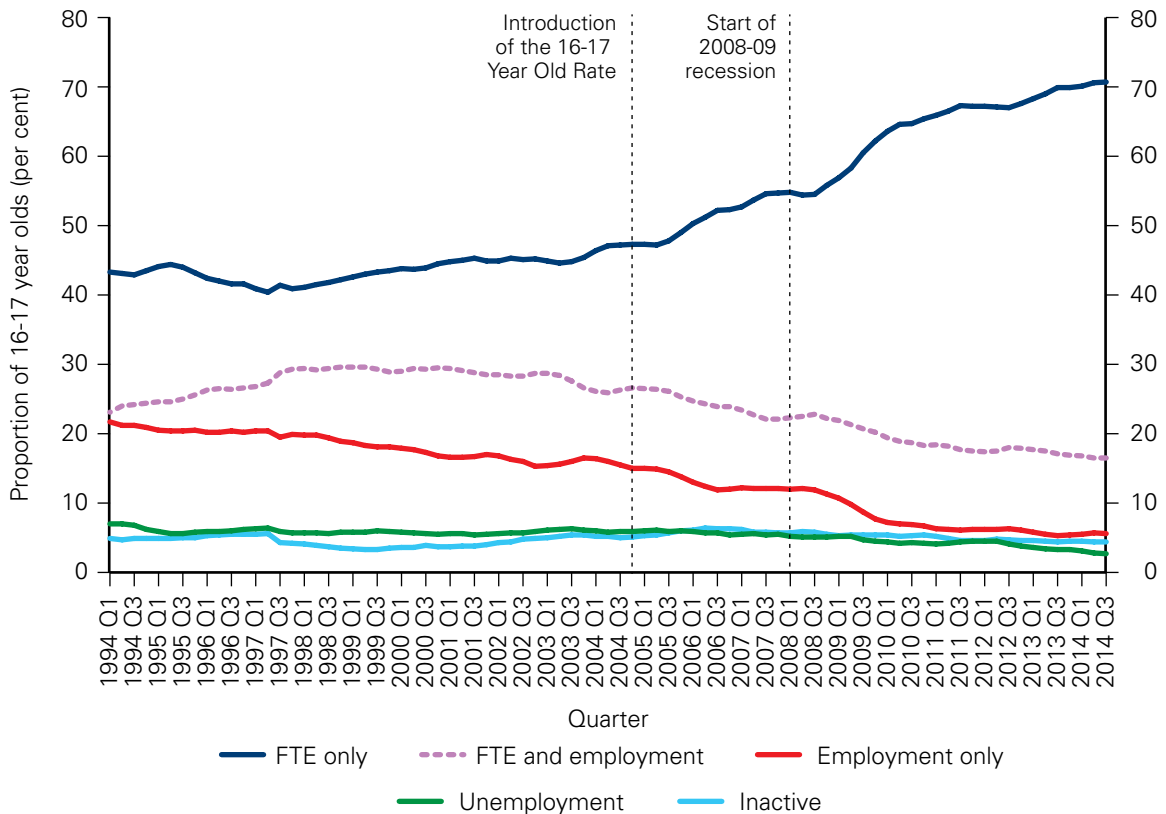
Figure 3.15: Economic Activity of 18-20 Year Olds, UK, 1994-2014



Source: LPC estimates based on LFS Microdata, quarterly, four-quarter moving average, UK, Q1 1994-Q3 2014.

3.41 The labour market pattern for 16-17 year olds year-on-year remains less positive than for their 18-20 year old counterparts, with neither notable increases to employment nor substantial falls in unemployment. However, the picture is one of stability and provides some indication that the deterioration observed through the recession may now be coming to an end. The largest group of 16-17 year olds are in full-time education and do not undertake any paid work. Figure 3.16 shows the number in FTE only, which increased by 0.8 percentage points or around 2,000 over the year to just under 1.03 million (70.7 per cent). Conversely, the number of 16-17 year olds that were working and studying fell by 0.6 percentage points, equivalent to a fall of around 11,000, to 240,000 (16.5 per cent). The number of 16-17 year olds in employment, and not studying, increased over the last year by around 4,000 (an increase of 0.4 percentage points) to around 82,000 (5.6 per cent) – this was due to an additional 10,000 17 year olds in employment, counterbalanced by a fall of 6,000 16 year olds. There was no change over the year in the proportion inactive (and not in FTE), accounting for around 64,000 (4.4 per cent) in the third quarter of 2014, but the proportion unemployed fell by 8,000 (0.6 percentage points) to 39,000 (2.7 per cent).

Figure 3.16: Economic Activity of 16-17 Year Olds, UK, 1994-2014



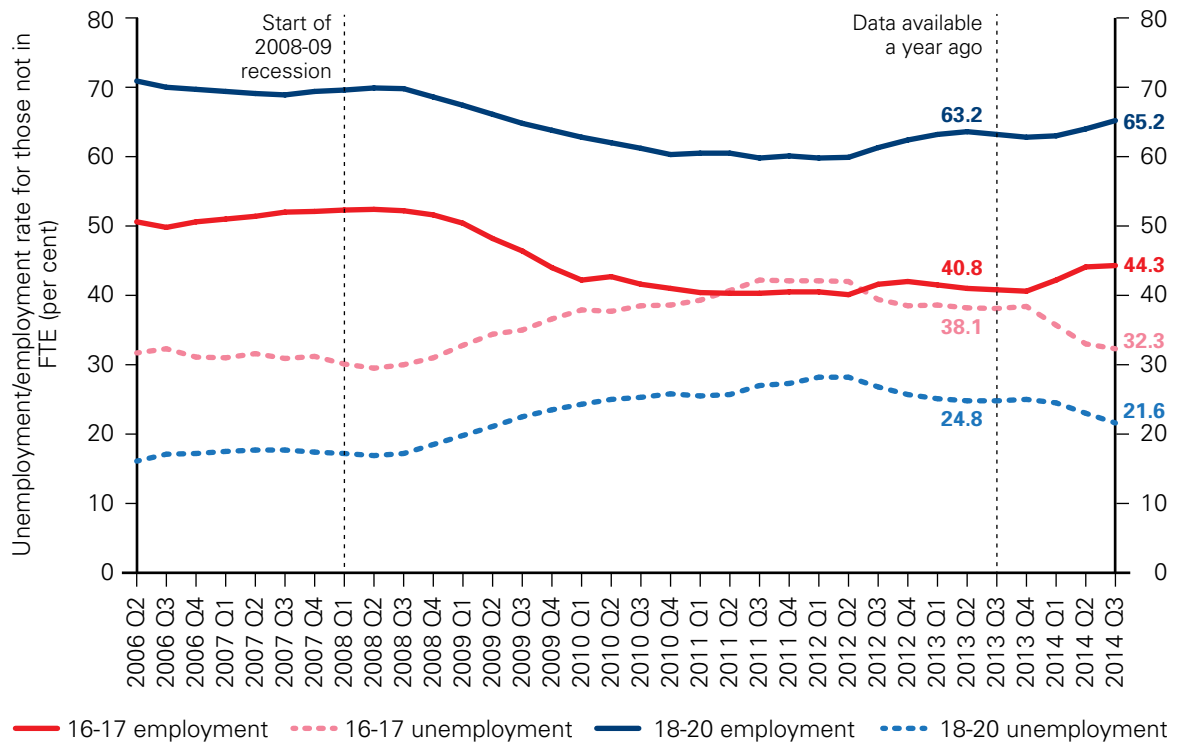
Source: LPC estimates based on LFS Microdata, quarterly, four-quarter moving average, UK, Q1 1994-Q3 2014

3.42 Overall, while changes over the year were no greater than 0.8 percentage points for 16-17 year olds on any measure, the deterioration in their labour market performance appeared to have stabilised and the general direction of travel was no longer negative.

National Minimum Wage

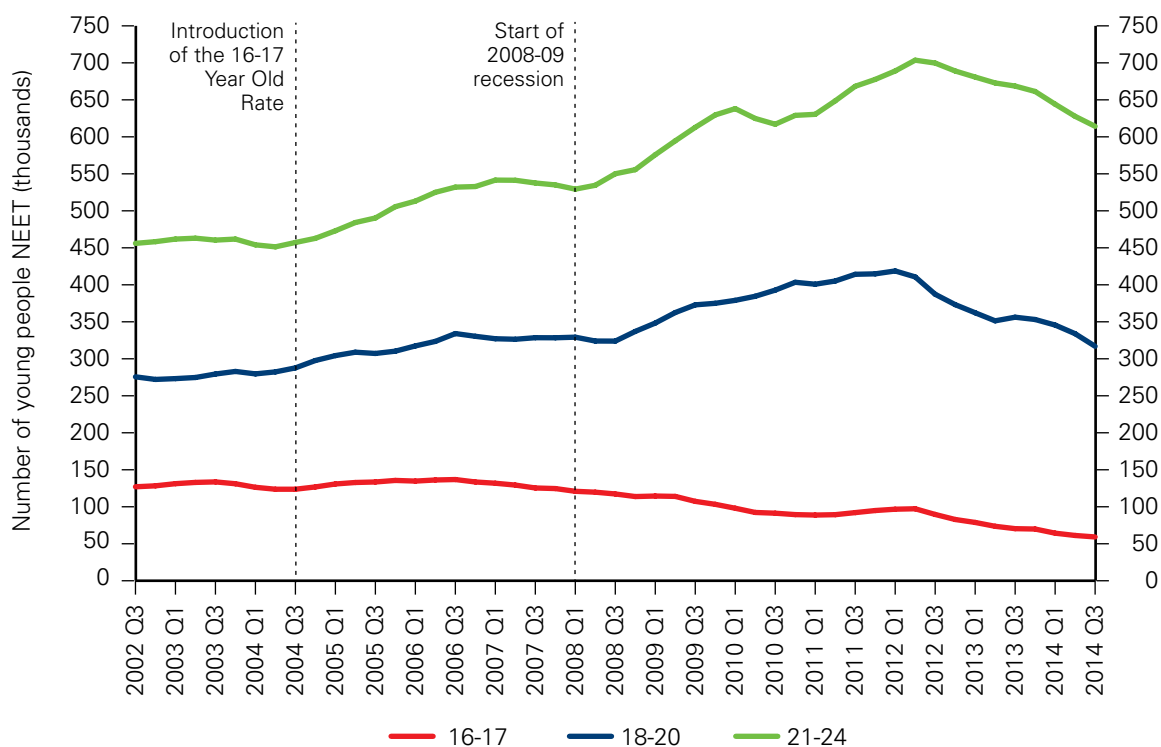
- 3.43** Notwithstanding the long-term decline in 16-17 year olds working while studying, which remains concerning since a lack of part-time work experience may increase future vulnerability to low-paid work, the latest data on the labour market outcomes of young people that have left education give rise to some cautious optimism.
- 3.44** Figure 3.17 shows stronger evidence of an improving labour market for young people not in FTE, the group that primarily concerns the Commission. Over the last year the unemployment rate fell and the employment rate increased for both 16-17 year olds and 18-20 year olds not in FTE. The unemployment rate for 16-17 year olds not in FTE fell from 38 per cent to 32 per cent – a fall of 5.7 percentage points – and is now only two percentage points above its level at the start of the recession. Their employment rate is still some way below the pre-recession rate but the increase of 3.5 percentage points, to 44 per cent, represents the first notable increase since the recession began. Their counterparts aged 18-20 years saw a smaller increase in employment (2 percentage points) but the current rate of 65 per cent marks the halfway point of return to the pre-recession peak of around 70 per cent. The unemployment rate also fell for 18-20 year olds – by 3.2 percentage points to 22 per cent.
- 3.45** While the employment rates for both groups of young people remain below their pre-recession peak, it is not clear if this is a cyclical or structural change. They may not return to the pre-recession levels given the continuing trend into higher education and the resultant changes in the characteristics of the young job-seeking population mentioned previously. Alternatively, we might expect the characteristics of this population to improve if the Raising the Participation Age policy is successful in encouraging the least able, and least work-ready, to remain longer in full-time education.

Figure 3.17: Employment and Unemployment Rates for Young People Not in Full-time Education, by Age, UK, 2006-2014



Source: LPC estimates based on LFS Microdata, quarterly, four-quarter moving average, UK, Q2 2006-Q3 2014

3.46 Finally, we conclude our review of the labour market by turning to the latest ONS data on the population not in education, employment or training (NEET). Figure 3.18 shows that the number of young people NEET has been falling since 2012. In the year to the third quarter of 2014, the number of 18-20 year olds who were NEET fell to around 317,000 (down by 39,000 or 1.5 percentage points to 13 per cent). Over the same period the number of 16-17 year olds who were NEET fell to around 59,000 (down 11,000 or 0.7 percentage points to 4 per cent). The percentage of 18-20 year olds NEET has now almost returned to its level in 2005. The percentage of 16-17 year olds NEET has fallen since 2006 – albeit with a disruption to this trend following recession, when the NEET rate settled at around 6 per cent until 2012 before continuing its downward trend. As we saw from the labour market analysis, the fall in 16-17 year olds NEET largely reflects movements into full-time education.

Figure 3.18: Number of Young People NEET, by Age, UK, 2001-2014

Source: LPC estimates based on ONS NEET data, four-quarter moving average, UK, Q3 2002-Q3 2014

Research on the impact of the Minimum Wage on Young People

3.47 As noted earlier in the chapter in recent years we have recommended lower pay increases for young workers compared with adults. We adopted this approach reluctantly, in response to their worsening labour market position alongside concern about the damaging long-term consequences of unemployment. Last year we commissioned research to explore whether our strategy had been effective in protecting the employment position of young workers. The findings are provisional and necessarily tentative but suggest that our cautious stance has had employment benefits for young workers.

3.48 London Economics (2015) investigated four aspects of the impact of the minimum wage on young people. The first part of its research looked at the impact of the recent freeze in the youth rates of the minimum wage. The second looked at the impact of reducing the age of entitlement to the adult rate to 21. The third investigated the extent of unpaid internships across the UK and the fourth assessed local labour market conditions and the determinants of young people's economic activity.

3.49 In October 2012, the minimum wage rates for young people were frozen for the first time, while the adult rate increased. London Economics undertook descriptive and econometric analysis to estimate whether the freeze had been effective in protecting the employment outcomes of the youngest workers. Descriptive analysis showed that, following the freezing of the youth rates, the fall in the employment rate for the youngest workers, observed from the start of recession, stalled. The econometric analysis using difference-in-difference methodology explored the impact of the slowdown and subsequent freeze in the two youth rates on the probability of employment for young people. The authors looked at employment

rates in the 'before slowdown and freeze' period, from October 2010 to September 2011 (when the NMW increased by 2 per cent for 16-20 year olds and 2.2 per cent for workers aged 21 and over); and in the 'after slowdown and freeze' period between October 2011 and September 2013 (when the youth rates increased by 1.1-1.2 per cent compared with 2.5 per cent for adults, before being frozen in October 2012). They measured the difference in employment rates in the before and after periods, and compared the difference observed for 16-20 year olds with that observed for 21 and 22 year olds.

- 3.50** The findings suggested that the slowdown and freeze in the youth rates protected young workers, as we had hoped. Overall, individuals aged 16-20 were 2.5 percentage points more likely to be employed compared with individuals aged 21-22 as a result of the slowdown and freeze in the two youth rates. A similar positive impact was achieved when the estimation was carried out by gender and for low-skilled individuals (those with their highest qualification at or below 5 or more GCSEs at grades A*-C). Disaggregated by age, young people eligible for the 16-17 Year Old Rate were 3.6 percentage points more likely to be employed compared with 21 and 22 year olds following the slower growth and subsequent freeze in the 16-17 Year Old Rate from October 2011. Young people eligible for the Youth Development Rate (YDR) were 2.0 percentage points more likely to be employed compared with 21 and 22 year olds during the period of the freeze in the YDR. The researchers also looked at two other periods: the period of the freeze only; and the period starting with the announcement of the freeze. These did not show the same significant effects as the analysis covering the slowdown and freeze period. We hope to commission more research this year to further explore the effect of the freeze.
- 3.51** London Economics (2015) also explored the impact of the freezing of the youth rates on older workers. One effect of the freeze for 16-20 year olds was that, on becoming 21 years old, there was a higher jump in earnings for a minimum wage worker moving from the YDR to the adult rate. Using a regression discontinuity approach, the study compared employment transitions in the 'lower-jump' period, before the youth rates were frozen, with those in the 'high jump' period following the freeze. In the 'lower-jump' period, their results were consistent with previous studies which suggested that there was a positive impact on employment outcomes when low-skilled workers became entitled to the adult rate. However, in the 'higher-jump' period, when we might have expected these positive impacts to be greater, they observed a significant negative impact on employment outcomes for low-skilled workers. This initial analysis would suggest that the freeze in the YDR had a detrimental impact on the employment prospects for low-skilled workers when they became eligible for the adult rate of the NMW. However, after a closer examination of the data and robustness checks, the authors concluded that the results may be an artefact of the data, given the relatively small samples in this period. They concluded that the true impact will only become clear as more data becomes available.
- 3.52** Comparing 21 year olds with those aged 20 and 22, the second part of the research looked at the impact of reducing the age of entitlement to the adult rate to 21. The analysis suggested that the labour market outcomes and trends were similar for all three cohorts between 2003 and 2010. However, the labour market had been greatly affected by the recession, with 21 year olds suffering more than 22 year olds. The study found a small positive employment

effect of the change in eligibility for women aged 21. There was some evidence of a negative impact on inactivity for men but this led to increased unemployment rather than employment. For men not in full-time education, the number of hours were reduced.

Policy

- 3.53** The main new policy development this year which is of relevance for the NMW in relation to young people concerns the National Insurance contributions (NICs) exemption for under 21 year olds that will come into force in April 2015. From April, employer NICs will be abolished for workers under 21 years old on earnings up to £813 a week. Employers will continue to pay NICs at 13.8 per cent on earnings above £813 a week (or above £42,285 a year). In its evidence to us, the Government advised that the change will make it over £500 a year cheaper to employ an under 21 year old earning £12,000, or £1,000 a year cheaper to employ an under 21 year old earning £16,000. It estimated that the average saving per employee, from a total of nearly 1.5 million 16-20 years old, will be around £320 per year.
- 3.54** In principle this could encourage employers to offer full-time work to young people, correcting the incentive to employ them on a part-time basis, which exists under current NICs rules. We noted in our work on the future path of the NMW last year that the structure of payroll taxes makes full-time NMW workers more expensive to employ than part-timers. This change remedies the issue for those aged under 21. However, very few 16-17 year olds earn above the current NICs threshold; and workers aged 18-20 on the YDR would need to work over 30 hours a week to earn above the NICs threshold. Our analysis indicates that 47 per cent of all 18-20 year olds worked more than 30 hours a week in 2014. This fell to 40 per cent for minimum wage workers aged 18-20 years earning at or below the Youth Development Rate (YDR). The median hours worked by these minimum wage workers were 37.5 hours. This suggests that an employer of an 18-20 year old on the YDR, working 37.5 hours a week, will gain around £4.60 a week, or £240 a year. Applied to the hourly rate of pay, this is a gain for an employer of around 12 pence an hour, or 2 per cent, for an employee working 37.5 hours a week on the YDR.
- 3.55** In addition to the changes in the NICs rules, there are a number of government policies that may have an impact on young people's labour market activity. This could be an indirect effect, by reducing the number of young people active in the labour market, and therefore subject to the minimum wage. Such policies include the Raising the Participation Age policy, Youth Engagement Fund, and the Youth Contract, which aim to increase the number of young people in education or training. Other policies could potentially increase the number of young people engaging with the labour market, either as workers or as apprentices. These include the Traineeship programme which provides work experience to prepare young people for work, including an apprenticeship, and other work experience programmes. We continue to monitor these for any implications for the number of young people subject to the minimum wage.

Apprentices

3.56 This section covers young people and apprenticeships including consideration of overall trends in apprentice pay and the latest evidence on levels of non-compliance. We set out, where relevant, findings from commissioned research, stakeholder views and analysis of policy changes. The analysis of pay is informed by ASHE and, critically, by the new Apprentice Pay Survey (APS). We welcome the fact that the Government has run this survey again as it is the most detailed source of information available on apprentices. The section also reports apprenticeship start numbers and programmes provided by the UK's devolved administrations.

Apprenticeship Starts

3.57 There remains a cross-party and cross-nation commitment to expand the number of apprenticeships. This section provides a brief overview of the types of schemes and categories of apprenticeships in the UK and then considers changes in volumes.

3.58 Apprenticeships are jobs with training leading to a recognised qualification, available across the UK and at different levels – from Level 1 (pre-GCSE) to Level 7 (Masters level), though the vast majority are currently at Levels 2 and 3, GCSE-equivalent and A Level-equivalent respectively. They have been widely promoted by governments with the aim of: delivering a step change in the number of apprenticeships; higher quality apprenticeships; and a higher proportion undertaken by younger workers. Targets include a commitment to 2 million starts over this Parliament, which the Government announced that it had met in December 2014. The Prime Minister has committed to 3 million starts during the next Parliament, if re-elected.

3.59 Table 3.4 shows the latest UK data on Level 2 and Level 3 apprenticeship starts. The medium-term story is one of a large expansion in numbers since the mid-2000s, from 265,000 in 2007/08 to 483,000 in 2013/14, with particularly sharp increases in 2010/11, due largely to an increase from 278,000 to 455,000 in England. Apprenticeship starts increased significantly in Northern Ireland between 2007/08 to 2008/09, from just under 4,000 to over 7,000, but have fallen since then and were at their lowest level, at just over 3,000 in 2013/14. Starts in Scotland have more than doubled since 2008/09, from just under 11,000 to over 24,000 in 2013/14, although that was below the peak of over 25,000 in 2011/12. Starts in Wales are similar now to a decade previously, being over 24,000 in both 2004/05 and 2013/14, but they have fluctuated over this time period.

3.60 We have noted in previous reports that increases have, to a significant extent, been driven by increasing numbers of those aged over 25 starting apprenticeships. Younger apprentices, in particular those aged 16-18 have made up a falling proportion of apprenticeships, more than halving as a proportion of starts in England since the mid-2000s, from 57 per cent to 23 per cent in 2012/13. In our 2014 Report we noted a small fall in overall start levels, the first since 2007/08 across the UK as a whole. We also noted two years of falling apprenticeship numbers for 16-18 year olds (2010/11-2012/13) in England and a small fall over the year to 2012/13 in the number of those aged 19 and over in England and Northern Ireland (but not for England if Higher Apprenticeships were included).

Table 3.4: Number of Apprenticeship Starts (Levels 2 and 3), by Country, UK, 2003/04-2013/14

Thousands	UK	England	Northern Ireland	Scotland	Wales
2003/04	-	193.6	-	-	-
2004/05	-	189.0	-	-	24.6
2005/06	-	175.0	-	-	28.1
2006/07	-	184.3	-	-	19.6
2007/08	264.8	224.7	3.8	14.7	21.6
2008/09	275.6	239.8	7.1	10.6	18.1
2009/10	320.2	278.2	6.1	19.5	16.4
2010/11	501.2	455.0	6.6	21	18.6
2011/12	565.5	516.9	5.6	25.4	17.6
2012/13	555.3	500.4	4.0	25.1	25.8
2013/14	482.8	431.2	3.1	24.4	24.1
2012/13 - 2013/14 (000)	-72.4	-69.2	-0.8	-0.7	-1.7
2012/13 - 2013/14 (%)	-13.0	-13.8	-21.4	-2.8	-6.6

Source: UK administrations, 2003/04-2013/14.

Notes:

- 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, Wales and Northern Ireland.
- Data for 2013/14 are provisional, and may be subject to small revision.
- Data exclude apprenticeship starts above Level 3.

3.61 In 2013/14, overall starts were down again, by a substantial 72,000 across the UK (13 per cent) year on year. But Table 3.5 shows that apprentices aged under 19 in all countries of the UK began to stage a modest recovery, increasing in numbers and increasing their share – albeit they remained below 2010/11 levels.

Table 3.5: Number of Apprenticeship Starts (Levels 2 and 3), by Country and Age, 2003/04-2013/14

Thousands	England		Northern Ireland		Scotland		Wales	
	Under 19	19+	Under 19	19+	Under 19	19+	Under 19	19+
2005/06	99.5	75.5	-	-	-	-	6.9	21.2
2006/07	105.6	78.8	-	-	-	-	4.9	14.7
2007/08	107.5	117.1	2.1	1.7	-	-	4.9	16.7
2008/09	99.3	140.5	1.8	5.3	7.5	3.1	4.5	13.6
2009/10	116.7	161.5	1.1	5.0	7.1	12.4	3.8	12.6
2010/11	131.5	323.5	0.7	6.0	9.9	11.1	3.6	15.0
2011/12	129.6	387.4	0.6	5.0	10.2	15.3	3.7	13.9
2012/13	114.0	386.5	0.6	3.3	9.7	15.5	4.6	21.2
2013/14	119.0	312.2	0.8	2.4	10.0	14.4	5.1	19.0
Change 2012/13-2013/14 (000s)	5.0	-74.3	0.1	-1.0	0.3	-1.1	0.5	-2.1

Age distribution (%):	Under 19	19+	Under 19	19+	Under 19	19+	Under 19	19+
2008/09	41	59	25	75	71	29	25	75
2012/13	23	77	16	84	38	62	18	82
2013/14	28	72	24	76	41	59	21	79

Source: UK administrations, 2003/04-2013/14.

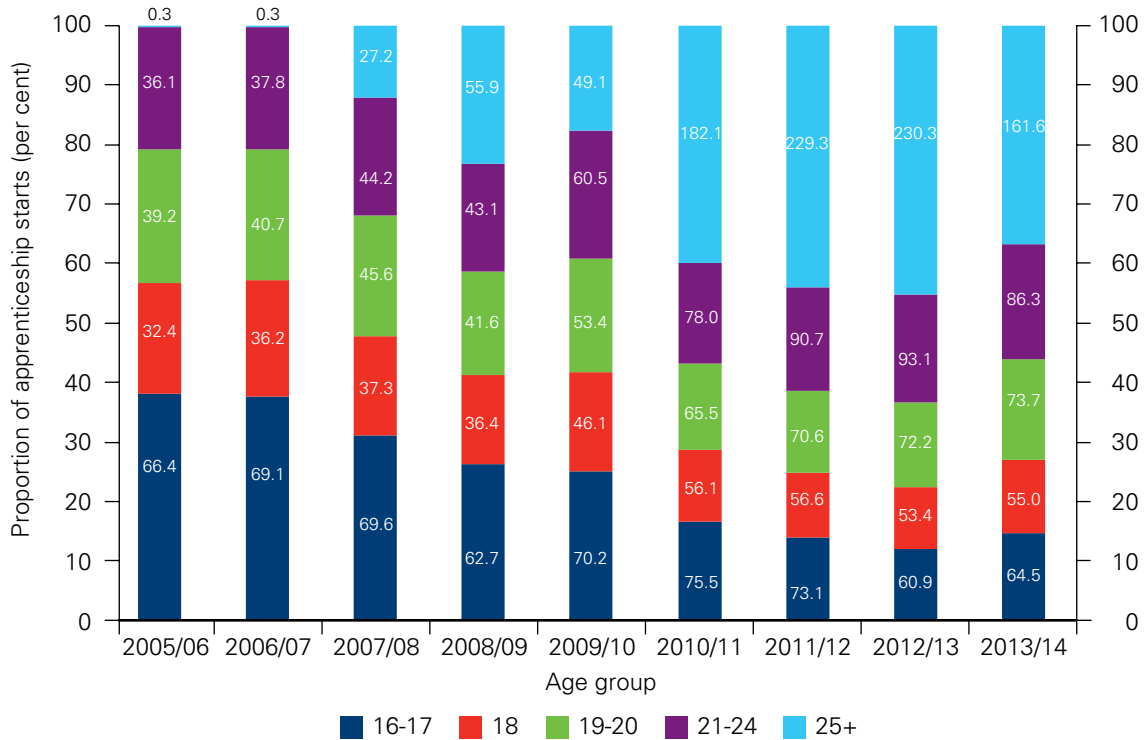
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- Data for 2013/14 are provisional, and may be subject to small revision.
- Data exclude apprenticeship starts above Level 3.

3.62 Figure 3.19 provides a more detailed age breakdown of apprenticeship starts (000s) in England. Starts for 16-17 year olds increased by 3,600 (from 60,900 to 64,500) in England, and starts for 18 year olds increased by 1,600 between 2012/13 and 2013/14. However, starts for apprentices aged 25 and over fell by just under 69,000 (30 per cent) over the year (from 230,300 to 161,600).

3.63 Changes to starts by apprentices in England aged 25 and over largely explain overall trends. These fluctuations appear to reflect policy changes in England, including the introduction of personal loans for older apprentices, instead of providing funding to training providers. This may have discouraged older workers from taking up apprenticeships and/or made older apprentices less attractive to employers.

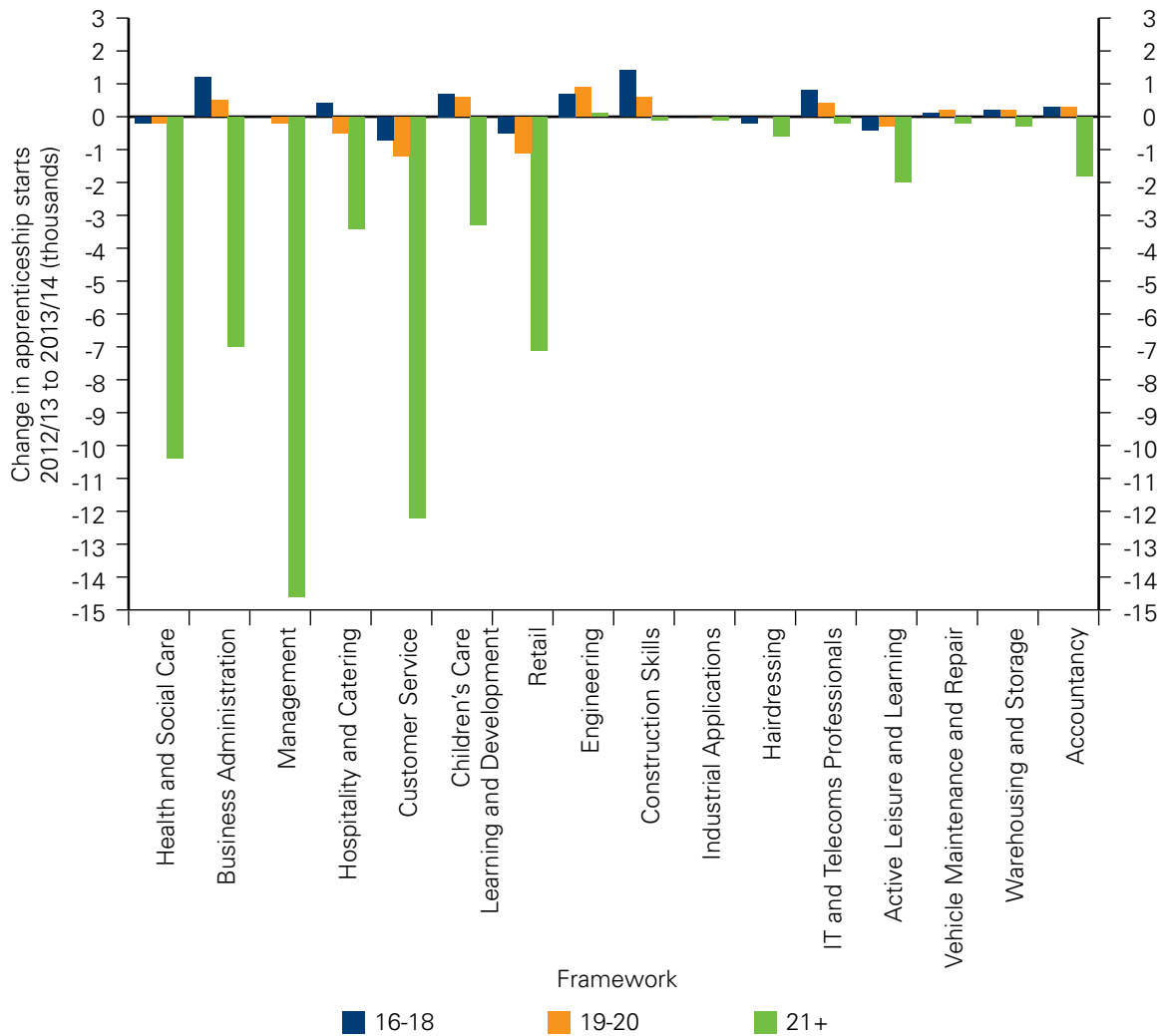
Figure 3.19: Apprenticeship Starts (000s), by Age, England, 2005/06-2013/14



Source: Individualised Learner Record, England, 2005/06-2013/14.
 Note: Data for 2013/14 are provisional and may be subject to minor revision.

3.64 The fall in the number of apprentices aged 25 and over in England may be evidence in particular that apprentice employers are sensitive to changes in costs – in the sense that they do not appear to have stepped in to meet the cost of loans on a sufficient scale to sustain starts. An increased administrative burden is also likely to have been a factor. Figure 3.20 shows the fall is greatest across the frameworks with the largest number of apprenticeship starts – those employing 5,000 or more apprentices in 2013/14. The greatest falls occurred in Management, Customer Service, and Health and Social Care, where starts among those aged 21 and over fell by 15,000 (32 per cent), 12,000 (38 per cent) and 10,000 (15 per cent) respectively. Figure 3.20 also shows a fall in the Retail framework across all age groups, with the largest fall in starts for those over 21, down by 7,000 (40 per cent) over the year. We have noted previously in this chapter that the retail sector remains one of the most important employers of young workers.

Figure 3.20: Change in Apprenticeship Starts (All Levels), by Framework and Age, England, 2012/13-2013/14



Source: Individualised Learner Record, England, 2012/13-2013/14.

Note:

- a. Data for 2013/14 are provisional and may be subject to minor revision.
- b. Data shown are for frameworks with more than 5,000 starts in 2013/14.

3.65 Table 3.6 shows the latest data on starts by framework in England. We noted in our 2014 Report that much of the expansion in apprenticeship starts since 2005/06 has been in non-traditional areas like Business Administration and Management. In 2013/14 Business Administration and Management frameworks were among the largest employers of apprentices, together accounting for around 77,000 starts (18 per cent) despite the fall in starts for those over 25 mentioned previously. However, the largest number of apprenticeship starts were in Health and Social Care (70,000 and 16 per cent of total starts). Apprenticeships in low-paying sectors remain important to overall numbers. For example, Childcare, Hospitality and Hairdressing frameworks together accounted for over 70,000 starts in 2013/14 (16 per cent of all starts).

Table 3.6: Number of Apprenticeship Starts (All Levels), by Framework, England, 2013/14

Framework	000s	Per cent
Health and Social Care	70.1	15.9
Business Administration	44.2	10.0
Management	33.1	7.5
Hospitality and Catering	32.0	7.3
Customer Service	31.3	7.1
Children's Care Learning and Development	24.3	5.5
Retail	16.6	3.8
Engineering	15.6	3.5
Construction Skills	15.5	3.5
Industrial Applications	14.9	3.4
Hairdressing	14.7	3.3
IT and Telecoms Professionals	9.8	2.2
Active Leisure and Learning	9.1	2.1
Vehicle Maintenance and Repair	8.5	1.9
Warehousing and Storage	7.1	1.6
Accountancy	6.6	1.5
Other	87.0	19.8
Total	440.4	100

Source: Individualised Learner Record, England, 2012/13-2013/14.

Note: Data for 2013/14 are provisional and may be subject to minor revision.

3.66 Table 3.7 breaks down starts in England by levels and age. It shows growing numbers of higher level apprenticeships, albeit from a low base. Level 2 apprenticeships continued to make up the vast majority of starts in 2013/14, accounting for 66 per cent of the overall total, and 70 per cent of starts for apprentices aged 16-18.

Table 3.7: Number of Apprenticeship Starts, by Level and Age, England, 2005/06-2013/14

Thousands	Level 2			Level 3			Level 4		
	16-18 years	19-24 years	25+ years	16-18 years	19-24 years	25+ years	16-18 years	19-24 years	25+ years
2005/06	77.1	45.6	0.1	22.4	29.5	0.2	0.0	0.0	0.0
2006/07	80.8	46.5	0.1	24.8	32.0	0.1	0.0	0.1	0.0
2007/08	82.0	55.2	14.6	25.5	34.8	12.6	0.0	0.0	0.0
2008/09	74.2	52.6	31.7	25.1	32.0	24.2	0.0	0.1	0.0
2009/10	89.4	72.8	28.4	27.2	39.8	20.6	0.1	1.2	0.1
2010/11	97.3	90.4	113.4	34.2	51.6	68.0	0.2	1.3	0.7
2011/12	95.4	101.7	131.9	34.1	58.0	95.7	0.3	1.7	1.7
2012/13	80.9	99.0	112.9	33.1	63.9	110.6	0.6	2.4	6.8
2013/14	83.4	97.0	106.1	35.6	59.3	49.8	0.7	2.9	5.6

Source: Individualised Learner Record, England, 2005/06-2013/14.

Note: Data for 2013/14 are provisional and may be subject to minor revision.

3.67 There is considerable policy interest in what is limiting further growth in apprenticeship numbers, particularly for younger workers. Table 3.8 shows that the National Apprenticeship Service reported 10.9 applications per place on average in 2013/14, with particularly high ratios of applications to vacancies in Arts, Media and Publishing, and Information and Communication Technology (16.7 per cent and 14.7 per cent respectively). Separate research (CIPD, 2014a) suggests that, within the low-paying sectors, the ratios of applications to vacancies were still high, at 15.6 applications per place in Children and Young People's Workforce, 11.6 per place in Hairdressing, 9.7 in Customer Services, and 8.8 per place in Health and Social Care. While these ratios partly reflect a high number of applications per candidate, the number of candidates exceeded the available vacancies in all Sector Subject Areas.

Table 3.8: Apprenticeship Applications and Vacancies, by Sector Subject Area, England, 2013/14

Sector Subject Area	Candidates	Vacancies	Applications	Ratio of applications to vacancies
Agriculture, Horticulture and Animal Care	10,680	2,950	36,240	12.3
Arts, Media and Publishing	9,810	2,230	37,310	16.7
Business, Administration and Law	83,700	66,650	706,730	10.6
Construction, Planning and the Built Environment	13,400	7,090	68,230	9.6
Education and Training	5,980	1,840	23,660	12.9
Engineering and Manufacturing Technologies	39,770	20,420	234,680	11.5
Health, Public Services and Care	41,430	19,300	232,280	12.0
Information and Communication Technology	17,650	9,120	133,800	14.7
Leisure, Travel and Tourism	7,110	3,090	27,020	8.7
Retail and Commercial Enterprise	51,770	33,520	311,000	9.3
Science and Mathematics	200	60	680	11.3
Total	281,510	166,280	1,811,630	10.9

Source: Skills Funding Agency

3.68 The CIPD (2014a) identified some 'hard-to-fill' vacancies, those that failed to attract a sufficient number of candidates, and suggested a range of contributory factors including wage level, location, time of advertisement, sector and framework. On our visits around the country we heard occasional examples of skill shortages and concern about applicant quality, but also regular accounts of high levels of worker demand. This, together with the higher number of apprenticeship applicants than vacancies, suggests that the key challenge remains supply of places.

Apprentice Earnings and Non-compliance

3.69 As in previous years, we report here on apprentice earnings and non-compliance with the minimum wage. The level of apprentice pay has been of concern to the Commission since 2009 when we first considered introducing a minimum wage for apprentices. While we determined that an apprentice minimum wage was necessary to prevent exploitation we

recognised that there was a high risk of non-compliance by the lowest-paying employers. The 2011 Apprentice Pay Survey confirmed our fears, finding very low pay and high levels of non-compliance in some sectors. This picture was repeated when the 2012 Apprentice Pay Survey again found very low pay in some frameworks alongside higher levels of non-compliance than had been identified in 2011. In the 2012 Apprentice Pay Survey, median gross apprentice pay was significantly above the Apprentice Rate, at £6.19 an hour (equal to the adult NMW at that time), but 29 per cent of apprentices were paid at a non-compliant rate. However, we speculated that the timing of the 2012 survey, around the time of the NMW uprating, and some methodological issues, may have contributed to significant error with the survey estimates.

- 3.70** This year we have two new sources of data on apprentice earnings. The first source is the 2014 Apprentice Pay Survey conducted by the Department for Business, Innovation and Skills (BIS) in the summer of 2014. The second source is the 2014 Annual Survey of Hours and Earnings (ASHE), conducted in April 2014, which included data on apprentices for the first time. It is worth noting that these two surveys collected data from different sources – from a sample of apprentices in the case of the APS, and from employers in the case of ASHE. Both sources contain potential error. In the case of the APS, apprentices report detailed information on earnings and hours, including hours spent on training. For much of the sample, an hourly rate is derived by dividing earnings by total hours. However, it is possible that respondents over-estimate or under-estimate hours and/or wages. ASHE collects information on pay and hours but does not ask specifically about hours spent training, and it is not clear whether the pay and hours information provided by employers includes training, particularly off-site. It is no surprise, therefore, that the two surveys produce rather different estimates, although they both showed generally similar patterns. We focus primarily on the APS data as the more detailed and ultimately authoritative source, but include ASHE data for comparison.¹¹
- 3.71** In 2014, median apprentice pay was £6.31 in both ASHE and APS, far above the Apprentice Rate. Disaggregated by age, median hourly pay was higher in ASHE than APS but the overall age profile of the survey was much younger (for example, 37 per cent of apprentices in ASHE were aged 21 or over compared with 64 per cent of APS respondents).¹² Hence they arrived at the same overall median. Both surveys found however that pay increased with the age of the apprentice, with estimated median hourly pay ranging, from APS and ASHE respectively, from: £3.18 to £3.56 for apprentices aged 16-17; £3.85 to £4.45 for 18 year olds; £5.10 to £5.55 for 19-20 year olds; and £6.99 to £8.13 for those aged 21 and over.
- 3.72** A further important factor influencing pay is the year of apprenticeship. Table 3.9 shows APS and ASHE earnings at key points of the earnings distribution by both age and year of apprenticeship. Hourly earnings were generally higher after the first year, particularly for apprentices aged 19 and over, who become eligible for the age-related NMW at that point.

¹¹ The APS has several advantages. Its sample is drawn from administrative data covering the (funded) apprentice population; the APS respondents are weighted to the known (funded) apprentice population; and the unweighted sample size is four times greater in APS than ASHE (9,367 and 1,686 respectively). However, as a self-reported source it is likely to have higher reporting error than ASHE, which is based on employer records.

¹² The APS sample was targeted at, and weighted to, the Framework apprentice population and so has a more representative age profile.

3.73 The overall bite of the Apprentice Rate – that is, the Apprentice Rate as a proportion of median earnings for the population entitled to it, i.e. all those in Year One and 16-18 year olds in any year – was 59.6 per cent in the ASHE and 43.6 per cent in the APS (with the younger age profile of apprentices in the ASHE contributing to the higher bite). This was lower than the bite of the other NMW rates, but the average is a misleading guide to the relationship to other wages because it is not age-adjusted. Table 3.9 shows that the bite of the Apprentice Rate was very high for 16-17 year olds (over 80 per cent), and higher than the bite of the 16-17 Year Old Rate for all workers (74.0 per cent). The bite of the Apprentice Rate was also high for 18 year olds in the first year of their apprenticeship and for apprentices in their second year aged 19-20 and 21 and over. Bite estimates were generally lower in ASHE but the bite of both the Youth Development Rate (82 per cent) and adult rate of the NMW (71 per cent) were still higher for apprentices than the equivalent bite of the YDR and adult rate of the NMW for all workers in the ASHE (76.9 and 53.9 respectively), discussed previously.

Table 3.9: Alternative Measures of Earnings, by Year of Apprenticeship and Age, UK and GB, 2014

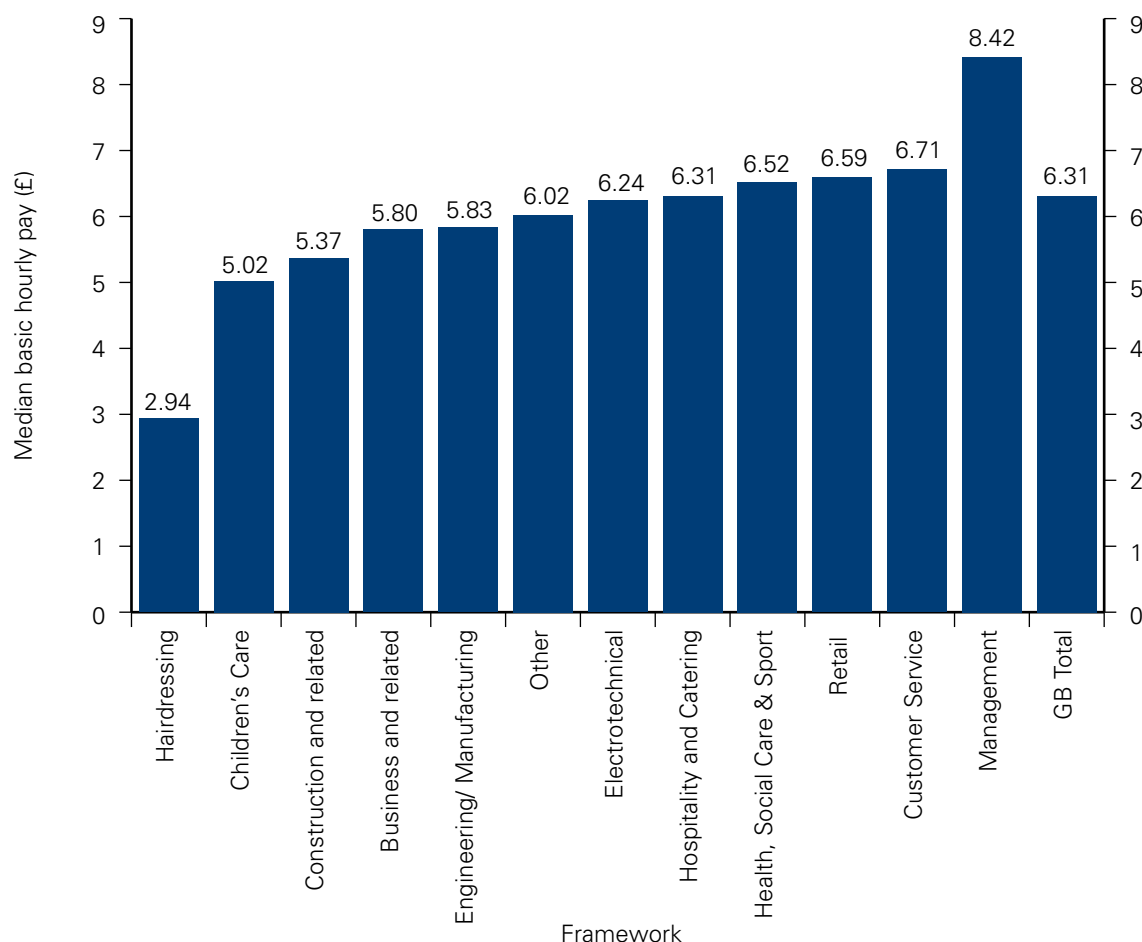
	Year 1				Year 2+			
	16-17	18	19-20	21+	16-17	18	19-20	21+
ASHE								
Median	3.32	3.98	4.98	6.56	4.54	5.11	6.10	8.88
Lowest decile	2.68	2.68	2.68	2.70	2.68	2.68	4.96	6.31
Lowest quartile	2.69	2.90	3.13	4.37	3.00	3.68	5.03	6.93
Mean	5.30	4.98	5.92	7.88	8.91	6.10	7.01	11.53
Bite at median	80.6	67.3	53.8	40.9	59.1	52.4	82.5	71.1
APS								
Median	3.16	3.41	5.00	6.92	3.57	4.68	5.42	7.09
Lowest decile	2.23	2.29	2.53	4.17	2.23	2.60	3.61	4.85
Lowest quartile	2.59	2.68	3.08	5.86	2.65	3.16	4.87	6.03
Mean	3.77	4.55	5.21	7.80	4.02	5.23	6.26	8.26
Bite at median	84.8	78.6	53.6	38.7	75.1	57.3	92.8	89.0

Source: LPC estimates based on: ASHE: 2010 methodology, April 2014, standard weights including those not on adult rates of pay, UK; Apprentice Pay Survey, GB, 2014.

Note: APS estimates based on hourly rate calculated from gross hourly pay including unpaid overtime, usual rate overtime and hours spent on work and training; excludes overtime at higher rate, tips and bonuses

3.74 While pay and non-compliance are strongly associated with age and year of apprenticeship, there continues to be wide variation between frameworks. In our 2013 Report we noted the findings from the 2012 APS of low wages and high non-compliance in frameworks covering hairdressing, construction and childcare. The 2014 APS finds the same pattern. Figure 3.21 shows median hourly basic pay for Level 2 and Level 3 apprentices in Great Britain. Hairdressing apprentices earned the lowest hourly median pay at £2.94 an hour, just 26 pence above the Apprentice Rate of £2.68. Management apprentices received the highest hourly median pay, at £8.42, which is likely to reflect an older age profile.

Figure 3.21: Median Basic Hourly Pay of Level 2 and Level 3 Apprentices, by Framework, GB, 2014



Source: 2014 Apprentice Pay Survey (BIS, 2014)
 Note: Hourly rate based on basic pay

3.75 Table 3.10 compares the earnings distribution for all apprentices at selected ages, on the ASHE and APS, with pay bands corresponding to the NMW rates. It demonstrates that estimated earnings provided by employers in the 2014 ASHE are generally higher than those provided by apprentices in the 2014 APS. But it also provides two further insights. First, that across ages significant proportions of apprentices are paid less than the rate to which they would be entitled if they had an equivalent minimum wage job. Second, that there is high non-compliance with the applicable minimum wage rate, albeit at a much greater level in the APS than the ASHE.

3.76 On the former issue, and using ASHE data as a lower bound, at least 53 per cent of apprentices aged 16-17 were paid less than the 16-17 Year Old Rate; 58 per cent of apprentices aged 18, 39 per cent of apprentices aged 19 and 26 per cent of apprentices aged 20 were paid less than the Youth Development Rate; and 17 per cent of apprentices aged 21 and over were paid less than the adult rate of the NMW. This reflects a deliberate feature of the apprentice wage floor – that it is set below the relevant age appropriate minimum wage because workers are in training. The lower wage is intended to offset the cost to employers of: lower productivity; supervision; formal training; and time spent at college, where hours should be paid. We return to this consideration in Chapter 4.

Table 3.10: Earnings Distribution of Apprentices, All Levels, UK and GB, 2014

Hourly Earnings Distribution	2014 ASHE (All Years and Levels)					2014 APS (All Years and Levels)				
	16-17	18	19	20	21+	16-17	18	19	20	21+
< Apprentice Rate (£2.68)	11	6	4	2	1	30	21	14	8	3
< 16-17 Year Old Rate (£3.72)	53	37	22	12	6	65	47	30	20	7
< Youth Development Rate (£5.03)	75	58	39	26	11	85	68	52	37	15
< NMW (£6.31)	84	77	67	52	17	92	84	73	66	31
At or above NMW (£6.31)	16	23	33	48	83	8	16	27	34	69

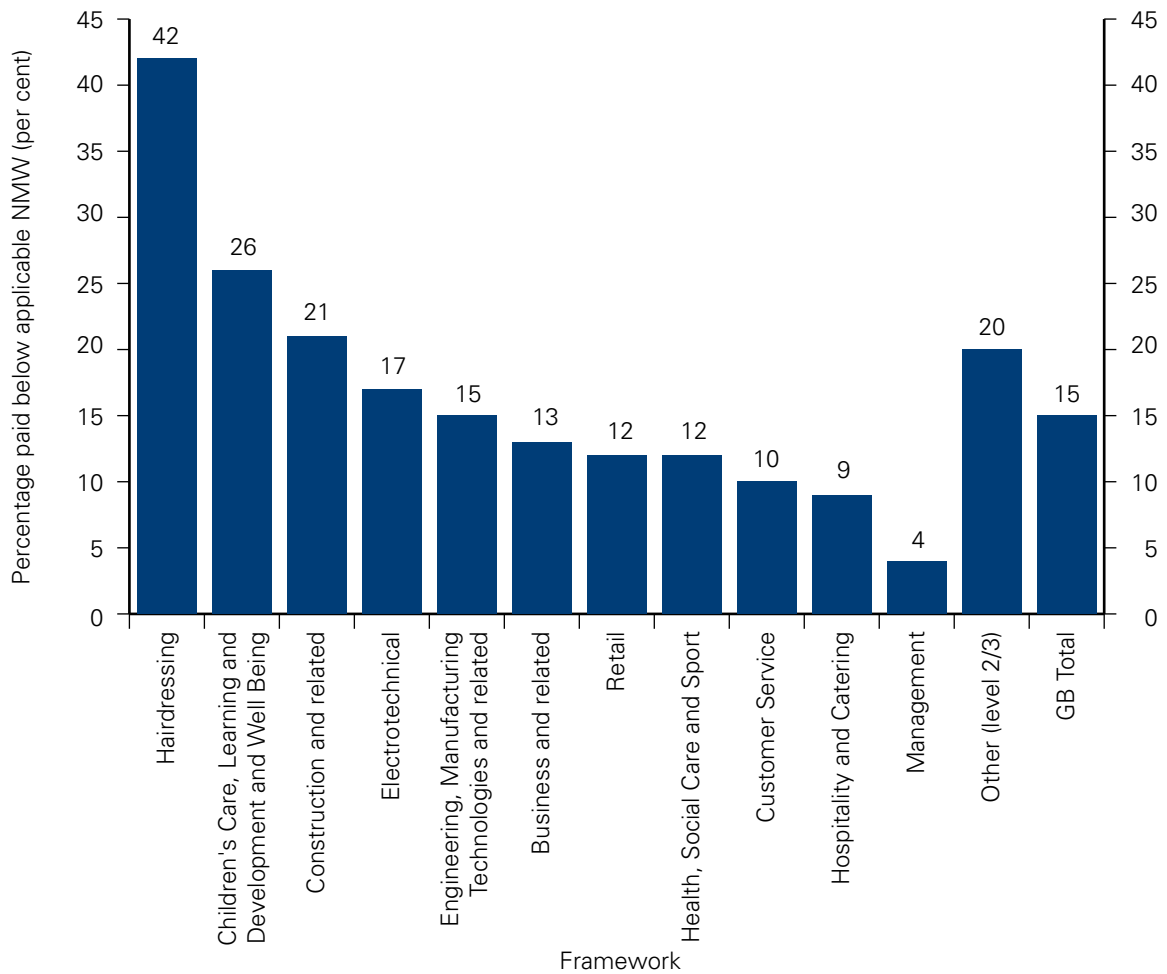
Source: LPC estimates based on: ASHE: 2010 methodology, April 2014, standard weights including those not on adult rates of pay, UK; Apprentice Pay Survey, GB, 2014. .

Note: Hourly rate calculated from gross hourly pay including unpaid overtime, usual rate overtime and hours spent on work and training; excludes overtime at higher rate, tips and bonuses

3.77 On the latter consideration, non-compliance, between 9 per cent (ASHE) and 14 per cent (APS) of apprentices were paid less than their applicable NMW in 2014, including between 11 per cent (ASHE) and 22 per cent (APS) of those under 21. Compared with estimates of non-compliance in the non-apprentice population these levels appear to be unacceptably high. Up to a fifth of young apprentices overall, and even higher proportions of 16-17 year olds, are not receiving the wage to which they are entitled.

3.78 It follows from the earnings analysis earlier in this section that non-compliance may also be higher in the lowest-paying frameworks. Indeed, Figure 3.22 shows non-compliance is highest in the Hairdressing (42 per cent), Childcare (26 per cent) and Construction frameworks (21 per cent). Research by The University of the West of England (Drew, Ritchie and Veliziotis, 2015), discussed later in greater detail, suggested that variation between frameworks in the level of non-compliance is partly explained by the characteristics of the apprentices; for example, their age and year of apprenticeship, employment status and hours worked. Treatment of tips also contributes to higher non-compliance among hairdressing apprentices, although not for other apprentices. Although tips do not legally count towards the minimum wage, non-compliance among hairdressing apprentices fell to 35 per cent when tips were included in total earnings, albeit that this remains higher than the level in other frameworks (BIS, 2014).

Figure 3.22: Non-compliance of Level 2 and 3 Apprentices, by Framework, GB, 2014



Source: 2014 Apprentice Pay Survey (BIS, 2014)

Note: Hourly rate calculated from gross hourly pay including unpaid overtime, usual rate overtime and hours spent on work and training; excludes overtime at higher rate, tips and bonuses.

3.79 It is likely that the new data from the 2014 APS are a more accurate guide to levels of non-compliance than the estimate of 29 per cent from the 2012 APS which brought non-compliance to public attention. To that extent the new data suggest a problem that is less serious than previously thought. There remain considerable uncertainties in the data however. And they do not provide evidence of improvement over time, as APS (and ASHE data) for 2014 cannot be reliably compared with previous years due to methodological changes. Better performance in enforcement or a diminishing problem cannot be inferred from these numbers.

3.80 Where they are more helpful is in offering some insight into the possible causes of non-compliance. As mentioned previously, under the structure of the NMW, all apprentices in the first year of their apprenticeship are entitled to the Apprentice Rate rather than the age-appropriate NMW rate. If they are not in their first year, those aged 19 or over are entitled to the age-applicable NMW. Non-compliance can therefore arise in four main ways: apprentices being paid less than the Apprentice Rate at any point when they are 16-18; apprentices being paid less than the Apprentice Rate in Year One aged 19 and over; apprentices aged 19-20 in Year Two and beyond being paid less than the Youth Development Rate; and apprentices aged 21 and over in Year Two and beyond being paid less than the Adult Rate.

3.81 Table 3.11 shows the hourly earnings distribution for APS apprentices in relation to the minimum wage rates, split by year of apprenticeship. For 16-18 year olds in the first year of their apprenticeship, a high proportion are paid less than the Apprentice Rate, although this proportion falls in the second year. For apprentices aged 19 and over in Year Two and beyond, the proportions paid less than their age-applicable NMW – whether aged 19-20 or 21 and over – are also striking. But for apprentices aged 19 and over in Year One, the problem appears less significant: a generally smaller proportion are paid less than the Apprentice Rate to which they are entitled.

Table 3.11: Earnings Distribution of All Apprentices, All Levels, by Year of Apprenticeship, GB, 2014

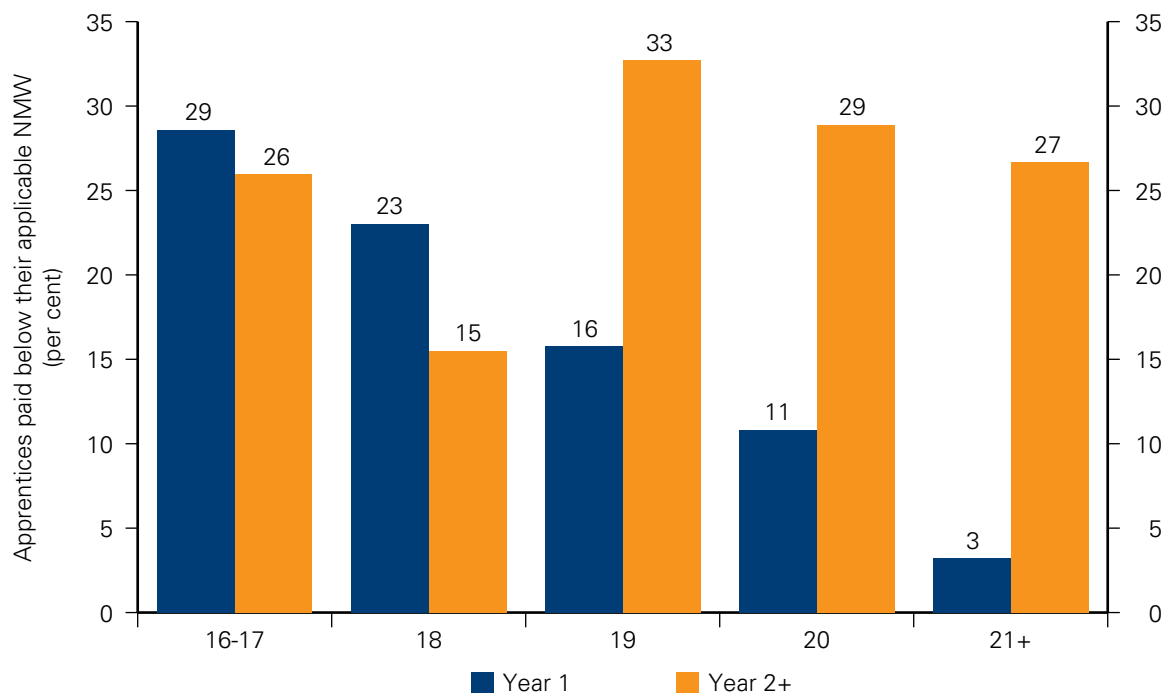
Hourly Earnings Distribution	Year 1					Year 2+				
	16-17	18	19	20	21+	16-17	18	19	20	21+
< Apprentice Rate (£2.68)	30	24	17	12	3	26	14	6	2	2
< 16-17 Year Old Rate (£3.72)	66	53	37	28	8	55	33	12	9	4
< Youth Development Rate (£5.03)	86	71	58	43	16	74	59	35	29	13
< NMW (£6.31)	93	86	75	67	32	91	78	69	63	29
At or above NMW (£6.31)	7	14	25	33	68	9	22	31	37	71

Source: LPC estimates based on Apprentice Pay Survey, GB, 2014.

Note: Hourly rate calculated from gross hourly pay including unpaid overtime, usual rate overtime and hours spent on work and training; excludes overtime at higher rate, tips and bonuses.

3.82 Figure 3.23 shows that non-compliance is strongly prevalent for two groups. First, for the youngest part of the cohort: 16-17 year olds in their first (29 per cent) and second year (26 per cent). Second, for the older, more experienced part of the cohort: apprentices in their second or subsequent years at ages 19 (33 per cent), 20 (29 per cent) and 21 and over (27 per cent).

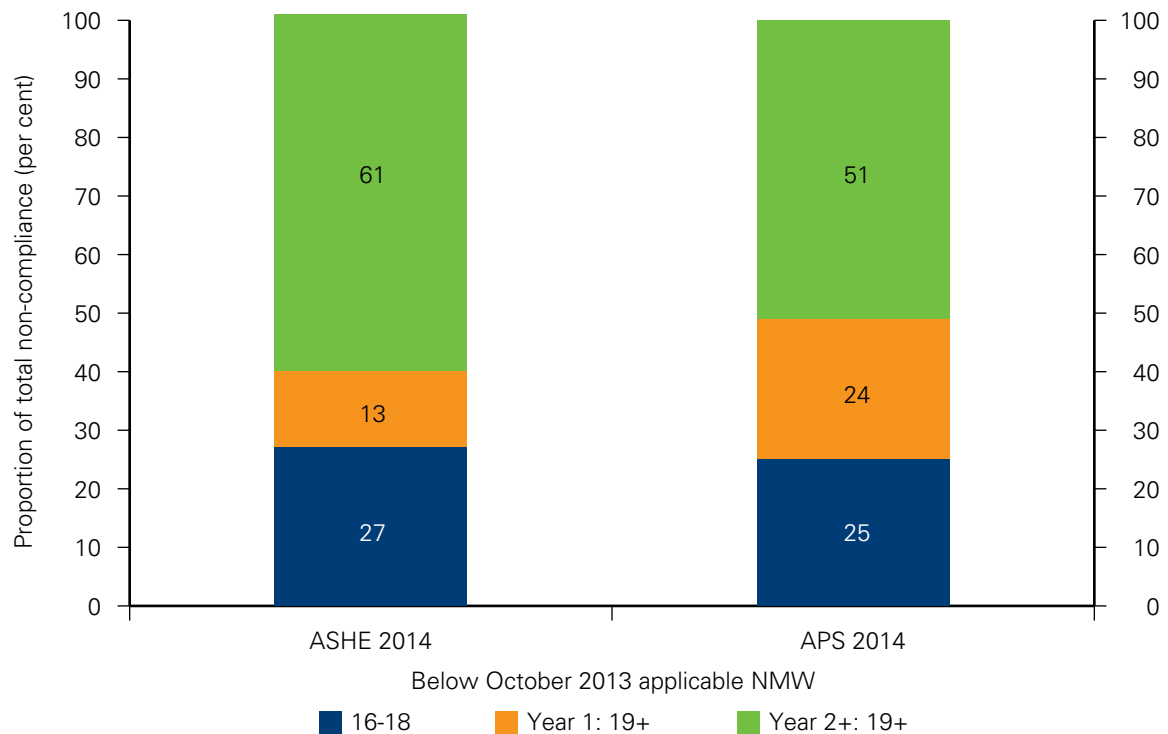
Figure 3.23: Non-compliance, by Age and Year, GB, 2014



Source: LPC estimates based on Apprentice Pay Survey, GB, 2014

Note: Hourly rate calculated from gross hourly pay including unpaid overtime, usual rate overtime and hours spent on work and training; excludes overtime at higher rate, tips and bonuses

3.83 An important point to note is that non-compliance is not just higher at these points, it is disproportionately so. Figure 3.24 shows the distribution of total non-compliance by age. Apprentices aged 19 and over and in their second year of study account for the majority of total non-compliance in both ASHE (61 per cent) and APS (51 per cent). This is despite apprentices in this age/year group constituting less than half of the apprentice population in both surveys; 46 per cent of ASHE respondents and 27 per cent of APS respondents. Non-compliance among apprentices aged 16-18 is also disproportionate to their share of the apprentice population using APS. They accounted for a quarter of total non-compliance, despite being only 15 per cent of the APS population. Using ASHE however, 16-18 year olds are not disproportionately more likely to have non-compliant pay; they accounted for 27 per cent of total non-compliance and 30 per cent of the apprentice population captured in ASHE.

Figure 3.24: Distribution of Total Non-compliance, UK and GB, 2014

Source: LPC estimates based on: ASHE 2010 methodology, April 2014, standard weights including those not on adult rates of pay, UK; Apprentice Pay Survey, GB, 2014.

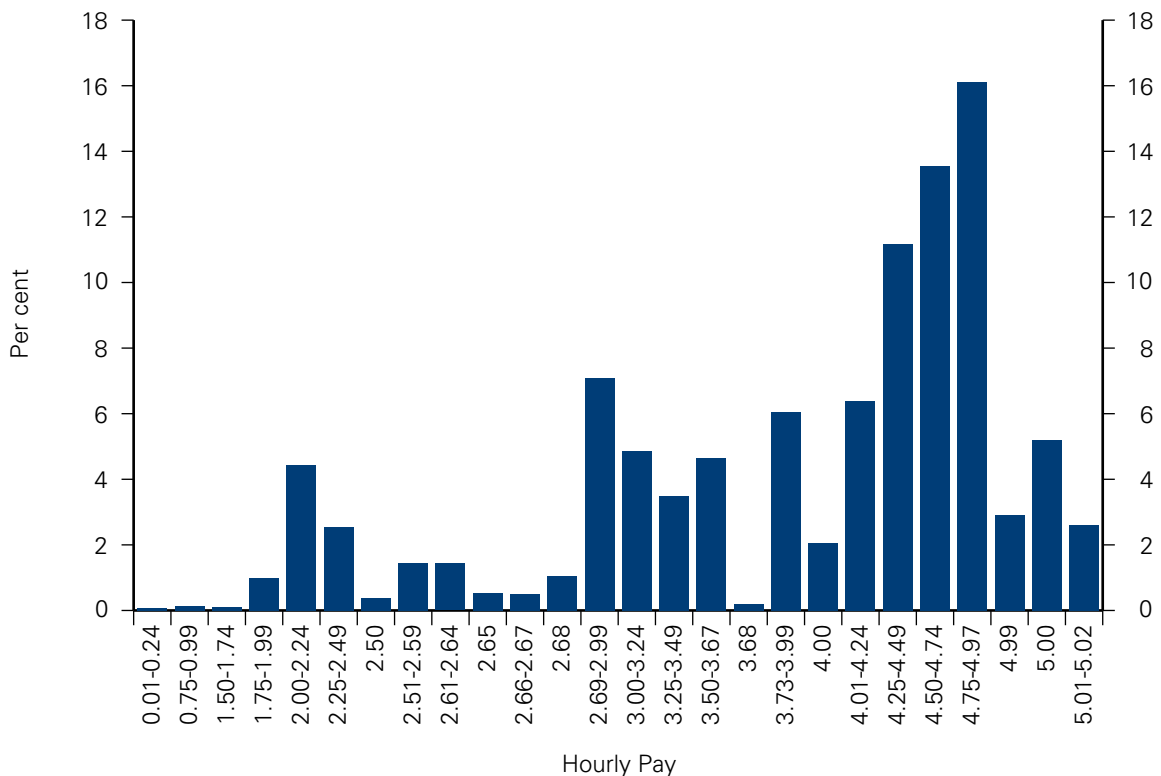
- 3.84** Some voices have argued that non-compliance arises from the structure of the rate, where the applicable hourly rate is relatively complicated compared with the other NMW rates. The data we have noted provide mixed support for this. The high recorded level of non-compliance for 16-17 year olds, and their 18 year old counterparts in their first year, is difficult to understand as a function of the complexity of the rate: this is the point at which the Apprentice Rate is simplest. It is a flat rate whatever the year of the apprenticeship for that age group. However, non-compliance among apprentices aged 19 and over in Year Two and beyond could be associated with the structure of the NMW, namely that non-compliance is at its highest after the first year of the apprenticeship because of the requirement to increase pay based on experience.
- 3.85** There is evidence that this feature is associated with non-compliance. Drew, Ritchie and Veliziotis (2015) found that the changing wage floor was the strongest predictive factor for underpayment. In our meetings with firms, some employers reported they found it hard to change pay on the basis of both apprentice experience and age. The structure of the rate requires employers to remember tenure anniversaries for those aged 19 and over with a year's experience, rather than just birthdays. There is also some limited quantitative evidence in the APS (BIS, 2014I): among Level 2 and Level 3 apprentices aged 21 or over, non-compliance was higher for those who had recently had a birthday or finished their first year than those who neither finished their first year recently, nor turned 21.
- 3.86** Examination of the earnings distribution for apprentices with non-compliant pay sheds further light on what is driving it, albeit one where the ability to draw definitive conclusions is constrained by data limitations. We focus on presenting evidence from the APS but data from ASHE are reported for comparison.

National Minimum Wage

3.87 Across ages, the data generally suggested that many non-compliant employers were paying apprentices at levels quite far removed from compliant rates, with weak or limited clustering around previous rates. A high proportion were not ‘near misses’. This was potentially consistent with employer lack of awareness, ignorance or deliberate non-compliance.

3.88 Looking at the older part of the non-compliance problem first, Figure 3.25 shows the earnings distribution for apprentices aged 19-20 in their second year of an apprenticeship who were paid below the YDR of £5.03. Encouragingly, few non-compliant employers were paying at or below the Apprentice Rate applicable in Year One for these apprentices. Just one per cent of apprentices on a non-compliant rate were paid at the current Apprentice Rate of £2.68, and a further one per cent were paid at a previous Apprentice Rate of either £2.65 or £2.50. Non-compliant employers of apprentices in Year Two and beyond do not appear to have attempted to pay the minimum in Year One and inadvertently remained there when required to increase pay.

Figure 3.25: Distribution of Pay for those with Non-Compliant Pay Aged 19-20 in Year Two or More of an Apprenticeship, GB, 2014

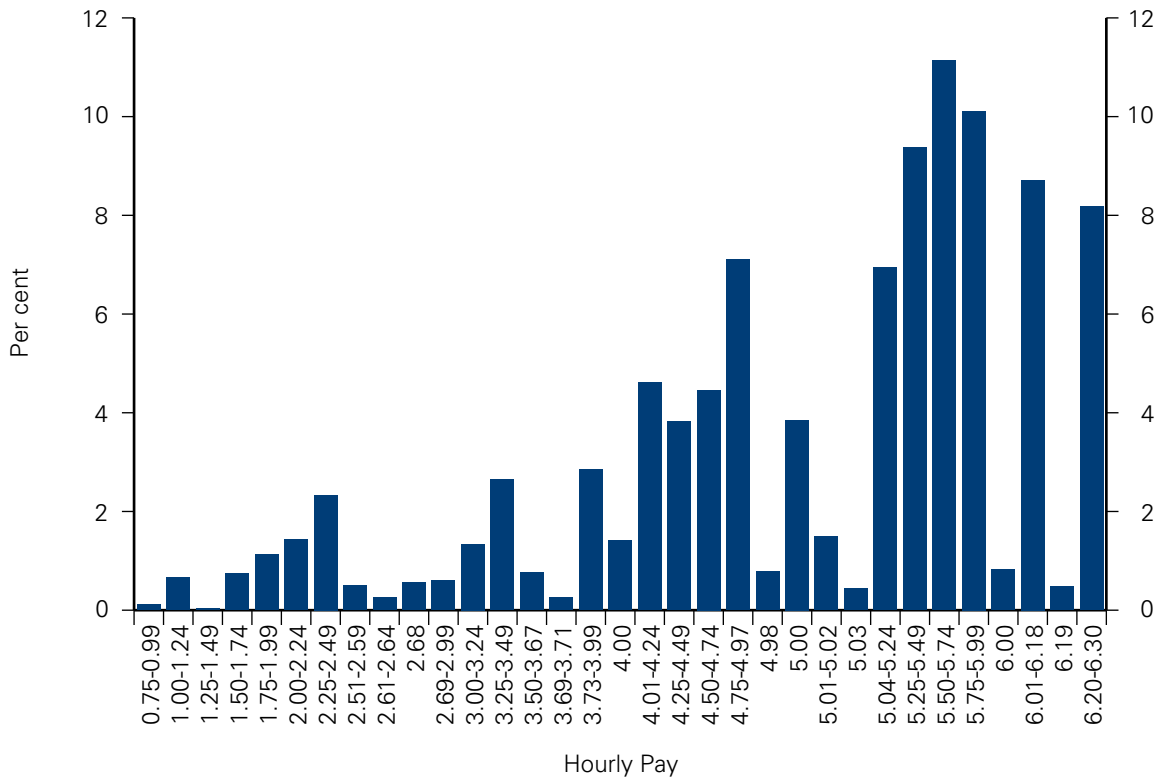


Source: LPC estimates based on Apprentice Pay Survey, GB, 2014

Note: Hourly rate calculated from gross hourly pay including unpaid overtime, usual rate overtime and hours spent on work and training; excludes overtime at higher rate, tips and bonuses

- 3.89** But nor does non-compliant pay appear to be focused strongly at the age-appropriate rate, the pattern that would be consistent with 'near miss' employer error. BIS (2014I) showed that three fifths (62 per cent) are not within 10 per cent of the right rate. Our analysis further shows that around 8 per cent were paid within 3 pence of the correct rate, including 5 per cent who were paid at the common focal point of £5.00. Some were paid near the previous Youth Development Rate of £4.98 an hour, where rounding effects may be at play. However, almost three-quarters (73 per cent) were paid less than £4.75 an hour, with a third (33 per cent) paid between £4.00 and £4.75 an hour. This could be evidence of non-compliant employers choosing a rate that they regard as appropriate, irrespective of the minimum wage requirement.
- 3.90** ASHE has a larger proportion of non-compliant pay clustered close to the correct rate: 37 per cent of 19-20 year olds paid a non-compliant rate in their second year were paid at least £5.00 (data not shown), compared with 8 per cent of their counterparts in the APS. Nevertheless, almost half (46 per cent) were paid less than £4.75 an hour.
- 3.91** Overall these data are consistent with employers setting a rate that is above the Apprentice Rate in Year One but then either not changing it in Year Two, or not changing it by enough to comply.
- 3.92** There is a similar pattern for apprentices aged 21 and over in their second year, shown in Figure 3.26. Around 8 per cent were paid within 10 pence of the correct rate (between £6.20 and £6.30) but in general the pay distribution was widely dispersed. Seven in ten (70 per cent) were not within 10 per cent of the applicable rate (BIS, 2014I). The proportions paid at any minimum wage rate were small: less than one per cent of apprentices aged 21 and over were paid at the Apprentice Rate; one per cent were paid at the Youth Development Rate (for either 2014 or 2013); and less than one per cent were paid at the previous adult rate of £6.19. Two-fifths (43 per cent) were paid between £5.00 and £5.99, while a quarter were paid between £4.00 and £4.99. The data are again consistent with employers needing to pay older apprentices higher wages or knowing that this is a requirement but being either unaware that the adult rate of the NMW applies to these apprentices, or disregarding the NMW in favour of a rate they feel is appropriate. By contrast, within ASHE there is a cluster near the right rate, with 31 per cent of those aged 21 and over in their second year being paid at least £6.00 an hour (data not shown), compared with 18 per cent of their counterparts paid non-compliantly in the APS. But pay below this remains evenly distributed.

Figure 3.26: Distribution of Pay for those with Non-compliant Pay Aged 21 or Over and in Year Two or More of an Apprenticeship, GB, 2014



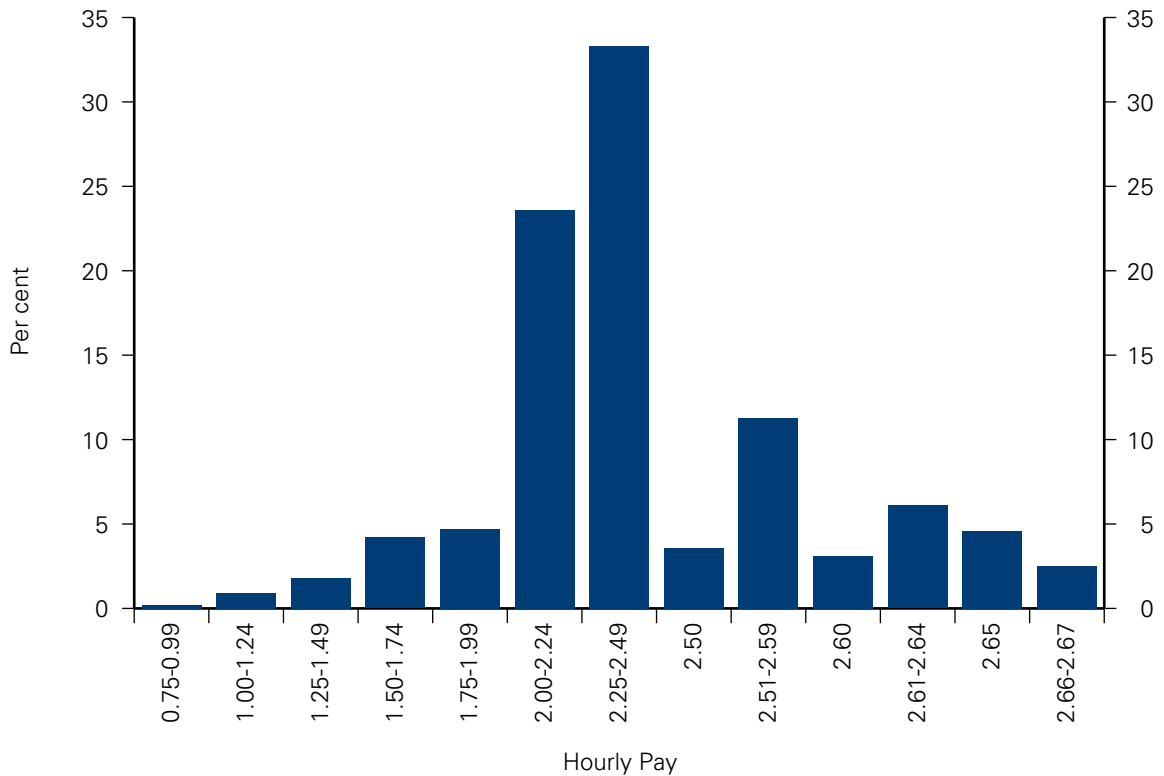
Source: LPC estimates based on Apprentice Pay Survey, GB, 2014.
 Note: Hourly rate calculated from gross hourly pay including unpaid overtime, usual rate overtime and hours spent on work and training; excludes overtime at higher rate, tips and bonuses.

3.93 Turning to the younger part of the non-compliance problem, the evidence of employers falling a long way short is weaker than for the older age group. For those aged 19 and over, we’ve seen that both the apprentice-reported APS and the employer-reported ASHE find significant proportions falling short, albeit ASHE has more clustering near the right rate. For 16-18 year olds, Figure 3.27 appears to show a similar story with the majority (56 per cent) of non-compliant apprentices paid between £2.00 and £2.50 – below the applicable rate four years ago. Two per cent of non-compliant 16-18 year olds were paid within a couple of pence of the Apprentice Rate, which could legitimately be explained by rounding errors in estimating pay and hours in the survey. There were small spikes, of 3-5 per cent, at previous Apprentice Rate pay points of £2.50 (2011), £2.60 (2012) and £2.65 (2013), together accounting for 11 per cent of total estimated non-compliance.

3.94 However, by contrast, ASHE, the employer-based data source, records both a much smaller overall non-compliance problem and one which is largely driven by errors of a few pence, with apprentices underpaid by small amounts. Around 84 per cent were paid at least £2.66 . It should be noted however that on this source, which would support ‘near miss’ employer error as a key explanation of non-compliance for this part of the Apprentice Rate, the overall problem is much smaller: for example, 11 per cent of 16-17 year olds are paid non-compliantly compared with 28 per cent in the APS. More profoundly if we exclude possible rounding error, non-compliance at age 16-18 falls to between 3 to 5 per cent. This is a significant finding from research commissioned by us this year (Drew, Ritchie and Veliziotis,

2015) and one that qualifies our headline findings on non-compliance levels: for younger apprentices non-compliance is slightly lower, proportionately smaller given the size of the cohort, and more likely to be explained by measurement error (particularly on ASHE data).

Figure 3.27: Distribution of Pay for Apprentices Aged 16-18 with Non-compliant Pay, GB, 2014



Source: LPC estimates based on Apprentice Pay Survey, GB, 2014.

Note: Hourly rate calculated from gross hourly pay including unpaid overtime, usual rate overtime and hours spent on work and training; excludes overtime at higher rate, tips and bonuses.

- 3.95** This is not the only data uncertainty with implications for understanding the extent and nature of non-compliance. An important consideration in understanding high levels of recorded non-compliance in the APS data is that the headline data does not separate employers getting the hourly rate wrong from the rather different issue of unpaid hours. Under the scope of the NMW, employers should pay apprentices for training outside the workplace, including hours spent studying at college, but there is some evidence that this requirement is poorly understood. For example, a recent survey of nearly 6,000 apprentices found one in six (17 per cent) usually undertook their training outside of contracted hours and a further 6 per cent never undertook training in contracted hours (BIS, 2014k). Other research (Drew, Ritchie and Veliziotis, 2015) found that higher training hours were significantly associated with higher non-compliance.
- 3.96** However, this factor does not account for why non-compliance is higher for older apprentices, where external training is lower (and the structure is more complicated), than for younger apprentices, where external training is higher (and the structure simpler).

National Minimum Wage

- 3.97** Looking at the APS an hourly rate was arrived at for most of the sample by dividing overall reported pay by total hours spent working and training. But for those who knew their hourly rate (roughly half of all respondents), just 5 per cent gave a rate that was non-compliant. We have calculated their derived level of non-compliance, taking account of their actual pay and reported hours worked, and preliminary analysis suggests that overall 14 per cent were paid a non-compliant hourly rate. Based on the hourly rate given by the respondent, non-compliance levels by age fall by about half – to 9 per cent for apprentices aged 16-18 years, and 16 per cent for apprentices aged 19-20 in their second year. On this basis up to half of non-compliance could be explained by unpaid hours, or reporting error.
- 3.98** Overall the evidence base on non-compliance is characterised by a significant degree of uncertainty. We conclude that, notwithstanding its limitations, non-compliance remains extremely high. We also conclude that there is evidence for non-compliance having a relationship to structure via the ‘tenure rule’ – the requirement to change pay for more experienced apprentices aged 19 and over.
- 3.99** By contrast, the evidence is weaker in relation to non-compliance for apprentices aged 16-18 – both for the extent of the problem, and its relationship to the structure of the NMW. This is, first, because the structure is a simple flat rate for this group so non-compliance is likely to be related to communication, awareness and enforcement rather than design. A second consideration is the finding (Drew, Ritchie and Veliziotis, 2015) that non-compliance linked to the rate may be exaggerated by rounding error and the overall extent of the problem overstated at this point.
- 3.100** As well as shedding light on the non-compliance problem, the data we have considered also suggested caution in relation to potential remedies for it. In particular the case for a structural solution involving changes to hourly rates is weakened by the fact that we cannot exclude non-payment of hours as a driver of non-compliance, so cannot be confident in policy design. If non-payment of hours or reporting error is driving up to half of non-compliance, as preliminary analysis suggests, changes to the hourly rate will either have little bearing on this portion of the problem or be based on a false assessment of the scale of the problem.
- 3.101** A separate insight is that, to the extent higher non-compliance at age 19 and above is associated with a pay floor that changes with tenure, the data do not establish whether this is a problem of excessive complexity or its obverse, inadequate communication and enforcement. There is little evidence from the APS that non-compliant employers are attempting to comply with the NMW; if this were the case we would expect to see larger proportions paid at NMW rates, albeit the wrong rates, and clustering closer to the correct rate. Conversely, the fact that employers were paying more than the Apprentice Rate to those aged over 19 in Year Two may be evidence they were not trying to ‘get away with’ paying the minimum possible. This was arguably suggestive of low awareness or ignorance. We cannot tell from these sources if low awareness and ignorance is a symptom of, or independent of, the rate. We return to this consideration in Chapter 4.
- 3.102** Further research with non-compliant employers is required in order to understand why they are not observing the NMW, including the extent to which they are unaware of the rates, the

hours requirements, and to what extent they are paying lower wages deliberately or by accident. We intend to consider this issue further in future research.

Level 4 and 5 Apprentices

3.103 The 2014 APS included Level 4 and 5 apprentices for the first time in 2014, reflecting the growth of these apprenticeships in recent years which accounted for 18,000 apprenticeships in England in 2013/14. This is the first pay data available for this group. Table 3.12 shows that median earnings were higher for these apprentices, as would be expected. However, it is worth noting that while the hourly median pay was £9.55 overall, and as high as £10.49 for those aged 25 and over, it was only 2 pence above the adult rate of the NMW (£6.31) for 19-20 year olds. Furthermore, the lowest paid apprentices, those in the lowest decile of the earnings distribution (tenth percentile), generally earned considerably below the adult NMW.

Table 3.12: Hourly Pay for Level 4 and 5 Apprentices, GB, 2014

	Mean	Median	Lowest decile	Lowest quartile
Level 4+5:	10.84	9.55	5.57	7.16
Accounting	7.55	6.84	4.91	5.88
Care Leadership and Management	11.40	10.00	6.09	7.90
Other	11.66	10.22	5.84	7.21
19-20	7.04	6.33	4.26	5.16
21-24	8.22	7.60	5.49	6.38
25+	12.17	10.49	6.81	8.18
Level 4:	9.90	8.55	5.16	6.50
Year 1	10.00	9.01	5.28	6.75
Year 2	9.70	7.16	5.16	6.33
Level 5:	11.61	10.26	6.31	8.00
Year 1	11.62	10.46	6.53	8.02
Year 2	11.58	10.02	6.02	7.65

Source: LPC estimates based on Apprentice Pay Survey, GB, 2014.

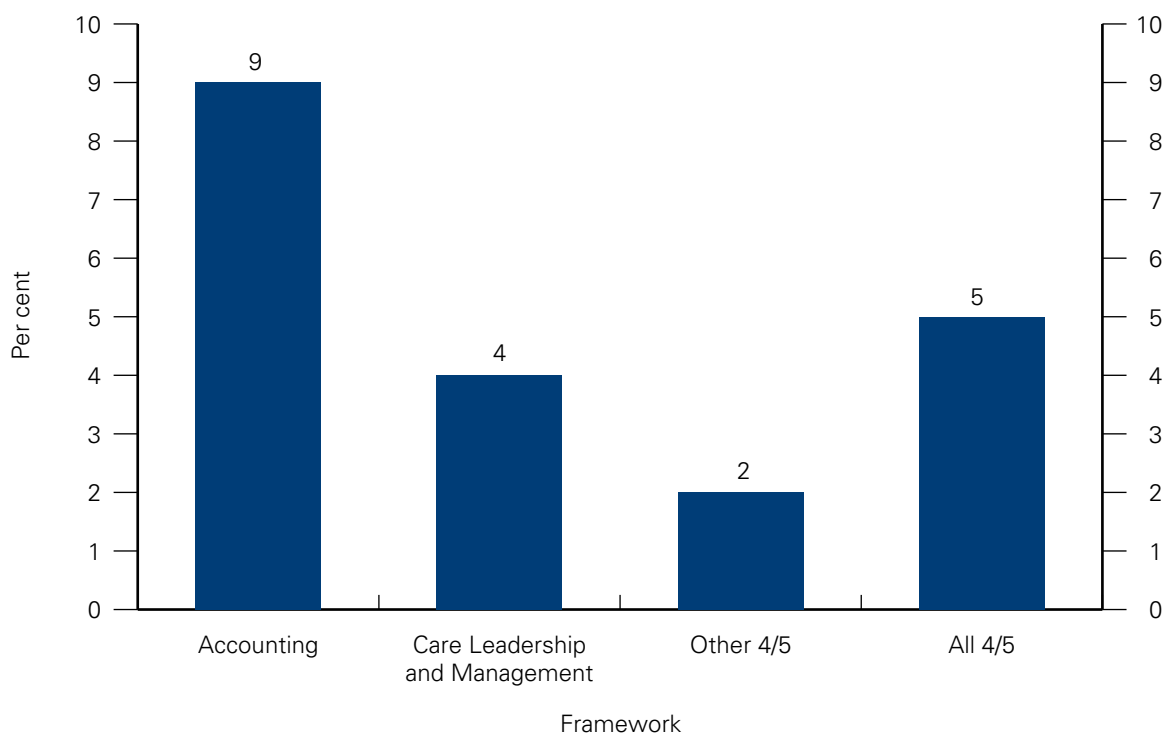
Note: Hourly rate calculated from gross hourly pay including unpaid overtime, usual rate overtime and hours spent on work and training; excludes overtime at higher rate, tips and bonuses.

3.104 Overall, one in ten Level 4 or Level 5 apprentices (11 per cent) were paid less than the age-applicable NMW, although of course employers are only required to pay those in Year Two the age-applicable rate, those in Year One being covered by the Apprentice Rate.

3.105 Reflecting their older age profile and higher earnings, non-compliance was lower for Level 4 and Level 5 apprentices, at 5 per cent overall, compared with 15 per cent for Level 2 and 3 apprentices. However, in common with Level 2 and Level 3 apprentices, non-compliance was higher among apprentices aged 19-20 in their second year (18 per cent) and aged 21 and over in their second year (10 per cent).

3.106 There was also variation by framework. Figure 3.28 shows that non-compliance in Accounting (9 per cent) was twice the level found in Care Leadership and Management (4 per cent). However, Accounting apprentices made up around 16 per cent of Level 4 and Level 5 apprentices in Great Britain while Care Leadership and Management apprenticeships constituted half of all these apprenticeships (54 per cent). Hence, while non-compliance was lower in the Care Leadership and Management, a greater number of non-compliant apprentices were located in this framework.

Figure 3.28: Non-compliance of Level 4 and 5 Apprentices, by Framework, GB, 2014



Source: LPC estimates based on Apprentice Pay Survey, GB, 2014.

Note: Hourly rate calculated from gross hourly pay including unpaid overtime, usual rate overtime and hours spent on work and training; excludes overtime at higher rate, tips and bonuses.

3.107 In Chapter 4 we draw on this evidence in considering whether Level 4 and Level 5 apprentices should be exempted from the Apprentice Rate, a request specifically included in our remit this year.

Apprenticeship Research

3.108 Our understanding of apprentice pay this year has been informed by new commissioned research. Drew, Ritchie and Veliziotis (2015) investigated the measurement of apprentice pay in the 2011 and 2012 BIS Apprentice Pay Surveys and ASHE. The research set out the rules covering the Apprentice Rate and its age and duration conditions. The headline estimates of non-compliance from the APS were 20 per cent in 2011 and 29 per cent in 2012 but ASHE data for 2013 (unpublished) and 2014 suggested much lower levels of non-compliance of around 8 per cent. However the research found that ASHE non-compliance could be reduced to 5 per cent overall if rounding errors were taken into account (i.e. counting as compliant those on monthly wages with a derived hourly rate that fell a penny short of their applicable

NMW). Non-compliance was lower for apprentices paid an hourly, rather than a weekly or monthly, wage.

- 3.109** The analysis found that, on all data sources, non-compliance appeared greater for those who were aged 19 and over, particularly those aged 19-20 years, and in the second year of their apprenticeship. The probability of non-compliance was also higher if the apprentice was: new to the employer; worked longer hours; undertook off-the-job training; or was undertaking a Level 2 apprenticeship. However, the second year effect was the strongest predictor of non-compliance and persisted across frameworks. Furthermore, differences between frameworks could often be explained by differences in the characteristics of apprentices. For example, hairdressing apprentices were: more likely to be aged 19-20 and in their second year; more likely to be on a Level 2 apprenticeship; less likely to hold a permanent job or be paid an hourly rate; and more likely to work longer hours. There were no notable differences across the countries of the UK.
- 3.110** In line with our conclusions earlier in this chapter, the researchers noted potential sources of error with both surveys. There were particular problems with the timing of the 2012 APS and the questions related to hours spent working and training which are likely to have produced over-estimates of non-compliance. A more general problem is that respondents to the APS may round hours and/or pay up or down for convenience, leading to inaccurate estimates of non-compliance. Notably, estimates of non-compliance were lower for those giving an hourly rate of pay, suggesting possible error in derived hourly earnings. ASHE may however underestimate non-compliance if training hours were not included (and it is not currently possible to know whether employers were including training hours). The authors suggested that the ASHE data, corrected for rounding errors, provided a lower bound and APS 2014 an upper bound of non-compliance.
- 3.111** We hope to commission further research, to better understand the drivers of apprentice non-compliance, for our 2016 Report.

Apprenticeship Policy

- 3.112** The context to this chapter and Chapter 4 is that apprenticeship policy is currently undergoing significant change in England, and to a lesser extent in the other countries of the UK. Following the November 2012 Richard Review of Apprenticeships and a government consultation in March 2013 (BIS, 2013j), which set out wide-ranging plans to improve the quality of apprenticeships, legislative changes to enable reforms are being made via the Deregulation Bill which is currently before Parliament. The reforms replace apprenticeship frameworks with more demanding new standards, which aim both to improve their appeal for employers and the returns to learning for apprentices. The Government is currently piloting employer-led Trailblazer Apprenticeships which include the new standards. From 2017/18, England will only fund starts on this basis.

- 3.113** The Government is also currently exploring wider changes to the funding of apprenticeships. Funding in England currently goes primarily to training providers who then engage with employers to provide apprenticeships. The Government wants to rebalance this relationship, giving greater control and purchasing power over apprenticeship training to businesses. It has consulted on two mechanisms for directing payments to employers: the PAYE system, which would deduct the Government contribution from an employer's PAYE payment; and an Apprenticeship Credit model. At the time of writing (January 2015) the outcome of this is unclear. The Government's response says that – in the absence of a clear preference in consultation responses and some stakeholder concerns about administration costs to employers, especially small firms – it will undertake further detailed design work before reaching a final decision on which funding mechanism will be taken forward.
- 3.114** An important part of employer-led standards in England has been a Government commitment to require employers to contribute more upfront costs to apprenticeships in the form of mandatory cash payments. In the model trialled in the 2014/15 academic year, employers will contribute a third of the costs. These are offset for small employers and 16-18 year old apprentices by incentive payments for successful completion. In the face of employer concern about additional cost, the Government (BIS, 2015b) has restated that cash contributions remain part of the reform, but also said any new model will be "simple, efficient and appealing to employers of all sizes".
- 3.115** Alongside these changes, wider programmes affecting apprenticeship provision remain in place like the February 2012 Apprenticeship Grant for Employers of 16-24 year olds. This provides a £1500 incentive payment for small firms hiring an apprentice and is funded to April 2016. About 95,000 payments were made between February 2012 and July 2014.
- 3.116** The Government has announced that it intends to abolish employer National Insurance contributions for apprentices aged under 25 from April 2016. The abolition of employer National Insurance contributions for most workers under 21 from April 2015 mean this change only really affects apprentices aged 21-24. The impact of this shift is considered further in Chapter 4 but in summary our judgement is that it is likely to make only a modest difference to NMW apprentices because many are below the eligibility threshold, so employer NI is not paid in any case. There will be benefit to employers of apprentices paid at higher wages.
- 3.117** Finally, wider reforms beyond apprenticeships remain in play. Traineeships are being introduced and scaled up in England. These are pre-apprenticeship programmes combining work-readiness training with a period of work experience and study of English and Maths. They are unpaid but people can take part in them while still claiming benefits. They are aimed at those under-19 with low qualifications and 19-23 year olds who have not yet achieved a full Level 2 qualification (5A-Cs at GCSE including English and Maths).
- 3.118** Overall, the general direction of these changes is to ask more of employers in terms of improved quality, with possible increases in training and administration costs, albeit offset by incentive payments and a National Insurance cut for some better-paid apprenticeships. It is not clear how firms will respond and what impact the changes will have on the supply of apprenticeships, particularly to those in lower-paid sectors.

Conclusion

Young Workers

- 3.119** In the year to April 2014 patterns of earnings growth were very different for 16-17 year olds and 18-20 year olds. Earnings growth of 18-20 year olds accelerated to 2.5 per cent, exceeding that among older workers. In contrast, 16-17 year olds experienced very little earnings growth, just 0.6 per cent over the year. This continues a trend that we have observed since 2008, with 16-17 year olds' median earnings remaining stuck at around the £5.00 an hour mark. As a consequence of these patterns, the bite of the 16-17 Year Old Rate increased over the year, reaching its highest-ever level – this despite the 16-17 Year Old Rate increasing by just 1 per cent in 2013. By contrast the bite of the Youth Development Rate continued to fall.
- 3.120** This year we were able to identify apprentices within ASHE for the first time – for whom a lower minimum wage often applies. As we expected, estimated median earnings for 16-20 year old workers and earnings growth were both a little higher once apprentices were excluded, with the bite a little lower, albeit still high. Taking account of apprentices makes a bigger difference to trends in the proportions of young people paid below their applicable NMW rate. These have been growing in recent years. But they fall significantly if apprentices are excluded from the data: from 8.6 per cent to 1.4 per cent of 16-17 year olds; and from 6.9 per cent to 1.7 per cent of 18-20 year olds. This brings the proportion of young workers paid below their applicable minimum age much closer to the average for adult workers (0.8 per cent).
- 3.121** In our 2014 Report we noted some evidence that employers may be moving away from paying young workers their respective youth minimum wage rates. However, over the last year the proportion of young workers paid at the youth rates actually increased. This is a trend that we will continue to monitor.
- 3.122** The labour market position of young people was deteriorating before the start of the recession in 2008, worsened in the period after, but has shown signs of improvement since 2012 for 18-20 year olds. The latest data suggest that the labour market may also now be stabilising for 16-17 year olds.
- 3.123** Over the last year, economic activity levels for 18-20 year olds were generally stable, but there were also small reductions in unemployment alongside smaller increases in employment. The pattern was similar for 16-17 year olds, with indicators generally stable, alongside very small improvements in unemployment and employment.
- 3.124** There was a more positive story for those young people not in FTE. There was a notable fall in the unemployment rate over the year, dropping by 5.7 percentage points for 16-17 year olds and by 3.2 percentage points for 18-20 year olds. These falls occurred alongside increases, albeit smaller, in the employment rate. The proportion of 18-20 year olds and 16-17 year olds who were NEET also fell over the year.

National Minimum Wage

- 3.125** Overall, our general conclusion is that labour conditions are modestly improving for young people but that these changes are matched by improved earnings only for 18-20 year olds. Workers aged 16-17 years continue to see little earnings growth and it remains unclear whether the very small recent improvements in employment and unemployment will continue or when this will generate earnings growth.
- 3.126** New research suggested that our approach of lower increases for the youth rates of the NMW during the recession and its aftermath may have helped to protect younger workers' employment prospects. Looking ahead, the abolition of employer National Insurance contributions for those under-21 from April 2015 should reduce the costs of employing up to 40 per cent of 18-20 year old NMW workers by 2 per cent.

Apprentices

- 3.127** Apprenticeship starts fell again over the last year, this time doing so in all four countries of the UK. Unlike in 2013, the recent falls occurred primarily in starts for apprentices aged 25 and over, while apprenticeship starts increased for those aged under 19 (albeit not sufficiently in England or Scotland to return them to their equivalent level in 2011/12). The fall in starts for apprentices aged 25 and over may be due to changes in the funding model for older apprentices; that is, the replacement of training grants with loans, a policy now revised.
- 3.128** The level of apprentice pay, and compliance with the Apprentice Rate, has been of continuing concern to the Commission since the introduction of the Apprentice Rate in October 2010. The 2012 Apprentice Pay Survey found very low pay in some frameworks and high levels of overall non-compliance. In 2012, median gross apprentice pay was significantly above the Apprentice Rate, at £6.19 an hour (equal to the adult NMW at that time), but 29 per cent of apprentices were paid at a non-compliant rate. However, we speculated that the timing of the survey, around the time of the NMW uprating, and some methodological issues, may have contributed to significant error with the survey estimates.
- 3.129** The 2014 Apprentice Pay Survey (APS), and new apprentice data in the 2014 ASHE, have allowed us to revisit apprentice pay and non-compliance. The former source is based on a survey of workers, the latter on a survey of employers. Median pay was £6.31 in both ASHE and APS, equal to the adult NMW at the time of the survey. Both the 2014 APS and 2014 ASHE found much lower levels of non-compliance than the 2012 APS, at 14 per cent and 9 per cent respectively (compared with 29 per cent), suggesting that survey timing and methodological issues contributed to the apparently high level of non-compliance found in the 2012 APS. Non-compliance still seems however extremely high.
- 3.130** As we have found in the past, median earnings were lower, and non-compliance higher, in some frameworks than others, particularly Hairdressing, Construction and Childcare. In addition to framework, age of apprentice and year of apprenticeship were important factors linked to non-compliance.

- 3.131** Non-compliance levels were disproportionately high among two groups: 16-18 year olds, for whom the Apprentice Rate should have been paid; and among apprentices in their second year aged 19 or over, for whom the age-applicable NMW rates apply. For the latter group there is evidence that this has a relationship to the structure of the rate. For the former group, where the rate is already simple, it is unlikely that non-compliance has a relationship to the structure of the rate.
- 3.132** Analysis of the earnings distribution for apprentices paid a non-compliant rate suggest many are not 'near misses': they are being paid at levels well below the right amount. These data could be consistent with some non-compliant employers being unaware of, or ignoring, the minimum wage requirements. However, the evidence for this pattern is stronger for the older age group – apprentices aged 19 and over in Year Two and beyond – than for apprentices aged 16-18. Indeed, commissioned research for this year's report suggested that some non-compliance among the latter group may be a measurement effect arising from rounding.
- 3.133** A limitation in our interpretation of high levels of recorded non-compliance in the APS data is uncertainty about the extent to which it is driven by unpaid hours as opposed to employers getting the hourly rate wrong. Unpaid hours cannot readily explain why non-compliance is higher for experienced apprentices aged 19 and over; conversely, the APS records low non-compliance in the hourly rate reported by apprentices, where it is known. However, preliminary analysis suggests that up to half of non-compliance could be accounted for by this factor or reporting error. This consideration implies caution in relation to potential remedies for non-compliance: changes to the rate will not address non-payment of hours, or will be based on a false assessment of the scale of the problem.
- 3.134** The 2014 APS also provided the first opportunity to examine apprentice pay for Level 4 and Level 5 (Higher) apprentices. As expected, median hourly pay was higher for Level 4 and 5 apprentices at £9.55, substantially above all NMW age rates. However, there was variation by framework, with Accounting apprentices earning just £6.84 an hour at the median, and 19-20 year olds earnings just £6.33. While these rates were still above the age-applicable NMW, apprentices in the bottom decile of the earnings distribution (the lowest-earning 10 per cent of apprentices) usually had median earnings significantly below the age-applicable NMW. Non-compliance levels were lower among Level 4 and 5 apprentices (5 per cent) than for their Level 2 and Level 3 counterparts (15 per cent). In Chapter 4 we draw on this evidence in considering whether Level 4 and Level 5 apprentices should be exempt from the Apprentice Rate.

Chapter 4

Review of the Structure of the Apprenticeship Rate

Introduction

- 4.1** This chapter provides our response to the Government's request for us to review whether any changes can be made to the Apprenticeship Rate to make the structure simpler and improve compliance and also to consider whether it should continue to be applied to all levels of apprenticeship, including higher levels. Our recommendations for the level of the Apprenticeship Rate are covered in Chapter 6. Our detailed views on enforcement issues in relation to apprentices are set out in Chapter 5, though summarised here.
- 4.2** The current Apprenticeship Rate arrangement dates back to 2010, before which apprentices were exempt from the National Minimum Wage (NMW) though covered by a weekly contractual minimum wage on government-supported schemes in England, and other recommended wages and training allowances under apprenticeships in the rest of the UK. Under the scope of the Apprenticeship Rate, set out in Table 4.1, any worker with a contract of apprenticeship or on a specified government scheme is required to be paid at least the Apprenticeship Rate if aged under 19, and at least the Apprenticeship Rate in their first year if aged 19 or over, and then their age-appropriate NMW rate. The value was initially set at £2.50 an hour in 2010 and this had risen to £2.73 by October 2014. The introduction followed a recommendation in our 2009 Report, with the operational details agreed the following year. Since its introduction, the Apprenticeship Rate has increased at a rate just below that of the rise in the adult rate but faster than the increase in the youth rates – by 9.2 per cent to October 2014, compared with 9.6 per cent for the adult rate of the NMW, 4.3 per cent for the Youth Development Rate and 4.1 per cent for the 16-17 Year Old Rate over the same period.
- 4.3** But concerns have been raised since its introduction about unacceptably high levels of non-compliance, revealed by the Apprenticeship Pay Surveys in 2011 and 2012. Some stakeholders have argued it is complicated compared with the other rates and that non-compliance is a symptom of employers struggling to understand it. This view has new impetus in the context of more naming and shaming of employers and policy concern to ensure well-intentioned firms are not inadvertently caught out by this area of NMW regulation. Others have argued that a significant amount of non-compliance is deliberate. These voices often also highlight concern that the Apprenticeship Rate is too low, and open to abuse through use in roles without adequate training. It should also be noted that others have raised lack of awareness as an important consideration. There was little publicity to explain the changes for apprentices. Since then more resource has been devoted to publicising the Apprenticeship Rate, but there has been no co-ordinated nationwide campaign to raise awareness.

- 4.4** Alongside these views, there have been substantial changes to the wider policy landscape since 2010 that affect the context in which the Apprentice Rate operates, some of which were highlighted in Chapter 3. Changes include: a rapid expansion of numbers; stronger requirements on training; phasing out of programme-led (non-employed) apprenticeships; and the emergence of Higher Apprenticeships. There is now much more focus on apprenticeships as a route to elite professions, not just access to the labour market. The Government's interim evidence (BIS, 2014h) explained that its "policy intention was that Higher Apprentices should be entitled to the appropriate age rate" rather than the Apprentice Rate "to reflect the higher productivity of this group of apprentices". But an error in formulating the 2010 regulations meant they were covered by the Apprentice Rate.
- 4.5** Given concerns expressed by some about the way the Apprentice Rate is working, and the wider changes in the policy context, we welcome the opportunity to review whether any changes can be made to this area of the NMW to make the structure simpler and improve compliance. We also welcome the opportunity to revisit whether the Apprentice Rate should continue to be applied to all levels of apprenticeship, including higher levels. Our deliberations have been informed by the evidence, presented in Chapter 3, which showed that protecting numbers of apprenticeship starts in general and opportunities for young apprentices in particular are important policy concerns, but overall starts in the UK are down 13 per cent in 2013/14 while starts for apprentices aged under 19 are staging a modest recovery after earlier falls. Apprenticeships in the low-paying sectors, likely to be most sensitive to changes in costs, remain a substantial proportion of overall numbers of starts and important to meeting the Government's ambitions. There are also a range of policy and other uncertainties, including the relationship between applicants and places (there appear to be more applicants than there are apprenticeship places), and the possibility of training cost increases arising from mandatory cash contributions from employers, as part of the introduction of Trailblazers in England (albeit offset by incentives).
- 4.6** Our conclusions are set out in detail later in this chapter. But, in summary, we agree with the Government that non-compliance among apprentices appears much too high and that the Apprentice Rate is not as well understood by employers or employees as the other NMW rates. We recommend clarifying in regulations that it should not apply to Higher Apprenticeships. However, we have found no other structural change that we feel able to recommend.
- 4.7** In particular, we have identified serious weaknesses in the reform option highlighted in the Government's evidence – a suggested combination of the Apprentice Rate and the 16-17 Year Old Rate that would raise NMW apprentice hourly wage costs by 39 per cent. We judge that this would present significant risks to current levels of apprenticeships and quality of training to younger low-skilled workers, especially the vulnerable 16-17 year old group. It would do so while potentially worsening levels of non-compliance because of a higher rate and greater complexity for employers of 18 year olds.

- 4.8** More broadly, we believe that the evidence available to us does not support a case for wider structural change. While it is true that the minimum wage for apprentices is more complicated than the other rates, the evidence suggests that non-compliance is not simply, and possibly not primarily a problem of structure, so much as its obverse: low awareness, inadequate communication and enforcement (including reflecting some deliberate evasion). The rules have had limited publicity despite low employer understanding in the past. This concern is reinforced by our preliminary analysis that up to half of non-compliance is explained by non-payment of hours, possibly training hours, or error in reporting hours rather than problems in complying with the hourly rate. Communication and enforcement are the weapons for lack of awareness or deliberate non-compliance.
- 4.9** Most profoundly, reform of the main structural feature for which there is strong evidence of a relationship with non-compliance – a pay floor that changes contingent on experience as well as age – is a zero sum game. As we go on to show, this particular complexity is inherent if policy-makers want to keep current employer incentives to provide apprenticeships, and the higher pay that rewards experienced apprentices while seeking to protect the relative attractiveness of offering apprenticeships to young people. Significantly greater simplicity would involve sacrificing one of these priorities.
- 4.10** In light of this analysis, we present a range of possibilities on structural reform with the advantages and disadvantages of each rather than a specific recommendation. A number of the decisions about the best way forward involve policy considerations outside our core remit and competence. These include training subsidies, possible higher contributions by employers, and the degree to which the Government wishes to refocus apprenticeships away from entry to the labour market for disadvantaged young people and more towards occupations that demand higher skills.
- 4.11** We do recommend, however, that if the Government decides to make a change it should do so only after further consultation. Any change in structure will need to be supported by a substantial publicity programme if it is not to lead to even lower compliance. We encourage further efforts to communicate and enforce the Apprentice Rate.

The Government View

- 4.12** In its interim evidence (BIS, 2014h) the Government argued that “the structure of the Apprentice Rate is more complex than any other NMW rate and is therefore more difficult for employers and employees to understand. For apprentices aged under 19, it is comparatively straightforward to apply the Apprentice Rate. The employer only needs to update the pay of these apprentices when the rate increases on 1 October each year (and when they turn 19 if they have already completed their first year). However, for apprentices aged 19 and over, the complexity increases as the Apprentice Rate only applies in the first year of their Apprenticeship (after which an apprentice should be paid at the relevant age rate).”

Table 4.1: The Structure of the Apprentice Rate

Age	Apprentice Rate		NMW for other workers
	Year One	Year Two	
16-17	2.73		3.79
18			5.13
19-20	2.73	5.13	5.13
21+	2.73	6.50	6.50

- 4.13** The Government evidence (BIS, 2014h and 2015a) pointed out that it may be possible to simplify the structural requirements of the Apprentice Rate by either: changing the age at which length of service is relevant from 19 to 18 years old, to align with the rest of the NMW at age 16-17, 18-20, or 21 and above; increasing or decreasing the one year period after which some apprentices are entitled to the age-appropriate rate; or changing the level to which it is applicable, to reflect that a growing number of apprentices are undertaking Higher Apprenticeships.
- 4.14** The Government also said in its written evidence (BIS, 2014h and 2015a), that it was considering the option of combining the Apprentice Rate and the 16-17 Year Old Rate. The new rate would apply to all apprentices in the first year of their apprenticeship and all workers aged 16-17. It would be a simplification because it would reduce the number of rates from four to three. It could also mean a significant increase in the minimum rate apprentices are entitled to in their first year. So the Government is also seeking the LPC’s views on this option, including how it might be implemented without adverse impact on future increases in the 16-17 Year Old Rate or damage to the Government’s goal of increasing apprentice numbers – for example, by converging the rates over a period.

Stakeholder Views

- 4.15** Overall only a minority of stakeholders responding to the Low Pay Commission’s written consultation considered the Apprentice Rate in the context of questions of structure and complexity. In fact, they divided into two broader groups. First, there were those who thought there was a case for change – for reasons sometimes including but often going beyond structure or the need for simplicity. Second, there were those who thought the current approach was appropriate, or that change was premature. Among those arguing for change, there was no consensus on suggested simplifications, with reforms often pointing in different directions.
- 4.16** EEF, the manufacturers’ organisation argued that the Apprentice Rate was complicated and confusing. It called for the abolition of the Apprentice Rate and the application instead of the usual age-appropriate NMW rates, and was supported by the UK Homecare Association (UKHCA). The British Hospitality Association (BHA), British Beer and Pub Association (BBPA), Business in Leisure (BIL) and Association of Licensed Multiple Retailers (ALMR) also thought the Apprentice Rate “rather complicated” but pointed out it “has created flexibility in starting rates and encouraged employers, especially in the pub trade, to offer apprenticeships to starters”. They suggested instead a single applicable rate to age 24 for the lifetime of the

apprenticeship. The National Hairdressers' Federation raised concerns aligned with this latter position – but for reasons other than complexity. It argued that applicability of the Apprentice Rate for just the first year of those aged 19 and over caused affordability problems – with the increase coming before improved productivity or qualifications that would make higher pay justifiable.

- 4.17** Another set of stakeholders, often employee representatives, did not accept that non-compliance was related to complexity – deliberate avoidance was also a concern. They argued for structural change on grounds including fairness, preventing exploitation and equal treatment of different ages. Several unions were concerned that pay levels were too low – either absolutely, or because some apprenticeship contracts were being abused and did not include meaningful or additional training. There was little specific evidence provided on practical problems being caused by the current levels of the rate (though some submissions mentioned apprentices struggling with travel costs): concerns were more about the point of principle of much lower pay for this group of workers.
- 4.18** The Trades Union Congress (TUC) felt that the Apprentice Rate should only apply to those undertaking Level 2 apprenticeships who were aged 16-18, and to 19-20 year olds in the first year of their apprenticeship, with the rate set at the same level as the 16-17 Year Old Rate. Other apprentices would be paid the age-appropriate rates. There would only be a discount for 18 year olds and 19-20 year olds in Year One. Excluding those aged 21 and over reflected the fact that pay rates were higher at this age and this tended to be where most 'rebadging' of existing staff as apprentices but without extra training happens. It thought that the Apprentice Rate should not apply to advanced and higher level apprentices because the contribution to the business of workers with existing intermediate qualifications was likely to be significant. It highlighted examples of demanding-sounding jobs that were being advertised as apprenticeships.
- 4.19** UNISON agreed with the TUC position, also stating that the Apprentice Rate should be the same as the Youth Development Rate. Advanced Apprentices, Higher Apprentices and apprentices aged 18 and over should be paid the adult rate. The GMB also supported the TUC but more broadly called for an increase in line with inflation and to ensure the qualifications are high quality. It cited the example of a large distribution company taking on warehouse apprentices without any meaningful qualification or training. The National Union of Students (NUS) thought it unacceptable the rate was so low and that it should equal the adult rate. The Union of Shop, Distributive and Allied Workers (Usdaw) did not comment on the structure directly but called for the differences to be narrowed, urging a rate around 80 per cent of the 16-17 Year Old Rate, plus a targeted information campaign.
- 4.20** Those arguing against structural change included the CBI, which concluded that "although the structure of the apprentice NMW rate is relatively complex, anecdotally, we have not found this to be a challenge for CBI members". It argued that structural change would in any event be premature "until the current training funding and standards reforms are embedded".

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- 4.21** The Federation of Small Businesses (FSB) supported in principle an increase in the Apprentice Rate and a narrowing of the gap with the 16-17 Year Old Rate but “at this stage, and without further evidence, does not believe that substantial change needs to be made to the [apprentice NMW] structure”. It argued that “increasing the Apprentice NMW by a significantly faster rate relative to the youth rate” should wait until after wider reforms to training have taken effect and been appraised. Unite said it did “not agree with the level of the Apprentice Rate” but “believes the structure of the Apprentice Rate is simple and should remain in terms of the Apprentice Rate applying to all levels of apprenticeships”.
- 4.22** Employer representatives, and one or two training providers (such as Skills Active), were very concerned that wider changes to apprenticeship funding in England could raise costs and create uncertainty for employers, so caution was needed in changing pay rules. The main concern was the proposal in wider reforms to require firms to meet a third of training costs upfront. This could mean training and wage costs rising at the same time for firms, with strong negative effects on provision. An additional concern was the administrative cost of firms having greater influence over funding for training.
- 4.23** The Welsh Government counselled that “any recommendations to increase the Apprentice Rate need to be carefully considered, as changes may have an adverse effect on the supply of apprenticeship places, particularly for younger age groups and in sectors most affected by the wage... The recruitment of apprentices and the value associated with their contribution to productivity levels during their first year remains a key issue for employers. The current apprenticeship pay rate allows them to be temporarily paid [a lower wage] at a time when they are below normal productivity levels... Recruiting an apprentice is still an upfront investment by employers”. It was “concerned about the possible impact the Government’s preferred option could have on the availability of apprenticeship places offered by employers, as the minimum cost of employing an apprentice will increase substantially”.
- 4.24** The Scottish Government supported the Government proposal and called for alignment of “the rates for apprentices with the other – higher – bands of the National Minimum Wage. We would, of course, like to go further with alignment with the Living Wage generally and annual increases at least in line with inflation”. It also provided some illustrative analysis of the option being considered by the UK Government saying a maximum of 32,000 Modern Apprentices could technically be subject to the change, but many were likely to be paid above the level already. Those most affected would be apprentices aged under 19 in Business administration, Childcare and Hairdressing.
- 4.25** In the absence of consensus in the views received, this chapter now considers the case for structural change in more detail.

The Case for Structural Change

Complexity and Non-compliance

- 4.26** Most stakeholders agreed that the Apprentice Rate is more complicated than the other NMW rates. The biggest structural concern highlighted in evidence was that employers had to change pay not just contingent on the 'vertical' consideration of age, but on a second 'horizontal' consideration: tenure or duration. This arose because, as Table 4.1 shows, apprentices aged 19 and over are entitled to the Apprentice Rate in the first year of their apprenticeship but not in the second, when they should be treated as normal NMW workers. The consequence of the 'tenure rule' is employers having to remember anniversaries of when apprentices started their apprenticeship, not just their birthdays.¹³
- 4.27** It is also clear that non-compliance is too high. In 2014 between 9 per cent – according to the Annual Survey of Hours and Earnings (ASHE) – and 14 per cent – according to the 2014 Apprentice Pay Survey (APS) – of apprentices were paid less than their applicable NMW, including between 11 per cent (ASHE) and 22 per cent (APS) of apprentices under the age of 21. As Chapter 3 set out in detail, these figures are lower than previous surveys – 29 per cent of apprentices were paid less than the applicable NMW in the 2012 APS, 20 per cent in 2011 – and likely to be more accurate, so the problem may be less serious than previously thought. But on these numbers it is still serious and indeed unacceptable.
- 4.28** Rather less straightforward is the relationship between the structure of the rate and non-compliance. As Chapter 3 also showed, non-compliance disproportionately arises in two places. First, of 16-18 year old apprentices, all of whom are entitled to the Apprentice Rate rather than the 16-17 Year Old Rate or Youth Development Rate, around 24 per cent were non-compliantly paid. They made up a quarter of the overall non-compliance problem, despite only being 15 per cent of the cohort according to the APS. Second, non-compliance disproportionately affected those aged 19 and over in Year Two and beyond, who are entitled to the Youth Development Rate or adult rate. 31 per cent of apprentices aged 19-20 in Year Two were non-compliantly paid and 27 per cent of those aged 21 and over. Together, they made up half of non-compliance, despite being only a quarter of the cohort according to the APS.
- 4.29** Looking at the younger part of the problem first, it is hard to understand non-compliance as a function of the complexity of the structure because for 16-18 year olds the Apprentice Rate is a simple flat rate. The distribution of non-compliance at this age does not obviously support the cause being structural either. As Chapter 3 sets out in detail, the two main data sources on apprentice pay present somewhat different pictures. The APS, the employee-based survey, is potentially consistent with ignorance or deliberate non-compliance rather than 'near miss' employer error: more than half of pay for non-compliant 16-18 year old apprentices is under £2.50, the rate applicable in 2010, four years ago (this could also reflect reporting error). ASHE, the employer-based survey, is more suggestive of inadvertent employer error

¹³ Other possible considerations include that firms can need to change pay more than once in a year for some apprentices and the structure of the rate, which has different rules applying to 16-18 year olds and those aged 19 and over, so is not aligned with the rest of the NMW, which has its major inflection points at ages 18 and 21. Neither of these concerns were raised widely in written or oral evidence by employers or apprentices.

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– with 84 per cent of non-compliant 16-18s paid within 2 pence of the right level. However, it also records a much smaller non-compliance problem for 16-18 year olds at around 8 per cent, a third the level of the Apprentice Pay Survey. Drew, Ritchie and Veliziotis (2015) found that if rounding error is excluded, non-compliance shrinks further for this group. On either scenario, the case for a structural remedy looks weak. If the problem is ignorance or deliberate non-compliance, a change in the structure has no direct bearing. If the problem is a small one of ‘near misses’, a change in the structure seems to lack proportionality.

- 4.30** Turning to older apprentices, the evidence of a relationship between the structure of the rate and non-compliance is stronger. As noted above, more than half of the cases of non-compliance arise among apprentices aged 19 and over in Year Two and above and there is anecdotal evidence of employers struggling to remember tenure anniversaries for this cohort, rather than just birthdays. Chapter 3 noted research which found that the changing wage floor was the strongest predictive factor for underpayment (Drew, Ritchie and Veliziotis, 2015). There is some limited quantitative evidence in the APS: among Level 2 and Level 3 apprentices aged 21 or over, non-compliance was higher for those who had recently had a birthday or finished their first year than those who neither finished their first year recently, nor turned 21 (BIS 2014l).
- 4.31** However, caution is needed in drawing inferences from this. First because to the extent higher non-compliance at age 19 and over is associated with a pay floor that changes with tenure, the data do not establish whether this is an intrinsic problem of complexity or instead reflects inadequate communication and enforcement.
- 4.32** Chapter 3 found little evidence from the APS that non-compliant employers were attempting to comply with the NMW. The distribution of non-compliance showed most non-compliant apprentices aged 19 and over in Year Two do not appear to be ‘near miss’ cases. Most were well short of the right hourly figure: 62 per cent of non-compliant apprentices aged 19-20 and 70 per cent aged 21 and over in the Apprentice Pay Survey were not within 10 per cent (ASHE, which is based on employer records, showed more were near the right figure but significant proportions were well below). Arguably, if this were attempted compliance we would expect to see larger proportions paid at other NMW rates, albeit the wrong ones, and clustering closer to the correct rate. Conversely, Chapter 3 also set out evidence that non-compliance did not appear to be a problem of firms paying the minimum – the Apprentice Rate, which applies in Year One – and getting stuck on it in Year Two. The vast majority of non-compliant cases were paid more than this. Employers were either setting a rate that was initially compliant but then not changing it, or not changing it by enough, to comply.
- 4.33** A second reason for caution is we cannot be sure of the extent to which non-compliance is a problem arising from the wrong hourly rate being paid or instead reflects some hours not being paid or reporting error. The NMW is supposed to be paid for all hours spent working and training, including those at college. But conversations with employers and apprentices suggest that this requirement is imperfectly understood. As set out in Chapter 3, a recent survey of more than 6,000 apprentices (BIS 2014k) found one in six (17 per cent) saying they usually did training outside of contracted hours and a further 6 per cent that never did training in contracted hours. The APS results provide evidence consistent with up to half of non-compliance being driven by non-payment of hours, or reporting error. Half of the sample

reported their agreed hourly rate, and in just 5 per cent of cases was it non-compliant.

But derived non-compliance for the same group – the survey’s main measure, arrived at by dividing overall reported pay by reported hours – was 14 per cent. Based on the hourly rate given by the respondent alone, non-compliance levels by age fall by about half – to 9 per cent for apprentices aged 16-18, and 16 per cent for apprentices aged 19-20 in their second year.

- 4.34** Overall, we share the Government’s view that the rate is more complicated than the other rates, (though as a hairdresser in Northern Ireland explained “It’s not rocket science. All you need to know is the birth date and the start date of the apprentice. And all employers should know those”). However, our reading of the evidence is that the 16-18 year old part of the non-compliance problem is largely unrelated to structure and mainly a function of communication, awareness and enforcement. We can be more confident that non-compliance arising in Year Two and beyond for those aged 19 and over has a relationship with structure. But this does not establish that, where the link arises, it is inevitably because of its design, or would be weakened or removed if there were stronger communication and enforcement. Moreover, to the extent that up to half of non-compliance may reflect an issue of hours not being paid rather than employers getting the rate wrong or reporting error, this weakens the case for structural change. Non-payment of hours would also substantially be a communications and enforcement issue – since no change to the level or the age structure of the hourly rate would remedy it.
- 4.35** As we have argued in the past, as well as being distinctive for its complexity, the Apprentice Rate is also much newer and has never been widely advertised because it was introduced at the same time as a marketing freeze in 2010. Ipsos MORI and Cambridge Policy Consultants (2012) conducted a survey of 500 employers of apprentices to assess the impact of the Apprentice Rate at introduction which highlighted the scale of the challenge. It found that a third of surveyed employers were not aware of the Apprentice Rate – this among a group employing apprentices, so people who should be better informed than the average employer.
- 4.36** We recommended in our 2013 Report that the Government undertake a communications campaign and a targeted enforcement initiative to ensure that the Apprentice Rate was known to employers and apprentices and that infringers were caught, punished, and wherever appropriate, named. In light of this, the Government has taken some valuable steps to publicise the Apprentice Rate including fast-tracking complaints to the Pay and Work Rights Helpline, writing to Level 2 and 3 apprentices in England to inform them of their entitlement and including information on the NMW in the National Apprenticeship Service information pack. Nonetheless, these developments are modest in size compared with the scale of the need. They are also recent. In its final evidence (BIS, 2015a), the Government highlighted some evidence of improved awareness among apprentices: 94 per cent had heard of the NMW in 2014 compared with only half in the 2012 Apprentice Pay Survey. However, there remained much lower awareness that there was a specific NMW for certain apprentices or of the actual rate. Around 62 per cent of all Level 2 and Level 3 apprentices were aware there was an Apprentice NMW, up from 52 per cent. Just one in four apprentices, 26 per cent, was aware of the actual Apprentice Rate.

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- 4.37** We have found no recent evidence on employer awareness of the apprentice NMW. However, new surveys of both apprentices and employers suggest that there may be wider weaknesses in understanding of this form of training. A survey of over 4000 employers (BIS 2014j) – sampled from official statistics so there was certainty they had offered apprenticeships – found 29 per cent did not know they had provided this form of training. This pattern was also observed in the sister survey of nearly 6,000 apprentices which found that just 65 per cent of apprentices recognised they were on an apprenticeship (BIS 2014k). Just three in ten employers (31 per cent) said they had used advice and support from the National Apprenticeship Service (BIS 2014j).
- 4.38** More broadly, little has happened to tackle some of the systemic drivers of non-compliance. The BIS (2014j) survey of employers found that being approached by a training provider remains a primary impetus for firms undertaking an apprenticeship, and they are a key source of information and advice. But we continue to hear concerns that training providers have weak incentives to explain the rate to employers – particularly that hours at college are expected to be paid and that pay for anyone starting an apprenticeship at age 18 or over rises after a year in an apprenticeship. The TUC has proposed that all training providers should have to check with employers that they are paying their apprentices the NMW, with those failing to carry out the proposed check at risk of losing their funding. Overall, we conclude that better information, marketing and enforcement remains critical to resolving non-compliance: these have not nearly been exhausted as policy tools. More could be done to make use of the rich data available in the ASHE and APS. We highlight further suggestions in relation to enforcement in Chapter 5.

Simplification as an End in Itself

- 4.39** Of course, even if complexity is not directly driving non-compliance, a simple system is a valuable end in itself and has a bearing on how easy the NMW is to communicate. So there is a possible case for both: better communication and a simpler system. To the extent that the rate could be a factor influencing non-compliance, the main structural problem for which there is evidence is, as noted above, the tenure rule – because it means firms having to change pay on tenure anniversaries rather than birthdays.
- 4.40** A fundamental challenge here, however, is that this feature is not accidental. Rather, it reflects deliberate decisions taken in the past about how the rate balances the interests of different groups.
- 4.41** Before 2010 there was no Apprentice NMW. Apprentices aged 16-18, or in the first year of their apprenticeship, were exempt. The rationale was that apprentices, while workers, were also in training, which meant costs for employers such that the normal NMW rates would be inappropriate. There was some protection from exploitation, including the contractual weekly minimum wage for apprentices on government-supported schemes in England, and recommended wage levels or allowances in the other UK nations.

- 4.42** In 2009 and 2010 we reviewed apprenticeships, paving the way in October 2010 for the introduction of the Apprentice Rate. We recommended introduction based on evidence that the de facto wage floor for apprenticeships was inadequate. In England, the contractual minimum weekly payment under the Learning and Skills Council (LSC) to waged apprentices on government-funded apprenticeship training of £95 per week was designed to be equivalent in value to the benefits package a young person's household could receive if they were in college. But the arrangement was not consistent across the other nations, where there was a general requirement for employed apprentices to be waged, but with no contractual minimum. There was no mechanism for enforcement in the event apprentices were not paid, and some limited evidence of exploitation.
- 4.43** The current structure built on what was in place. It took into account:
- the need to recognise the benefits and costs involved in apprenticeship provision;
 - that applying the current age-related minimum wage rates to apprentices could give rise to unrealistic and unaffordable increased costs to employers;
 - that an Apprentice Rate would be a floor, set below the (adult rate of the) National Minimum Wage;
 - the need to ensure sufficient volume, quality and sectoral variety of apprenticeship places to meet Government targets; and
 - the effective functioning of the education market and young people's choices.
- 4.44** Particularly important was the application of the first consideration. The founding principle of the Apprentice Rate was that for all ages of apprenticeship, the pay floor was lower for apprentices in their first year than the age-appropriate NMW. As with the period before there was a minimum wage for apprentices, the 'discount' was intended to reflect the extent to which new apprentices are in training, not productive work. Employers face costs in taking on an apprentice, including lower productivity, training and supervision costs, and pay costs for hours at college. In England, for example, Level 2 and 3 apprenticeships require 280 "guided learning hours" of which 100 hours (or 30 per cent, whichever is the greater) must be off-the-job training. BIS (2014k) found that apprentices aged 16-18 reported 8.4 hours at college per week, falling to 6.6 hours for 19-24s. The lower hourly wage for the employee helps offset these costs. The expected reward for the worker is higher wages in future once they are qualified and trained. In the absence of a discounted rate the wage costs for workers without training would be the same as for apprentices, so the overall cost of offering apprenticeships would potentially be higher, with a risk of lower supply of places, or a reduction in the quality of training. The discount is a design feature to avoid cutting across the means by which young people acquire skills to equip them for well-paid work, and better employment prospects, in the future. As Chapter 3 set out, the feature is used widely in practice with high proportions paid less than the age-appropriate rates of equivalent NMW workers.
- 4.45** The need for a supply of places also shaped the decision that for those aged 18 and under the lower wage floor applies in the second year and beyond whereas the discount is temporary for workers aged 19 and over. This was intended to encourage availability of apprenticeships to younger workers, through a relative 'price' advantage to offset greater

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inexperience, whilst building in some wage progression for older ones. We had previously heard evidence that 16 and 17 year olds were often working towards lower level qualifications. A number of pay agreements had Year Two rates significantly below the Youth Development Rate.

- 4.46** The structure of the minimum wage for apprentices – and the complexity of it changing for apprentices aged 19 and over after a year – arises from these two considerations: a single rate, discounted relative to other rates, which is temporary for older workers. The implication, explored further below, is that reform is not straightforward. Getting rid of the discount would simplify things but at the price of increasing apprenticeship costs to employers. Making the discount permanent for the lifetime of the apprenticeship, not temporary for older workers, would simplify things in the other direction, but at the price of reduced wages to future cohorts of older apprentices, and making younger apprentices relatively less attractive to employers (because older ones would be cheaper to employ). We return to this below.

The Level of the Rate

- 4.47** A number of stakeholders were concerned about the level of the rate, currently £2.73 an hour. This view was linked in some responses to criticisms of current training quality, with a number of voices worried about employers exploiting the opportunity to pay low-level apprentice wages without fulfilling the concomitant obligation to provide decent training.
- 4.48** As with its broader design, the current level of the Apprentice Rate derives from its origins in 2010. Decisions on the level of the apprentice minimum wage were based on both research evidence and judgements about the appropriate comparator.
- 4.49** An extensive review of research and evidence from our visits and written consultation in 2010 suggested that young people felt it was in principle reasonable to receive a lower wage while training for a career. Lawton and Norris (2010) found that pay was an important factor influencing people to take-up an apprenticeship but far from being the only one. The existence of a wage rather than its level was what tended to make the difference. The Education Maintenance Allowance (EMA) was used as a point of comparison for those at school or college. The research found no ‘market’ case for a minimum wage to increase demand for apprentices: places were already significantly oversubscribed. However, it did find evidence that wages mattered to completion rates. These findings were supported by econometric evidence that wages foregone as an apprentice are rewarded by a lifetime earnings premium.
- 4.50** In further research for us last year, London Economics (2013) looked at apprenticeships in the UK compared with those in 13 other countries. It found that UK apprenticeships were internationally distinctive because of their short duration and low Government financial support. In particular levels of funding per full-time equivalent learner were lower in England than in every country except Italy and New Zealand. Apprenticeship duration in England was shorter than everywhere but Spain. By contrast, apprentice pay, though varying by age, was generally higher in the UK than in many other countries. The research noted that the countries most associated with high quality vocational training systems – Germany, Austria

and Switzerland – had some of the lowest pay levels for apprentices but had the highest rates of pay after qualification. The wage discount was biggest in these countries.

- 4.51** Since 2010, the level of the Apprentice Rate has broadly continued to reflect these considerations. The level is low compared to what people could be earning in a job without training. But, as Table 4.2 shows, it continues to be equivalent in value to what those individuals at college eligible for financial support can receive. It compares favourably to the cost of tuition fees for those at University – an income of at least £5,000 per year compared to payment of fees of around £9,000 per year.

Table 4.2: Maximum Amount Payable to the Family of a Young Person, Aged 16-19, Remaining in Full-time Education, England

£	2005	2010	2014
Child Benefit (eldest) (per week)	17.55	20.30	20.50
Education Maintenance Allowance (per week)	30.00	30.00	-
Bursary (per academic year)			1,200.00
Child Tax Credit (per year)	1,690.00	2,300.00	2,750.00
Total Weekly Equivalent	79.96	94.41	103.24
Contemporary LSC minimum/ Apprentice Rate (at 38 hours)	80.00	95.00	103.74

Source: Low Pay Commission estimates based on HMRC Tax and Benefits and discussions with DfE on EMA and bursaries.

Note: Fewer students are entitled to bursaries than were entitled to EMA.

- 4.52** The Government's written evidence (BIS, 2015a) pointed out that the bite of the Apprentice Rate – its proportion of median earnings for the entitled population – is lower than for other rates. But as Chapter 3 set out, it should be age-adjusted to be interpreted on a comparable basis. On this basis, the bite of the Apprentice Rate for 16-17 year old apprentices (between 80.6 per cent and 84.8 per cent) was much higher than the bite of the 16-17 Year Old Rate for their 16-17 year old non-apprentice counterparts (72.2 per cent).
- 4.53** As also noted in Chapter 3, evidence regarding the volume of apprenticeship applications and feedback from visits around the country suggests that apprenticeships are oversubscribed. BIS (2013k) commissioned BMG Research and the Institute for Employment Studies to conduct an evaluation of apprenticeships which found that employees face short-term costs in terms of the gap between apprenticeship earnings and what they could have earned of £8,900-£15,400 but significant lifetime returns. The net present value of apprenticeship benefits for employees was estimated at £95,500 for Intermediate Apprentices and £151,000 for Advanced Apprentices. The Government's written evidence (BIS, 2015a) gives lower but still favourable figures: "Those who complete an Intermediate Apprenticeship earn, on average, between £48,000 and £74,000 more over their lifetime than similar individuals with other Level 2 qualifications. Those with an Advanced Apprenticeship earn on average between £77,000 and £117,000 more. Higher Apprentices could earn £150,000 more on average compared to those with Level 3 vocational qualifications."
- 4.54** The trade-off implicit in the Apprentice Rate is that lower earnings are accompanied by high quality training. The Apprentice Rate therefore depends on enforcement of these requirements as well as payment of the Rate for genuine compliance. We share concern about the abuse of apprenticeships for jobs without decent training – effectively an indirect

sort of non-compliance. BIS (2014k) found that as many as 21 per cent of apprentices in 2014 reported receiving no formal training. This was lower in Construction and Hairdressing at 4 per cent and 6 per cent respectively. But it rose to 27 per cent in Business, Administration and Law and over 35 per cent in Retail.

Options for Structural Change

4.55 Having considered the evidence carefully, we agree with the Government that: non-compliance is too high; that the Apprentice Rate is more complicated than other rates; and that it is not as well understood by employers or employees as other elements of the NMW. Against that background we have considered a full range of options for structural change. We have evaluated them against three main criteria:

- the effect on levels of apprentice pay;
- whether the option simplifies the structure in a way that would be conducive to greater compliance;
- the potential effect on apprentice numbers, particularly of younger apprentices.

The level of the Apprentice Rate under the existing structure is considered separately as part of our normal review of the rates in Chapter 6.

Merge the 16-17 Year Old Rate and Apprentice Rate

4.56 We consider first the option being considered by the Government, which combines the Apprentice Rate with the 16-17 Year Old Rate. Table 4.3 sets out the effect of this change on rates of pay.

Table 4.3: The Government’s Preferred Option for the Apprentice Rate

Age	Existing structure		After change	
	Year One	Year Two	Year One	Year Two
16-17			3.79	
18	2.73		3.79	5.13
19-20	2.73	5.13	3.79	5.13
21+	2.73	6.50	3.79	6.50

4.57 The key differences from the current structure are first that this option would remove one rate, through making the 16-17 Year Old Rate and the Apprentice Rate the same, and it would change from 19 to 18 the age at which tenure is a consideration. The effect would be to raise the hourly wage/cost of a 16-17 year-old apprentice on the minimum wage in Year One by 39 per cent, and that of an 18 year old in Year Two by 88 per cent. In cash terms this would amount to a weekly increase from just over £100 to £140 a week for a first year apprentice on the minimum wage. The annual wage would rise by about £2,000 – from £5,394 to £7,489; and for an 18 year old in Year Two by nearer £5,000 – from £5,394 to £10,137.¹⁴

¹⁴ Based on 38 hours and 52 weeks.

- 4.58** A 39 per cent increase – or £1.06 extra an hour – is around four times bigger than the previous biggest percentage NMW annual uprating (10.8 per cent) and two and a half times bigger than any previous cash increase (40p), both in 2001.
- 4.59** We estimate that these higher wages would apply to between 91,000 and 200,000 apprentices on the latest data for 2014. This is roughly 10-23 per cent of apprentices. The Government’s estimate that 31,000 apprentices would be affected was incomplete.¹⁵
- 4.60** The change would particularly affect younger apprentices. Two-thirds of 16-17 year old apprentices, half of 18 year old apprentices and around a third of 19-20 year old apprentices are paid less than the 16-17 Year Old Rate that would be applicable if the option were introduced.
- 4.61** Of particular note is the impact on 16-17 year olds, where the bite of the Apprentice Rate is over 80 per cent. The merger option would remove any discount with the result that apprentices in this age group would, uniquely, have the same wage costs as workers to whom no training was being provided.
- 4.62** It would affect a large proportion of apprentices in certain industries. Almost a quarter of Construction and Business apprentices, a third of Childcare apprentices and two-thirds of Hairdressing apprentices are paid less than the 16-17 Year Old Rate, so could see substantial increases in pay for the apprentices and costs to employers. The proportions paid between the Apprentice Rate and 16-17 Year Old Rate are 14 per cent, 17 per cent, 18 per cent, and 28 per cent respectively.
- 4.63** The merger option would not be limited to low-paying sectors in its effects. Engineering, Manufacturing, Technologies apprentices and Business apprentices each account for 17 per cent of those paid below the 16-17 Year Old Rate. Hairdressing apprentices accounted for 13 per cent and Childcare and Construction apprentices each accounted for just under 10 per cent of those paid below the 16-17 Year Old Rate.¹⁶
- 4.64** We estimate total weekly costs from merging the Apprentice Rate and 16-17 Year Old Rate in the range of £3.2m-£8m¹⁷, giving annual costs of £168-£419 million. This compares with approximate costs of £317 million for this year’s adult rate increase.
- 4.65** What difference would this reform make to the supply of apprenticeship places? The price sensitivity of apprenticeship supply is bound to be uncertain, but we set out below some of the evidence, including the Government’s own research, that suggests a pessimistic

¹⁵ The Government’s estimate only looked at the Year One population using data that understated numbers, excluding any impact of higher pay on non-compliance. Using APS as a lower-bound estimate, 91,000 apprentices were paid more than the Apprentice Rate but less than the 16-17 Year Old Rate (or more than Apprentice Rate but less than the Youth Development Rate if they are 18 and in Year Two, which would be applicable under the option). This rises to around 258,000 if non-compliant apprentices are included and the ASHE estimate used – about 30 per cent of the cohort. We report here a lower upper-bound – 200,000 – using a slightly more conservative methodology.

¹⁶ The largest proportion of apprentices paid between the Apprentice Rate and the 16-17 Year Old Rate are located in Engineering, Manufacturing and Technologies (19 per cent of those affected) and Business and Related frameworks (18 per cent of affected). Hairdressing, Childcare and Construction apprentices each accounted for around one in ten of those affected.

¹⁷ The lower bound is estimated using APS 2014 based on apprentices paid more than the Apprentice Rate but less than the 16-17 Year Old Rate (or more than Apprentice Rate but less than the Youth Development Rate if they are 18 and in Year Two, which would be applicable under the option). The higher bound uses ASHE 2014 and includes all paid less than the 16-17 Year Old Rate across both Year One and Year Two, and 18 year olds in Year Two paid less than the YDR. These estimates use 38 hours, which is slightly above the median contracted hours, 37.5 hours, but below the actual median hours worked, 40 hours (see this chapter’s section on moving to a weekly rate), so this is likely to be an underestimate.

outcome. Possible consequences range from reduced training to fewer apprenticeships being offered, with particular impacts in low-paying sectors that provide entry to the labour market for less-skilled workers. A change in cost particularly falling on 16-18 year old apprentices would make them relatively less attractive compared with those aged 19 and over, who would still attract a wage discount relative to their peers. 16-17 year olds seeking an apprenticeship would be both more expensive than their contemporaries, and worse 'value' than those somewhat older than them. We note that this is the cohort where employers have most concerns about work-readiness, there are fewest other employment options, and successive governments have struggled to expand provision.

- 4.66** The UK Government's own policy work is premised on the view that firms are sensitive to costs and that a higher price could affect employer behaviour in relation to marginal groups in particular. There are incentives in Trailblazers that appear designed specifically to protect employers of 16-18 year old apprentices from higher costs that might damage supply of places. It is not clear why the same logic would not apply in relation to pay.
- 4.67** Declines in the number of starts over the past year also suggest that changes in costs can affect apprenticeship supply. As set out in Chapter 3, fewer starts for apprentices aged 25 and over may have been driven by changes from grants to loans, with individuals and their employers unwilling to step in to meet the costs at sufficient levels to prevent a decline in overall numbers.
- 4.68** Evidently, many apprentices are paid above the NMW. But as with other rate decisions, the key individual of concern is the marginal apprentice, not the average. Pay for young apprentices is much lower (the median is £3.18 for 16-17 year olds; and £3.85 for 18 year olds). Lowest quartile pay is below the 16-17 Year Old Rate for all apprentices aged under 21 in the APS.
- 4.69** The Government intends to abolish National Insurance employer contributions up to the upper earnings limit for all workers under 21 from April 2015, and for apprentices aged under 25 from April 2016. These changes could in principle create headroom for employers. Changes to National Insurance, however, have only a modest bearing on the affordability of the Apprentice Rate as they generally only affect better-paid apprentices. Minimum wage apprentices above the threshold are those aged 19 and over in Year Two or beyond of apprenticeships, where reduced NI will apply to a small number of hours.¹⁸ The change would have no impact on NMW apprentices in Year One – the majority of all NMW apprentices – or the 16-18 year old apprentices whose costs are most exposed to the preferred option.
- 4.70** We bear in mind the evidence set out in Chapter 3 that apprenticeships for 16-18 year olds are staging a modest recovery this year. They fell over the previous two years and their proportion of total apprenticeship starts in England remains lower than in 2010/11. Further, the low-paying sectors most exposed to the costs of the option remain important to overall numbers, and there are other possible funding risks in relation to the introduction of Trailblazers, which may require a third of training costs to be met upfront by employers.

¹⁸ Employees need to earn £153 a week for National Insurance contributions to be due. The current Apprentice Rate is £103 per week (38 hours). The 16-17 Year Old Rate would be £144.02 (38 hours). The only NMW apprentices above the threshold would be apprentices aged 19-20 in Year Two and above working more than 30 hours and apprentices aged 21 and over in Year Two and above working 24 hours.

4.71 Also influential in our view is concern about the strength of the rationale in this change in the Apprentice Rate for 16-18 year olds and uncertainty about the benefits.

4.72 On the strength of the case:

- non-compliance at age 16-18 comprises the minority of the overall problem – apprentices of this age make up only a quarter of cases and in any event there is some uncertainty about the scale of the problem – non-compliance falls to 5 per cent for 16-18 year olds on ASHE if rounding error is assumed. The change does not directly address the feature of the Apprentice Rate for which evidence is strongest that there is an association with non-compliance, its treatment of apprentices aged 19 and over in Year Two and beyond.
- there is little evidence that non-compliance among 16-18 year old apprentices is caused by the structure – because it is a simple flat rate. The Government’s interim evidence states that: ‘for apprentices aged under 19, it is comparatively straightforward to apply the Apprentice Rate... However, for apprentices aged 19 and over, the complexity increases as the Apprentice Rate applies in the first year of their apprenticeship (after which an apprentice should be paid at the relevant age rate).’ But the merger option does not seem built on this logic since it is focused on the ‘comparatively straightforward’ part.¹⁹

4.73 On uncertainty about the benefits, the option under consideration would reduce the number of rates from four to three. On the other hand:

- the change itself would have no direct bearing on low awareness levels. While it may be a little easier to explain, any change also has the potential to cause confusion among those already complying with the existing system;
- to the extent compliance is improved at age 16-17 by having a single wage floor, there is a risk it may be achieved by shrinking the number of apprenticeships for this age group rather than reducing non-compliance. A possible problem of confusion over the Apprentice Rate would be solved at this point, but by effectively not having one for this age group;
- the shift from age 19 to 18 extends rather than remedies the tenure rule. Using the latest data for 2014, employers would have to remember to change pay for around 11,000-15,000 more individuals based on how long they had been an apprentice rather than just their birthday (those aged 18 and in Year Two paid less than the Youth Development Rate);
- the rate would be considerably higher: this seems more likely to increase than to reduce non-compliance;
- the merger option has no bearing on non-payment of some hours as a driver of non-compliance;
- combining the Apprentice Rate and 16-17 year Old Rate would not significantly reduce the number of times employers have to change pay.²⁰

¹⁹ The interim Government evidence (BIS, 2014h) provided an illustrative example of the complexity caused to employers by the current structure – an employer having to change pay three times in two years for an 18 year old starting a two year apprenticeship. This is unchanged under the proposed reform.

²⁰ A theoretical reduction arises for apprentices who end their course before they turn 18, for whom employers will no longer have to move to the 16-17 Year Old Rate because they will already be on it. But the affected group is small (16 year olds on apprenticeships lasting less than 2 years; 17 year olds who will have turned 18, so employers would need to move them to the Youth Development Rate) and employers typically increase pay after apprenticeships end in any event.

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- 4.74** Other possible benefits of the Government's option include higher status for apprenticeships and improved signalling of their worth in the labour market. However, the Commission has not seen evidence that perceptions of the value of apprenticeships are strongly influenced by the applicable wage floor. International evidence highlighted above (London Economics, 2013) found that some of the European countries with the highest status systems also had the biggest discounts and lowest wages – training quality and wages on completion seem to matter more.
- 4.75** The Government's interim evidence (BIS, 2014h) asked us to consider if its suggested option could be phased in over time. We have considered this carefully, but extended implementation would not address most of the concerns described here.
- 4.76** We have also considered wider policy impacts. Under the Raising of the Participation Age (RPA) policy in England, from September 2015, young people under the age of 18 should continue to receive education or training. On this basis, a wage discount might theoretically be unnecessary – since employers would be choosing between hiring 16 and 17 year olds with training and 16 and 17 year olds on an apprenticeship. However, RPA includes no requirement for an employer to provide any training or education and is not enforced. Moreover, it does not apply in Scotland, Wales and Northern Ireland.²¹

Price Sensitivity of the Supply of Apprenticeships

- 4.77** There is little direct evidence on how employers would respond to major changes in the cost of apprentices. But survey and other evidence suggest a need for caution regarding large increases:
- BIS (2014c) found that among 39 case study firms interviewed in March 2014 to scope Trailblazer training incentives, most said they would be sensitive to large training cost increases (comparable in size to those implied by the preferred option). These costs would at best affect training quality and at worst affect provision. For employers less attached to offering apprenticeships, a requirement to pay for training would lead to them moving training to unaccredited in-house provision and "even an increase of a few hundred pounds could have a substantial impact on their participation in Apprenticeships". The research cautioned that willingness to pay is a function of the value employers see in apprenticeship, not of sectors per se. However, "employers in retailing and hospitality were more likely to say that they would either reduce the number of apprentices they trained or abandon Apprenticeships altogether";
 - A BIS (2013k) evaluation of the Apprenticeship Grant for Employers interviewed more than 1000 employers and found evidence consistent with price-sensitivity. 78 per cent of employers said that the availability of a £1500 grant (a figure again comparable in size to those implied by the preferred option) made a difference to their decision to recruit. 64 per cent said that future grant availability would be very or quite important. Indeed, only 13 per

²¹ The Government interim evidence to us (BIS, 2014h) said "There are no duties on employers in relation to RPA, so there will be no action taken against them if their young employees fail to undertake part-time training. While young people are under a duty to participate, employers are not under an obligation to provide or arrange that training... There will be no new costs to employers as a result of RPA".

cent of employers said that decisions on future recruitment of young apprentices would not be influenced by grant availability;

- The UK Commission for Employment and Skills (UKCES, 2014) in its representative survey of 18,000 establishments across the UK found that 'cannot currently afford to' was the (joint) fourth most popular reason for not offering apprenticeships, after lack of suitability because of size of establishment, a recruitment freeze and no need as staff are fully skilled. Reasons relating to cost were more common among establishments with 2-4 employees and were also most common among employers in the construction sector (12 per cent);
- New Zealand introduced a minimum wage reform for young workers in 2001 that increased pay for 16-17 year olds over 2 years by sums similar to the merger option: 41 per cent. Hyslop and Stillman (2007) found no evidence of an adverse employment effect immediately but some evidence of employment loss by 2003. There were significant increases in earnings of teenagers relative to adults. However, educational enrolment fell, and unemployment and benefit receipt rates increased. Overall the reform increased the labour supply of teenagers but this increase was not matched by an increase in employment. A further 2008 reform resulted in a 28 per cent increase in the real value of the minimum wage faced by 16-17 year-old workers. Further research (Hyslop and Stillman, 2011) found that it lowered the employment rate of 16-17 year olds by 3-6 per cent after two years with evidence of substitution of 16-17 year olds by 18-19 year olds. They also found that hours worked by 16-17 year olds fell relative to slightly older workers. This fall in hours also led to falls in total earnings;
- In 2012, the UK lowered eligibility for the adult rate of the NMW to 21 from 22: this amounted to a 23 per cent increase in the NMW entitlement for 21 year olds. Dickens, Riley and Wilkinson (2011) found that the rate change was associated with an increase in employment and a reduction in inactivity for 21 year old men. There was no evidence of negative employment outcomes for workers one year below the eligibility criteria. Using a different methodology however, there was weak evidence of an increase in unemployment for 21 year old men and a reduction in hours worked by 21 year olds on average. In interpreting this evidence, it is important to note that this change only affected around a tenth of 21 year olds, most of whom were paid over the adult NMW, unlike apprentices, a large proportion of whom are paid at the Apprenticeship Rate.

Other Possible Structural Changes

4.78 In addition to the option put forward by the Government we have considered:

- change to the period for which the Apprenticeship Rate applies: currently it is applicable only for the first year of an apprenticeship for those aged 19 and over but applies to 16-18 year olds in any year of an apprenticeship. Options include: making it a flat rate applicable for the length of the apprenticeship for everyone; abolishing the Apprenticeship Rate so that the wider NMW applies; or consistently limiting it to one year;
- change to the age at which the applicability of the Apprenticeship Rate varies: for example, moving applicability for Year Two from the current age of 19, to 18 or 21;

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- change to a flat rate. The Apprentice Rate could vary by age along the lines of the rest of the NMW: either as a fixed percentage discount on age-related rates, or as a variable rate, with different discounts applying at different ages;
- change to the apprenticeship levels to which the Apprentice Rate applies; and
- change to the period of the rate – for example, the replacement of the hourly with a weekly rate.

4.79 We have considered each of them carefully and our conclusions are set out below. Data are generally based on the APS, which we regard as the most reliable source, except where specified. As stated above, the key point is that in relation to the tenure rule – the main structural factor which evidence suggests has a relationship with non-compliance – reform is a zero sum game. Changes that increase pay also increase costs, and vice versa. This may explain why – though a number of stakeholders would like a simpler or different system – there was little consensus on its design. International evidence suggests that there is no simple solution to pay floors for individuals in training: apprentice minimum wages are in general more complicated than other rates (see Appendix 3).

4.80 As with our evaluation of the merger option, it should also be borne in mind that change to the level or the age structure of the hourly rate has no bearing on unpaid hours as a driver of non-compliance. Moving to a weekly rate could address this, albeit with the costs and benefits discussed below.

A Flat Rate

4.81 A single flat rate would be simpler than the current system and would remove the main structural complexity potentially related to non-compliance: the requirement on firms to remember to change pay on anniversaries. It would also strengthen incentives to provide two-year or longer apprenticeships for workers aged 19 and over. But the corollary of these benefits is that it would reduce pay rates for future cohorts of apprentices aged 19 and over in Year Two, where individuals are currently eligible for the Youth Development Rate or the Adult Rate, and remove any progression in the wage floor.

4.82 There are around 200,000 apprentices aged 19 and over in Year Two and beyond. We cannot model what would happen to pay in the event the wage floor were lower because we do not know how employers paying above it now would respond. We have tried to arrive at a ballpark estimate for those apprenticeships where wages might decrease by identifying those where the employer is currently paying at or near the legal minimum or lower (the assumption of this approach is that those paying above this level would not be affected by a lower wage floor since they are already paying more than they legally required). There are around 88,000 apprentices aged 19 or over in Year Two paid up to 5 per cent above their age-appropriate rates. This is the group for whom a lower wage floor would be most likely to be used. It should be noted that this group is similar in size to the number of apprentices in Year One and/ or 16-18 year olds who are paid below the Apprentice Rate plus a 5 per cent margin. This arithmetic implies that policy-makers could not easily offset hypothetical employee losses in Year Two arising from a move to a flat rate by an increase in the Apprentice Rate applicable in Year One. More broadly, moving to a flat rate as a reform would

be likely to make older apprentices relatively more attractive compared with younger ones since they would be cheaper in Year Two and beyond than at present. In other words, it could reduce the share of apprentices among younger workers.

- 4.83** There was some employer support for a single rate in stakeholder responses: for example, from the BHA, BBPA, BiL and ALMR and the NHF. However the Scottish Government said “we should not support an imposition of the Apprentice Rate on apprentices aged 19 and over subsequent to completion of the first year of their apprenticeship”.

No Apprentice Rate

- 4.84** Abolishing the separate Apprentice Rate would also clearly be simpler than the current system. It would mean minimum wage apprentices would have the same wage as workers without training. The EEF has supported this option. In its evidence to us, the TUC thought there should be no separate Apprentice Rate for parts of the system – for workers aged 21 and over and workers aged 16-17. The Government’s suggested option effectively removes the Apprentice Rate for 16-17 year olds.
- 4.85** The possible impacts of abolishing the Apprentice Rate would be significant: according to the APS 65 per cent of 16-17 year old apprentices, 68 per cent of 18 year old apprentices, 52 per cent of 19 year old apprentices, 37 per cent of 20 year old apprentices and 31 per cent of apprentices aged 21 and over are paid less than the age-appropriate rate were they not apprentices. The risks to training quality and apprenticeship supply would clearly be very substantial.

Require 16-18 Year Old Apprentices to be Paid their Age-Appropriate Rate After a Year

- 4.86** A consistent tenure rule may also be simpler – in other words removing the distinction whereby 16-18 year olds are currently treated differently to those aged 19 and over because the Apprentice Rate is applicable beyond the first year. Extending the requirement to change pay after a year to the age-appropriate rate to 16-18 year olds would affect 36,000 Year Two apprentices based on the latest data for 2014. Between 15,000 and 21,000 are paid less than the 16-17 Year Old Rate or Youth Development Rate, and so would benefit from a pay rise (albeit it would increase the cost to employers). However it is not clear that the reform would be easier for firms to comply with: greater tidiness would come at the price of more firms having to remember to change pay on tenure anniversaries rather than just on birthdays. It would also make young apprentices relatively more expensive than older ones compared with the current system. Risks include effects on the provision of two-year apprenticeships to 16 year olds. No stakeholders proposed this option. The NHF has expressed concern that age-appropriate rates after one year for those aged 19 and over are already problematic and this would extend that principle.

Move Requirement to Pay the Age-Appropriate Rate in Year Two from 19 to 18

- 4.87** The tenure rule could be aligned at age 18, not 19 as currently. The Apprentice Rate is the only part of the NMW where employers have to change pay for 19 year olds, a feature which reflects the origins of the Rate as integrated with the education system. Alignment at age 18

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could have some presentational advantages in removing this anomaly. However our analysis suggests that these advantages are largely theoretical. If non-compliance is broken down by age, there is little evident 'NMW alignment' gain for those in Year Two at age 21, even though employers are sensitised to it as a key age within the NMW structure. Moreover, as with the Government's suggested option, it would increase the size of the cohort whose tenure anniversaries were of concern to employers. It could mean a significant increase in pay/cost for future Year Two apprentices relative to now: between 11,000 and 15,000 would be paid up to 88 per cent more. It would mean the apprentice pay system no longer being aligned with educational incentives for apprenticeships. No stakeholders proposed this option.

Move Requirement to Pay the Age-Appropriate Rate in Year Two from 19 to 21

4.88 The tenure rule could be aligned at age 21, not at age 19. This would amount to a flat Apprentice Rate for workers aged 16-20. As with the proposal for a single flat rate more generally, it would be simpler for employers and would strengthen incentives to provide two-year or longer apprenticeships for 19 year old workers. However, it would reduce pay rates for future cohorts of minimum wage apprentices aged 19-20 in Year Two – where individuals are currently eligible for the Youth Development Rate. There are around 50,000 apprentices aged 19-20 in Year Two or above. Again, we cannot model what would happen to pay because we do not know how employers paying above it now would respond. About 24,000 apprentices aged 19-20 in Year Two and above are paid less than the Youth Development Rate plus a margin of 5 per cent, a rough proxy for those for whom employers are paying the minimum, which again suggests risks on the downside for future cohorts of apprentices. No stakeholders proposed this option. It would also make apprentices aged 19 and over relatively more attractive compared to those aged 16-18 (since it would reduce their costs in Year Two relative to the current system).

Apply a Fixed Percentage Apprenticeship Discount to the Age Appropriate Rates

4.89 The Apprentice Rate could change by set proportions at different ages. It would for example be possible to apply a fixed percentage discount to the wider NMW structure to arrive at rates that varied by age. This may be easier to communicate, particularly if these were lifetime rates rather than applicable for one year only for apprentices aged 19 and over. But the changes could also be seen as adding further complexity by moving to six NMW rates in total rather than just four. Moreover, when we considered this option in 2010 we found it difficult to identify a single discount that worked for both older and younger apprentices. Unless the wider NMW structure were recalibrated, it would require a significant increase in the relative reward and cost for older apprentices or a reduction for younger apprentices.

Replace the Single Apprentice Rate with Three Age-related Rates

4.90 The single Apprentice Rate could be replaced with three separate ones. It would be possible to introduce age-specific minimum wage rates for apprentices parallel to the broader NMW structure: a 16-17 year old apprentice rate; an 18-20 year old apprentice rate; and an adult (21 and over) apprentice rate. These would be flat rates for the lifetime of the apprenticeship.

If an apprentice became 18 or 21 their entitlement would change. There would be no wage floor change based on tenure.

- 4.91** This option would be simpler for employers from the point of view of removing duration as a consideration, but more complicated from the point of view of the number of rates. The UK Home Care Association (UKHCA) supported a parallel NMW structure for apprenticeships: “the most obvious route to simplification is by specifying age specific national minimum wage rates. The complexity of the current arrangements that tie age related rates to the duration creates double standards because people on longer-term schemes can be penalised... complexity can lead to errors”.
- 4.92** Such a change would give scope for variation in the treatment of different age groups, though stakeholders have different views on its desirability. (The bite of the Apprentice Rate is currently 84 per cent at the median for 16-17 year olds, for example. To make a separate rate for this age group could be seen as creating scope for those aged 18 and above to have higher apprentice pay, or reducing the pressure to lift the level for 16-17 year olds that derives from being grouped with these older cohorts). There would be particular challenges in setting an apprentice version of the Youth Development Rate because of large variation in pay: lowest quartile apprentice pay ranges from £2.68-£2.90 for 18 year olds to £3.13-£3.58 for 20 year olds (the range for each year reflects whether ASHE data or the APS is used).

Move From an Hourly to a Weekly Rate

- 4.93** The hourly Apprentice Rate could be replaced with a flat weekly rate. This was in fact the system in place in England (as a contractual wage for government-supported apprenticeships) before the Apprentice Rate was introduced in 2010 and we consulted on it at the time. The consultation found that a weekly rate is generally simpler for employers, but also less flexible and presents risks that employees will not be rewarded for overtime. Lawton and Norris (2010) found a strong preference among apprentices for hourly pay and few of the employers they interviewed favoured weekly pay, although some business organisations favoured it in our consultation. Evidence from the TUC for this year’s report highlighted concerns about a small number of apprentices being required to work very long hours.
- 4.94** Our analysis, using the APS, suggests that the median hours for apprentices in 2014 was 40 hours, so this might be the basis on which a weekly rate would be set, albeit there is likely to be some reporting error. However we calculate 49 per cent of NMW apprentices (earning up to 5 over cent above the NMW) work more hours than this per week, with median hours for this group of 46 – again subject to the reporting error caveat. On this basis, calibrating the weekly rate to median hours would reduce the entitlements of half of NMW apprentices by 13 per cent (since 6 hours of 46 would no longer be waged); calibrating it to the median hours for apprentices working longer hours would increase costs to employers of other apprentices by 15 per cent (6 hours above 40), independent of any increase in the hourly rate.
- 4.95** A practical challenge in introducing a weekly rate would be its fit with the age structure of the Apprentice Rate and the wider NMW. To make this change within the existing framework, policy-makers would either need to limit a weekly rate to the Apprentice Rate itself (currently applicable to 16-18s and all apprentices in Year One), with those aged 19 and

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above moving to the age-appropriate rates. Or there would need to be three weekly rates: one for 16-18 year old apprentices and those in year one based on the Apprentice Rate; a second for 19-20 year old apprentices in Year Two based on the Youth Development Rate; a third for 21 year old apprentices in Year Two based on the adult rate. Alternatively, a weekly rate could be combined with another structural change: for example, a weekly rate with no change in the pay floor contingent on experience. This would be a weekly version of a flat rate Apprentice Rate, with its strengths and weaknesses.

- 4.96** Influential in our recommendation in 2010 was the fact that a move to a weekly rate would sit poorly with the rest of the NMW framework. It would also require a change to primary legislation. Anecdotal evidence suggest that the key weakness on payment of hours is treatment of time at college, which some employers do not understand should be paid. This could be remedied without structural change through communication, or changing the obligations on training providers.

Higher Apprenticeships

- 4.97** The remit specifically asked that we consider the case for exempting Higher Apprenticeships in line with the original policy intention for the Apprentice Rate. Age-appropriate rates would apply instead.
- 4.98** According to the APS, median pay for Level 4 and Level 5 apprentices was £9.55 in 2014, very substantially above any apprentice rate. Higher Apprenticeships are also very largely taken by those over 18 so there should be limited effect on younger workers. We need also, however, to consider the discount from the wage of workers without training in order to protect incentives to provide apprenticeships and the possible effect on the marginal apprentices in this category.
- 4.99** A constraint on analysis is that only one year's data is available on pay for Higher Apprentices, where numbers are in any event small, with only 18,000 in England. Our analysis suggests that around 11 per cent of Level 4 and 5 apprentices are paid less than their age-appropriate NMW rates, so would be affected by being removed from the Apprentice Rate. This includes one in five Higher Apprentices in Accounting and one in 10 in Care Leadership and Management. The lowest paid 10 per cent of apprentices generally earn below the adult rate (£4.91 in Accounting; £6.09 in Care Leadership and Management), and the lowest quartile in Accounting (at £5.88). Though the change would affect a smaller proportion, the larger numbers taking Care Leadership and Management apprenticeships mean around half of those affected would be in these areas. Total numbers affected however would be very small, perhaps around 2,000.
- 4.100** We have sought evidence from the relevant representative bodies in care and accounting. The UKHCA and Care England supported the change. The Chartered Institute of Payroll Professionals conducted an online poll of its members: two-thirds (66 per cent) said they would not have any concerns if Higher Apprentices were paid at the age-appropriate NMW rates rather than the Apprentice Rate. The National Day Nurseries Association was concerned that if the age-appropriate NMW was applied to Higher Apprenticeships employers may feel

that they might as well recruit someone who is already qualified. It thought a gradual upward move in that direction to test impact on employment of higher apprentices would be advisable. Other bodies have not replied.

- 4.101** The average additional weekly cost to the employer or gain per apprentice would be £29 per week for 18-20 year olds and £40 for 21 year olds. This would give a total additional cost for employers of moving to the age-appropriate rates of £3.8 million a year. We note that those taking Level 4 and Level 5 Apprenticeships will often be qualified to Level 3, where recent data (BIS 2014i) suggest median wages are well above the age-appropriate rates.²² So applying the age-appropriate NMW rather than the Apprentice Rate to this group is consistent with employers being able to build in some wage discount for Higher Apprentices to compensate for training and other costs.
- 4.102** On balance, **we recommend amending regulations to exempt Higher Apprenticeships from the scope of the Apprentice Rate. These apprentices should be entitled to the age-related rate of the NMW.**

Conclusion

- 4.103** The exemption of Higher Apprenticeships would make no real contribution to the broader question of simplification. On this we have found no other structural change that we feel able to recommend. All the options that we have identified either lead to lower pay for apprentices or higher costs for employers with consequent likelihood of substantial risks to training quality and the supply of apprenticeships. Many, including the option being considered by the Government (about which we have serious concerns), would bear particularly on young apprentices, making them less attractive to employers.
- 4.104** More broadly, we are concerned about the strength of the case for structural change. This significantly reflects the lack of proportionate remedy for the only structural feature where there is strong evidence of a relationship to non-compliance, the tenure rule. It also reflects wider concerns. In particular, the evidence suggests that non-compliance is not simply, and possibly not primarily, a problem of structure. It appears substantially to reflect a mixture of a lack of understanding and awareness (as well as some deliberate evasion). This is apparent in survey data on employer and employee understanding. It is implied by high non-compliance for apprentices at age 16-18, the point where the structure is a simple flat rate. It is reinforced by evidence that up to half of non-compliance could be explained by non-payment of hours, possibly training hours, or reporting error. No change to the level or age structure of the hourly rate would remedy non-payment of hours, which is primarily an issue of communications and enforcement.

²² Recent experimental estimates (BIS, 2014i) show the sustained annualised earnings for Further Education learners up to 3 years post-study. They cover learners achieving full Level 2 and Level 3 qualifications in 2009/10 and show their average sustained Annualised Earnings in 2010/11, 2011/12 and 2012/13. As a comparator for Higher Apprenticeships – Level 4 and Level 5 – we have considered individuals qualified to Level 3. In 2010/11, those who had completed an Accountancy advanced apprenticeship earned £15,600; those with a Level 3 NVQ in Accounting £16,300. Those who have completed a Health and Social Care advanced apprenticeship earned £14,000; those with a Level 3 NVQ in Health and Social Care earned £15,800. Converted into hourly rates, these are well above the applicable 2010 NMW rate – £5.80 for those aged 21 and over. This implies it would be possible to offer Higher Apprenticeships with a significant wage discount.

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4.105 We are though aware that changes to structure need to fit with broader government policies that lie outside our competence and scope. The Government's option may for example fit with a policy that aims apprenticeships towards occupations that demand higher skills, and away from a policy that sees them fulfilling a purpose among other things to provide access to the labour market for disadvantaged young people. Any changes would also need to be coherent with policy on subsidies for training, and higher contributions by employers. For these reasons we have presented a range of possibilities for structural reform with the advantages and disadvantages of each, rather than a specific recommendation.

4.106 We believe that the evidence available to us does not support a case for structural change. However, we recommend that if the Government decides to make a change it should do so only after further consultation. Of course any change risks an increase in non-compliance unless accompanied by the major communication effort that is anyway needed. We encourage further efforts to communicate and enforce the Apprentice Rate, informed by use of the data in ASHE and APS.

Chapter 5

Compliance and Operation of the National Minimum Wage

Introduction

5.1 Compliance and enforcement matters. This chapter considers the overall framework in place to ensure that the National Minimum Wage (NMW) is the wage floor for the UK labour market in practice, as well as in statute. It looks at the latest evidence on how these arrangements are working, both for specific groups of workers in receiving their entitlement to be paid at least the NMW (for example, care workers), and in relation to specific structural features of the minimum wage (for example, the accommodation offset).

5.2 The rationale for focusing on enforcement and compliance dates back to the introduction of the NMW in April 1999. Compliant employers need to be assured that they will not be undercut by unscrupulous businesses flouting the law, and workers need to be assured that they will receive the promised wage protection, particularly those vulnerable to ill-treatment. There would be little practical effect from our work if NMW compliance were low.

5.3 So although it has rarely been an explicit part of our remit from the Government, we have always reported on the evidence gathered on compliance and enforcement matters through our consultation processes, and regarded this as an integral part of our role in advising on the minimum wage. This has led us at times, where we saw a weakness in the system, to criticise performance and recommend remedial action by the Government. It has also led us to highlight progress. In our 2014 Report, we acknowledged and welcomed significant improvements in efforts to address NMW compliance and enforcement, albeit further work was needed, particularly for those groups of workers and sectors at higher risk of non-compliance.

5.4 In this chapter we update our assessment of compliance and operation of the NMW. We look first at the overall strategic approach to compliance, the level of resources and the range and level of activities undertaken. We then consider compliance and enforcement in relation to specific groups and issues.

“The NMW is the UK’s wage floor and it goes without saying that no business should ever pay its employees below this level... high levels of compliance are vital to ensure low-paid workers receive a wage which reflects their legal rights but also to reassure employers that they will not be undercut by other businesses paying less than the NMW.”

CBI evidence

Compliance Strategy and Enforcement Activities

5.5 The underpinning framework for compliance and enforcement is the five-year National Minimum Wage Compliance Strategy, and we consider this first.

Compliance Strategy

5.6 The strategy was introduced in March 2010 and subsequently endorsed by the Coalition Government (BIS, 2010). Its overall vision is that everyone entitled to the NMW should receive it, delivered through a balance of civil and criminal action, combining reactive demand-led and more proactive work. The key reporting mechanism is individual complaints to the Pay and Work Rights Helpline (PWRH). All complaints are investigated, with a strong focus on recovering arrears for the individual worker. In addition, and in response to Commission recommendations, there is a system for fast-tracking certain categories of complaints, by higher risk groups. BIS has directed HMRC currently to prioritise the investigation of complaints from apprentices, interns, and seafarers.

5.7 Alongside this largely reactive work, the strategy also commits to proactive targeted work, based on risk assessment and informed by recommendations from the LPC and others. This has led to interventions in high-risk sectors, such as social care and hotel cleaning. The Government's evidence for this report (BIS, 2014h) has again emphasised the strategy's multi-faceted approach, involving a suite of interventions, ranging from use of phone calls or correspondence through to various face-to-face methods, including multi-agency taskforces.

5.8 A number of stakeholders have welcomed the more strategic approach adopted by HMRC, and its work in targeting areas of abuse. However, some have also raised concerns. The TUC called: for HMRC to be able to enforce holiday pay; for the Government to guarantee payment to workers of non-recoverable arrears of the NMW; and for changes to the NMW Act to create legal 'gateways' to allow HMRC to exchange information with local authorities and the Maritime and Coastguard Agency. The Union of Shop, Distributive and Allied Workers (Usdaw) called for HMRC to have the power to inspect a whole workforce where an employer was found guilty of underpayment. Others called: for a formalised third party role in the complaints process (considered in more detail later in the 'Access to the Enforcement Regime' section of this chapter); for public bodies to be 'named and shamed' when the organisations they commission services from break the NMW rules; for HMRC to have powers to impose on-the-spot fines when employers failed to keep sufficient records; and to require employers to include the NMW rates on pay slips.

5.9 The Government told us in evidence it submitted for our 2014 Report, that it would be undertaking an evaluation of the Compliance Strategy with the work scheduled to be completed by summer 2014. We now understand, however, that rather than undertake a formal review it has updated policy documents to reflect recent changes in the law (such as on Naming). BIS said it would ensure that its approach to compliance and enforcement was informed by intelligence and data, that it was making the best use of the tools and resources at its disposal, and it was reviewing priorities for pro-active enforcement action for 2015/16. BIS also told us it would be reviewing next year whether it needs to update the Compliance Strategy.

- 5.10** While we welcome the changes BIS has made to policy documents to reflect recent developments in the enforcement regime, our view remains that an overall review and evaluation of the Compliance Strategy to ensure it remains fit for purpose is important. We believe both the Low Pay Commission and other key stakeholders should be consulted as part of that process.

Resources

- 5.11** One important reason for having a review of the Compliance Strategy is that the Government has significantly increased resources for enforcement after a long period when budgets were protected in cash terms, but fell in real terms. We strongly welcome the additional £3 million for HMRC's NMW work in 2015/16 announced in the Government's 2014 Autumn Statement (HM Treasury 2014e). On top of a previously announced increase of over £1 million, to £9.2 million in 2014/15, this amounts to an increase in excess of 50 per cent between 2013/14 and 2015/16. The extra funding has the potential to address concerns highlighted in our 2014 Report in relation to: increased responsibilities for HMRC (for example, in agriculture); high levels of non-compliance in social care; and a continued high volume of enforcement work in apprenticeships; as well as the revised Naming Scheme. Extra resources need of course to be sustained into future years – one-off cash injections are of limited value for labour-intensive work with high training costs – and properly deployed. As the next section explains, HMRC's targeted enforcement work has always been limited in scale by the fact it is funded out of money left over after the completion of its complaint work. During 2013/14, and now in 2014/15, HMRC has faced pressure from a rapid rise in demand-led casework – and one that has reduced its resource for more strategic efforts. We therefore welcome the statement in the Government's evidence, (BIS 2014h), that it had increased HMRC's budget with the specific intention to strengthen the proactive, intelligence-led, element of its work.

Enforcement Activity

- 5.12** In its interim evidence (BIS, 2014h), the Government highlighted that since HMRC began enforcing the minimum wage in April 1999, it had identified £54 million in arrears for over 229,000 workers during more than 65,000 employer interventions. In the latest full year (2013/14) HMRC NMW compliance officers achieved a higher value of identified underpayments of the NMW than in previous years – a record total of £4.6 million. There was also an increase in the 'strike rate' (the percentage of cases investigated where non-compliance was found), rising from 43 per cent in 2012/13 to 47 per cent in 2013/14 – the highest ever since the NMW was introduced. The underpayments in 2013/14 were due to almost 23,000 workers, with average arrears of around £205 per worker (this compared with over 26,000 workers at an average of around £150 per worker in 2012/13).
- 5.13** Although these measures of HMRC activities showed a generally upward and positive trend, there continued to be a fall in the number of cases completed. This may have reflected casework becoming more complex and time-consuming. In evidence for our 2014 Report, HMRC told us that the average number of workers per case had risen by 220 per cent since 2009/10; and that from 2009/10 changes occurred to the enforcement regime (including the

introduction of fair arrears and penalties) which had an impact on the nature of casework handling. We also note in evidence for this report that the average time taken to complete a case was 213 working days, with the median time of 173 days, for all cases closed in the year 2013/14 (both for cases where arrears were identified and cases where no arrears were found). While we recognise there will always be differences in the scale and complexity of cases, average case handling times of this length are too high and of concern. However, the Government advised us that HMRC was working to reduce these times and had introduced a new structure and processes for handling cases. We understand that it is now giving increased focus to individual customer service, and this is a welcome commitment. This is an area we will continue to monitor.

- 5.14** A particularly striking development in 2013/14 was a further sharp rise in the volume of complaints of underpayment – a reversal in the trend over recent years of falling numbers. They rose from 2,243 to 3,294 (47 per cent) between 2012/13 and 2013/14. We understand that the rising number of complaints has increased further in 2014/15. The reason for this rise is uncertain: data on non-compliance are not sufficiently robust for us to be sure whether it reflects underlying trends, or reporting behaviours. HMRC thought it possible that extra publicity as a result of the relaunch of the Naming Scheme, and subsequent naming of employers under the new criteria, had played some role. It had no evidence that the introduction of tribunal fees (and reduction of cases submitted through the employment tribunals) was having an impact on complaints to HMRC.
- 5.15** Completing these complaint cases, and improving customer waiting times, has been HMRC's priority this year and it told us this had reduced its ability to do risk-based targeted enforcement. However, it advised that increased resource would mean more scope for targeted activity in 2015/16. It had also continued with its commitment to do: street sweeps on Employment Agency compliance, as agreed with BIS; and operational cross-government work, including operations with Home Office Immigration Enforcement to counter illegal working.
- 5.16** As noted above, we welcome plans by the Government to increase the speed of case handling. But we are concerned at the tension, which sits at the heart of how HMRC enforcement is organised, between increased volumes of demand-led work and reduced risk-based targeted enforcement. We urge BIS/HMRC to ensure that part of the budget is held and used for targeted compliance work, with social care prioritised (covered in more detail in the section on Care Workers). We will continue to take close interest in the strategy and activities to support better enforcement and to ensure adequate resources are available to, and used effectively by, HMRC. We are also aware that the National Audit Office is conducting a review of HMRC minimum wage enforcement, particularly with reference to the social care sector. We understand that its report is expected shortly and we will consider its findings carefully.

Improving Compliance

5.17 Two keys to raising compliance are better guidance and improved awareness of the NMW. Our previous recommendations on these matters have included that the Government should more actively communicate the rates of the NMW, and rights and obligations under the NMW Act; and put in place effective, clear and accessible guidance on all aspects of the minimum wage (Low Pay Commission, 2012). While the Government has partly responded to our recommendations to improve guidance and raise awareness, we believe more needs to be done.

Awareness of the National Minimum Wage

5.18 In its interim evidence (BIS, 2014h), the Government highlighted a communication campaign, which ran from September to December 2014, with the objectives to: raise awareness that the NMW rates had changed on 1 October 2014; promote the new NMW rates; and raise awareness of wider changes, including the changes to the penalties regime and naming policy. The campaign included separate messages for employers and workers. The aim for employers included raising awareness of the new rates and highlighting common errors that result in non-compliance. The aim for workers included giving re-assurance about confidentiality and anonymity after making a complaint.

5.19 The Government also told us that HMRC continued successfully to raise the profile of its NMW enforcement activity through the media – publicising successes at Employment Tribunals and applications for County Court Judgments, and issuing several high profile press releases. For example, in February BIS, (2014b) issued a press release promoting the work undertaken in the music industry with the headline ‘Brit awards record labels face the music on unpaid interns’.

“Many employees, particularly young people, are not aware of their rights and don’t know how to take a case forward if underpaid the NMW. NMW compliance should be taught to young people in sixth form colleges.”

HMRC NMW Compliance Officer evidence, Commission visit

5.20 Stakeholders have generally welcomed activity by the Government to raise awareness of the NMW, but continue to call for further action. For example, the TUC argued that awareness of the NMW and how it can be enforced had fallen and that resources for awareness remained too low. Citizens Advice Scotland told us that there were a significant number of cases where employers appear to be ignorant of their duty to pay their staff the NMW and also that their clients in financial difficulty are often not aware of their entitlement to the appropriate NMW rate. A number of stakeholders highlighted that workers were often afraid to report cases of non-payment of the NMW because they were concerned about the repercussions from their employer (such as a reduction in their hours or a termination of their contracts). Suggestions from stakeholders for further activity in this area included the inclusion of NMW rates on payslips.

National Minimum Wage

5.21 We encourage the Government to devote further time and resource to raising awareness regarding workers entitlement to the National Minimum Wage and an employer's obligation to pay – including evaluating the impact of its efforts through quantitative methods like polling or surveys rather than inputs like number of press releases. While there has been some activity undertaken it remains small scale and we have seen no evidence that there is direct year-on-year tracking of what difference it has made to understanding or behaviour. The Government has not published its communications plan. We remain of the view that such a plan should be published, and would help ensure activities are contributing to a strategic approach in raising awareness of the NMW. We note that the Government's 2014 NMW communications campaign included messages to employees about confidentiality issues. Worker confidence in the confidentiality of their complaint can be critically important in ensuring the worse examples of abuse are reported and exposed. We would particularly welcome further publicity to highlight HMRC's confidentiality/whistleblowing policy.

National Minimum Wage Guidance

5.22 We also think more could be done to improve guidance – as recommended originally in our 2012 Report. Although the Government accepted this recommendation, the subsequent introduction of GOV.UK, the integrated government website, meant the promised action was never delivered, and actually led to a reduction in the existing material. The Commission, and numerous stakeholders, have continued to press the Government to at least restore previous guidance and continue to address gaps. In our 2014 Report, we recognised that some progress had been made on general guidance, but called again for the publication of more detailed underlying advice, particularly in poorly understood areas.

5.23 In its submission for this report, the Government provided some evidence of improvements. An important step has been publication of draft consolidated NMW Regulations, bringing 20 sets of regulations into one document, and thus simplifying and streamlining the regulatory text. The new regulations are expected to come into force sometime in 2015. It also highlighted that it had updated material on GOV.UK with respect to: a general NMW 'landing page' with links to the NMW rates; a 50-page detailed guide to calculating the NMW; the Government evidence on the NMW; information on internships and work experience; a worker checklist; the Naming Scheme; and information on NMW penalties.

5.24 These developments are welcome, and should aid clarity and understanding. However, we have continued to receive evidence from stakeholders of a shortfall in the level of detail and specificity needed. The United Kingdom Homecare Association's (UKHCA) evidence highlighted that understanding the rules for travel time and 'down time' between user contacts was important for the sector remaining compliant with the NMW, but the application of legislation in practice remained confusing. HMRC's investigations had shown that errors were occurring. UKHCA told us there continued to be a lack of clarity within the regulations and that there were: 'significant grey areas open to interpretation' given the complex working patterns of homecare workers. While this issue stems from concern about the regulations themselves, rather than the guidance, UKHCA was seeking support to develop clearly understood 'operational rules' for how the regulations work in order to reduce error and non-compliance.

5.25 The Association of Labour Providers (ALP) argued that while guidance on GOV.UK was generally effective in communicating the key points of the NMW, the information within it was rudimentary and certain sectors needed better direction on issues like deduction for transport costs and payment for travel time. The ALP suggested that trade associations representing members in low-paying sectors should be able to access and work with HMRC NMW technical advisers to develop their own sector-relevant guidance and to assist with complex and challenging issues. The National Day Nurseries Association (NDNA) voiced concern at situations where members had been named as breaching the NMW but it told us information was not available to enable them to understand the rules.

“To avoid innocent mistakes, the poor quality of the official guidance available via GOV.UK needs to be improved.”

BHA, BBPA, BIL and ALMR evidence

5.26 The TUC acknowledged recent improvements to GOV.UK guidance, but believed it still fell short in terms of both accuracy and completeness – for example, regarding the payment of the NMW during sleepovers. It recommended that the guidance text is looked at again, in consultation with stakeholders. The TUC (2015) has also highlighted the need for more detail on self-employment where, it said, the guidance states self-employed individuals are not entitled to the NMW without any discussion of the tests that would be relevant; including in cases where the self-employed status was bogus. Equity’s written and oral evidence called for sector-specific guidance on the NMW for the creative industries, adding that its absence encouraged the ill-treatment of vulnerable groups of workers and perpetuated low and no pay practices. The union suggested this additional information would also be of benefit to employers in the sector, who faced uncertainty and costs due to what it regarded as the current lack of clear guidance. Other unions, including Unite, UNISON and the GMB, also called for further improvements in the available written advice and support.

“The NMW regulations need to be clear, simple and enforceable with realistic examples on GOV.UK which show how the regulations apply in different sectors.”

Care worker, Commission visit to Norfolk and Suffolk

5.27 We recognise that, overall, there have been welcome developments since our last report, which should help to assist with understanding the NMW rules. However, the clear message from many of those representing both workers and employers in low-paying sectors and beyond is that further improvements are needed, particularly where sectors have more complex ways of working. Stakeholders are also seeking direct involvement in helping to develop the guidance material. We encourage BIS and HMRC to engage and work in partnership with those in sectors, such as care, agriculture, and entertainment, to address concerns.

Strengthening Enforcement

5.28 Since the NMW commenced in April 1999, we have made a number of recommendations aimed at strengthening the enforcement of the NMW. These included that the Government should introduce penalties to apply to employers found to have paid below the NMW (Low Pay Commission, 2007); and that the Government should introduce a “name and shame” policy to expose those who show a wilful disregard for the minimum wage (Low Pay Commission, 2009). We therefore welcomed the introduction of Penalties and Fair Arrears in 2009, and the Naming Policy in 2011, as well as developments to those arrangements in 2013 and 2014 respectively, which we cover later in this section. However, before a worker can enforce their right to the NMW they need to have access to the system and its arrangements. We first look at how these arrangements have operated, and then turn to consider developments in the sanctions available against employers in breach of the law.

Access to the Enforcement Regime

5.29 The NMW is unusual among UK individual employment rights in having a state body responsible for its enforcement. This arrangement operates alongside an individual’s right to enforce their statutory entitlement via the Employment Tribunals (ETs).

Access through HMRC

5.30 The Government has made clear that HMRC responds to every complaint made to the Pay and Work Rights Helpline (PWRH). This is a confidential route for both obtaining information about employment rights, including the NMW, and taking the first step in the complaints process. But some stakeholders have voiced concern that the current system inhibits both individuals from making complaints themselves and third parties supporting a complaint on behalf of either individuals or a group of workers.

5.31 A common concern in evidence was that there remained a lack of clarity on third party complaints: it was unclear if there is an effective reporting mechanism, as the standard form to be completed only related to individuals complaining about their own issues. Stakeholders were not sure whether there was scope for them to bring to HMRC’s attention examples of breaches, and what happens when they do. As mentioned above, stakeholders also raised related concerns about whistleblowing and

maintenance of worker anonymity. HMRC advised us that anyone can call the Pay and Work Rights Helpline (PWRH) with information. If this is third party information which enhances what HMRC knew from a worker complaint then it would be linked with that case; if not, it would form part of the evidence available to HMRC for risk or complaint-based investigations in the future (although this, some stakeholders advised us, meant there was no feedback to them – as third parties – on what had eventually happened). HMRC also confirmed to us that

“In many cases, clients are well aware of their entitlements but are unable to enforce them due to fear of being dismissed or disadvantaged in doing so.”

Citizens Advice Scotland evidence

it had an extremely robust policy around sources which do not wish to be identified and it will go to great lengths to ensure that their anonymity is protected in every case.

- 5.32** We will consider further stakeholder proposals for a more active or formalised role in the complaints process to HMRC for third parties, as a way of encouraging workers to expose possible breaches of the NMW, and report our findings in the 2016 Report.

Neither worker had much confidence in HMRC and thought the form to complain should be clearer about the enforcement policy and on anonymity for the worker lodging the complaint.

Worker evidence, Commission visit to Norfolk and Suffolk

Access through Employment Tribunals

- 5.33** As with other employment rights, individuals can seek redress through ETs. In evidence for our 2014 Report some stakeholders voiced concern that the introduction of tribunal fees in 2013 may lead to fewer cases being brought overall and a risk of displacement, with cases that would otherwise go to an ET being referred to HMRC, with resultant implications for resourcing.
- 5.34** Historically, relatively few NMW cases have gone to ET. Most are referred to HMRC and subsequently investigated by the official enforcement body. We reported in our 2014 Report that 500 cases or 0.2 per cent of all ET claims by jurisdiction included the NMW. Latest data on ET caseloads showed that the number of NMW-related cases has fallen by 55 per cent from 186 in April-September 2013, to 83 in the same period in 2014. As noted above, complaints to HMRC have increased dramatically – seemingly beyond the scale of decrease in ET cases concerning the NMW. HMRC told us that it had no evidence that the introduction of Employment Tribunal fees was a contributory factor in this increase.
- 5.35** Among stakeholder evidence, Usdaw highlighted the TUC Report ‘At What Price Justice?’, which reported a 70 per cent drop in workers pursuing claims for non-payment of the NMW through ET (related to different periods – January to March in 2013 and 2014 – to those we referred to above). Usdaw called for any worker winning a claim at ET to have their fees reimbursed. Unite called for the Government to abolish ET fees. The Government told us it had committed to reviewing the introduction of tribunal fees. It was considering the scope and timing of the review and would bring forward plans in due course. Equity, in line with other union organisations, thought enforcement of employment rights would be greatly enhanced if the Government removed the barrier of ETs only hearing cases brought by individual workers and enabled unions to launch collective enforcement actions.
- 5.36** We will continue to monitor the use of ETs as an alternative to HMRC by individuals seeking to complain about a breach of the NMW, whether this has been a material factor in the recent increase in HMRC’s workload, and its effect on worker access. We will also seek to obtain a better understanding of whether third parties can have a role, within the existing law and tribunal procedures, in the handling of worker complaints about non-payment of the NMW. We will report our views in our 2016 Report.

Penalties and Fair Arrears

- 5.37** Penalties and fair arrears for NMW non-compliance were introduced in April 2009. Arrears of NMW pay were to be paid at the current rate(s) rather than the rate(s) which applied at the time of the breach, and a penalty (a fine) was set at half of the amount of arrears identified up to a maximum penalty of £5,000. The Commission subsequently received evidence from stakeholders about this new arrangement: some questioned whether arrears should be at the current rate; some whether 'genuine' mistakes should be automatically penalised; and some argued for higher penalties.
- 5.38** In evidence for our 2013 and 2014 Reports (BIS, 2013a and 2013g), the Government said it was reviewing the regime. As part of this process the Government commissioned research on how the arrangements had operated. The key findings (BIS, 2014f) included: that the civil penalty worked fairly effectively as an enabler to compliance, with most employers paying back the arrears owed to workers within the 14-day window, thus taking advantage of a reduced penalty; and workers received a higher amount of arrears than they would have done under the previous regime. However, the penalty regime did not seem to have a deterrent effect on non-compliance. Possible reasons for this could be employers' lack of awareness of the penalty regime and a lack of understanding about the NMW.
- 5.39** Major changes to the fair arrears and penalties arrangements were introduced in March 2014. The financial penalty increased from 50 to 100 per cent of NMW arrears, with the maximum penalty raised from £5,000 to £20,000. The maximum penalty would in future apply to each under-paid worker; arrangements to bring this aspect of the strengthening of the penalties regime into force required primary legislation and measures were included in the Small Business, Enterprise and Employment Bill. Until the measures become law and are introduced, HMRC has a workaround in place to ensure the higher penalty can be levied in applicable cases.
- 5.40** It is still early days with respect to the new penalty level, as it has only applied to cases with a pay reference period of 7 March 2014 onwards. Overall, however, we welcome these changes, which have the potential to help reduce NMW non-compliance and ensure better redress for those who have not received the wage to which they are entitled. However, we would draw the Government's attention to the findings from its own research on the impact of the existing penalty arrangement – namely, that a lack of employer awareness had possibly reduced its impact on deterring non-compliance. This underlines our earlier call for the Government to ensure an appropriate communications campaign is in place, which improves employer awareness of the NMW in general and the penalties regime in particular.

Naming Scheme

- 5.41** A further major development in relation to enforcement in recent years has been the introduction in 2011 of the Naming Scheme – itself a response to a Commission recommendation. However, in our 2013 Report, we expressed our disappointment – and that of many stakeholders – that it had produced the naming of only one employer in the first two years, a scale of impact unlikely to have much of the intended deterrent effect. There were clearly weaknesses in the criteria for naming and following a government review, it

announced welcome reforms in August 2013 that would make it simpler for BIS to name employers who break the NMW rules.

5.42 The new arrangements have operated since October 2013. Under the reformed scheme employers who have been issued with a Notice of Underpayment (NoU) by HMRC (setting out owed wages and the penalty for non-compliance) will be named if the total underpayment is £100 or more. There remains a mechanism for employers to appeal against the NoU and they can make representations to BIS against being named on the basis that they meet one of three criteria: naming carries a risk of personal harm to an individual or their family; there are national security risks associated with naming; or there are other factors which suggest that it would not be in the public interest to name the company/individual.

“Whilst NHF support naming and shaming for employers who were wilfully ignoring the rules and exploiting workers, we have concerns about employers who have inadvertently paid under the NMW being named, despite small underpayment amounts being involved”.

NHF evidence, Commission visit to London

5.43 The new Scheme has operated since October 2013, but only covers cases originating from this date. As at the end of 2014, there had been 55 employers named under the revised scheme. A further 37 employers were named in January 2015, bringing the running total to 92.

5.44 Although most employer representatives welcomed the strengthening of arrangements, the National Hairdressers Federation (NHF) reported that members expressed concern about inadvertent breaches of the rules, where there was a genuine error or it was a small underpayment and immediately corrected. The UK Fashion and Textile Association (UKFT) said it welcomed changes to the Naming Scheme but thought it needed more publicity in the local press to have real impact. The TUC questioned the low number of employers named to date, given there were 708 cases in 2012/13 where civil penalties were imposed.

“The CBI fully supports strong enforcement where businesses have ignored the law and as such we have welcomed recent developments in this area”.

CBI evidence

5.45 Overall, we welcome the new arrangements and hope that more naming of those not meeting their obligations will send a stronger message to other infringers. We expect to see an increased number of companies named as cases opened from October 2013 reach their closure and will monitor numbers accordingly. We suggest that the Government consider whether the results from Naming could be put to greater use, further raising awareness of the penalties which result from failing to pay the NMW. To date results have been publicised via a general press release. There may be scope to do more sector-specific communications work in industries where non-compliance appears to be concentrated.

Prosecutions Policy

- 5.46** Criminal prosecutions are an expensive tool in any area of law. However, we have long regarded them as having a potentially high impact on employers considering deliberately flouting the requirement to pay the NMW. We have encouraged their greater use by Government, focused on employers showing a wilful disregard for the law.
- 5.47** The Government's evidence (BIS, 2014h) explained that since March 2013, eight cases have been referred for consideration of prosecution. The annual level of referrals has remained at similar levels in recent years, with for example, 6 referrals in both 2012/13 and in 2013/14. The Government said two cases were currently being pursued by HMRC's Criminal Investigation staff. Officials advised that the number of prosecutions remained low due to the strict criteria that needed to be satisfied.
- 5.48** While HMRC will refer suitable cases to prosecutors, the decision on whether to prosecute is made by the Crown Prosecution Service (CPS), which considers the evidence and determines whether it is in the public interest to proceed. The Government's evidence also pointed out that criminal investigations by HMRC and prosecutions by the CPS may not necessarily lead to arrears of wages being paid to workers, as this was not the objective of such proceedings; so further enforcement action may still be required to ensure any arrears are paid.
- 5.49** The Government has advised that it is reviewing its prosecution policy to consider whether any changes are needed. It will consider whether there is a need to be more explicit about its prosecution policy and that it is reserved for the more serious cases – hence the low numbers – or whether it needs to revisit any of the prosecution criteria. This will be considered alongside the recent changes made to civil sanctions and policy on Naming, which had considerably increased the financial and reputational penalties faced by non-compliant employers.
- 5.50** Among stakeholders expressing a view on this matter the TUC called for the Government to adopt a new prosecutions standard – one which committed to prosecute at least a limited number of aggravated cases including: repeat offenders; those who deliberately keep fraudulent records; and those who obstructed HMRC investigations. Usdaw also called for more prosecutions, focusing on underpayment rather than inadequate record keeping.
- 5.51** It remains disappointing to us that so few cases have been brought since the introduction of the minimum wage. However, we acknowledge the strict criteria that need to be satisfied and costs involved. We also accept that it is appropriate for the Government to review its prosecutions policy, given the recent developments in other sanctions (higher penalties and a reformed Naming Scheme). This review was first signalled in evidence for our 2014 Report, and we would welcome the opportunity to engage with it.

Compliance with the National Minimum Wage

5.52 In this section we first consider the nature and scale of NMW non-compliance. The chapter then turns to specific areas of the operation of the NMW, where compliance issues have arisen for particular groups of workers or low-paying sectors.

Measuring Non-compliance

5.53 As Chapter 2 briefly highlighted, it continues to be very difficult to obtain an accurate measure of non-compliance. Official data for April 2014, based on the Annual Survey of Hours and Earnings (ASHE), showed around 208,000 adults (aged 21 and over) were paid less than the adult rate of the NMW. This compared with 203,000 in April 2013 and 207,000 in April 2012. We can also look at numbers paid below the NMW over a longer period and on a comparable basis if we consider those aged 22 and over (those entitled to the adult rate prior to 2010). On this basis: there were 188,000 adults aged 22 and over paid less than the adult rate in April 2014. The number has been at around this level since 2011. Prior to that, it had been higher, at around 230,000 or 1.0 per cent in the mid-2000s. These data show little change compared to the recent rise in the number of complaints of NMW underpayment, which may be driven by a higher profile for compliance through the increased use of the naming of transgressing employers.

5.54 The ASHE numbers are not the same as non-compliance. The reason is that there are, of course, legitimate reasons why some workers are exempt from the NMW or can be paid at a lower rate (for example, apprentices in their first twelve months of training). As stated in our previous reports, the Commission's working assumption has been that these reasons accounted for less than half of the number reported in the official data as paid below the NMW. On the other hand, there will also be under-reporting of unlawful non-payment in the formal economy, and very little reporting of non-payment in the grey economy.

5.55 In its interim evidence to us (BIS, 2014h) the Government told us that 7.3 per cent of 16-17 year olds, 5.5 per cent of 18-20 year olds, and 0.8 per cent of adults earned below their applicable age-related minimum wage in April 2013. In its final evidence, (BIS, 2015a), the Government advised that if apprentices were taken into account, there were fewer young workers paid below the NMW: for ASHE 2014 data, non-compliance fell from over 8 per cent to 1.2 per cent for 16-17 year olds, and from nearly 7 per cent to 1.6 per cent for 18-20 year olds. The proportion of adult workers remained at around 0.8 per cent. This has remained steady despite increasing coverage of the NMW overall. It thought that although the number of NMW complaints to the PWRH had increased, the actual level of non-compliance, workers paid below the minimum wage, was modest.

5.56 It also concluded that non-compliance was mostly due to error rather than deliberate non-compliance. Its evidence was that the percentage of workers being underpaid by large amounts below the NMW was small. This was also supported by arrears data where the average sum recovered per worker was £205 in 2013/14, implying gross ill-treatment was rare.

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- 5.57** The Government evidence (BIS, 2014h), also pointed to research it had commissioned on NMW non-compliance. This indicated that small and medium-sized enterprises (SMEs) in low-paying sectors were generally non-compliant with NMW laws as a result of mistakes, not malice, and in most cases mistakes were made because employers did not take the time to understand a specific detail of the legislation. Furthermore, interviews with employers and workers highlighted the fact that poor record keeping resulted in errors in applying the NMW and deductions made from wages. Workers also reported that they were unaware of deductions made and whether they were paid correctly if employers did not provide adequate records (for example, contracts, payslips etc.).
- 5.58** The Government said that research on understanding workers' behaviour showed that there appeared to be two distinct groups of workers who work for below the NMW. One group consisted of those who were aware of the NMW but choose to work below it because they received other benefits from their employer that they valued more than the NMW. The other group consisted of those who were unaware of NMW and their eligibility to be paid it. Among those who were aware of the NMW and knew they were being underpaid, reasons given for non-compliance included: perceptions about eligibility; receiving non-financial benefits; ability to illegally claim state benefits; compromising a good relationship with the employer; and fear of losing their job.
- 5.59** We note the Government's evidence on the levels and nature of non-compliance. Equally however, there is no room for complacency. First, properly understood, non-compliance should be measured in relation to those likely to be paid the NMW, not just against the entire wage distribution. In research commissioned for our 2013 Report, le Roux, Lucchino and Wilkinson (2013) estimated that around 6 per cent of the bottom decile of adult earners did not receive their NMW entitlement between 2000 and 2011. Second, we know that NMW non-compliance varies greatly by sector. If we add up estimates of non-compliance from analysis of individual sectors, such as for care workers, interns and apprentices (discussed in more detail later in this chapter on these groups and in Chapters 3 and 4 for apprentices), then estimates of overall numbers paid below the NMW are much higher than those derived from ASHE alone.
- 5.60** We also know, based on evidence submitted for this report and previous ones, that for some sectors and groups of workers, non-compliance may be rooted in more systematic causes than simply ignorance alone (for example, for migrant workers or those working in social care). Arrears data is based on proven losses so may understate losses for which there are no records. It is likely that some of the worst cases of non-compliance are not picked up in official pay data or in HMRC enforcement data – individuals working in the grey economy. All of this underlines the importance of ensuring HMRC carries out proactive work, rather than just responding to individual complaints: focusing disproportionately on the latter means many breaches potentially going unresolved.
- 5.61** This chapter now looks at the experience of specific groups of workers in receiving their entitlement to be paid at least the NMW, and how effectively specific features of the minimum wage have operated (for example, the accommodation offset). For some of these, there is evidence that NMW non-compliance is a substantial issue.

Apprentices

- 5.62** Apprentices remain a key group of concern for NMW non-compliance. Chapter 3 sets out the key data on non-compliance while Chapter 4 sets out our response to the Government’s request for us to review the structure of the Apprentice Rate. This is our main discussion of awareness and enforcement in relation to this group.
- 5.63** Following the introduction of the Apprentice Rate in 2010, subsequent data in the 2012 Apprentice Pay Survey indicated that non-compliance was potentially running as high as 29 per cent. While we believed that this figure was likely an overestimate,²³ we recommended in 2013 that the Government combine a communications campaign and a targeted enforcement initiative to ensure that the Apprentice Rate was known to employers and apprentices and that infringers were caught, punished, and wherever appropriate, named.
- 5.64** In response, the Government agreed that Apprentice Rate non-compliance was unacceptable. It fast-tracked complaints from apprentices to the Pay and Work Rights Helpline and confirmed that it would be stepping up its communication activity to increase the level of awareness of the NMW rules, as well as improving guidance.
- 5.65** Recent data showed that non-compliance in 2014 was between 9 per cent (according to ASHE) and 14 per cent (according to the new 2014 Apprentice Pay Survey) of apprentices. The problem is therefore lower than previously thought, but incidence still remains unacceptably high. It should be noted that these data cannot be reliably compared with previous years, due to methodological changes between years, so don’t inform us about change over time (i.e. better performance or a diminishing problem cannot be inferred from these numbers) – albeit they are likely to be more accurate than previous estimates.
- 5.66** In evidence for this report, stakeholders once again expressed their concerns about non-compliance in connection with the Apprentice Rate. Both the National Union of Students (NUS) and TUC referred to the high levels of non-compliance found in the 2012 Apprentice Pay Survey results as a cause for concern. The TUC added that a BIS Apprentice Pay report, (BIS 2013f) identified an additional enforcement issue, namely that a small proportion of apprentices reported that they were contracted to work more than 50 hours per week, an amount that may put their health at risk (and was potentially illegal).
- 5.67** The National Hairdressers Federation (NHF) commented that the increased emphasis on compliance was making business owners more aware of the need to get their systems right, so they pay their employees correctly. The TUC expressed scepticism that so many employers expressed ignorance of the NMW rules in relation to Apprentices, since a number

“... it is... shocking that such high proportions of apprentices are not paid at the apprenticeship rate, with more than 70 per cent of hairdressing apprentices and two-fifths of construction apprentices paid less in 2012.”

National Union of Students evidence

²³ The fieldwork for the survey was conducted in October, just after the NMW rates had increased and before many had been paid for the month.

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of trade organisations had cascaded a substantial amount of information and guidance to their members, via the internet, (for example, NMW guidance issued by the National Hairdressers Federation and Habia in the hairdressing sector). However, the TUC also pointed out that the introduction of the Apprentice Rate in 2010 coincided with a Government marketing and advertising freeze, which extended to spending on publicising the minimum wage, followed after a couple of years by the restoration of about 10 per cent of the 2009/2010 publicity budget. The TUC concluded that further action on raising awareness in connection with the Apprentice Rate was vital if employer knowledge and awareness was to improve.

- 5.68** The Government has asked us to review the structure with a view to simplifying the rate partly in order to improve non-compliance. We share the Government's view that the rate is more complicated than the other rates. However, the data suggest the non-compliance problem is one of communication, awareness and enforcement as much as the structure itself. That insight underpinned our recommendation in 2013 for a communications campaign.
- 5.69** The evidence that non-compliance is significantly a function of communications includes the high non-compliance levels for the most straightforward part of the Apprentice Rate – that covering 16-18 year olds, where it is a simple flat rate. It is also apparent in evidence that up to half of non-compliance could be explained by non-payment of some hours or reporting error rather than employers getting the hourly rate wrong. Anecdotal evidence suggests the requirement under the NMW to pay hours at college is poorly understood, and this may be a factor driving the data. No change to the level or the age structure of the hourly rate would remedy this problem.
- 5.70** Chapters 3 and 4 find one area where quantitative and qualitative evidence suggests that the structure of the rate does have a relationship with non-compliance: at age 19 and over, where the Apprentice Rate applies only for the first year, before reverting to the age-appropriate rate. Some employers report that a change in the wage floor based on experience causes confusion – because it means firms have to change pay on tenure anniversaries rather than birthdays. However, as we set out in Chapter 4, this complexity is to some extent inherent if policy-makers want to protect both employer incentives to provide apprenticeships, and higher pay for experienced apprentices than new ones: reform of it is a zero sum game.
- 5.71** Moreover, the data do not establish that non-compliance at this point derives from the inherent complexity or its communication. As well as being more complex than the other rates, the apprentice NMW is much newer and has never been properly advertised, as it was introduced at the same time as a marketing freeze in 2010, which restricted Whitehall departments from using such funds to pay for publicity on specific issues, such as the National Minimum Wage. Ipsos MORI and Cambridge Policy Consultants (2012) surveyed 500 employers of apprentices looking at the impact of the Apprentice Rate and highlighted the scale of the challenge. It found that a third of these employers were not aware of the Apprentice Rate – this among a group employing apprentices, who should be better informed than the average employer.
- 5.72** Following our 2013 recommendation, the Government has taken some action to address this, stepping up activity on communication. For example, posters have been issued and in England, information on the NMW rules has been included in the employers' packs that the

National Apprenticeship Service issues to prospective apprentice employers and the Government has written to Level 2 and Level 3 apprentices. And as noted above, apprentice calls to the PWRH have been fast-tracked.

- 5.73** This is welcome activity, and a significant increase relative to previous publicity and enforcement. But its scale remains small relative to the communication challenge apparent in a third of apprentice employers not being aware of the rate.
- 5.74** With respect to NMW compliance for apprentices, HMRC has confirmed that during the period September 2011 – June 2014, it received 458 complaints, of which 232 had been closed. The 232 identified 91 cases with a total of £274,276 arrears for 309 workers. These compared with non-compliance levels involving up to 100,000 apprentices per year extrapolating from the Apprenticeship Pay Survey 2014 (although there may be reporting error, and not all of these cases will be ones with large losses). Meanwhile, naming of firms in breach of the NMW has affected 92 cases across all grounds of non-compliance at the time of writing (early February 2015).
- 5.75** More broadly, little has happened to tackle some of the systemic drivers of non-compliance. A recent survey of employers (BIS, 2014j) found that being approached by a training provider remains the primary impetus for firms undertaking an apprenticeship, and they are a key source of information and advice. But we continue to hear concerns that training providers have weak incentives to explain the rate to employers – particularly that hours at college are expected to be paid and that pay for anyone aged 18 or over rises after a year in an apprenticeship. The TUC has proposed that all training providers should have to check with employers that they are paying their apprentices at least the NMW, with those failing to carry out the proposed check at risk of losing their funding.
- 5.76** We also have concerns that the Apprenticeship Rate may not be being communicated in the most effective way. The Government's interim evidence (BIS 2014h) presented a flow chart of the decisions facing employers that made the NMW for apprentices appear very complicated indeed. Yet in fact, it can be explained in two rather simpler steps. First, is the apprentice in their first year? If so they are eligible for the Apprenticeship Rate. If not, are they 19 or over? If so, they are like any other NMW worker. Those under 19 remain entitled to the Apprenticeship Rate.
- 5.77** In its final evidence (BIS, 2015a), the Government highlighted some evidence of improved awareness among apprentices: 94 per cent had heard of the NMW in 2014 compared with only half in the 2012 Apprenticeship Pay Survey. However, there remained much lower awareness that there was a specific NMW for certain apprentices or of the actual rate. Around 62 per cent of all Level 2 and Level 3 apprentices were aware there was an Apprenticeship NMW, up from 52 per cent. Just one in four apprentices, 26 per cent, was aware of the actual Apprenticeship Rate.
- 5.78** We have found no recent evidence on employer awareness of the apprentice NMW. However, new surveys of both apprentices and employers suggest that there may be wider weaknesses in understanding of this form of training. A survey (BIS, 2014j) of over 4,000 employers sampled from official statistics – so there was certainty they had offered apprenticeships – found 29 per cent did not know they had provided this form of training.

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This pattern was also observed in the sister survey of nearly 6,000 apprentices which found that just 64 per cent of apprentices recognised they were on an apprenticeship (BIS, 2014k). BIS (2014j) found that just three in ten employers (31 per cent) said they had used advice and support from the National Apprenticeship Service. Low awareness is likely to be higher for small businesses that don't benefit from dedicated HR staff.

- 5.79** Overall, we conclude that information and enforcement remains critically important to improved compliance. We urge the Government to take further action to raise awareness of the Apprentice Rate and target enforcement action where the evidence suggests non-compliance is likely to be greatest. This should be guided as far as possible by detailed analysis of the Apprentice Pay Survey and ASHE which suggest possible problems in relation to non-payment of some hours, possibly those at college, and non-compliance for experienced apprentices aged 19 and over in Year 2. Other risk factors increasing the probability of non-compliance include apprentices being new to the employer.
- 5.80** We encourage the Government to explore strengthening the responsibilities or incentives of training providers to communicate the NMW. Regularly running the Apprentice Pay Survey is also essential to understand what is happening to compliance. A number of stakeholders had other ideas on improved communication and enforcement that are worth considering. The NUS suggested targeting schools and colleges to ensure that students were aware of their rights in connection with the NMW. Usdaw suggested using the National Apprenticeship Service to improve compliance by, for example, issuing a letter to apprentices on their birthday reminding them of the anniversary increase. There may also be scope to do more with payroll technology to ensure duration anniversaries are not forgotten.

Care Workers

- 5.81** In our 2014 Report, we concluded that care workers remained at a high, and possibly increasing risk, of non-compliance with the NMW. Evidence provided by HMRC had suggested that the reasons for non-compliance included non-payment for working hours (such as for travel time and time spent training) and deductions which took pay below the NMW (such as for uniforms and accommodation). We had previously estimated that up to 10.6 per cent of care workers may not be being paid the NMW. Government promises to develop tougher measures to deter non-compliance and support compliance had been slow to materialise.
- 5.82** We urged the Government to: build on the work by HMRC and the Equality and Human Rights Commission (which had conducted an investigation in homecare); create better guidance; maintain effective enforcement; and support the use of fee-costing models/transparency. We also encouraged the Government to take the opportunity of forthcoming statutory guidance on commissioning of care, to include a requirement for local authorities to take into account the actual costs of care.
- 5.83** We have been concerned for many years by the commissioning policies of local authorities that appear not to take proper account of the costs of care on the independent care sector (and its ability to pay at least the NMW). We have made numerous recommendations to address the matter, some accepted by the Government, some simply noted. However, we

continue to receive strikingly similar evidence on the issue and the link between commissioning policies and a care worker's risk of not being paid at least the NMW. We look below at four areas which have featured in evidence this year: the perennial issue of commissioning; payment for travel time and for sleepovers; and zero hours contracts.

Care Commissioning and Impact on Care Providers and their Workers

- 5.84** Budget pressures at local authority level remain severe, including pressure on adult care expenditure. In its annual budget survey, the Association of Directors of Adult Social Services (ADASS, 2014) reported that adult social services in England have been required to reduce budgets by 26 per cent (£3.5 billion) over the last 4 years.
- 5.85** This constraint has continued to be reflected in the fees paid by local authorities for care from the independent sector. Laing and Buisson (2014), in its annual survey of local authority care home fees in 2014/15, found councils were giving an average uplift of 1.7 per cent, well below the 2.4 per cent it had calculated was needed to keep pace with care home cost inflation. Of 143 councils providing figures: 73 gave below 'standing still' uplifts, including 21 that froze fees and one that had actually reduced fees; 31 gave fee revisions in the 'standstill' band (2-2.9 per cent); while 17 increased baseline fees at a margin-enhancing rate of 3 per cent or more. The remaining councils had either not yet set baseline fees or not responded to the survey. Laing and Buisson said that as a result of these findings, the UK could expect average margins for council-funded residents in care homes to drop by a further 0.7 per cent in 2014/15; a cumulative 5.7 per cent drop over the past five years.
- 5.86** A number of independent care providers, faced with what they regard as councils not reflecting the actual costs of care in the fees they pay, have mounted legal challenges against the process used by councils when setting fees. Care operators have been successful in the majority of these, but the result was usually a requirement for the council to start the fee-setting process again. Both employer and union stakeholders highlighted to us the impact of inadequate fees in relation to provider costs. The United Kingdom Homecare Association (UKHCA) viewed the current approach to commissioning homecare services as actively hindering both wage growth and the recognition of different skill levels in the workforce that should attract wage differentials. This was because of flat rate, fixed fee contracts, typically for a three-year period that paid a single fee rate. This was despite the differing complexity of user needs and hence the services required.
- 5.87** In its submission, UNISON suggested that we publish our own recommendations on the appropriate rates that should be paid by local authorities for social care. UNISON produced a table of the ten lowest-paying councils, ranging from £9.08 an hour in Hartlepool to £10.23 in Brent, and noted that the UKHCA had calculated that a minimum of £15.19 an hour was required to meet minimum wage obligations. UNISON called for local authorities that

"The exploitation of the workforce and underpayment of the NMW in social care is widespread, inextricably linked to the chronic and persistent underfunding of the sector."

UNISON evidence

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knowingly let contracts that are too low to pay the National Minimum Wage, to be named and shamed along with the social care provider.

- 5.88** The Government's evidence, (BIS 2014h and 2015a) has again highlighted that while it allocated resources to local authorities, it was individual councils that were ultimately responsible for decisions about how much should be spent on adult social care for those with eligible assessed needs who qualified for state funding. It said that both local authorities and the NHS had to ensure they, and service providers from whom they commission, offered a quality service. This has included encouragement of all social care employers to sign up to a Social Care Commitment (which included compliance with the NMW). In addition, it said HMRC (following its November 2013 report on targeted enforcement in the sector) had collaborated with care sector representative bodies to improve understanding of compliance risks and design controls within payroll systems to prevent workers being underpaid the NMW. For the period, April 2011-July 2014, HMRC's strike rate in the sector (the proportion of completed cases where it finds non-compliance) was 50 per cent (56 per cent in residential care and 40 per cent in domiciliary care). This was higher than the overall strike rate across all sectors in 2013/14 (47 per cent), which was itself the highest to date.
- 5.89** BIS also advised us that it would be carrying out a joint piece of work with the Department of Health (DH) and HMRC with the aim of supporting more care workers to get redress and reduce non-compliance by employers. This work will consider how they can: increase the number of complaints made; make investigations quicker and easier; and publicise the outcome of cases. In addition, as part of its planning for 2015/16, BIS was considering social care activity, within its wider plan for pro-active work.
- 5.90** Alongside this, DH had developed statutory guidance for implementation of the Care Act 2014, which referred to employment law and HMRC guidance on travel time, to help local authorities assure themselves that contracted care companies comply with the NMW. We note that the guidance, which will apply in England from April 2015, states that when commissioning services, local authorities should assure themselves and have evidence that contract terms, conditions and fee levels for care and support services are appropriate to provide the delivery of the agreed care packages with agreed quality of care; this should support the wellbeing of people who receive care and support and allow service providers to meet the statutory obligation to pay at least the NMW. Also local authorities should have regard to guidance on minimum fee levels necessary to provide this assurance. We also heard from ADASS during oral evidence that it had previously provided some guidance to members on NMW compliance, including travel time. However, it was still considering whether it would issue further advice on how local authorities should implement

"The Federation of Small Businesses (FSB) welcomes the LPC's recognition of the additional cost constraints under which many firms are operating... We agree with a number of concerns affecting specific sectors, such as social care, where low pay is in large part a result of local authority commissioning practices, exacerbated in recent years by the efficiency savings councils are required to make."

FSB evidence

the new statutory commissioning guidance. In addition, ADASS advised that guidance on commissioning standards had recently been launched, developed by a cross-sector group, including providers, to be used as part of a peer review process.

- 5.91** UKHCA said that the impact of any increase in the NMW was detrimental in a sector where over 70 per cent of the work was commissioned by near monopsonistic local authorities, and characterised by reductions in care fees. It concluded that any adjustment in the NMW that did not carry an automatic and mandatory fee increase for care providers meant that the stability and sustainability of local care provision was challenged because margins were thin. The Registered Nursing Home Association (RNHA) told us that care homes are left between a 'rock and a hard place': local authorities, who purchase 60 per cent of all residential care, have not increased fees over the past three years, while the NMW has increased each year.

Travel Time

- 5.92** Failure to pay care workers for travel time again featured heavily in stakeholder evidence as a central cause of underpayment of the NMW in this sector. In its evidence the Government (BIS 2014h) said it was aware that non-payment of travel time was a particular issue for domiciliary care workers and that it had updated the official NMW guidance to make it clear when travelling time and rest breaks must be paid. Despite this, we heard from stakeholders that payment for travel time remained sporadic and additional enforcement and guidance was needed.
- 5.93** UNISON told us that failure to pay staff for travel time between appointments was probably the single most important reason for care workers not receiving the NMW. It said that more than half (57.8 per cent) of UNISON homecare workers in England reported that they were not paid for their travel time between visits and that a recent Freedom of Information survey of local authorities revealed that only 10 per cent required that providers must pay travel time when they issued contracts. UNISON said there was a fear that care providers may seek to extend the length of gaps between visits to get round travel time responsibilities.

Zero Hours Contracts

- 5.94** Zero hours contracts again featured strongly in evidence from the sector. UNISON said that most homecare workers were employed on zero hours contracts and that the issue of non-payment of travel time caused members particular problems when combined with the use of such contractual arrangements; it could mean there was pressure to take as many hours as possible. It thought that many care workers were too scared to report their employer for fear of subsequently having reduced hours. This might explain why complaints to HMRC from the sector were not higher. Unite and the TUC also expressed their concerns about the impact of this type of contract on NMW compliance, particularly in the care sector.
- 5.95** However, UKHCA repeated views previously expressed to us on the use of zero hours contracts in evidence for our 2014 Report. It believed that the use of zero hours contracts in the sector was both inevitable, because of the operating environment, and that it met a demand from the workforce who benefit from the flexibility it offers. It said that calls for a reduction in zero hours contracts within the home care sector would require a large increase

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in the expenditure on care by local authorities, which UKHCA believed would be entirely unachievable in the current economic climate.

Sleepovers

- 5.96** A final area of concern in relation to social care was sleepovers – arrangements where payments are made to workers when they are provided with facilities to sleep at or near their place of work and be available to deal with emergencies, but would not necessarily expect to be woken otherwise. This featured strongly in the evidence we received partly because of recent Employment Appeal Tribunal (EAT) decisions involving payment of the NMW during sleeping time. The Government’s evidence (BIS, 2014h) reported that in one case the worker was found to be entitled to the NMW for sleep-in night time shifts at the care home where she worked, as this was time work. In another case, the EAT ruled that a ‘sleep-in’ care worker was entitled to the NMW; this was because her contract specifically required the carer to be present at the care home rather than being at home (nearby) and on call from there.
- 5.97** Unite highlighted inconsistent practice by employers and poor enforcement on the issue: some employers had taken the position that the NMW did not need to be paid to workers who undertook sleepovers because, for example, they believed that payments for sleepovers constituted an allowance and were therefore not subject to the NMW. The union urged the Commission and HMRC to take steps to improve enforcement on the issue. UNISON told us that payment for sleepovers was a bigger issue than travel time for those working in residential care. It said that the LPC should recommend that BIS revise and re-issue its guidance on the NMW and sleepovers. In oral evidence, the National Care Association said the EAT rulings would mainly affect learning disability providers.
- 5.98** The Government’s view was that workers should be paid the NMW if what they were doing amounted to work under their contract. If the worker was working – in practice ultimately a question of fact for a tribunal to determine – then the minimum wage was payable. The provisions about whether or not a worker is asleep only came into play in circumstances where the worker was available to work but not actually working. The Government told us that in cases where the worker must be present at their place of work, and are in effect working even if their employer allows them to sleep rather than carry out other duties, the worker should be paid at least the NMW. In light of the recent court decisions, we believe there would be a benefit in the official guidance making these points clear.
- 5.99** Overall, the evidence on adult social care is familiar and concerning in equal measure. We have heard from employers and workers alike that there remain serious issues within the adult social care sector, such as the pressure from a worsening situation in local government finance – in many instances the level of funding for services being less than the costs of care and not including payment of travel time. Together, these issues put pressure on workers’ hourly rates of pay, sometimes causing them to fall below the NMW. There are also a number of other complexities, such as when workers should be paid for ‘sleepovers’, which can make workers receiving their entitlement to the NMW problematic.

5.100 While there have been some welcome developments to address social care non-compliance, such as the move to introduce statutory guidance for local authority commissioning, there is much more to do in terms of updating and disseminating guidance and increasing the scale and intensity of enforcement action. We believe HMRC should give the sector strong and sustained priority to understand further the scale of non-compliance and deliver targeted enforcement activity. This should include ensuring that it seeks out and takes into account local authority commissioning rates in its risk-assessment and publicises results from the Naming Scheme within the sector. The Government should also consider the feasibility of whether the Naming Scheme can be used to name public sector commissioners of 'named and shamed' social care providers where the local authority can't provide evidence it has fulfilled its obligations under statutory commissioning guidance with regard to payment of the NMW.

Unpaid Work: Interns, Work Experience and Volunteering

5.101 Over the last few years we have received a substantial volume of evidence suggesting a growth in situations where the terms 'internship', 'work experience' or 'volunteer' were applied to unpaid activities that looked like work and to which the NMW should be applied.

5.102 In our 2014 Report, we acknowledged that the Government was being more active in addressing the issue – specifically, naming employers, a poster campaign to communicate issues and some enforcement success – and requested that the Government intensify its efforts to make real headway in tackling non-compliance. We concluded that to achieve greater compliance still, the Government should focus on two things. First, the Government should make clear, comprehensive and accessible guidance readily available, working in partnership with key stakeholders. Second, the Government should continue with targeted enforcement, concentrating on areas where the issue is most acute and reports of non-compliance are widespread.

5.103 In commissioned research for this report, London Economics (2015) analysed interns using data from recent graduates. The researchers estimated that the proportion of interns that were unpaid was at least 13-16 per cent (though possibly much higher as a result of the classification of earnings information associated with unpaid internships). In independent research, the Sutton Trust (2014), estimated around a third of graduate interns were unpaid. Both figures are suggestive of continued possible problems with NMW non-compliance – though neither is the final word as we cannot use the data to separate genuine volunteers from workers.

5.104 In its evidence for this report, the TUC said that workers were continuing wrongly to be denied their true employment status by employers in order to avoid the NMW and other employment rights. It commented that there were still too many unpaid interns. However, the rapid expansion of internships had slowed, possibly reflecting a combination of bad publicity surrounding this issue and a recovering labour market. The TUC added that for the first time they were seeing some 'commission only' intern posts on offer. It told us that the rise of bogus 'volunteer' jobs seems also to have continued, in the private sector as well as the public sector. The TUC also added that such jobs were particularly common in the charity sector.

5.105 The TUC additionally commented that an inappropriate expectation of free work continues in broadcasting, the performing arts and some other sectors. This view was supported by Equity, who said that many organisations in the arts and entertainment industries, particularly film schools continue to reference Section 44 of the National Minimum Wage Act (the NMW exemption for Voluntary Workers) in their attempt to avoid paying the NMW to performers. In the light of this, Equity appealed to HMRC to focus its energies on investigating cases of non-compliance in this area. During our London visit we heard from the Young Women’s Trust how the experience of undertaking an internship can vary. One intern had received good work experience and been paid by one of her employers, but in another internship she had undertaken well-defined job responsibilities for no pay or expenses.

5.106 EEF, the manufacturers’ organisation, thought that the status of interns remained a ‘grey’ area and as such was most likely open to non-compliance, simply due to its complex and confusing nature. Consequently, the EEF called for greater clarity in this area. Intern Aware recommended the introduction of a new four-week limit for unpaid internships. It pointed out that at present both businesses and interns were unclear about when the NMW applied and when it did not, leading to widespread non-compliance. It thought this limit would clarify the current law, which it regarded as complex and ambiguous. Intern Aware proposed that after four weeks there would be an automatic assumption that interns should be paid. The Sutton Trust (2014) also called for all interns working for over a month to be paid the minimum wage.

5.107 Other stakeholders warned that putting a time limit on unpaid internships would create a major ‘loophole’ in the NMW – with unscrupulous employers licensed to take on anyone unpaid for that period – while potentially inhibiting genuine volunteering that lasted longer than four weeks. They called instead for robust enforcement of the existing NMW rules. For example, the National Union of Students (NUS) said that it continued to support the Commission’s position on internships and the minimum wage as outlined in successive reports, and rejected any different set of rules for those undertaking internships and other forms of unpaid work experience. It called for us to continue to recommend strong action is taken to enforce minimum wage rules around internships and unpaid work experience, to avoid further exploitation of young workers. Similarly, UNITE called for the Commission to target enforcement at unpaid internships in the voluntary sector.

“Despite the Government’s work in increasing some enforcement of the National Minimum Wage for interns, employers still routinely advertise for internships which are clearly unlawful. There now needs to be action, and not just words, from those in a position to make change.”

Intern Aware evidence

5.108 Inspiring Interns, a recruitment/placement agency for internships, proposed a new minimum wage specifically for interns, to combat the growing risk applicable to employers hiring graduates in the current economic climate. It believed this intern minimum wage should sit somewhere between the Apprentice Rate and the adult rate of the NMW to mark this career stepping stone and to help improve social mobility.

- 5.109** Mark Watson, a freelancer in the television industry, suggested there had been a noticeable policy shift at HMRC whereby it would not consider complaints from interns where the individual concerned (who was working set hours and had regular duties) had known from the start that the position was unpaid and they had received no payment since starting the post. This would be a concern if true, since it would create a loophole in the law and systematically disadvantage individuals who cannot afford to work for nothing, as well as removing protection in cases where voluntary posts actually turn out to be jobs of work.
- 5.110** Subsequent advice we received from HMRC was that it had not changed its policy. The absence of any payments made would just be one of a number of factors that would be taken into consideration when assessing an individual's entitlement to NMW. So the absence of pay should not in itself mean a case would not be pursued.
- 5.111** This is a facet of the NMW that remains poorly understood. Moreover, because the harm of an agreement to work unpaid is borne by candidates unable to take up a role rather than just the worker concerned, there is a risk such cases will get deprioritised in an enforcement model that is focused on recovering lost wages. For these reasons, we believe it would be helpful if this issue were clarified in the official NMW guidance and in any awareness-raising activities aimed at interns and employers.
- 5.112** In its evidence to us (BIS, 2014h), HMRC said it had fast-tracked complaints from interns. It reported that it had received 238 complaints on the issue, of which 195 were closed. These had identified nearly £472,000 of arrears for 1,624 workers in 33 cases. Forty three complaints were ongoing and there were 162 cases where no arrears were identified. The reasons for non-entitlement to arrears included that: there was no evidence available from the worker/employer to substantiate non-payment of the NMW; the employer was paying the correct amount; or the employer had ceased trading. In addition, in February 2014, HMRC sent 35 'nudge' letters to targeted employers that were, based on HMRC's research, associated with the music industry awards event, The Brits, and were likely to have been involved in recruiting or offering internships. The Government also told us the guidance on the NMW and internships had been updated on GOV.UK to ensure the advice on unpaid work was clear and consistent.
- 5.113** The Government announced in autumn 2014 that it was conducting a wide-ranging employment review to help clarify and potentially strengthen the employment status of workers. The BIS press release (BIS, 2014m) also stated that the review would look at a range of employment statuses – including employee, worker and self-employed. In addition, it said that "for those groups who will always find themselves in a grey area... specific guidance, or even legislation, could provide clarity, reducing the need to rely on courts for resolution." We understand that interim findings were presented to Ministers in December 2014, with the final report to be delivered in the spring. The Government has confirmed that this is an internal, official-led review designed to support future policy decisions.

"If the mountain of media discussion on this subject is anything to go by, it seems to be now pretty much universally accepted that there are huge numbers of young people who are being used as interns who should be paid the minimum wage."

Mark Watson evidence

5.114 The need is for a system in relation to pay for interns that is: simple; that protects workers' rights to the NMW from day one; and that does not inhibit genuine volunteering and work experience. We are also concerned about abuse of internships both in terms of the harm to the individual who goes unpaid, and the harm to the individual denied the opportunity of getting experience because they are unable to take a low-paid or unpaid job. Pending the results of the review of employment status, we encourage HMRC to develop further its enforcement activities in the area of interns and voluntary workers, particularly focusing in those sectors where there is evidence of significant non-compliance (for example, the entertainment sector, PR, fashion, marketing and so on). In response to requests for clarification on entitlement to the NMW where no reward has been paid to an intern, we encourage the Government to ensure that the official guidance is unambiguous on this issue and that cases are pursued. We will continue to monitor developments in this area closely.

Migrant Domestic Workers and Other Migrant Workers

5.115 Evidence in our 2014 Report highlighted the difficulties migrant domestic workers experienced in establishing their right to the NMW. Despite entering the UK on an overseas domestic worker visa, employers often invoked the Family Worker Exemption from the NMW (set up primarily to exclude au pairs from the NMW) to argue that individuals were not entitled. There were examples of higher courts upholding these claims (Low Pay Commission, 2014). More broadly, stakeholders pointed to changes in visa arrangements in 2012 plus reductions in availability of access to legal redress which meant migrant domestic workers faced increased difficulties in enforcing their right to be paid the NMW.

5.116 We recommended that the Government review the law to clarify the entitlement of migrant domestic workers to the NMW. We also urged the Government to raise awareness of the NMW among this group, to undertake effective enforcement action, and to ensure UK visa arrangements involved an effective check on the legal obligation on the employer to pay at least the NMW.

5.117 We were therefore disappointed that in response to the Commission's recommendation, the Government only noted rather than accepted it. The Government said it fully agreed that non-compliance in this area needed to be reduced, and that it would look at this area of the NMW legislation and consider the full range of options to reduce non-compliance.

5.118 In evidence for this report, the Government told us that the Home Office and BIS were working together to ensure that migrant domestic workers received sufficient support to understand and receive their rights under UK employment law. The Government

“Leena’ came to the UK on the ‘tied’ migrant domestic worker visa in April 2014... She works approximately 16 hours a day, 7 days a week. However, since April Leena has received one payment of £100. Leena speaks little English and was not aware of her entitlement to the NMW. It is impossible for Leena to seek redress while still working for her abusive employer. However if she leaves... she is in breach of the immigration rules and would have no means to support herself during any legal proceedings.”

Kalayaan evidence

believed that it was up to the courts to interpret whether the Family Worker Exemption applies in individual circumstances. It said that migrant domestic workers had the protection of UK employment law, including the right to be paid at least the NMW (unless they are treated as if they are a member of the family); the right to a written contract; advice from ACAS and a range of other bodies including the Pay and Work Rights Helpline; and access to Employment Tribunals.

- 5.119** In oral evidence to us, HMRC explained that it was working with the Home Office to obtain data on migrant domestic worker visas in order to undertake a limited amount of targeted enforcement. This work is ongoing. The Home Office has also stated that the Modern Slavery Bill will require the Home Secretary to issue guidance on identifying and supporting victims, which will ensure that more front-line professionals are aware of modern slavery and know what to do if they think someone they encounter is a victim. It will also ensure that appropriately severe sentences can be given to those who have held victims in the worse forms of domestic servitude, sending out a clear message to others that this will not be tolerated.
- 5.120** Our Secretariat met again this year with both Kalayaan and the Anti-Trafficking and Labour Exploitation Unit (ATLEU) to gather further evidence about migrant domestic workers. They reported that individuals in this group faced continued difficulties in enforcing their right to the NMW given: changes to visas; financial barriers to accessing the law; and lack of clarity in relation to the Family Worker Exemption. In their view this remains a cross-government area of weakness – citing lack of Home Office checks on payment of the NMW in visa applications for further leave to remain; and domestic workers being given no information by embassy staff abroad. ATLEU's evidence to us stressed that the Family Worker Exemption had been found to apply in the most extreme cases, where overseas domestic workers have been required to work long hours and in very poor conditions. It was concerned that the exemption is commonly used by wealthy employers to defend claims, where domestic workers have little or no access to legal representation and are subject to removal from the UK once they have left abusive employers. The effect was to disentitle these workers to any payment whatsoever. ATLEU regretted that the Government had not accepted the LPC's recommendation for this area of the law to be reviewed.
- 5.121** Subsequent written evidence from Kalayaan stated that since cuts in legal aid in April 2013, Kalayaan had found significant difficulty in obtaining representation for clients wishing to take legal action against their employer in enforcing the NMW. Only those whose situations came within the definition of human trafficking were allowed access to legal aid, and these were a very small proportion of Kalayaan's clients. Unite called for clear formal recognition that the requirements of the overseas domestic worker visa precluded a 'family member relationship' and that this be properly reflected in BIS guidance and helpline advice.
- 5.122** The Commission remains concerned about this issue. While the Government has said it will improve enforcement of the NMW for this group of workers, it has not addressed the regulations themselves, where we continue to believe the difficulties faced by this group can only be satisfactorily resolved through a review of the application of the Family Worker Exemption. The existing visa arrangements also need to be operated much more effectively and consistently in relation to apparent NMW breaches.

Other Migrant Workers

- 5.123** The NMW problems facing migrant workers more broadly also featured in a number of stakeholder submissions this year. UNISON highlighted concerns about the treatment of a group of Filipino migrant workers in the care sector. Their working week could be as high as 60 hours, sharing an employer-provided flat, with one toilet and no lounge at the care home where they worked, for £300 a month each. They worked a 10 hour nightshift for £35. Another example was of migrant workers, working 42 hours a week, and paid £900 a month. After paying for rent, training and uniforms, they were left with £50 a month to live on, and existed by just eating rice. Citizens Advice Scotland raised similar concerns about the treatment of migrant workers, including a Lithuanian who worked 78 hours a week in a factory for £2.50 an hour.
- 5.124** The Association of Labour Providers (ALP) highlighted a major report by the Migration Advisory Committee (MAC, 2014) which looked at migrants in low-skilled work. MAC concluded that reducing reliance on migrant labour in certain occupations would not happen without changes to a number of policies, including greater labour market regulation in some sectors, more investment in training, better wages and conditions in some low-waged publicly-funded jobs, improved job status, a decline in low-wage agency work and addressing any abuse in use of zero hours contracts.
- 5.125** The wider evidence we received on migrant workers argued that they remain more vulnerable than workers generally to ill-treatment and should continue to be a focus for the enforcement authorities, with calls for targeted action in sectors that use high proportions of migrant workers, including horticulture and meat packing (TUC, 2015).

Fair Piece Rates: Homeworkers and Hotel Cleaners

- 5.126** Where workers are paid on a piece-rate basis and their employer does not control their hours, the NMW Regulations contain arrangements, called Fair Piece Rates (FPR) to measure whether they are being paid at least the minimum wage. If workers' hours are being controlled, then even if they are being paid by the piece, they are regarded as undertaking time-work for NMW purposes, and must be paid on average at the rate of at least the NMW for each hour of work.
- 5.127** Low-paid homeworkers are those most likely to be paid on a piece-rate basis, often performing low-skilled manual work. They are, however, a group about whom it is difficult to obtain information, and unfortunately we have not received any information from organisations representing their interests for either this report or our 2014 Report. We will continue to seek out further information, if possible, in preparation for our next report.
- 5.128** The Commission has also received evidence in recent years of workers engaged to clean hotel rooms, by agency and contract cleaning companies, on a per room basis. This is not illegal in itself. However, the rates were often too low for the workers to have the prospect of earning at least the NMW. We suspected they were in fact time workers rather than piece-rate workers for NMW purposes (as their hours were controlled) and recommended that HMRC investigate this sector. Subsequent feedback from HMRC confirmed our concerns and resulted in arrears payments to workers underpaid the NMW. However, we said we

would continue to monitor evidence from the hotel cleaning sector, and it remains an area of concern.

- 5.129** The Commission also continued to receive evidence from the textiles and clothing sector which highlighted views among manufacturers that because they controlled workers' hours, despite having piece rate arrangements, they had to 'make-up' the pay of less productive workers to the hourly rate of the NMW. Over time, as the NMW had increased, employers told us that the rate of 'make-up' had risen, and the pay differential (and incentive) between the less and more productive workers had reduced.
- 5.130** We again heard from the UK Fashion and Textile Association (UKFT) for this report that the level of pay its members had to make-up was still a concern. Although it had not risen since their last submission of evidence, it was on average 30 per cent for its members. Both in a Secretariat meeting and in written evidence, UKFT explained that when there were faster increases in the NMW this caused the most dramatic rise in 'make-up'; it gave the example of the 2002-04 period when it told us the 'make-up' rate rose from 16 to 28 per cent. Place UK, a soft fruit grower and processor, also raised the issue of 'make-up' pay and said it would like to be able to make use of the FPR arrangement.
- 5.131** In evidence for this report Unite, which has previously noted abuse of piece-rate arrangements in the hotel cleaning sector, reported that the situation had not improved in the past year. The union has again called for the FPR arrangement to be removed from the hotel sector, because it argued hotel room cleaning did not constitute 'output work' under the NMW Regulations. Its evidence also gave examples of how agencies, typically faced with an agreed payment from the hotel for each cleaned room, had an incentive to raise profits by increasing the number of rooms cleaned per hour. The union claimed the fixed rate per room fee was clearly linked to the NMW because it was always revised and renegotiated when the NMW increased in each October.
- 5.132** Unite has again highlighted that 'bogus self-employment' was becoming increasingly prevalent in employment agencies supplying workers to the hotel sector. It described a situation of a 'race to the bottom' in terms of employment standards in the London hotel sector, fed in its view by widespread outsourcing to employment agencies. The TUC also told us there was plenty of low-paid bogus self-employment in occupations such as cleaning, car washing and couriering. GMB highlighted members engaged in door-to-door sales, who were told they were self-employed despite their employers telling them when to come in, when to leave, what to wear and providing them with their work materials.
- 5.133** In the Government's evidence (BIS, 2014h), we were advised of HMRC's investigations into businesses supplying workers in the hospitality sector (specifically hotel cleaning). Ten cases were investigated, with six of these now closed, recovering arrears of over £17,000 for 216 workers. There was an array of infringements, ranging from deductions due to attachment of earnings, uniform deductions, unpaid travel time and hotel cleaning room rates that paid below the NMW when calculated against hours worked.
- 5.134** The evidence from union stakeholders, and the outcome of HMRC investigations, highlighted continued abuse of the NMW rules in parts of the hotel cleaning sector. We encourage HMRC to continue with their enforcement operations. The lack of evidence from any

representatives of homeworkers is an ongoing concern and we will continue efforts to engage and gather evidence. The issues on 'make-up' pay for textile sector manufacturers are bound up with the sector's ability to accommodate faster increases in the NMW. While we acknowledge calls to allow use of FPRs within a 'time-work' environment we believe this could undermine NMW compliance through giving an employer control of both hours and payment per item.

Accommodation Offset

- 5.135** The accommodation offset is the only benefit-in-kind which can count towards payment of the minimum wage. It provides a mechanism to enable employers to offset the cost of providing accommodation for workers against the NMW up to a maximum daily limit – currently £5.08 per day. We were asked to review it for the 2013 Report. The outcome from our deliberations was that: the offset should remain the only permitted benefit-in-kind that can count towards payment of the NMW; there should only be one rate; and that it should apply irrespective of whether the worker has a choice over taking the accommodation. Particularly important in forming our view was evidence that there was no robust test of whether a worker had voluntarily taken accommodation without duress.
- 5.136** The review, however, also concluded that evidence indicated the provision of accommodation by employers had decreased, a concerning trend in cases where it was beneficial to both employer and employee. Although this reduction was likely the result of several factors, we believed a higher offset would help encourage mutually beneficial provision of accommodation. Equally, we did not want to reduce take-home pay at a time when the low-paid were experiencing erosion of their real wages. We therefore signalled an intention to recommend staged increases in the offset towards the hourly adult rate of the NMW when economic circumstances meant the real value of the NMW was tending to rise.
- 5.137** There were a range of stakeholder responses to the outcome of our review. Some employer groups welcomed the Commission's approach to the offset including those representing hospitality and agricultural businesses. Others continued to oppose the existing offset arrangement. Some trade unions were wary of the Commission's signal of future increases in the level of the offset, while some others remained against any deduction for employer-provided accommodation counting towards payment of the NMW. In our 2014 Report, we concluded that we had received no new evidence to suggest we should deviate from the agreed position reached at the conclusion of our 2013 Report review of the offset. As the 3 per cent uprating of the adult NMW hourly rate was expected to be the first real terms increase since 2008, the Commission decided to trigger its signalled intention to increase the offset towards the adult hourly rate, with a 3.5 per cent rise in the daily offset from £4.91 to £5.08 in October 2014.

“Even if the offset was raised to the same level as the hourly rate of the NMW it would not be enough to enable decent accommodation.”

Place UK evidence, Commission visit to Norfolk and Suffolk

- 5.138** In evidence for this report, there was little change in stakeholder views on the offset, and the Commission's approach to it. The British Hospitality Association (BHA), British Beer and Pub

Association (BBPA), Business in Leisure (BIL), and the Association of Licensed Multiple Retailers (ALMR), confirmed they supported the Commission's position on this issue. They noted the 3.5 per cent rise in the offset level in 2014 and looked forward to what they regarded as a move towards a more market-based rate continuing. The National Farmers' Union (NFU) remained supportive of staged increases in the value of the offset, but still balanced this with concern were this to be a consequence of real increases in the adult hourly rate.

5.139 Place UK was concerned at the level of the offset. It said this made it difficult to afford to maintain accommodation standards or justify building further accommodation. It hoped the offset would rise to a 'realistic' level (at least £9.50 per day), or that the offset would not apply when accommodation was not a requirement of the employment. The Association of Labour Providers (ALP) also argued for change. It argued strongly that the general effect of the offset arrangements was that employers could not legally provide accommodation to their own workers paid at or around the NMW. It proposed a two-tier approach to the offset: the existing accommodation offset rules should continue to apply if the accommodation was tied; and a different system, based around market rates, should apply where accommodation was optional. Accommodation would be considered tied if provided in connection with the employment contract; or continued employment was dependent upon occupying particular accommodation; or a worker's occupation of accommodation was dependent upon remaining in a particular job. Underpinning this would be a written tenancy/licence agreement allowing cancellation by the worker without penalty. The ALP also encouraged us to hold a consultation looking at the impact of the offset on supply of accommodation and alternative arrangements; with the consultation scoped in 2014/15 for inclusion in the 2016 Report.

5.140 Trade unions continued to be concerned that the offset rules were being flouted. The TUC said there were still employers who cheated, in some cases with collusion between employers and accommodation providers to facilitate underpayment of the NMW. It called for the re-instatement of previous NMW guidance which outlawed employers splitting their business into employment and housing divisions. The TUC also remained concerned at the poor standard of

some accommodation provided to workers and thought, where it was overcrowded or unfit to occupy, the offset should not apply. Similarly, GMB thought HMRC should be able to call in local authority officials to assess accommodation, and where it was of poor quality it should be able to recover the offset deductions. Usdaw remained wary of the Commission's policy on increasing the level of the offset. It urged caution and called for the level to be increased in October 2015 by a similar level to the general NMW uprating. Unite supported our approach to the offset. The RMT viewed the offset as a tax on the lowest-paid seafarers. It thought it could also be acting as a deterrent to people wishing to start work as ships ratings and contributed to the static rate of recruitment of UK seafarers to the industry. The union urged us to recommend the removal of the offset.

"... the accommodation offset is a license for shipping companies to exploit the lowest paid and, therefore, most vulnerable staff."

RMT evidence

5.141 Overall we found there was little change in either the respective views of stakeholders, or the evidence base, on the offset and our signalled intention to increase its level when there were real increases in the NMW. As the last fundamental review of the offset was only concluded in 2013, we think it is important we continue on the current trajectory and see how it works in practice. So we propose no change in the offset arrangements and set out our recommendation on its level for October 2015 in Chapter 6.

Transport Costs

5.142 The Commission received evidence for our 2014 Report on two familiar issues relating to transport costs and their treatment under the NMW rules. One concerned the situation where an employer provides transport for its workers: representatives of labour providers argued that employers should be able to deduct the cost of this service directly from wages without this lowering pay for the purpose of calculating the NMW. The Commission maintained its previously established position on the matter: that deductions from pay (other than for the accommodation offset) which take pay below the NMW should not be allowed. This was to protect vulnerable workers, as there was no sufficiently robust test to prove acceptance of employer-provided transport was a genuine free choice.

5.143 The other transport-related matter concerned travel and subsistence (T&S) schemes, where workers sacrifice some of their wages and are given a tax-free T&S payment. Gross pay is reduced, but the worker pays less tax and National Insurance (NI), and the value of their pay and T&S payment is higher than their original take-home pay would have been, so they appear to be a net gainer. However, the worker can lose out over the longer-term because paying reduced NI may reduce entitlement to contributory benefits, such as pensions and JSA. Overall the employer is usually the main beneficiary through its lower NI contributions.

5.144 Stakeholders told the Commission that – although the law was changed in 2011 so that tax-free T&S payments could not count towards pay for NMW purposes – such schemes were still operating, with businesses not wishing to conduct such practices being put at a competitive disadvantage. In our 2014 Report, the Commission urged HMRC to investigate the compliance issues raised, and consider the case for providing greater clarity on the NMW rules and the use of T&S schemes.

5.145 In this year's evidence, the Recruitment and Employment Confederation (REC) has again expressed its concern about the lack of clarity in the use of travel and subsistence schemes. In a Secretariat meeting, HMRC confirmed that it continued to see cases relating to use of T&S schemes by employers and agencies, primarily to avoid payment of PAYE and National Insurance, but with some models designed as an attempt to deny workers common employment rights. HMRC advised that five employment agency standards staff remained with them and were being utilised by HMRC in casework and targeted enforcement.

“Use of travel and subsistence (T&S) schemes by umbrella agencies is still being used as a way to make up NMW pay and reduce tax and NICs liabilities, despite changes to the law to outlaw this practice.”

**Supertemps evidence,
Commission visit to Wales**

- 5.146** In a move to clarify the rules more generally around employee benefits and taxation, and in response to the recommendations of the Office of Tax Simplification (OTS), the Government announced in its Budget 2014, HM Treasury (2014c), that it would launch a package of four related consultations on employee benefits-in-kind and expenses, alongside a longer-term review of the tax treatment of travel and subsistence expenses. REC welcomed this review, but said that in conducting it the Government must consider the use of employment intermediaries and how best to regulate this section of the labour supply chain. We await the outcome of the Government's review process with interest for any implications for the NMW and its enforcement.
- 5.147** The Association of Labour Providers (ALP) once again raised the matter of the deduction of transport costs from wages where an employer provides transport for its workers. It maintained this was "a matter of significance to all sectors where workers at or around the NMW are offered transport to work." In summary, it argued that HMRC's interpretation of the NMW Regulations was: perverse; caused labour providers and their workers to incur additional cost; made it more difficult for the poorest workers to obtain work; and put health and safety at risk. It sought a meeting between itself and BIS/HMRC to resolve matters and the LPC Secretariat has encouraged the respective representatives to hold discussions.

Seafarers

- 5.148** The rules surrounding the entitlement of seafarers to the NMW are some of the more complex aspects of the minimum wage framework. Section 1 of the NMW Act 1998 applies the NMW to a person who "is working or ordinarily works" in the UK. Section 40 of the Act provides that the NMW applies to seafarers working on a UK flagged ship, unless either their employment is wholly outside the UK or they are not ordinarily resident in the UK. However, following a ruling by the Court of Appeal in 2011 it was possible that the NMW may be applied to workers on non-UK flagged ships where it can be shown they have a jurisdictional link with the UK. In our 2012 Report, we noted that the Government had convened a working party to consider the legal position on the application of the NMW to non-UK registered ships travelling between UK ports. The Commission encouraged all parties to continue their dialogue to try to resolve the issue.
- 5.149** We received evidence for this report from both the Government and sector stakeholders about seafarers and the NMW. The TUC (2015) estimated 47 per cent of seafarers on British ships were not covered by the minimum wage. It referred to a number of workers who were employed only on ferry routes between two UK ports but still did not receive the NMW. It thought the Government should look again to see if it could do more to ensure that these workers were paid in line with UK law. The RMT argued that legal uncertainty and weak enforcement continued to facilitate poor performance in the shipping sector and the impact of the NMW had been markedly more

"There was a trend of shipping companies exploiting loopholes in the legislation in order to avoid paying the NMW and replacing British seafarers with seafarers from the Philippines who were working for £2 an hour".

Scottish Trades Union Congress evidence, Commission visit to Glasgow

limited than initially promised. It cited a number of cases in evidence, including one ferry operator reportedly paying as low as £2.35 an hour to non-EEA seafarers on ferry services between Poole and Weymouth, and the Channel Islands. The union said that domestic law and international shipping conventions included various legal loopholes which permitted a wide range of discriminatory employment practices. These views were reaffirmed on a Commission visit to Southampton and the Isle of Wight where we met RMT seafarers and officials.

5.150 HMRC/BIS told us that seafarers were a group whose complaints to the PWRH were prioritised and fast-tracked for investigation. However, we understand that no complaints have been received through this route; alternative methods may be needed to uncover non-compliance for this group of workers. The Government also told us it was committed to looking at recruitment and pay practices in the maritime industry following concerns raised by the RMT Parliamentary Group and other trade union representatives about the application of the NMW in the sector. It said it had focussed its enquiries on Irish Sea routes, with concerns raised about potential moves to low-pay models in this area. However, given its international nature, jurisdictions and application of the NMW in the industry are complex. BIS and Department for Transport officials had met with ferry companies operating on Irish Sea routes, and employer bodies, to establish how they take the NMW regulations into account when considering pay and recruitment. The Government said it would now consider the findings of that work and whether any changes to Government guidance or policy were necessary in this area.

5.151 We acknowledge that the application and enforcement of the NMW within the maritime industry is a complex issue, and we welcome the steps that the Government has taken so far. However, we are concerned by evidence of extreme low pay among seafarers on routes between UK destinations with examples that – on the face of it – merit further investigation. We encourage the Government to do all it can to address these issues and specifically to review how the NMW should apply to seafarers on ships working between UK ports.

Conclusion

5.152 This chapter has highlighted a range of encouraging developments during the past year to improve the compliance and enforcement regime. Progress includes the naming of non-compliant employers under the revised Naming Scheme and higher penalties for those employers found in breach of the minimum wage. We strongly welcome the increase in the resources available to HMRC, whose budget is due to increase by a further £3 million in the next financial year – a significant commitment in a period of austerity, though one that needs to be sustained to make a lasting difference. There has also been renewed focus on case handling times, which have been unacceptably slow. This is an area we will continue to monitor.

- 5.153** Other areas require continued improvement. There has been a striking rise in the number of complaints to HMRC concerning the NMW. We do not know for sure the reason for this increase, which could partly be driven by the additional publicity prompted by naming infringers, but we take it as a further indication that additional work still needs to be done before the Compliance Strategy can fulfil its objective that everyone entitled to the NMW receives it. The Government argues that the incidence of non-compliance remains low overall. The evidence suggests to us that when analysis focuses on the lowest-paid workers and sectors most prone to non-compliance, the number not receiving their entitlement is higher than aggregate data suggest.
- 5.154** This matters in particular because of evidence that more demand-led work has affected risk-based targeted enforcement. The latter is critical to ensuring the compliance regime has a systemic effect, helping individuals who do not or cannot complain. Resources for pro-active work need to be protected. Other areas of concern include the depth of official guidance, the need for more awareness-raising and publicity for confidentiality rules, and the use of prosecutions for the most serious infringers.
- 5.155** The evidence suggests some groups remain at greater risk than others of not receiving their entitlement to the NMW. Of particular concern, once again, is social care where reports continue of non-payment for travel-time leading to non-compliance. We also remain concerned about: non-compliance among employers of apprentices; inappropriate use of unpaid interns; the application of the NMW to seafarers on ships working between UK ports; and abuse of the Family Worker Exemption for migrant domestic workers.
- 5.156** While we have not made any formal recommendations this year on compliance and enforcement issues, we urge the Government to consider action in a number of areas:

Compliance and Enforcement Regime

- Implement an overall review of the Compliance Strategy to ensure it remains fit for purpose.
- Ensure that part of the enforcement budget is held and used for targeted compliance work, with social care prioritised.
- Devote further time and resource to raising awareness regarding workers entitlement to the National Minimum Wage and an employer's obligation to pay – including evaluating the impact of its efforts through polling or surveys. Particularly welcome would be further publicity to highlight HMRC's confidentiality/whistleblowing policy.
- Develop the NMW guidance further and engage and work in partnership with those in sectors such as care, agriculture, and entertainment, to address concerns about the existing guidance.
- Consider whether the results from Naming could be put to greater use, further raising awareness of the penalties which result from failing to pay the NMW. There may be scope to do more sector-specific communications work in industries where non-compliance appears to be concentrated.

National Minimum Wage

Apprentices

- Raise awareness of the Apprentice Rate and target enforcement action where the evidence suggests non-compliance is most likely, guided by detailed analysis of the Apprentice Pay Survey and ASHE.
- Explore strengthening the responsibilities or incentives of training providers to communicate the NMW.
- Regularly run the Apprentice Pay Survey.

Care Workers

- Give the sector strong and sustained priority to understand further the scale of non-compliance and deliver targeted enforcement activity. The Government should also consider the feasibility of whether the Naming Scheme could be used to name public sector commissioners of 'named and shamed' social care providers where the local authority cannot provide evidence it has fulfilled its obligations under statutory commissioning guidance with regard to payment of the NMW.

Unpaid Work

- Develop further its enforcement activities in the area of interns and voluntary workers, particularly focusing in those sectors where there is evidence of significant non-compliance (for example, the entertainment sector, PR, fashion, marketing and so on). We encourage the Government to ensure that guidance provides clarity and there is enforcement in cases where no wage has been paid to an intern.

Migrant Workers

- We believe the difficulties faced by migrant domestic workers can only be satisfactorily resolved through the Government looking again at the application of the Family Worker Exemption. The existing visa arrangements should also be operated effectively and consistently in relation to apparent NMW breaches.
- The wider evidence received on migrant workers argued that they remain more vulnerable than workers generally to ill-treatment and should continue to be a focus for the enforcement authorities.

Hotel Cleaners

- The evidence from union stakeholders, and the outcome of HMRC investigations, highlighted continued abuse of the NMW rules in parts of the hotel cleaning sector. We encourage HMRC to continue with its enforcement operations.

Seafarers

- We received evidence of extreme low pay among seafarers on routes between UK destinations with examples that – on the face of it – merit further investigation. We encourage the Government to do all it can to address these issues and specifically to review how the NMW should apply to seafarers on ships working between UK ports.

Chapter 6

The Rates

Introduction

- 6.1** The meeting to discuss and agree our recommendations that are set out in this report was held towards the end of January 2015. The deliberations that took place were based on data and information available up to 23 January 2015. The preliminary estimate of gross domestic product (GDP) for the fourth quarter of 2014 was released on 27 January 2015. That suggested that quarterly growth was 0.5 per cent, a little below that generally expected by economic forecasters, but the estimate for growth in the whole of 2014 was 2.6 per cent, which was in line with what we (and many others) had expected when we agreed our recommendations.
- 6.2** In the previous five chapters we have set out the evidence base used in making our recommendations. Our understanding of the economic context to the October 2014 upratings of the National Minimum Wage (NMW) was set out in Chapter 1, where we discussed the current state of the economy, particularly recent trends in pay, inflation and employment. The impact of the adult rate of the minimum wage, particularly the increases up to and including those in October 2013, were investigated and summarised in Chapter 2. The youth labour market and the impact of the youth rates of the NMW and the Apprentice Rate were considered in Chapter 3. The structure of the Apprentice Rate of the NMW was reviewed in Chapter 4. In Chapter 5, we assessed the workings of the NMW, including issues concerning compliance and enforcement.
- 6.3** As well as that evidence base, we take into consideration the upratings that were made in October 2014, but as we noted in Chapter 2, it was too early to assess fully their impact. In this chapter, we set out: the prospects for the economy; the evidence provided by stakeholders; international comparisons; and recent and proposed Government legislative changes. An assessment of the factors that influence the future path of the minimum wage, as we noted in our 2014 Report, is then presented. All of these considerations helped inform our deliberations. We then set out our recommendations, before considering their implications for the bite of the minimum wage, the coverage of the minimum wage, and its effect on take-home pay. We begin by considering the prospects for the economy in 2015 and 2016.

Economic Prospects

6.4 The recommendations that we make for this report are likely, if accepted by the Government, to be implemented in October 2015 and are unlikely to be changed before October 2016. Therefore it is important that we consider the prospects for the economy over the next 21 months or so, especially the likely strength and direction of growth, employment, inflation and pay. A perennial consideration is the future affordability of the minimum wage in the parts of the economy it affects most – small firms and low-paying sectors. Particularly prominent this year were the likely paths of the prices of oil and energy, and the value of sterling. Inflation and its future trajectory was also very much in our minds, as were the prospects for real wage growth this year and next. In our 2014 Report, we noted that we pay close attention to the real and relative values of the NMW. This remained an important factor in our recommendations. In the section that follows, we consider first the prospects for the economy, price inflation and real wages, before turning to employment and unemployment.

Prospects for GDP Growth

6.5 The UK economy fared better in 2014 than the previous year, growing by around 2.6 per cent, compared with 1.7 per cent in 2013. This was the strongest performance since 2007, when GDP also increased by 2.6 per cent, albeit in line with rather than above the long-term trend. As we noted in Chapter 1, the UK economy had recovered to its pre-recession level of GDP in the third quarter of 2013 and was 2.9 per cent above that level in the third quarter of 2014, following seven consecutive quarters of GDP growth, which had raised GDP by a cumulative 4.6 per cent.

6.6 This pick-up in growth was reflected in revisions to the forecasts over the year, until the Office for National Statistics (ONS) revised the GDP growth data downwards in December 2014. At the time of our deliberations in January 2014 for our previous report, the median of the HM Treasury Panel of Independent Forecasts for GDP growth was 2.6 per cent in 2014 and 2.4 per cent in 2015. The median forecast for 2014 was then revised upwards, exceeding 3.0 per cent in July 2014 and remaining at 3.0 per cent or above until December 2014, when ONS made those data revisions. Forecasts then fell to 2.6 per cent to reflect those revisions. Similar changes were also reflected in the forecasts made by the Office for Budgetary Responsibility (OBR). It revised its forecast for GDP growth in 2014 upwards, from 2.4 per cent in December 2013 to 2.7 per cent in March 2014 and 3.0 per cent in its latest forecast made in December 2014, prior to the ONS data revisions. As recently as November, the Bank of England (2014), anticipating upward (not downward) revisions to the GDP data, forecast growth of 3.5 per cent in 2014. The Bank of England was also more optimistic than other forecasters about the medium-term outlook, forecasting growth of 2.9 per cent in 2015 and 2.6 per cent in 2016.

6.7 The HM Treasury Panel's median of growth forecasts for 2015 have remained around 2.5-2.6 per cent throughout the year, while those from the OBR have been revised up slightly from 2.2 to 2.4 per cent. These forecasts suggest a similar rate of growth in 2015 to that in 2014. The HM Treasury Panel's median forecast of 2.4 per cent growth in 2016 has remained unchanged since November 2013. Similarly, the OBR forecast growth in 2016 of 2.6 per cent

in both December 2013 and March 2014. However, in its latest December 2014 forecast it revised down its expectation of growth to 2.2 per cent, reflecting concerns about further austerity measures and the continued sluggishness of growth in many European countries.

- 6.8** Although the IMF (2015) revised down its estimates of global growth by 0.3 percentage points in both 2015 and 2016, arguing that recession in Russia and the slowdown in China would outweigh the global benefits of cheaper oil, it was reasonably relaxed about the impact of that on the UK economy, maintaining a forecast of growth in 2015 of 2.7 per cent and marginally reducing its forecast for 2016 to 2.4 per cent. The OECD (2014b) also has the UK economy slowing from 2.7 per cent in 2015 to 2.5 per cent in 2016.
- 6.9** Taken all together, these forecasts suggest reasonably sustained growth from 2013 to 2016, albeit, as we showed in Figure 1.2 in Chapter 1, nowhere near as fast as growth following the 1980s and 1990s recessions, and despite the UK starting from a deeper trough. Growth is back to trend rather than at the above-trend level that would mean we were recovering lost ground.
- 6.10** However, many of these forecasts appear to have been overtaken by events. The recent falls in the price of oil and other commodities have reduced inflation and costs to most businesses. Although the UK is an oil-producer and that sector will be damaged by a prolonged period of low oil prices that reduce profits and inhibit investment, most forecasters expect falling oil prices to benefit the UK economy significantly overall, if sustained. Indeed, in the short-term they could add as much as 0.5 percentage points to growth, a substantial boost. Thus, growth might turn out stronger than the current forecasts, with the UK potentially experiencing above-trend growth – notwithstanding other risks discussed in this chapter.
- 6.11** The economic outlook for the low-paying sectors will depend not only on the general level of, and growth in, GDP but also on the difference among the components of growth: consumer spending; government spending; investment; and trade. The largest component is consumer spending, which has accounted for about 61 per cent of GDP in each quarter since 1997. Government spending on consumption has accounted for about 20 per cent and investment 17 per cent, more than half of which was business investment. Imports and exports both accounted for just under a third of GDP, with net trade contributing no more than around 3 per cent of GDP. Thus, the economy is currently dependent on the level and character of consumer spending.
- 6.12** The prospects for consumer spending will affect low-paying sectors such as: retail; hospitality; leisure, travel and sport; and hairdressing. Indirectly, cleaning will also be affected. 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, sport and travel. Investment will help determine the long-run outlook for the UK economy and the path of real wage and productivity growth. We now turn our attention to look at the prospects for consumer spending, investment, trade, and government spending.

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6.13 There had been hopes after the financial crisis that there would be a rebalancing of the economy towards trade and investment and away from consumer and government spending that was dependent on borrowing. In our 2014 Report, we noted that many forecasters were still relying on such re-balancing and continuing to expect trade and investment to pick up in the coming years, but there had been little sign of that so far. However, ONS revisions and changes to the methodology and definitions used to determine investment and trade, now suggest that the recovery had been led by investment to a greater extent than previously thought. Table 6.1 shows the overall weakness of the recovery this time: quarterly growth has averaged just 0.4 per cent, compared with growth of 0.6-0.7 per cent a quarter in the recoveries following the two previous recessions. Consumer spending has been weaker than after the two previous recessions and, unlike in the past it has not been the main driver of growth, increasing on average by 0.3 per cent each quarter since the third quarter of 2009. Government spending held up during the recession but has also grown more slowly than the whole economy since the recovery began. In contrast, investment has averaged growth of 1.1 per cent a quarter, driven in turn by business investment and investment in dwellings (Government investment growth has been much weaker). However, rebalancing has had clear limits. While overall, trade has made a net contribution to growth since the onset of recession in the second quarter of 2008, between the third quarter of 2009 and the third quarter of 2014, imports have grown faster than exports.

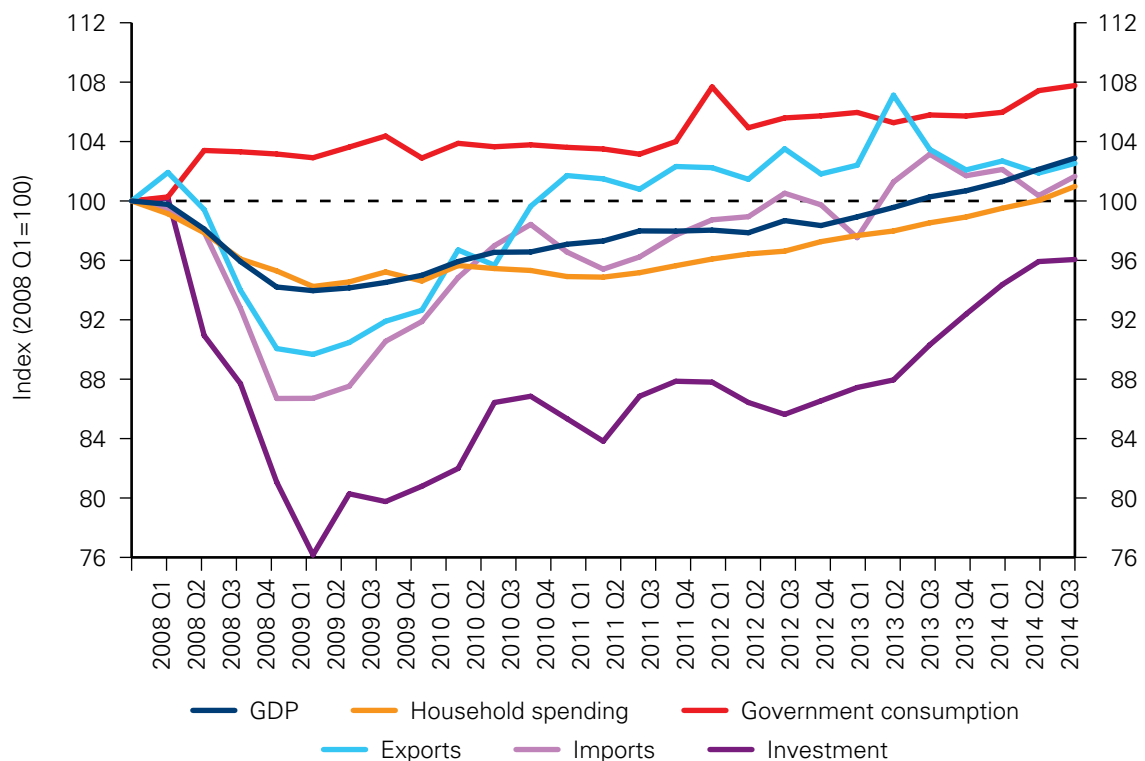
Table 6.1: Components of Gross Domestic Product Growth in Recession and Recovery, UK, 1980-2014

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- 1985 Q2	1991 Q4- 1995 Q4	2009 Q3- 2014 Q3	2013 Q4	2014 Q1 Q2 Q3		
Household consumption	0.1	-0.3	-1.1	0.9	0.7	0.3	0.4	0.6	0.5	0.9
Government consumption	0.1	0.8	0.3	0.2	0.2	0.2	-0.1	0.2	1.4	0.3
Investment	-3.5	-2.0	-4.5	0.8	0.2	1.1	2.3	2.2	1.6	0.1
Business investment	-2.4	-2.8	-3.8	1.0	1.0	1.2	2.7	0.7	3.2	-1.4
Dwellings investment	-7.1	-2.9	-5.5	1.0	1.2	1.2	0.5	6.1	3.1	-0.4
Change in inventories	-1.5	-1.4	-1.4	-0.1	0.2	0.6	2.0	1.6	1.7	1.3
Domestic demand	-1.3	-0.8	-1.4	0.9	0.6	0.5	0.3	0.6	0.5	1.0
Exports	-1.3	0.4	-2.0	1.1	1.7	0.7	-1.3	0.6	-0.8	0.6
Imports	-3.4	-1.1	-2.7	1.9	1.6	0.8	-1.4	0.4	-1.7	1.3
Real GDP	-0.9	-0.4	-1.2	0.7	0.6	0.4	0.4	0.6	0.8	0.7

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) minus alignment adjustment (DMUM), total domestic expenditure (YBIM), total exports (IKBK), total imports (IKBL) and GDP (ABMI), chain volume measures, quarterly, seasonally adjusted, UK, Q4 1979-Q3 2014.

6.14 What about the year-on-year picture? Over the twelve months to the third quarter of 2014, the UK economy grew by around 2.6 per cent, with investment growing at 6.4 per cent, consumer spending at 2.5 per cent, and government consumption spending at 1.9 per cent. There was also a positive contribution from trade albeit one that arose because exports fell less than imports. We now consider the prospects for consumer spending, investment, trade and government spending, looking forward.

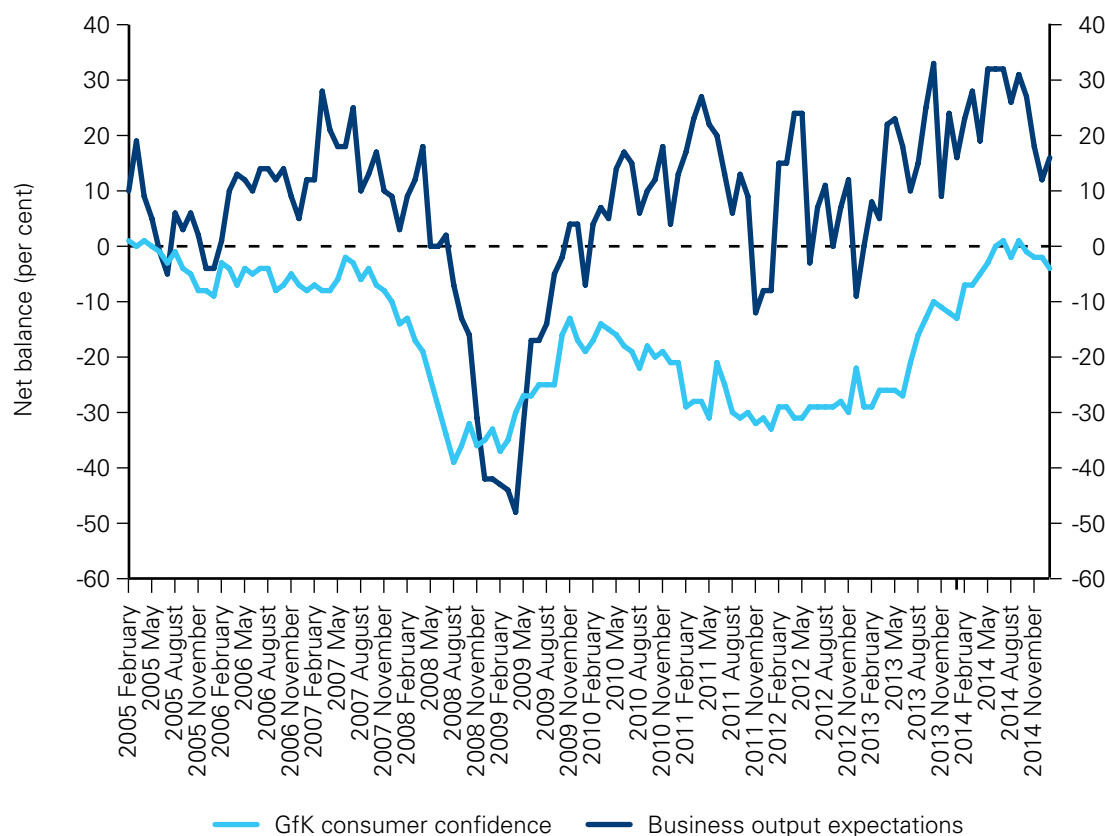
Figure 6.1: Spending, Investment and Trade Since the Onset of Recession, UK, 2008-2014



Source: LPC estimates based on ONS data: household final consumption expenditure (ABJR), general government final consumption expenditure (NMRY), total gross fixed capital formation (NPQT), total exports (IKBK), total imports (IKBL) and GDP (ABMI), chain volume measures, quarterly, seasonally adjusted, UK, Q1 2008-Q3 2014.

6.15 Consumer spending – solid throughout 2014 – grew at its fastest quarterly rate since 2010 in the third quarter of 2014 (0.9 per cent), with spending on vehicles particularly large. Previously we have been concerned that consumption had been financed by falling savings. But recent upward revisions to household income now suggest that since the beginning of 2013 this has not been the case. Rather, real household incomes had increased as inflation had fallen and employment had increased. This more benign picture may have been reflected in retail sales in November 2014, which continued to be strong – although it was unclear whether this was a consequence of underlying growth or consumers bringing forward purchases by taking advantage of the discounts available on ‘Black Friday’. According to the Bank of England’s regional agents (2015a), Christmas trading was solid.

- 6.16** Consumer credit growth also increased. The Bank of England (2015b) reported that credit conditions improved with unsecured lending becoming easier as lending criteria were loosened and the proportion of loan approvals went up. The one weaker area has been the housing market, which slowed towards the end of 2014. Mortgage approvals remained below the Bank's expectations and house price rises had slowed. Secured lending for mortgages had fallen sharply in the fourth quarter of 2014 despite falls in fixed mortgage interest rates.
- 6.17** Consumer spending will depend on future income as well as current earnings. Data suggest that recent increases in average earnings growth and the fall in inflation will boost real household disposable income in 2015. The HM Treasury Panel of Independent Forecasts (2015) has real household disposable income growing by 2.2 per cent, with consumer spending increasing by 2.4 per cent in 2015. With the recent further falls in the oil price and cuts in the price of gas announced by energy companies, these might be underestimates, albeit there is notable uncertainty concerning wage forecasts.
- 6.18** A key factor underpinning improved real incomes is inflation, which is likely to fall to zero in the spring of 2015, according to the Monetary Policy Committee (Bank of England, 2015b), before rebounding towards 1 per cent by the end of 2015. Ernst & Young (2015) has factored in the oil and price changes, and forecast inflation to fall below zero and indeed average zero across the whole year. It also expects average earnings growth to pick up, giving consumers more money in their pockets. It has increased its forecasts of consumer spending to 2.9 per cent in 2015 and 2.6 per cent in 2016. In a special report on consumer spending last September, prior to the recent falls in the oil price, Ernst & Young (2014) predicted the gradual increase in real disposable income would be spent on hotels, restaurants and consumer technology. Its latest view is that bigger and faster increases in real incomes will be spent in a similar pattern, meaning that the main beneficiaries will be hospitality and electronics retailers along with those in fashion and clothing. It is unlikely that food, where there has been price deflation, will see a pronounced impact although there could be a reversal of the recent trend towards discount brands. Consumer goods producers are also likely to benefit.
- 6.19** Consumer confidence, as shown in Figure 6.2, had picked up in line with growth in the economy from the beginning of 2013, but had stalled in autumn of 2014. However, the latest data does not reflect the recent sharp falls in inflation. These, combined with signs of recovery in average earnings growth, may help boost confidence going forward. It should be noted however that these beneficial effects on real household incomes are dependent on inflation remaining low in the short-term as businesses are constrained in passing costs on to customers. Critically, they are also predicated on the disinflation effects being temporary, and not developing into a sustained period of deflation that, if it fed through to wages, may affect the financial position of borrowers, for whom debt would become more difficult to service as real interest rates increased.

Figure 6.2: Consumer and Business Expectations, UK, 2004-2014

Source: GfK consumer confidence index, and CBI, output expectations, monthly, not seasonally adjusted, UK, 2004-14.

- 6.20** The outlook on investment is more ambiguous with encouraging data from the end of 2012 but a sharp softening in sentiment at the end of 2014 saw the recovery become more dependent on consumer spending.
- 6.21** The medium-term picture is that only the first of its three components – business investment, dwellings investment and government investment – has recovered to its pre-recession levels and was 6.7 per cent higher in the third quarter of 2014 than it was in the first quarter of 2008. In contrast, dwellings investment is 3.5 per cent lower and government investment is 0.8 per cent lower.
- 6.22** The rebound in private sector investment has been strong since the recession ended and the recovery began, in the second quarter of 2009, with business investment growing by 29.4 per cent and dwellings investment by 28 per cent. In contrast, government investment has fallen by 6.8 per cent.
- 6.23** Furthermore, over the year to the third quarter of 2014, growth was strong with all components of investment increasing – dwellings investment was up 9.8 per cent, business investment up 5.2 per cent and government investment up 4.8 per cent – although business investment weakened in the third quarter, falling by 1.4 per cent. The Bank's regional agents (2015a) also indicated that investment intentions had eased, with a greater drop-off in manufacturing than in services. CIPD (2014c) found that investment intentions were muted as firms took advantage of subdued wage growth to employ more workers rather than commit to capital expenditure. In contrast, the BCC (2015) suggested that investment intentions had picked up in the fourth quarter of 2014.

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- 6.24** Business investment depends not only on the pick-up in demand but on the expectation that it will be sustained. A weakening outlook may reflect concerns about economic growth and deflation in the Eurozone, along with sterling appreciating against the euro.
- 6.25** A more mixed factor is the fall in the oil price. This has already led to some announcements of delays and cancellations of investment projects and it was likely that further capital spending in the North Sea would be put on hold or cancelled. On the other hand, a significant reduction in costs for many businesses may give firms the headroom to fund investment.
- 6.26** Business investment will also depend on the cost and accessibility of finance, both internal and external. Last year, we reported on some easing of credit conditions. These have been greatest for large firms, which account for about 65 per cent of net capital expenditure. Since then however, credit conditions for small firms have remained restrictive: there have been some reductions in the cost of credit to small and medium-sized enterprises (SMEs) and availability of credit has improved but net lending by banks to all UK businesses continued to contract. SMEs account for around a third of total business investment but rely much more than large firms on bank credit as they have limited access to capital markets and internal financing.
- 6.27** Stockbuilding has been an important contributor to growth since 2010 and again added significantly to growth over the last year, with companies increasing their stocks since the end of 2013. However, surveys have suggested that those stock levels are now close to, or above, their long-run averages. Changes in inventories are therefore unlikely to provide much of a boost to growth going forward.
- 6.28** Overall, business expectations for growth picked up strongly in 2013 and this was sustained until the summer of 2014, as shown in Figure 6.2, with investment intentions and profit forecasts improving. Businesses were expecting a consolidation of the recovery, although credit conditions remain problematic. Concerns about global economic growth outside the US and the UK, may have caused expectations to fall sharply in the latter part of 2014, notwithstanding the possible impact of the oil price fall.
- 6.29** As well as investment, it had been hoped that the economy would rebalance with more emphasis placed on exports of goods and services. The trading performance of the UK will be affected by the value of its currency and the economic prospects in its main trading nations. Despite the large depreciation in sterling between 2007 and 2009 of over 25 per cent against the dollar, the euro and a trade-weighted basket of currencies, the contribution of net trade to growth has disappointed. Exports grew by 14.3 per cent between the second quarter of 2009 and the third quarter of 2014, but imports grew by more (17.2 per cent). A partial explanation is provided by the fact that, although sterling remained around 15 per cent lower than its value pre-recession, it appreciated against the euro and a trade-weighted basket of currencies in 2013 and 2014. Against the dollar, sterling appreciated in 2013 but fell back in 2014 as the dollar strengthened. As well as this general appreciation, recession in the Eurozone, the UK's main trading partner, is also likely to have played a role. To some degree the export performance reflected both of these factors as, between the third quarter of 2013 and the third quarter of 2014, exports fell by 0.9 per cent but imports also fell and by more, down 1.4 per cent. This acted as a boost to growth but only of around 0.2 percentage points.

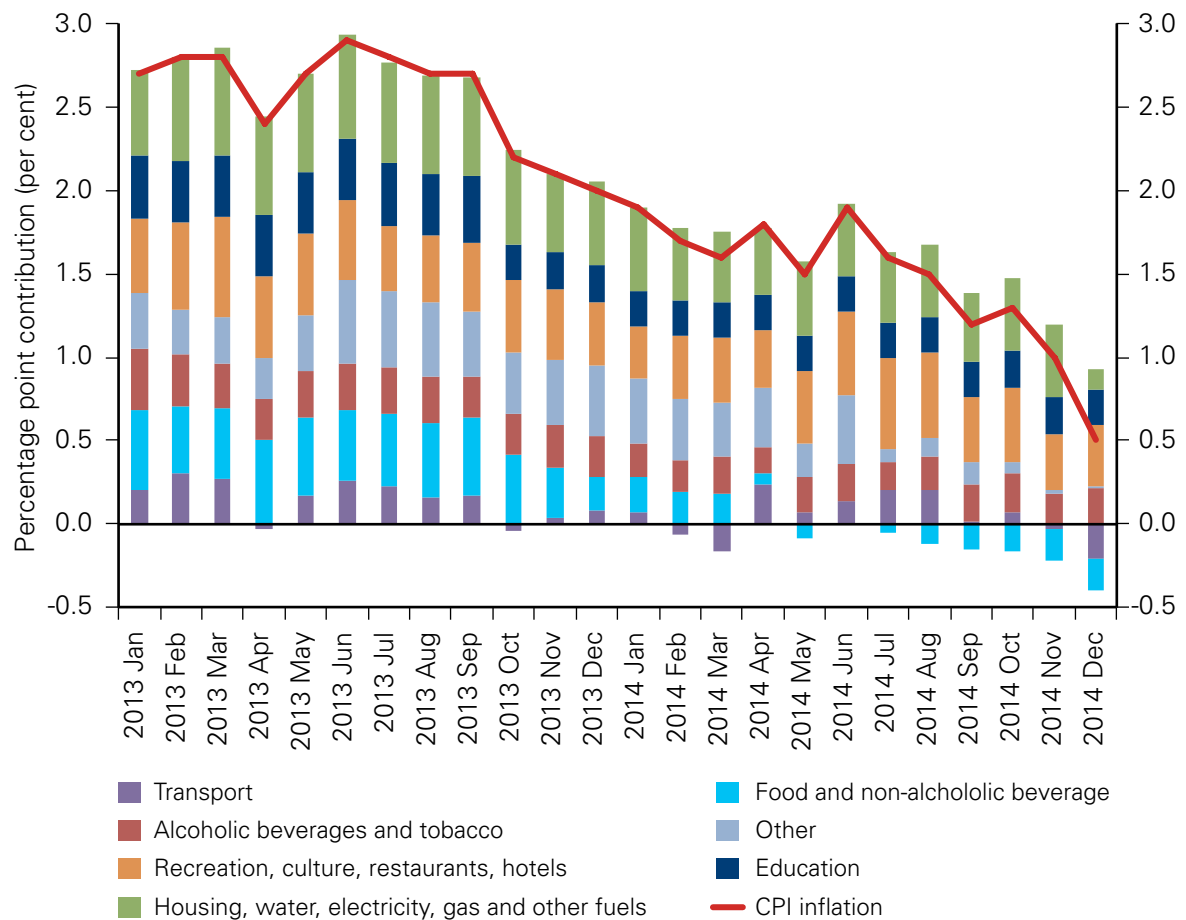
- 6.30** As previously noted, the IMF (2015) has revised down its forecasts for world economic growth in 2015 and 2016. Although it estimated that the recent fall in oil prices in US dollar terms would boost global output by around 0.3-0.7 percentage points in 2015 and 0.4-0.8 percentage points in 2016, it noted other factors moving in the opposite direction. The oil price fall would lead to falling real incomes and profits in oil-exporting countries but boost purchasing power and private demand in oil-importing countries. Apart from the US performing better than most expectations, the other major countries, especially Japan and those in the Eurozone, have performed much worse and are forecast to continue doing so. The US dollar has appreciated while the euro, the yen and emerging countries' currencies, particularly those of commodity exporters, have weakened. The latter countries have also seen interest rates increase, while long-term bond yields have weakened further in many advanced economies, reflecting weaker economic activity and safe haven effects. The IMF noted that the main risks around its economic growth forecasts included: uncertainty around oil prices, particularly if there was a stronger than expected rebound; a sooner-than-expected rise in US interest rates that could lead to financial instability as capital flowed into the US leaving emerging economies vulnerable, particularly oil-exporting countries; protracted low inflation or deflation in the Eurozone; and significant geopolitical risks, especially in Russia, Ukraine and the Middle East, although these effects might be mitigated as increased oil supply meant that their impact on oil prices had declined.
- 6.31** The downward revisions in growth forecasts have been greatest for countries that have a relatively low share in UK exports, such as China (3.4 per cent in 2013) and Russia (1.5 per cent in 2013). In contrast, the US is expected to grow more strongly and has a higher share of UK exports (17.6 per cent in 2013). However, the IMF also revised down growth in the UK's largest export market, the Eurozone, to 1.2 per cent in 2015 and 1.4 per cent in 2016. The change of government in Greece will affect this forecast but the direction and magnitude of any impact is as yet uncertain. All in all, the IMF forecast implies a smaller downward revision to growth in the UK's export markets, down around 0.2 percentage points, compared with a 0.3 percentage point fall in overall global growth forecasts.
- 6.32** Overall we expect continuity, with world growth and the value of sterling unlikely to lead to a significant change in the sluggish trading performance of sectors like textile manufacture, food-processing and agriculture. Tourism from the US might be boosted but this will be offset by the UK becoming more expensive for our European partners. Government initiatives, such as the recent high profile trade missions to China, India and other emerging economies may have a positive impact.
- 6.33** From the start of the recession, government current spending has been one of the main contributors to growth, growing by 6.5 per cent between the first quarter of 2008 and the third quarter of 2014, while other components such as consumer spending (up 1.3 per cent) and investment (up 0.2 per cent) have been much weaker. However, most of that growth in government spending occurred before the second quarter of 2010. Since then government spending has grown by 3.7 per cent albeit half of that growth (1.9 per cent) was in the year to the third quarter of 2014. With economic growth lower than expected between the autumn of 2010 and the end of 2012, and the pick-up in the economy in 2013 and 2014 not leading to the expected pick up in tax receipts, public sector finances had not improved as quickly as

the OBR had forecast. In December 2014 the Institute for Fiscal Studies told us that the annual deficit was 8.8 per cent of national income (£165 billion). The plans set out by the Chancellor in his Autumn Statement (HM Treasury, 2014e) would be equivalent to a fiscal consolidation of 11.1 per cent of real national income over ten years. The fiscal consolidation was set to continue. Most of the tax increases had already been implemented or announced but the UK was only 55 per cent 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. Local authorities are also likely to find it increasingly difficult to maintain the pay differential between their lowest-paid workers and the NMW.

- 6.34** The OBR (2014b) estimated that these fiscal consolidation measures had a substantial effect on GDP, reducing it by about 1.1 per cent in both 2010/11 and 2011/12, and 0.1 per cent in 2012/13. However, GDP was boosted by 0.2-0.4 per cent by fiscal measures in 2013/14 and 2014/15. Wren-Lewis (2014) believed the multipliers used were conservative and that this might be an underestimate of the impact. Looking forward, the OBR (2014b) noted that “the Government’s fiscal plans imply three successive years of cash reductions in government consumption of goods and services from 2016 onwards, the first since 1948. The corresponding real cuts directly reduce GDP.” Thus, these were likely to be a downward drag on GDP in 2016 onwards.
- 6.35** Overall, the economy has picked up and grew more strongly in 2014 than in 2013. This recovery was forecast to be sustained into 2015 and 2016. The forecasts suggested that consumer spending and investment would be the main drivers, with the latter having done more work in recovery than previously thought and the former less. World trade was expected to grow at a slightly faster rate in 2015 and 2016 than in 2014 but would not provide much of a boost to exports, especially as the effects from the appreciation of sterling in 2013 and 2014 worked their way through. As discussed above, government spending was also not expected to provide much of a boost, leaving the consumer and businesses as the main determinants of the future growth path. Consumer spending was likely to depend on real incomes. We now go on to look at the prospects for inflation and wage growth.

Prospects for Inflation, Pay Settlements and Earnings

- 6.36** In the latest data available to us, for the 12 months to December 2014, the CPI inflation rate was 0.5 per cent, its lowest level for 14 years, and the RPI rate was 1.6 per cent. As Figure 6.3 shows, inflation has fallen steadily over the last year due to the appreciation of sterling, lower food prices, and the falling oil price. The falling oil price, dropping from \$115 a barrel in June 2014 to \$50 a barrel in January 2015, has led to substantial falls in petrol prices (from £1.39 to £1.20 a litre between December 2013 and December 2014).

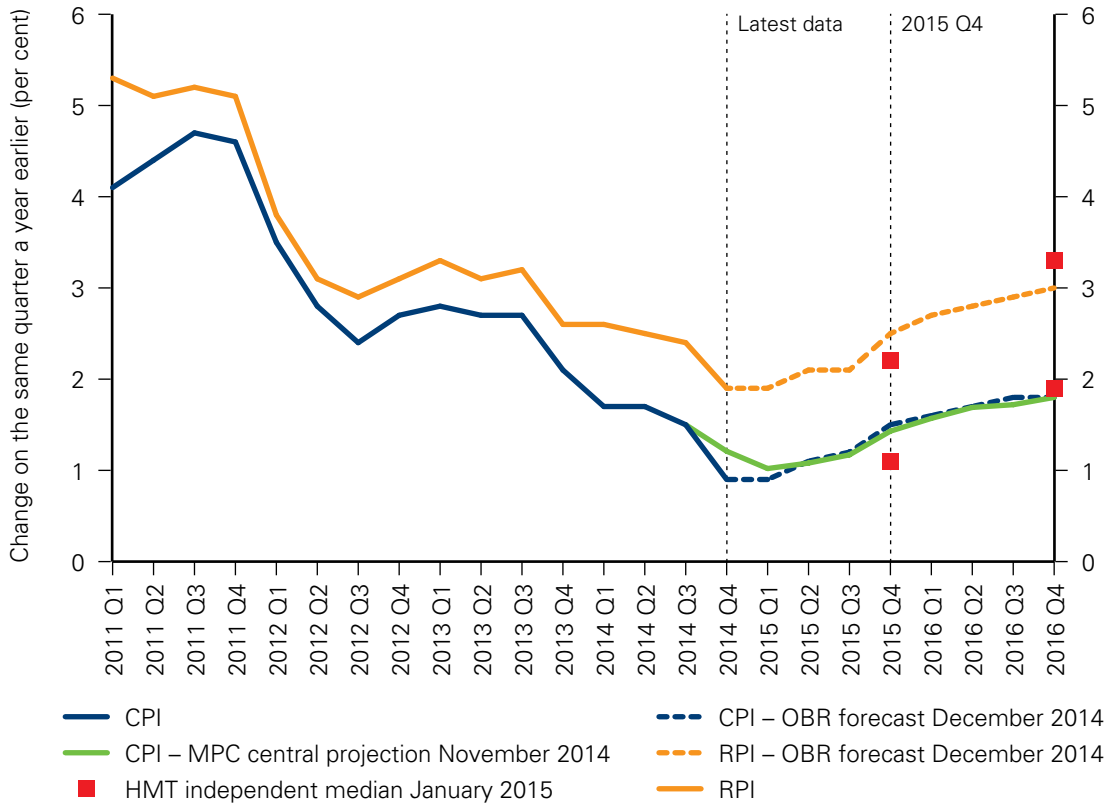
Figure 6.3: Contributions to CPI inflation, UK, 2013-2014

Source: ONS, CPI (D7G7), monthly, not seasonally adjusted, UK, January 2013-December 2014.

6.37 The continued fall in the oil price since December, and the recently-announced cuts in domestic gas prices from February 2015 mean that inflation is likely to fall further in the short-term, but we would expect these price falls to start unwinding in the twelve-month rate by the middle of the year. In January 2015, the Bank of England (2015b) indicated that it expected CPI inflation to reach a trough of zero in March, with a roughly even chance that inflation would temporarily dip below zero at some time during the first half of 2015. The expected near-term profile of inflation was weaker than had been assumed in the November forecast. The MPC considered that the downward effect in inflation was likely to be temporary if oil prices stabilised at around their current level, and that the downward effect from exchange rate movements in 2013 and 2014 could also begin to fade as 2015 progressed.

6.38 Figure 6.4 shows the latest published inflation forecasts available to us. Most of them were from the end of 2014, since when the oil price has fallen further. CPI inflation is forecast to be 1.1-1.5 per cent in the fourth quarter of 2015, with RPI inflation at 2.2-2.5 per cent. The median expectation from the HM Treasury Panel of Independent Forecasts in January 2015 is for a one quarter point base rate rise by the end of 2015, which would directly increase RPI inflation but leave CPI inflation unaffected.

Figure 6.4: Annual Change in RPI and CPI, and Forecasts, UK, 2011-2016



Source: ONS: CPI (D7G7), RPI (CZBH) quarterly, not seasonally adjusted, UK, Q1 2011-Q4 2014; Bank of England (2014c), November 2014, Office for Budgetary Responsibility (2014b) HM Treasury (2014d and 2015).

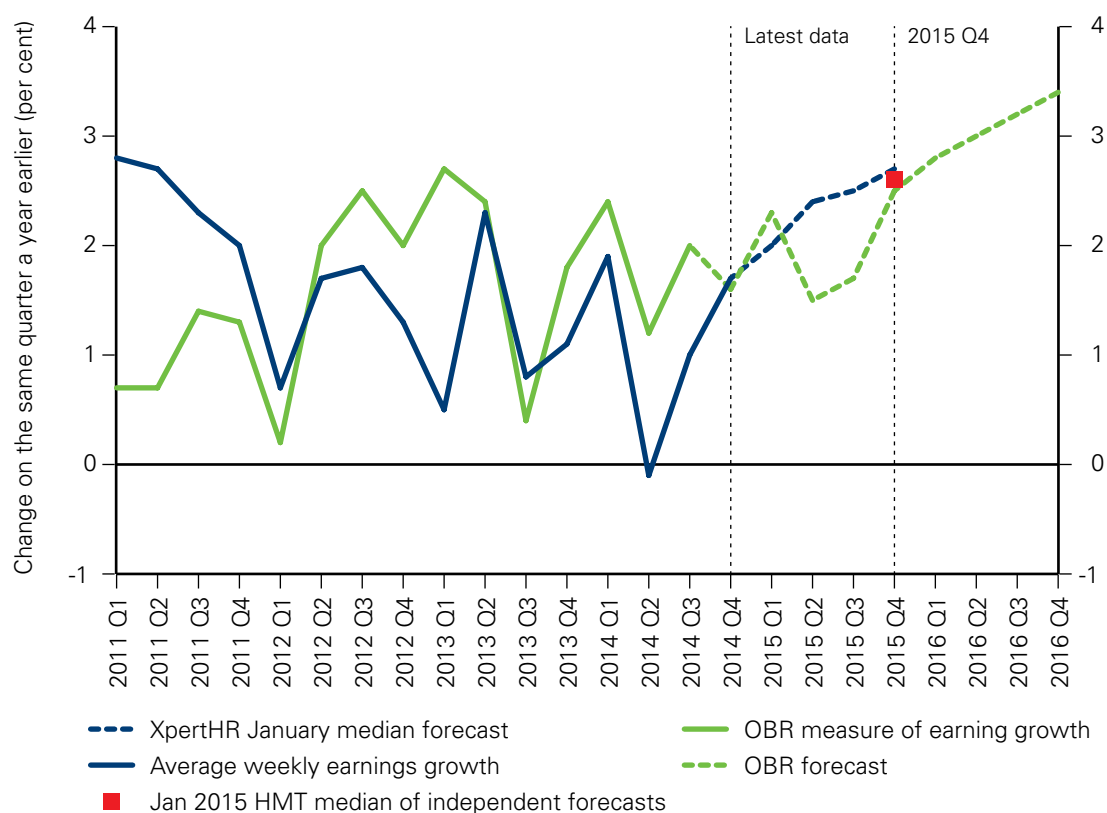
6.39 In its December report, the OBR (2014b) expected CPI inflation to reach a low of 0.9 per cent in the first quarter of 2015, well below its March 2014 forecast of 1.9 per cent, as recent falls in the oil price and the lagged effects of the past sterling appreciation worked their way through to consumer prices. It forecast further falls in inflation if energy companies stuck to their commitment to hold the price of electricity and gas constant (subject to wholesale prices not increasing significantly) as there were large increases in utility prices in late 2013 and early 2014. It forecast inflation to return to the 2 per cent target at the end of 2017. But, with wholesale prices falling, energy companies have recently announced forthcoming price cuts. Inflation is therefore likely to be lower than these forecasts. It should be noted, however, that there has recently been much discussion about the usefulness of both CPI and RPI as measures of inflation.²⁴

²⁴ In May 2013 the UK Statistics Authority (UKSA) commissioned an independent review led by Paul Johnson from the Institute for Fiscal Studies to 'consider what changes are needed to the range of consumer price statistics produced for the UK to best meet current and future user needs'. His report (Johnson, 2015), which included 24 recommendations, was published on 8 January 2015 and provided a wealth of detail on the pros and cons of the various inflation measures as well as detailed recommendations on methodological issues. His main recommendation was that CPIH (a measure which includes owner occupiers' housing costs) should become the UK's headline main inflation measure but that CPI should remain the main measure until methodological problems have been overcome. Perhaps more pertinently, he highlighted statistical flaws in compiling RPI and recommended that the Government and regulators should work towards ending its use. On the other hand, Courtney (2014) offered an alternative, and less complimentary, view of the statistical methodology used to calculate CPI and supported the RPI as a better uprating index.

- 6.40** We now turn to pay settlements, where we looked at measures published by IDS, XpertHR, Labour Research Department (LRD) and EEF, the manufacturers' organisation. Pay settlement medians started 2014 at 2.4-2.5 per cent, but dropped slightly, to 2 per cent according to IDS (2015b) and XpertHR (2015), in the last quarter of the year. IDS recorded 4 per cent of private sector settlements to be freezes in 2014, compared with 8 per cent in 2013, while EEF recorded 7 per cent of manufacturing pay settlements as freezes, compared with 10 per cent in 2013. Manufacturing pay settlements (2.5 per cent median according to both IDS and XpertHR) were slightly higher than private services (2.0-2.5 per cent), with a 1.0-1.5 per cent median in the public sector. As Chapter 2 set out in detail, settlements in low-paying sectors were half a percentage point lower than the overall median – at about 2 per cent, and had indeed been persistently lower over the past four years.
- 6.41** While there is a possibility that the very low, and falling, current rates of inflation may reduce pay settlements further in the first half of 2015, when most pay decisions are made, we have in recent reports noted the weakening of the relationship between inflation and the level of pay increases since the recession. Pay settlement medians were persistently below inflation between 2010 and 2013 and only came into line in 2014 due to falling inflation. With nine out of ten private sector pay settlements (89 per cent) monitored by IDS in 2014 at 2 per cent or above, it seems unlikely that this pay bargaining floor will collapse quickly in the face of a short period of very low inflation.
- 6.42** This view is supported by the available data for 2015. An early analysis by XpertHR of 50 pay awards for this year gives a median of 2.1 per cent, 0.1 percentage points higher than the last quarter of 2014. XpertHR (2015) noted that the first quarter has seen a slight boost to pay awards over the past four years, due to the predominance of manufacturing settlements and the fact that pre-agreed long-term awards are likely to net higher increases, so that January 2015 awards show less of an increase than might have been expected. Overall though, pay settlement medians do not yet appear to be falling in line with inflation.
- 6.43** Surveys of employer intentions undertaken in the latter part of 2014 support the view that pay settlements are likely to remain at around 2 per cent in 2015. In its Labour Market Outlook, the Chartered Institute of Personnel and Development's (CIPD, 2014c) reported that the expected median basic pay settlement, among those employers that were planning a pay review in the 12 months to September 2015, was 2.0 per cent. This was 2.0 per cent in the private sector, 1.5 per cent in the voluntary sector, and 1.0 per cent in the public sector. Similarly, XpertHR (2014b), drawing on its survey of 282 private sector employers, predicted a median pay award of 2.0 per cent in the twelve months to August 2015, matching its 2.0 per cent median for 2014.

- 6.44** Pay settlement data provides us with a timely measure of the momentum in the labour market and the extent to which it affects pay. However this indicator is not representative of all firms and nor, importantly, does it take into account other changes to the wage bill, notably through working hours, variable pay or pensions. For a broader view we turn to the official measure of earnings growth, Average Weekly Earnings. This picks up wider trends in average earnings, including the effects of the changing make-up of the workforce, although, as Blanchflower (2014) has pointed out, this does not fully account for wage changes in small firms.
- 6.45** Average weekly earnings over the first 11 months of 2014 were just 1.1 per cent higher than in 2013.²⁵ Further, according to ASHE, hourly earnings for adults rose just 0.4 per cent in the year to April 2014 – compared with NMW increases of 1.9 per cent in 2013 and 3 per cent in 2014. In Chapter 1 we pointed to evidence that the low recent earnings growth may be a function of the changing make-up of employment: the recent strong employment growth brought in a higher proportion of younger, lower-skilled and less experienced workers with below average earnings, which served modestly to bring down average earnings growth.
- 6.46** Earnings growth may have nudged up in the latter months of the year to levels somewhat nearer those indicated by pay settlements, with headline earnings growth at 1.7 per cent in the three months to November 2014. However, it is too soon to tell whether this is just a short-term change, a genuine tightening of the labour market, or simply a slow-down in the compositional change that had been serving to reduce earnings growth over 2014. Indeed, average earnings growth has noticeably weakened in the second half of 2014 in the relatively low-paid retail and hospitality sector and, unlike in previous years, has shown little discernible impact from the NMW uprating in October. Overall, the picture is one of sluggish performance.
- 6.47** Looking ahead, forecasts suggest that average earnings growth is expected to pick up over 2015, to around 2.5 per cent by the fourth quarter of the year, as shown in Figure 6.5 – though we note that past forecasts have recently been characterised by a persistent optimism bias. The OBR expects real wage growth to resume this year, which seems highly likely in the face of such low inflation, but points out that the longer-term path of earnings growth is reliant on the timing and strength of the long-awaited return to sustained productivity growth. Here the outlook – as we have seen in Chapter 1 and 2 – is still mixed.

²⁵ This is Average Weekly Earnings total pay, seasonally adjusted (KAB9), average of January-November 2014, compared with January-November 2013.

Figure 6.5: Average Earnings Growth and Forecasts, GB, 2011-2015

Source: ONS, AWE total pay (KAC3), quarterly, seasonally adjusted, GB, 2011-14; OBR (2014b), XpertHR (2015); and HM Treasury (2015).

Note: The median of HM Treasury Panel of Independent Forecasts is for the whole year, but this has been plotted in Q4.

Prospects for Employment

6.48 The strength of the labour market in terms of hours, jobs and employment has been a notable aspect of the recovery from the recession that began in 2008. Although output fell by 6.0 per cent in the recession and did not return to its pre-recession level until the third quarter of 2013, total employment and total hours worked fell by less and recovered more quickly. This is in stark contrast to the two previous recessions (in the 1980s and 1990s) when employment and hours took much longer than output to recover. Usually in a recovery growth in employment, and falls in unemployment, will be accompanied by real wage growth but this time has been different. The labour market resilience has been accompanied by low productivity growth and falling real wages.

6.49 Over the last year, as we noted in Chapter 1, there has been exceptionally strong growth in employment, jobs and hours. In the year to November 2014, total employment increased by 612,000 (1.7 per cent) to reach 30.8 million. Over the same period the number of hours worked each week increased by 2.2 per cent to 992.6 million. In the year to September 2014, the number of workforce jobs increased by a remarkable 3.8 per cent to 33.5 million with employee jobs increasing by 3.5 per cent to 28.8 million. Indeed, as we noted in Chapters 1 and 2, the growth in workforce jobs in 2014 was the fastest recorded, at 4.0 per cent, since records began in 1959, beating the previous high of 3.6 per cent in 1988. Employee job growth, at 3.3 per cent, was also the fastest on record, surpassing the 3.2 per cent recorded in 1960. Total employment growth, of 2.5 per cent in the year to the second quarter of 2014,

National Minimum Wage

was the fastest recorded since the first quarter of 1989. That quarter also saw the fastest growth in hours worked (3.2 per cent) since the first quarter of 1989 (3.4 per cent).

- 6.50** The record employment and job levels reflect a growing labour force, enlarged by later retirement, immigration, and changes to the out-of-work benefit system. The working age employment rate (73.0 per cent in November 2014) is back to its pre-recession level (in May 2008). Over the last two years (November 2012-November 2014), employment of those aged 65 and over has increased by about 159,000 (16.3 per cent), with an extra 449,000 people aged 50-64 becoming employed (5.9 per cent). In addition, around an extra 421,000 people born outside the UK have become employed between September 2012 and September 2014. Between May 2012 and May 2014 (the latest data available), a further 685,000 people stopped claiming various out-of-work benefits. They have joined the labour market and have been absorbed by it, as unemployment, measured on both the ILO unemployment basis or the claimant count, and working age inactivity have fallen over the last two years. This performance is more striking given that it has occurred at the same time as the public sector has shed jobs.
- 6.51** In the two years to November 2014, the number of people looking for work and available to start within two weeks has fallen by around 608,000 to 1.9 million, a working age ILO unemployment rate of 6.0 per cent. The unemployment rate for all workers fell to 5.8 per cent. The more timely claimant count has also seen a fall of 691,000 in the two years to December 2014, when it stood at 868,000. Over a similar period (November 2012-November 2014), working age inactivity has also fallen by 43,000 to 9.1 million. On the other hand, the proportion of part-time workers who would like to work full-time remains almost double its pre-recession level, and there remain question marks about the quality of some jobs with more temporary work and zero hours contracts.
- 6.52** The labour supply forces underpinning employment growth are likely to be sustained, albeit with smaller effects. Migration may continue at similar levels – particularly from within the EU, if the UK economy continues to strengthen while the Eurozone stagnates. There is likely to be further pressure on out-of-work benefits and potential tightening of the conditionality regime. By contrast, the impact of changes to the benefit system for lone parents and the move to a State Pension Age of 65 for women will fade, although the increase in the Pension Age to 66 from 2018 may counter this effect to some extent. Older workers may increase their attachment to the labour market but it is not yet known what impact the latest pension reforms will have on incentives to remain in work or return to the labour market.
- 6.53** The OBR and the median of HM Treasury Panel of Independent Forecasts expect a further strong increase in employment in 2015, with growth of 1.2-1.4 per cent, and unemployment is also expected to fall. The OBR expects the unemployment rate to continue to fall relatively quickly in the short-term, to around 5.5 per cent in the first quarter of 2015, as spare capacity in the economy is taken up. Thereafter, it expects the decline in unemployment to slow as the current momentum in GDP growth eases and productivity growth picks up. This is also reflected in its forecast for the adult (16 and over) employment rate, rising from 59.6 per cent in the third quarter of 2014 to plateau at 60.0 per cent in the second quarter of 2015. It is then forecast to remain at 60.0 per cent until the end of 2017.

- 6.54** These forecasts are supported by employer surveys. The CIPD (2014c) reported that near-term employment intentions had risen to their highest in seven years. The net balance of employment intentions, which measures the difference between the proportion of employers who expect to increase staff levels compared with those who expect to decrease staff levels in the next quarter, was +30 in autumn 2014, up from +23 in summer 2014 and +24 in autumn 2013. The positive net employment intentions are driven by the private sector. The net balance for the private sector was +46 for autumn 2014, up from +35 in summer 2014 and +38 in autumn 2013. In contrast the net balance for the public sector had fallen to -23 in autumn 2014, down from -14 in summer 2014 and -19 in autumn 2013. Employment growth was expected to be just as strong in manufacturing as in private sector services. As well as reflecting increased hiring intentions, the positive net outlook was also influenced by a lower share of employers planning to make redundancies.
- 6.55** We noted in Chapter 1 that a strengthening labour market had not in 2014 begun to put pressure on wages. Survey evidence provides mixed support for whether this is likely to remain the case in future. The CIPD (2014c) found that increased hiring intentions, with strong growth in both low-skilled and high-skilled jobs, had not fed through to recruitment difficulties for employers, especially those for low-skilled roles. It reported that competition for low-skilled jobs had increased with an average of 60 applicants for the least low-skilled or unskilled jobs, compared with 50 applicants last year. The labour market was a little tighter for more skilled roles, with 20 applicants on average for high-skilled jobs and 30 for medium-skilled jobs. However, although the number of applicants for medium-skilled jobs was similar to that recorded in 2013, the number of applicants for high-skilled jobs had doubled. Further, around four in ten of all applicants were considered by the employer as suitable. Applications continued to increase from EU migrants and those aged 55 and over. Reports of hard-to-fill vacancies remained broadly unchanged (44 per cent) and only two-fifths of these thought they were due to skill shortages.
- 6.56** Retention pressures also remained subdued, with few workers switching employers. As well as this absence of widespread recruitment and retention pressure, other reasons for weak pay growth include: affordability, with many firms citing poor profitability and low productivity; and increased non-wage labour costs, from auto-enrolment and the recent increase in the National Minimum Wage. Public sector pay has also dampened wage expectations. Public sector employers reported lower or static starting salaries compared with 2013. In contrast, private sector starting salaries were higher than in 2013 but three in ten organisations reported that they had not carried out a review of pay in the last twelve months, equivalent to a pay freeze. This was especially prevalent among small and medium-sized firms. CIPD (2014c) concluded that the labour market was likely to continue to strengthen but with wage growth remaining weak.
- 6.57** By contrast, the Recruitment and Employment Confederation (REC)/KPMG (2014) reported that skill shortages were putting upward pressure on wages. The Report on Jobs showed that, in December 2014, the rate of expansion of permanent and temporary jobs continued to be strong but that the increase in vacancies for both had slowed. The growth in jobs was weakest in construction but increased over the year in hotels and catering. Demand for temporary care workers was strong. Availability of staff to fill both permanent and temporary

staff had decreased and in the low-paying sectors, staff shortages were reported for chefs, care workers, drivers and warehouse workers. Starting salaries for permanent workers and pay rates for temporary and contract staff continued to increase albeit the rates of increase were slower than those in late summer. In its Job Outlook, REC (2015) reported that employers were more optimistic going into 2015 than they were going into 2014, and were planning to recruit both permanent and temporary workers. Three-quarters of surveyed employers were looking to recruit permanent workers and just under a half were intending to increase their use of agency workers. There had been a notable improvement among micro businesses, compared with last year, and they were looking to increase permanent staffing. The survey also highlighted concerns that over 90 per cent of employers had little or no spare capacity to take on more work without creating new jobs. This suggested that if the economy continued to pick up then this could lead to greater employment. However, some employers cautioned that shortages of suitable candidates in some skill areas could hamper growth. These included driving and distribution jobs.

- 6.58** Overall, the labour market continued to perform impressively in 2014, helped by the recovery gaining momentum. This optimism has fed through into the forecasts for employment and unemployment in 2015 and 2016. However, wage growth and pay settlements in general continue to be subdued and remain well below the increases recorded before the recession. Real wage growth was expected to resume – but mainly because of inflation falling sharply.
- 6.59** Productivity had been flatlining on the main three measures – output per worker, output per job and output per hour – and in the third quarter of 2014 remained below their pre-recession levels. However, the latest data showed that productivity had modestly improved on all measures since the beginning of 2014 with output per worker up 0.8 per cent, output per job up 0.5 per cent, and output per hour up 0.6 per cent between the first and third quarters of 2014. Although the forecasters in the HM Treasury do not make labour productivity forecasts, they do forecast output and employment. These forecasts expect output growth to be faster than employment growth in both 2015 and 2016. The OBR does, however, make forecasts about productivity growth. It expects both output per hour and output per worker to be sluggish over the next year or so, with output per hour growing faster than output per worker. Output per hour is forecast to grow by about 1.4 per cent between the fourth quarters of 2014 and 2015, and 2.1 per cent between the fourth quarters of 2015 and 2016. Output per worker is forecast to grow by only 1.0 per cent and 1.7 per cent over the same period. The Bank of England (2014c) also expects only a modest recovery in productivity, as increases in demand enable firms to employ their staff more efficiently and investment responds to improved credit conditions, which may also enable a better allocation of resources within companies and across the economy.
- 6.60** In summary, the prospects for the UK economy in the short to medium-term are good, with growth forecast to be sustained at around trend in 2015 and 2016, despite a notable dip in sentiment in late 2014, and continued weakness in trade. That growth is likely to carry through to the strengthening labour market, with employment growing and unemployment falling – albeit the increase in employment and fall in unemployment will moderate compared with 2014, when job growth was very strong. The latest forecasts are shown in Table 6.2. Inflation expectations are subdued and CPI inflation is expected to fall to zero,

or become negative, in March/April 2015 before picking up, but only to around 1 per cent by the end of 2015.

Table 6.2: Actual Out-turn and Independent Forecasts, UK, 2014-2016

Per cent	Actual data 2014	Median of independent forecasts (November 2014 and January 2015)		OBR forecasts (December 2015)	
	(Actual to Q4/whole year or latest)	2015	2016	2015	2016
GDP growth (whole year)	2.6^a	2.6	2.4	2.4	2.2
Average earnings AWE (whole year)	1.1^b	2.5	-	2.0	3.1
Inflation RPI (Q4)	1.9	2.0	3.2	2.5	3.0
Inflation CPI (Q4)	0.9	1.0	2.0	1.5	1.8
Employment growth (whole year)	4.0	1.2	-	1.4^c	0.7 ^c
ILO unemployment rate (Q4)	5.8	5.5	5.4	5.2	5.2
Claimant count (millions) (Q4)	0.87	0.80	-	0.83	0.82

Source: HM Treasury (2014d and 2015), OBR (2014b) and 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), 2012-15.

Notes:

- Estimate of economic growth based on latest ONS data and LPC estimates of likely Q4 out-turn.
- Estimate of average earnings growth based on January-November 2014 compared with the same period a year earlier.
- OBR forecasts employment levels rather than growth. Growth forecasts shown here reflect the percentage differences between these forecast levels.
- '-' denotes not available.

6.61 Some forecasters are expecting productivity to at last pick up – albeit modestly – and are forecasting an increase in wages to follow. With low inflation, that will result in rising real wages. However, this outlook is subject to a number of important uncertainties. Key areas of risk including productivity growth, the sustainability of the fall in the oil price and, critically, the economic prospects of the Eurozone.

Future Path

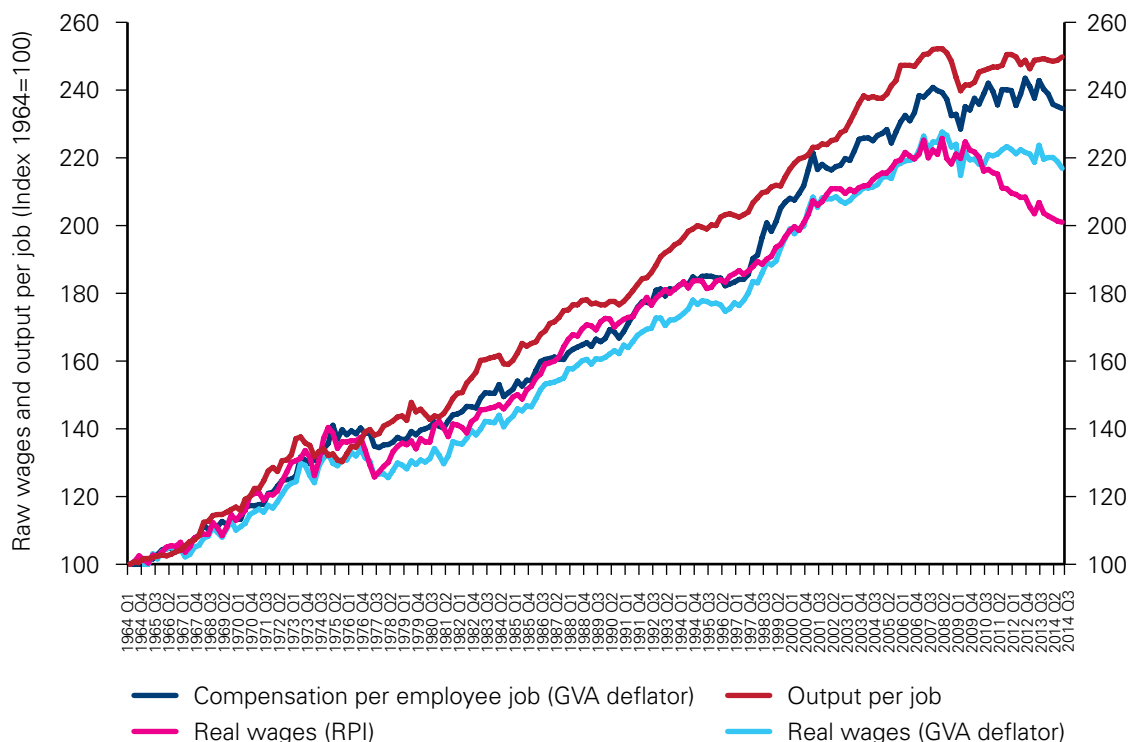
6.62 This year we have again been asked to review the conditions that need to be in place to allow the value of the minimum wage to increase in real terms including updating our advice on the future path of the NMW. This is considered below in our discussion of the rates.

6.63 A key factor that bears upon this, and a critical uncertainty in the outlook, is the future prospects for wages and productivity. We share the generally held view that a sustained increase in real wages depends on increased productivity: for wage increases to be sustainable they must be affordable, which generally requires an overall increase in output per head.

- 6.64** As noted above, forecasts for wage growth are positive, with the OBR projecting growth in average wages of 2.5 per cent in the year to the fourth quarter of 2015 and 3.4 per cent in the year to the fourth quarter of 2016. The HM Treasury Panel only forecasts wage growth for the whole of 2015. Its median is also 2.5 per cent. The Bank of England (2014c) has also reported evidence that wage pressures had started to increase, especially for new starts. With falls in unemployment and the extent of underemployment reducing the slack in the labour market, the Bank of England (2014c) has noted that its regional agents have reported some recruitment difficulties. It judges that, as labour market conditions normalise and workers become more willing to move jobs, the improvement in the economy and further reductions in the unemployment rate are expected to increase wage pressure. The Bank of England (2014c) forecast that annual average earnings growth will increase to 3.25 per cent in the fourth quarter of 2015 and 3.75 per cent in the fourth quarter of 2016. It also noted that these might be underestimates if employees push for higher wages as they become more confident in the sustainability of the economic recovery, or if the degree of slack is less than thought. If inflation remains low, this could be a period of real wage increases.
- 6.65** The flipside to all of these projections is that most forecasters had been expecting similar scenarios in recent years and have been continually disappointed. Excessive optimism has been repeatedly followed by further forecasts, pushing wage growth back to the next horizon. Wage growth has been weak since the onset of recession. It could be that there is more slack in the economy than the Bank of England has estimated. Labour supply has been boosted in the last few years by older workers, migrants, women, and those moving off benefits. This could act as a drag on wage growth for some time. Further, this period of low wage growth could persist if the current low inflation rates get embedded in wage settlements, particularly as the Bank of England (2015b) expected inflation to fall to zero in March of 2015, just before the most common pay review month – April. However, the Bank's central forecasts for wages suggest it sees wage growth returning towards pre-recession levels – 4 per cent. Finally, as we have noted earlier in this chapter, there have been limited improvements in productivity to date, and forecasts are only for a modest recovery by October 2015.
- 6.66** As we noted in Chapter 2, the real value of the adult rate of the NMW in CPI terms peaked in 2007 at £6.74 in 2014 prices. To match that value in October 2015, assuming that the HM Treasury Panel median forecast for CPI inflation of 1.0 per cent turns out to be correct, the NMW would need to rise by nearly 5 per cent to £6.81 an hour.
- 6.67** Our 2014 Report observed that the growth in real labour costs per worker over the longer-term tended to grow roughly in line with productivity. Figure 6.6 shows that there appeared to have been some divergence since the 1990s between real consumer wage (average real RPI wage) growth and productivity. This was particularly marked after the onset of recession, when the real consumer wage continued to fall, while output per job recovered towards its pre-recession level. The real product wage, deflated by the gross value added (GVA) deflator, that better measures changes in the costs of inputs for employers did not fall as steeply as the real consumer wage, but still remained below productivity. If we then take account of non-wage labour costs, such as National Insurance and pension contributions, the difference

between real compensation per employee and productivity is much smaller, but there are signs that it has diverged in recent quarters.

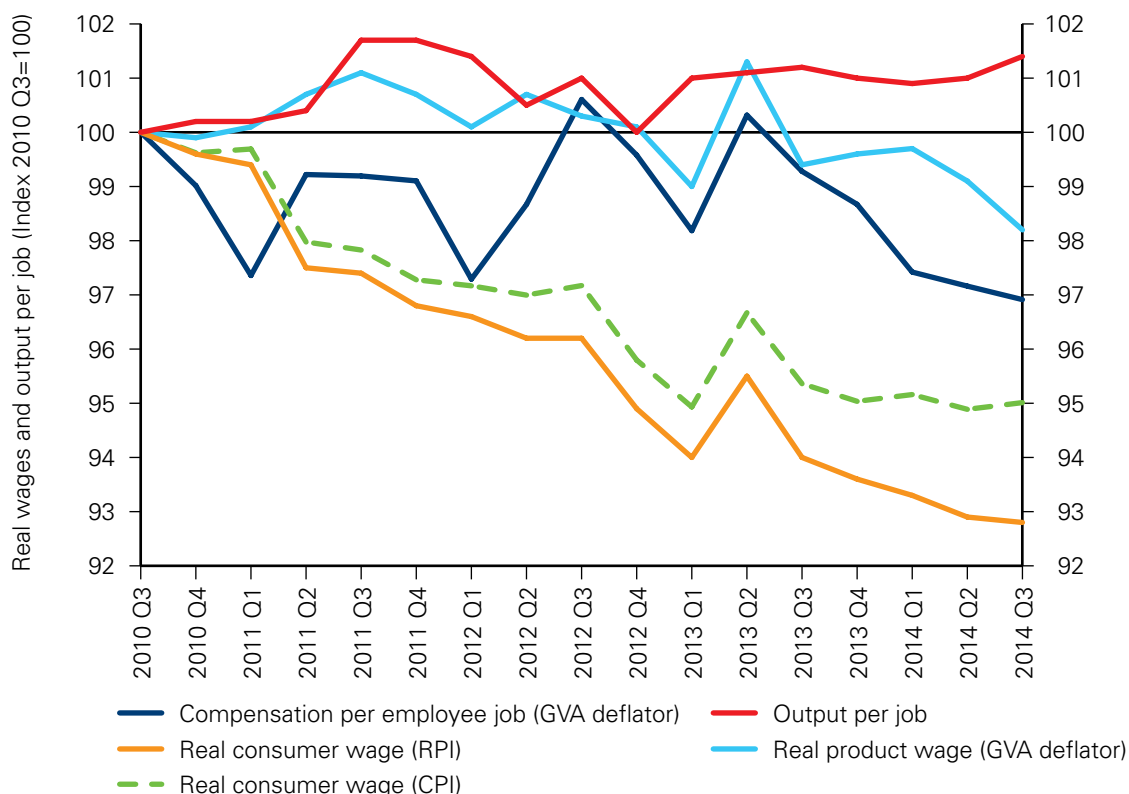
Figure 6.6: Productivity and Real Compensation of Employees, UK, 1964-2014



Source: LPC estimates based on ONS data: Real RPI consumer wage is wages and salaries (ROYJ) per employee job (BCAJ) deflated by RPI (CHAW), the real product wage is wages and salaries (ROYJ) per employee job (BCAJ) deflated by the GVA deflator (CGBV), and the real product compensation is total compensation of employees derived from wages and salaries (ROYJ) and employers' social contributions (ROYK) per employee job (BCAJ) deflated by the GVA deflator (CGBV), output per job (LNNN), UK, 1964-2014.

- 6.68** We used RPI as our measure of consumer price inflation in that long-run analysis as CPI is not available prior to 1988. We can though look at the post-recession period in more detail using CPI as another measure of real consumer wages. Since the third quarter of 2010, output per job has increased by 1.4 per cent and output per worker by 1.6 per cent, although output per hour has fallen by 0.2 per cent. However, over that time, the growth in real average wages, however measured, has not kept pace. The real CPI consumer wage has fallen by nearly 5.0 per cent and the real RPI consumer wage by 7.2 per cent. Even allowing for non-wage costs, and including employers' social contributions, total compensation per employee fell by 3.1 per cent. The real product wage, deflated by GVA, has not fallen as much, reflecting lower inflation for producers than consumers but it still fell by 1.8 per cent. This suggests that there may be a little headroom for real wages and total compensation to catch up with productivity growth. This is a trend we will continue to monitor.

Figure 6.7: Productivity and Real Compensation of Employees, UK, 2010-2014



Source: LPC estimates based on ONS data: the real RPI consumer wage is wages and salaries (ROYJ) per employee job (BCAJ) deflated by RPI (CHAW); the real CPI consumer wage is wages and salaries (ROYJ) per employee job (BCAJ) deflated by CPI (D7BT); the real product wage is wages and salaries (ROYJ) per employee job (BCAJ) deflated by the GVA deflator (CGBV); and real product compensation is total compensation of employees derived from wages and salaries (ROYJ) and employers’ social contributions (ROYK) per employee job (BCAJ) deflated by the GVA deflator (CGBV), output per job (LNNN), UK, 1999-2014.

6.69 Overall, growth in output appears to be on a sustainable path – albeit around trend rather than above. Employment growth also appears strong, and is particularly so in the low-paying sectors. But the performance of real wages and productivity remain weak. While there were some signs towards the end of 2014 that both had picked up, both remained below their pre-recession levels. This remains the key uncertainty in relation to the factors influencing the future path of the NMW.

Stakeholder Views

6.70 As usual, stakeholders have provided views on the future rates of the NMW through a variety of routes including written consultation, oral evidence, visits and a snapshot on-line survey. The names of those who contributed to our consultation, and agreed to be listed, are given in Appendix 1. A summary of views expressed on the rates is set out below. It should be noted that most of the views were received by November 2014, when inflation and the oil price were both higher.

The Adult Rate

6.71 As in previous years there were broadly two views about the right level for the adult rate of the minimum wage from October 2015. Most employer representative organisations

stressed uncertainties in the economic environment, highlighted stagnating average pay and urged varying degrees of caution, with some noting a softening in the economy towards the end of 2014, and reporting that some sectors are already struggling to absorb the last NMW increase, a real-terms increase. The second view, argued strongly by trade unions and others representing workers, was that the labour market was resilient, particularly in the low-paying sectors where past rises had proved no obstacle to employment growth. A further year of recovery, with more positive forecasts on pay and productivity, meant it was time for a significant increase.

- 6.72** There was more individual employer support expressed in our written consultation than in the past for a very substantial increase in the minimum wage, with some support for increases to the level of the Living Wage. Written responses from around 80 businesses expressed this view – representing about half of all our written consultation returns. We do not know why there was a wave of such responses this year, and whether they were prompted by any particular campaign. From the limited information available they appeared to be mainly from manufacturing, construction, design and distribution sector employers. Most were based in London, the South East, or the South West, with around a third small or medium-sized businesses. Many also appeared to be already paying their staff above the NMW.
- 6.73** Few submissions this year called for a freeze in the adult rate. The National Hairdressers’ Federation (NHF) was one exception, citing a poll of its members in which 78 per cent called for a freeze. The Association of Convenience Stores (ACS) also preferred this option, as did the Registered Nursing Home Association (RNHA). Some stakeholders called for an increase below price inflation. The British Retail Consortium (BRC) suggested increases should be guided by long-run average earnings growth, which it put at 0.9 per cent. The UK Fashion and Textile Association (UKFTA) put forward a similar view, an increase of no more than the rise in average earnings. The Food and Drink Federation (FDF) proposed a formula – the movement in basic rates of pay across the economy over the previous 12 months – but was opposed to linking this to average earnings increases.
- 6.74** Some employer voices discussed cautious rate increases. The CBI was one of several organisations which stressed weak productivity, the challenge of absorbing the 2014 rate, and other costs – both automatic enrolment and holiday pay – following recent court judgements. It concluded that cautious upratings remained a necessity and that the recovery was not yet broad enough based to support ambitious upratings in the NMW. The joint submission of the British Hospitality Association (BHA), British Beer and Pub Association (BBPA), Business in Leisure (BIL) and the Association of Licensed Multiple Retailers (ALMR) also urged us to exercise caution. A major hospitality sector employer advised us that any sharp increase in the NMW (above the rate of the 2014 increase relative to CPI) would be counter-productive because it would damage jobs.
- 6.75** The National Farmers’ Union (NFU) recommended that the rise should be limited to 2 per cent at this point in the economic cycle. The Federation of Small Businesses (FSB) suggested an increase in line with the CPI inflation forecast, 2 per cent at the time of

“A significant increase in the NMW would result in our sector either reducing jobs or hours.”

NHF, Commission visit to London

submission. The Forum of Private Business (FPB) also did not feel many businesses were yet ready for above-inflation increases. It suggested 2-3 per cent may be affordable, but would cause some small businesses problems when combined with interest rate increases and pension auto-enrolment costs. The British Chambers of Commerce (BCC) said evidence from its consultation with members found that business was broadly in favour of an increase in line with inflation. It said few favoured increasing it above inflation, suggesting a 3 per cent increase would have a detrimental effect on firms. The UK Homecare Association (UKHA) suggested an adult rate of £6.65, a 2.3 per cent increase, with the strong caveat that, in the homecare sector, any increase needed to be matched by increases in fees from local authorities for their contracted services. The Recruitment and Employment Confederation (REC) said that given the current jobs market, it would support an increase in line with, or slightly above, inflation.

6.76 However, trade unions argued a higher increase was affordable, and necessary. The TUC said that the economy was performing strongly, with the low-paying sectors outpacing the labour market as a whole. It favoured increasing the adult rate to 'significantly more than £7 an hour' (at least 7.7 per cent). This would help restore the real value and support consumer spending. It thought that the evidence pointed to scope for significant increases in the NMW and that the current situation should lead us to consider the dangers of undershooting as carefully as we consider the dangers of being too bold. UNISON suggested a figure of £7.18 (10.5 per cent), a midpoint on a trajectory to the Living Wage. The Union of Shop, Distributive and Allied Workers (Usdaw) suggested over £7 for the adult rate, as well as emphasising the importance of above-RPI increases to address the lower value of the minimum wage in recent years. The GMB said it would like to see an increase to significantly more than £7, with a view to it moving towards a target of £8. It said the rate should at least keep pace with RPI for October 2015. Unite called for an increase to £7.81 in October, which would help the low paid, improve public finances and had the potential to create jobs through stimulating the economy.

6.77 A number of voices wanted to see the NMW reach the level of the Living Wage in time, with differing views on how long it should take to get there. The National Union of Students was in this camp. Derby City Council wanted to encourage a debate about the National Living Wage applying on the same basis as the NMW. The Communications Workers Union (CWU) urged us to undertake a full analysis of the minimum level of acceptable pay in both real and relative terms and to commit to raising the NMW to the Living Wage through a number of staged increases in the next few years. The Rail, Maritime and Transport Workers' Union (RMT) called for only one NMW rate and for this to be set at two-thirds of the male full-time median wage – based on April 2013 data this would have been £9.26.

The workers we met highlighted that without working long hours or having multiple jobs it was difficult to generate sufficient income to live on when paid at the NMW. They supported a higher NMW, generally seeing room for this without an adverse impact on employment. Some supported a Living Wage.

**Hospitality workers,
Commission visit to Wales**

6.78 The Scottish Government suggested that as the economy recovered, consideration should be given to restore the real value of the NMW lost since 2007. It favoured an annual increase in the NMW, at least in line with inflation. It also suggested that we consider a progressive reduction in the differential between the different NMW rates. The UK Government reminded us of its ambition to increase the real value of the NMW without an adverse impact on employment.

The Youth Development Rate and the 16-17 Year Old Rate

6.79 This year only a few responses commented in detail on the youth rates. Employer representative responses generally urged caution, with some calling for increases to continue along the path of recent years, and remain below the adult rates. In contrast, trade union responses highlighted falling youth unemployment and repeated previous calls for the phasing out of the youth rates.

6.80 The majority of feedback from employers or employer organisations favoured caution, with some calling for youth rates to continue to be increased more slowly – for example the joint submission of the BHA, BBPA, BIL and the ALMR. In contrast, youth organisations and trade unions generally stressed the principle that remuneration should not vary according to the age of the employee. Their responses highlighted increased youth employment, reduced youth unemployment and reductions in numbers of young people not in education, employment, or training.

6.81 The National Day Nurseries Association (NDNA) commented that the lower youth rates gave nurseries the opportunity to employ young people and invest in their training and development. NDNA added that they would like all the NMW rates, including the youth rates, increased by “a moderate amount” of 2 per cent. The FSB recommended an increase of the youth rates in line with the forecast rate for CPI inflation, while the BRC maintained that the youth rates and other NMW increases should not exceed long-run average wage growth.

6.82 The NFU commented in its evidence that the lack of job opportunities among 16-24 year olds remained widespread. It called for balance in determining the NMW increases in 2015, recognising the need to price workers into jobs, especially the younger workforce.

6.83 In contrast to the problems with the youth labour market identified by employers, trade unions in their evidence pointed to improving prospects for young people. For example, UNISON said that youth unemployment had fallen by 206,000 over the past year, the largest drop since records began in 1984, bringing it to the lowest level for nearly 6 years.

6.84 As in previous years, UNISON argued that youth rates were discriminatory. It recommended that the Youth Development Rate for 18-20 year olds should be brought into line with the adult rate of the NMW from 2015 and for 16-17 year olds to be entitled to the Youth Development Rate, with a view to harmonising it with the adult rate within three years. Both the British Youth Council (BYC) and the National Union of Students (NUS) had similar concerns regarding the youth rates, with the latter recommending equalisation of minimum wage rates so that all workers aged 16 and over are entitled to the current rate for those aged 21 and over.

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- 6.85** In its evidence, the GMB proposed that the adult rate of the NMW should be paid from age 18, but failing that the youth rates should rise by the same percentage as the adult rate, and faster than inflation and adult earnings. Usdaw agreed, saying that low upratings did not encourage youth employment, and action was needed to stop a drift in the relative values of the Youth Development Rate and 16-17 Year Old Rate.
- 6.86** The TUC argued that no-one had found robust evidence of an adverse impact of NMW on employment of young people. It favoured at least as large a rise for young people as for adults, adding that the youth rates should increase faster than inflation and average earnings.

The Apprentice Rate

- 6.87** Views on the appropriate level for the Apprentice Rate were less clearly divided than those on the adult and youth rates, and complicated by discussion of the appropriate structure. Our review – carried out in response to the Government’s remit request – is set out in Chapter Four.
- 6.88** Most employer submissions to us did not refer to a specific level or applied their views on other rates to this wage. The CBI was concerned that further changes to apprenticeships at a time of considerable wider policy activity would cause confusion, and urged caution. The FSB also referred to wider changes taking place in apprenticeship policy in England and specifically expressed concern that the proposed new funding models may lead in some cases to small businesses incurring higher administrative and training costs. Consequently, the FSB recommended against increasing the Apprentice Rate by a significantly faster rate relative to the 16-17 Year Old, until after the Government’s reforms had taken effect and the impact on employer take-up of apprentices could be appraised.
- 6.89** The EEF, NFU and FDF argued that the existing Apprentice Rate structure was confusing. The EEF supported replacement with the age-appropriate rate. In contrast, the NFU suggested that a rate should be in place that applies to the apprentice regardless of age, increasing as they progress through the apprenticeship scheme to reflect the skills they have gained.
- 6.90** The NHF commented that reverting to age-appropriate rates for the second year for those aged 19 and over was confusing (especially where people were beginning second apprenticeships), and hampered employment. It favoured a flat rate that applied to all apprentices whatever their age. Both the NHF and Association of Convenience Stores (ACS) called for a freeze in the current Apprentice Rate, while White Horse Child Care asked for the NMW rates to be either frozen or reduced in the childcare sector.
- 6.91** The joint submission from the BHA, BBPA, BIL and ALMR also advocated a single Apprentice Rate, up to age 24, to give employers a ‘straight run’ at attracting young people into apprenticeships. BHA added that care and caution should be exercised in determining the NMW upratings in 2015.
- 6.92** Trade unions generally argued for structural reform and higher levels. The TUC spoke for a number of employee representatives in arguing that the Apprentice Rate should be higher, aligned with the 16-17 Year Old Rate. The TUC added that the Apprentice Rate should only

apply to those undertaking intermediate level apprenticeships, not advanced or higher. Furthermore, the rate should only apply to apprentices aged 16-18, or apprenticeships aged 19-20 in the first year of their apprenticeship, not those aged 21 and over. In its evidence the GMB supported the TUC proposal and additionally said that the rate should increase each year of an apprenticeship, and go up by at least RPI.

- 6.93** Usdaw thought the Apprentice Rate should be raised significantly above the general increase, and also highlighted a possible ratio of 80 per cent of the 16 and 17 year old rate (about £3.03). Unite said that the Apprentice Rate should increase by more than the adult rate of the NMW in real terms to help close the gap, whilst the NUS called for apprentices to be paid the adult rate, which should be set at the same level as the Living Wage.
- 6.94** During a Commissioners' visit to the Isle of Wight in July 2014 we met with apprentices in Business Administration who recommended that there should be age-relevant apprentice rates and those aged 20 and over should have a higher Apprentice Rate. On a visit to Norfolk in September 2014 apprentices in plumbing told the Commissioners that the Apprentice Rate should be increased after one year to reflect their increase in skills, knowledge and capability, as they were now generating a financial return for their businesses.
- 6.95** In October 2014 Commissioners met with 25 catering and butchery apprentices in Leeds. During that meeting the apprentices said they would like a higher NMW but were broadly supportive of the principle of a wage discount to cover training costs and also felt that wages should increase with experience.

Implications of Other Government Legislation

Pension Reforms

- 6.96** In our previous three reports we have commented on the introduction of pension automatic enrolment, and its cost implications for both workers and employers. The reforms were introduced from October 2012 and we are now over two years into the implementation phase. The reforms will not fully be in place until 2018. Once again we consider the impact here in light of a further year's evidence.
- 6.97** Under the reforms, all eligible workers have to be enrolled into a qualifying pension scheme. Eligible workers are those aged 22 and over, and below State Pension Age, who earn above £10,000 and who work in the UK. Contributions are based on qualifying earnings which are currently aligned with the National Insurance contribution lower (LEL) and upper earnings limits (UEL). In 2014/15 the LEL is £5,772 and the UEL is £42,285, increasing to £5,845 and £42,385 from 2015/16. For workers who are paid the NMW, this means that they will have to work in excess of 30 hours per week in order to fall within the scope of automatic enrolment.
- 6.98** The pension automatic enrolment arrangements are being implemented in controlled stages, depending on the size of firm. Firms with between 61 and 1,250 workers joined the scheme between October 2013 and September 2014. Small firms (those fewer than 50 employees) are expected to join over the year from June 2015, so its implications for them are relevant to the rate decision this year.

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- 6.99** 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. From October 2017, the minimum contribution rises to five per cent, of which the employer must contribute at least two per cent and then rises again to a total of eight per cent, of which the employer must contribute at least three per cent, from 1 October 2018.
- 6.100** A worker can, if they wish, choose to opt out of the pension automatic enrolling arrangements. As at December 2014, 5 million workers in over 43,000 firms had joined the scheme. The level of opt-outs has been much lower than was originally anticipated. Prior to the new arrangements coming into force, research undertaken by the Government had suggested that the opt-out rate could be as high as 30-35 per cent. However, more recent data have shown a much lower opt-out figure in practice, of between 9 and 10 per cent (Department for Work and Pensions, DWP, 2013). This evidence has prompted DWP to reduce its opt-out forecast to 15 per cent (DWP, 2014b) for the lifetime of the pension auto-enrolment programme.
- 6.101** Stakeholders again raised concerns for this report about the impact of these reforms, with those on the employer side noting the impacts this year on small businesses. Both CBI and the EEF commented that the costs of pension auto-enrolment had increased the cost of employing staff. The EEF added that this additional cost affected an employer's ability to afford an increase in pay and should be seen as a reason to mitigate the pace of increases in the NMW. The FPB said that many small businesses would be forced to contribute to pensions for their staff for the first time, adding that for businesses still not making profit, or with limited cash flow, there would undoubtedly be a decision to make as to whether both a wage rise and pension was affordable. The BRC said that many of its members offered pension packages above the minimum, while the Registered Nursing Home Association (RNHA) said that it expected employees would seek a pay increase to cover their contribution, as well as any cost of living increase.
- 6.102** In the Commission's previous reports, we have given an estimate of likely costs to employers joining during the period for which Commissioners were making their recommendations. The estimated cost for large firms (joining from October 2012) was 0.2 per cent of the total wage bill; for medium-sized firms (joining from April 2014) it was 0.4 per cent. These figures were calculated on an estimated opt-out rate of 25 per cent and the initial earnings thresholds. Revised cost estimates, based on higher thresholds and an opt-out rate of 15 per cent, are that costs will be less than 0.4 per cent for small firms. Costs remain at 0.2 per cent for large firms but fall to 0.3 per cent for medium-sized firms. Costs are likely to be lower for employers in low-paying sectors as minimum wage workers are more likely to work part-time and are therefore less likely to meet the earnings threshold of £10,000. Workers who are paid the adult rate have to work in excess of 30 hours a week in order to fall within scope of auto-enrolment. We estimate that three in five (61 per cent) minimum wage workers in small firms work fewer than 30 hours a week, so up to two in five (39 per cent) will be affected.
- 6.103** Incomes Data Services (IDS, 2014b) undertook research for the Commission's 2014 Report that broadly supported this assessment of auto-enrolment costs. It found that where employers had not yet started the process, they anticipated an increase of 1-2 or 3-4 per cent

on their wage bill. Those that had started reported costs being either less than 1 per cent or between 1 and 2 per cent.

- 6.104** We have again 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 seen that auto-enrolment will have an impact on firms, in terms of a potentially increased non-wage costs, start-up costs, administration, legal advice and communications requirements. On the other hand, the staging of contributions means that the biggest costs are backloaded and the current threshold means that many NMW workers are not directly affected. We will continue to monitor the reforms next year and beyond as more data become available.

Abolition of the Agricultural Wages Board in England and Wales

- 6.105** The Agricultural Wages Board (AWB) in England and Wales was abolished in October 2013 by the Enterprise and Regulatory Reform Act 2013, bringing agricultural workers in England and Wales within the scope of the National Minimum Wage Act 1998. Those in Scotland and Northern Ireland remained subject to their own respective wages board.
- 6.106** The Welsh Government opposed the abolition and argued that the AWB's functions were a devolved matter, passing legislation to carry forward wages board functions in Wales. The issue was referred to the Supreme Court, which in June 2014 found in the Welsh Government's favour.
- 6.107** The Agricultural (Wales) Act 2014 came into force on 30 July 2014. This provided that the Agricultural Wages Order 2012, which previously set out terms and conditions for agricultural workers in England and Wales, continued to apply in Wales until the yet to be formed Agricultural Advisory Panel for Wales puts forward recommendations for a new Order to Welsh Ministers. A formal consultation by the Welsh Government on the structure and remit of the Agricultural Advisory Panel for Wales ended in October 2014 and at the time of our report the Welsh Government, BIS and Defra were exploring what further legislative changes were needed before the new panel could commence its work in late 2015.
- 6.108** In 2014 we reported that employer and union stakeholders continued to hold different views on the impact of the abolition of the AWB in England and Wales. The NFU welcomed the abolition of the AWB, seeing this as simplifying arrangements in the sector and giving farmers greater flexibility to set wage arrangements above a single minimum. Unite, however, voiced its concerns. It estimated that from October 2013 around a quarter of a million rural workers – both those directly covered and those whose pay was benchmarked against the AWB order – would come under the enforcement regime of HMRC. It expressed concern that HMRC would not have the resources to accommodate these additional responsibilities. We said that we would continue to monitor developments and consider commissioning further independent research on the sector, when there had been sufficient time to assess fully any implications for the NMW.
- 6.109** In its latest evidence, the NFU pointed out that this was the first year for the agricultural and horticultural sectors under the National Minimum Wage (NMW) framework. It had undertaken a considerable amount of activity to alert farmers to the changes, and to prepare the industry

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for the new regime, including publishing an information pack and a set of labour market indicators to help employers determine the appropriate rates of pay for their workers. While it was monitoring developments, it was too early to assess the impact of the abolition. Given the differences going forward in minimum wage arrangements between Wales and England, NFU thought it was important that farmers in each country knew which rate of pay applied to their workers and that businesses were not disadvantaged by divergent approaches.

- 6.110** Unite by contrast remained concerned at what it saw as a lack of protection which now existed for agricultural workers pay and conditions in England. It called for monitoring and proposed that we should check to what extent HMRC was equipped to accommodate additional enforcement responsibilities.
- 6.111** We note the steps NFU has taken to prepare its sector for the new regime. While we have highlighted in Chapter 5 that HMRC has received welcome extra resources to ensure that the NMW is properly enforced, we also note continued trade union concern about the changed arrangements and level of wage protection which now exists for agricultural workers in England. We will continue to monitor this issue closely in future, including considering the commissioning of further independent research.

Changes to Other Regulations

- 6.112** In addition to the changes mentioned above, a number of organisations asked us to consider the impact of other regulations on the overall ability of business to afford and accommodate an uprating in the NMW. For some of these business organisations, changes to other regulatory-related costs were of greater concern to their members than the impact from recent NMW upratings.
- 6.113** A number of business organisations expressed concern about recent court decisions on statutory holiday pay, including the potential for backdated claims, notwithstanding a pledge by the Government to legislate to limit these to two years. They argued that this could impose significant costs on firms at a time when the economy was still fragile, albeit in recovery. The ACS and the Rural Shops Alliance (RSA) both also highlighted arrangements for statutory sick pay, under which they could no longer claim back expenditure, as an additional pressure. This would bear particularly heavily on small businesses that were less able to absorb costs. In oral evidence the NHF, representing a sector characterised by small and micro businesses, was also concerned about the increased burden generated by this change. It further highlighted apprenticeship reform as another cost risk for firms in England.
- 6.114** On a Commission visit to Wales, we heard businesses voice concern about the level of VAT and the ending of tax relief for investment in their properties.

“Changes to employment regulations, such as the Agency Workers Regulations, the right to request flexible working and the removal of the Default Retirement Age, and the introduction of pensions auto-enrolment, have had a significant cost impact for smaller companies and companies paying the NMW to some of their employees.”

Food and Drink Federation

6.115 The National Federation of Retail Newsagents (NFRN) was concerned about business rates and utility bills. The BBPA highlighted that the majority of pubs were SMEs and more exposed to sharp increases in inflationary pressures and costs than larger businesses, with fewer economies of scale. The Association of British Bookmakers (ABB) was worried about an increase in the Machine Games Duty, introduced at 20 per cent in 2013 and increased to 25 per cent from March 2015. It said this additional cost was leading to shops becoming unprofitable and some had closed.

“Staff costs were the main cost pressure reported by 38 per cent of businesses... Only a small minority reported the staff costs were due to increases in the National Minimum Wage, with auto-enrolment, real time information and salary costs more influential.”

Forum of Private Business

6.116 This year we heard renewed concern about the effect of regulation in the care sector. Care England explained at its meeting with the LPC Secretariat that forthcoming changes under the Care Act 2014 were likely to have a significant impact. An increase in the upper threshold for means-tested support to £118,000 (from £23,250), effective from April 2016, would reduce the number of self-funders and thus possibly adversely affect the financial viability of services. The RNHA also highlighted this issue. It feared that the amount of money transferred from central to local government to pay for the increased threshold would be less than required. Further serious financial pressures on care home owners could result in increased closures. The RNHA also reminded us that its sector has had to absorb costs associated with registration of staff in the past and these costs continue. We looked at the funding of independent adult social care providers, and the impact from the NMW, in Chapter 5.

6.117 In the nursery sector, the NDNA stated that a critical factor limiting pay in the nursery sector was the level of funding paid to nurseries for government-funded free early education. The offer of 15 free hours per week (in England) covered all three and four year olds and was being extended to 40 per cent of two year olds. However, the rate paid by local authorities to provide these free hours was often below the cost of delivery. NDNA highlighted findings from its most recent annual survey, which indicated that nurseries were losing £900 per child per year on provision of places.

International Comparisons

6.118 Once again this year we have looked at the level and arrangements for minimum wages in a number of other countries. We have monitored the situation in 12 comparator countries since 1999 when the NMW was introduced in the UK. In addition, this year we have collected information on Germany, which introduced a national minimum wage of €8.50 for the first time in January 2015. More detailed analysis is contained in Appendix 3.

6.119 Overall, there has been little change since our 2014 Report with regard to the position of the UK's minimum wage, whether its value is ranked against these comparator countries in sterling exchange rate or purchasing power terms. It has remained in the middle of the group. The bite of the UK's minimum wage has however slightly increased in comparison

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with the other countries. For example, in 2013 the UK minimum wage had a higher bite than five countries (US, Japan, Greece, Spain and Canada) up from three in 1999.

- 6.120** Countries with a higher minimum wage than the UK's such as Australia, France, the Netherlands and New Zealand generally uprated their minimum wage, while those with a lower one such as Spain and Greece continued to freeze their rates in 2014. A number of members of this latter group continued to face severe economic conditions and, in some cases, had specific wage terms linked to international loans. An exception to a continued freeze in the minimum wage rate was Portugal which, following a two and a half year recession, uprated its minimum wage by 3.9 per cent in 2014, after its first full year of growth.
- 6.121** As well as monitoring minimum wages in other countries we have this year taken part in a two-day Peer Review on the UK's National Minimum Wage, organised by the EU, and hosted by us and the Department for Business, Innovation and Skills. Held in London, over 30 delegates from seven Member States, Norway, and international bodies attended the meeting to learn about how the UK had introduced and operated its minimum wage since 1999. The UK's model continues to influence other countries' approaches to minimum wage setting. For example, the Republic of Ireland is this year introducing its own 'Low Pay Commission' designed along similar lines to the UK's.

Recommended Rates

- 6.122** Discussion of the outlook for inflation, wages and productivity were at the centre of deliberations this year. Arguments for a substantial increase in the adult rate included that:
- growth remains strong and stable and the recovery is well established. While GDP growth is forecast to be slightly lower in 2015 than in 2014, it remains in line with pre-recession trend levels, and the fall in the price of oil will, if sustained, be a further boost;
 - the performance of the labour market continues to exceed expectations. It is notable that the employment rate for adults is back to its pre-recession peak, while absorbing a large increase in labour supply, resulting in an increase of a million more people employed. There is new evidence of improvements for younger workers. There have been improvements in employment and reductions in unemployment across regions and nations;
 - the employment performance of the low-paying sectors continues to match or surpass that of the economy as a whole, suggesting that the record bite of the NMW has not had an adverse effect on employment among the low paid;
 - while wage growth and productivity remains sluggish, they are somewhat understated because of compositional effects, and forecasts for 2015-16 are promising.
- 6.123** However, other arguments suggested caution. These included that:
- growth, while well-established, continues to rely too heavily on consumer demand to command confidence in its sustainability. Though the overall economic outlook is positive,

there are serious risks from the Eurozone, recession in Japan and softening performance in China and India;

- the bite is at its highest ever level, 53.9 per cent, surpassing the previous peak of 2012. It is also at its highest level ever across low-paying sectors as a whole and across all sizes of firms, reaching 67.2 per cent for micro firms – before all the effects of the October 2014 increase have been priced in;
- productivity and wage growth remain weak, even correcting for compositional effects;
- lower inflation is a mixed blessing. Previous NMW increases above average earnings may have been affordable only because they were below increases in prices. Low inflation, while bringing boosts to real incomes within sight, implies reduced scope for employers to pass on the cost of large wage increases in higher prices.

The Adult Rate

- 6.124** Last year we recommended the first real terms increase in the value of the minimum wage since the recession. Over the course of the slowdown its level rose relative to typical earnings to near its highest ever, increasing the relative pay of the lowest-paid – an encouraging difference from recessions going back to at least the 1970s, in which those at the bottom had tended to fall behind. On the other hand high inflation meant that the real value of the minimum wage, like other wages, fell. We saw this as necessary to protect the jobs of the low paid.
- 6.125** 2014 was a milestone because we judged that economic recovery allowed us to take a first step towards larger increases. Influential in our decision was a more optimistic economic outlook, a strongly performing labour market and a small fall in the relative value of the NMW. We cautioned that it was too early to know how strong and sustained a recovery would be. We were concerned about the extra pressure on social care. Overall however, we judged that provided the economy continued to recover, we expected to recommend further progressive improvements, restoring and then surpassing the previous highest level of the minimum wage.
- 6.126** This year, strong performance on employment and unemployment has continued, beating expectations. Growth has been sustained while inflation and the oil price have fallen. Nominal pay growth has remained sluggish. Overall we judge that, like last year, sharp increases in the minimum wage would put jobs at risk – not least bearing in mind pressure on low-paying sectors and small firms. The bite (the minimum wage as a proportion of median wages) is now at its highest ever: overall, in low-paying sectors, and in firms of all sizes.
- 6.127** We do believe however that the recovery should this year allow a further increase in the real and relative value of the minimum wage. A persuasive factor in our decision has been evidence that firms have been able to adjust to previous increases without damaging employment. Indeed, as Chapter 2 set out, there has been very strong jobs growth overall and in the low-paying sectors.

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- 6.128 We recommend that the adult rate of the National Minimum Wage be increased by 3 per cent to £6.70 an hour from 1 October 2015.** Forecast inflation at the time we met to agree our recommendations was 1.0-1.5 per cent, so this should be a bigger real increase than last year. It should mean two-thirds of the fall in the real value of the NMW has been restored relative to its peak in 2007.²⁶
- 6.129** Over two years the NMW will have increased by more than 6 per cent. Because of the improved economic and labour market conditions we believe once again that employers will be able to respond in a way that supports employment. However, our recommendation this year is predicated on a forecast which foresees lower input costs for business in fuel and energy, a strong economic performance, significant recovery in earnings across the economy and rising productivity. If these expectations are not borne out over the year we will take this into account when considering next year's recommendation. We also remain concerned about the pressures the increase will place on social care. We urge the Government to ensure funding is available to meet the extra burden the NMW rise will place on the sector.
- 6.130** Overall our recommendations for the adult rate may increase the number of jobs covered by the minimum wage significantly – to 1.43 million in October 2015 compared with some 1.2 million in April 2014, albeit this analysis is sensitive to what happens to earnings growth and pay structures. When the ASHE surveys become available to validate this estimate, the 2014 and 2015 NMW increases may each be seen to have added about 115,000 jobs to the total, together expanding the coverage of the NMW by 20 per cent. For comparison, around 900,000 jobs were covered at the start of the downturn in 2008. The increase reflects the fact that the minimum wage has risen relative to median wages.

The Accommodation Offset

- 6.131** In 2013 we conducted a review of the accommodation offset. As a result we said that it was our intention to recommend staged increases towards the value of the adult rate of the NMW when economic circumstances mean that the real value of the NMW is tending to rise. As indicated above, we are recommending an increase in the NMW that should deliver a further increase in its real value. We are therefore making a second step in raising the offset's value, by recommending that it increase by a larger amount than the increase in the NMW. **We recommend that the accommodation offset be increased by 27 pence to £5.35 a day from 1 October 2015.**

The Youth Development Rate and the 16-17 Year Old Rate

- 6.132** In recent years we have recommended smaller increases for young people than for adults because their labour market position has been worse, and the damaging consequences of unemployment even more serious. We have also said that we expected to be able to recommend larger increases when economic conditions have eased and indeed that the youth rates should increase by more than adult rates when economic circumstances permit. This year wages for workers aged 18-20 have outperformed adults and, for this group, the

²⁶ The Bank of England's latest CPI forecast, released on 12 February 2015, after we had met and agreed our recommendations, was 0.5 per cent for the fourth quarter of 2015. On this basis, the recommended increase would restore three-quarters of the fall in the real value of the NMW relative to its peak in 2007.

bite has fallen. There has been further improvement in the employment position and the abolition of employer National Insurance contributions for those under 21 from April 2015 should modestly reduce employment costs for about two-fifths of this age group on the minimum wage. These factors mean we see scope to take a step towards bigger increases for this cohort. **We recommend an increase of 3.3 per cent in the Youth Development Rate to £5.30 an hour from 1 October 2015.** This should increase its real and relative value.

- 6.133** The labour market position for 16-17 year olds remains less strong than for 18-20 year olds, with improving unemployment but sluggish wage growth. Meanwhile new research for the Commission this year has provided evidence that caution on the NMW helped to protect the employment of this group during the recession. **We recommend an increase of 2.2 per cent in the 16-17 Year Old Rate to £3.87 an hour from 1 October 2015.**

Apprentice Rate

- 6.134** No apprentice pay survey took place in 2013 so we had little new evidence last year to inform a recommendation. In previous years we had taken a careful approach, calibrating the original level of the Apprentice Rate in 2010 to be roughly equivalent to the weekly minimum then provided by the Learning and Skills Council in England, which was in turn equivalent in value to the financial support that those in full-time education could receive. The level of the Apprentice Rate was set below the 16-17 Year Old Rate to recognise the costs to employers of providing training (and thus supporting provision) while also protecting apprentices from exploitation. We have generally recommended modest increases since.

- 6.135** Over the past year apprenticeship starts have fallen overall, driven by those aged over 25, but have increased for those aged under 19. The new Apprentice Pay Survey has shown non-compliance remains unacceptably high, though at a lower level than in previous estimates. Meanwhile, as Chapter 4 sets out, we have been asked to consider the possibility of structural changes including an option suggested by the Government that would significantly increase the level of the Apprentice Rate.

- 6.136** Overall, we judge that large increases in the level of the Apprentice Rate could pose risks to provision. However, we do believe there is scope for a more cautious step. **We recommend an increase in the Apprentice Rate of 2.6 per cent to £2.80 an hour from 1 October 2015.** This rate would apply unless the Government decides to proceed in this timescale with structural change, for example, the option to combine the Apprentice Rate and the 16-17 Rate set out in its evidence. We highlight the significant risks of this option in Chapter 4. We encourage the Government to redouble its efforts in actively publicising the existence and level of the rate, which the evidence suggests is poorly understood.

Future Path

- 6.137** This year we have again been asked to review the conditions that need to be in place to allow the value of the minimum wage to increase in real terms including updating our advice on the future path of the NMW.
- 6.138** Last year we said 2014 could mark the start of a new fourth phase for the minimum wage, of bigger increases than in recent years, following previous phases of cautious initial increase

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from the late 1990s, bolder above-inflation increases in the early 2000s, and increases above average earnings growth but below inflation during the recession and its aftermath. However, to achieve our shared aim of faster increases in the minimum wage without risk to the employment of the low paid, we believed it would be necessary to see rising real wages in the economy, stable or rising employment, particularly in low-paying industries and small firms, and an expectation of sustained economic growth.

- 6.139** We thought government had scope to influence these conditions to some degree. For example, it could affect general economic conditions through macroeconomic levers. It could directly influence the employment costs of low-paid workers via National Insurance and tax and wider regulatory requirements such as pensions. It could also play a role as an advocate. We highlighted evidence that one in four NMW workers were not in low-paying sectors and that for many it may be affordable for employers to raise their wages without adverse impacts.
- 6.140** A year on, our analysis of the basic considerations necessary for rises is unchanged: it remains centred on growth, jobs, productivity and earnings, with a particular concern for low-paying sectors.
- 6.141** In relation to where the UK stands against those considerations, we judge that – as this chapter and Chapter 2 set out employment is strong and rising, with impressive performance in low-paying industries and small firms. Economic growth has also been solid and is somewhat more balanced than last year – though sentiment weakened towards the end of 2014, growth remains too unbalanced for us to be fully confident it is sustainable, and a welcome fillip from falling oil prices needs to be weighed against external risks, notably in the Eurozone. The area where there is least certainty is wage growth and productivity, where 2014 saw limited progress. More positive forecasts for 2015, while encouraging, on past experience need to be interpreted cautiously. While this year we believe that there is scope for another real increase, further evidence of improvement in average pay, and productivity will be important to the future trajectory.
- 6.142** We remain of the view that policy action can help to support a higher minimum wage. We also continue to believe that employers who are not driven by business pressures to pay the NMW should be encouraged to pay more.

Implications of the Recommended Rates

- 6.143** In assessing the likely impact of our minimum wage recommendations, we have looked at various factors, including the bite (the value of the minimum wage relative to average or median earnings) and the coverage, as well as likely changes to household income. We also consider the likely impact on wage bills and the Exchequer.

Position Relative to Average Earnings

- 6.144** The bite of the minimum wage is one way of assessing the impact of the minimum wage on the earnings distribution. In April 2014, it was 53.9 per cent for workers aged 21 and over according to ASHE – based on comparison of median gross hourly earnings (excluding overtime) of all employees of this age (full and part-time) of £11.71 an hour and the adult rate

of the NMW of £6.31 an hour. In order to compare this figure with the bite for the recommended adult rate from October 2015, we need to forecast how wages are likely to change between April 2014 and April 2016.

- 6.145** We use two main forecasts to do this. First, the OBR's forecasts for earnings growth for the period from the second quarter of 2014 to the first quarter of 2015 (1.8 per cent) and from the second quarter of 2015 to the first quarter of 2016 (2.1 per cent), which cover the period required. Second, the HM Treasury Panel forecasts, which estimate average wage growth of 2.5 per cent for the whole of 2015. Taking account of actual wage growth between April and October 2014 and adjusting the HM Treasury Panel forecasts to make comparisons from April 2014 to April 2016, we assume wage growth of 1.95 per cent for the year to April 2015 and 2.5 per cent for the year to April 2016. These estimates are summarised in Table 6.3.
- 6.146** We estimate that, as a result of the increase in the NMW to £6.50 an hour following our 2014 Report, the bite of the adult rate of the NMW at the median for workers aged 21 and over will increase from 53.9 per cent in 2014 to around 54.5 per cent in April 2015, depending on the forecast used. As a result of this report's recommendation to increase the NMW to £6.70, it is then likely to increase further, to 54.7-55.1 per cent in April 2016.
- 6.147** As well as considering the bite at the median, we can also look at the bite at the mean. The mean of hourly earnings in April 2014 was £14.95 for those aged 21 and over and the bite was 42.2 per cent. We estimate that it will increase to 42.7 per cent in April 2015 and to 42.9-43.1 per cent in April 2016.

Table 6.3: Estimated Bite of the Recommended National Minimum Wage, UK, April 2014-2016

April each year	LPC estimate based on ASHE		LPC estimate based on OBR forecasts				LPC estimate based on HMT Panel forecasts			
	2014		2015		2016		2015		2016	
Median	£ per hour	Bite (£6.31)	£ per hour	Bite (£6.50)	£ per hour	Bite (£6.70)	£ per hour	Bite (£6.50)	£ per hour	Bite (£6.70)
21 and over	11.71	53.9	11.92	54.5	12.17	55.1	11.94	54.4	12.24	54.7
22 and over	11.85	53.2	12.06	53.9	12.31	54.4	12.08	53.8	12.38	54.1
Mean	£ per hour	Bite (£6.31)	£ per hour	Bite (£6.50)	£ per hour	Bite (£6.70)	£ per hour	Bite (£6.50)	£ per hour	Bite (£6.70)
21 and over	14.95	42.2	15.22	42.7	15.54	43.1	15.24	42.7	15.62	42.9
22 and over	15.07	41.9	15.34	42.4	15.66	42.8	15.36	42.3	15.74	42.6

Source: LPC estimates based on ASHE 2010 methodology, standard weight, UK, April 2014, OBR (2014b) and HM Treasury Panel (2015).

- 6.148** In order to compare on a consistent basis over the lifetime of the NMW we need to exclude those aged 21 from the analysis. This is because before October 2010 the adult rate only applied to those aged 22 and over. For this age group we estimate that the bite at the median will increase from its current level – 53.2 per cent in April 2014 – to about 53.9 per cent in 2015 and to 54.1-54.4 per cent in 2016. We estimate that the bite at the mean will increase from 41.9 per cent in April 2014 to 42.3-42.4 per cent in April 2015 and 42.6-42.8 per cent in April 2016. For comparison, the bites at the median and mean were 45.7 per cent and 36.6 per cent respectively when the NMW was introduced in 1999.

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- 6.149** Overall then, assuming the wages of low-paid workers increase in line with the OBR or the HM Treasury Panel forecasts for average earnings, the bites at both the median and mean for those aged 22 and over are expected to increase between April 2014 and April 2015 and be at their highest ever level in April 2016. This reflects the fact that these bites were at an historic high in April 2014 and increases in the NMW are greater than the average wage forecasts for the period.
- 6.150** The increases in both the Youth Development Rate (YDR) and the 16-17 Year Old Rate in October 2014 were lower than that in the adult rate. However, the recommended increase for the YDR was higher than that for the adult rate in October 2015 and most of the earnings forecasts used in this analysis, though it still remains lower for the 16-17 Year Old Rate. Forecasts of young people's earnings are not separately available, and they have not followed the same path as those of adults in recent years. Pay growth was weaker for 16-20 year olds between 2007 and 2011, but stronger for 18-20 year olds between 2011 and 2014. Assuming earnings growth for young people turns out in a similar vein – slightly stronger than those forecast by the OBR or the HM Treasury Panel of Independent Forecast for 18-20 year olds but weaker for 16-17 year olds – we would expect the bite for 18-20 year olds to be at least at similar levels in April 2015, but increase in April 2016. In contrast, we would expect the bite for 16-17 year olds to be maintained in April 2015 before falling slightly in April 2016.

Coverage

- 6.151** Another way of looking at the impact of the NMW is to assess the number of people that are covered by the minimum wage. According to ASHE data for April 2014, excluding apprentices, there were around 1.78 million jobs that paid less than the minimum wage rates that became effective in October 2014, consisting of 1.63 million jobs held by those aged 21 and over (6.5 per cent of jobs in that age group), 120,000 held by 18-20 year olds (12.9 per cent of jobs in the age group) and 29,000 jobs held by 16-17 year olds (10.6 per cent of jobs in the age group). Around 2.43 million jobs were paid less than the minimum wage rates we are recommending for October 2015. Of those jobs paid below the recommended rates for 2015, 2.26 million were held by those aged 21 and over (9.0 per cent of jobs in the age group), 146,000 jobs by 18-20 year olds (15.8 per cent of jobs in the age group), and 31,000 jobs held by 16-17 year olds (11.4 per cent of jobs in the age group).
- 6.152** We expect that most workers will have received a pay rise between April 2014 and April 2016. In order to estimate the coverage of the recommended upratings, we attempt to account for wage increases for those paid less than the recommended NMW. We therefore downrate the recommended rates using predicted wage growth between April 2014 (the date of the latest earnings data) and April 2016.
- 6.153** Again, we have produced estimates using two scenarios: assuming that the wages of the low paid increase according to the earnings growth forecasts of: the OBR (1.8 per cent between April 2014 and April 2015 and 2.1 per cent between April 2015 and April 2016); and the median of the HM Treasury Panel (1.95 per cent in the first of those years and 2.5 per cent in the second).

- 6.154** Table 6.4 shows coverage of the NMW under these counterfactual earnings scenarios. Looking at jobs held by people aged 21 and over, excluding apprentices, the number affected by the new rate (£6.70) ranges from 1.38 million (5.5 per cent of jobs in the age group) to 1.48 million (5.9 per cent of jobs in the age group), giving a midpoint estimate of 1.43 million. This compares with around 1.2 million or 4.8 per cent in April 2014, and around 900,000 in 2008 at the start of the downturn.
- 6.155** It should be noted that these kind of estimates are inevitably uncertain, being sensitive to earnings growth and changes in pay structure. If earnings forecasts are too pessimistic coverage will be lower than these figures suggest. If they are too optimistic coverage will be greater than these figures suggest. Forecasts are currently running ahead of the increase in annual average earnings growth suggested by AWE. Coverage might also be affected by the NMW for adults being again set at a round number this year. Fry and Ritchie (2012a and 2012b) and Dawson, Ritchie and Whittard (2014) suggested that employers, particularly those in small firms, use focal points or round numbers to set wages.

Table 6.4: Estimated Number and Percentage of Jobs Covered by the Recommended National Minimum Wage Upratings, UK, April 2016

	Earnings growth forecast		Earnings growth forecast	
	OBR		Panel	
	000s	%	000s	%
21+	1,484	5.9	1,375	5.5
18-20	111	12.0	108	11.6
16-17	25	9.2	25	9.2
Total	1,620	6.2	1,508	5.7

Source: LPC estimates based on ASHE, 2010 methodology, low-pay weights, including those not on adult rates of pay, UK, April, 2014; HM Treasury (2015), OBR (2014b); ONS, AWE total pay (KAB9), monthly, seasonally adjusted, GB, CPI (D7BT), quarterly, non-seasonally adjusted, UK.

Note: It is assumed that coverage for 16-17 year olds will be similar to that in 2014, as it is not possible to estimate this using the methodology adopted here.

- 6.156** The recommended increase in the YDR is higher than that for the adult rate. Using the same coverage methodology adopted for adults, we estimate that around 108,000-111,000 jobs held by 18-20 year olds will be affected by the new YDR, depending on the wage forecast used. Our recommendation for the increase in the 16-17 Year Old Rate in April 2016 was again below those for the adult rate and the YDR. Under the same earnings growth scenarios set out above, we estimate that around 25,000 jobs held by 16-17 year olds will be affected by the new 16-17 Year Old Rate in April 2016 based on the OBR forecasts. Using the HM Treasury Panel to estimate coverage for 16-17 year olds in April 2016 does not yield sensible estimates as the downrated values are lower than the current rates. We judge it is likely that coverage would be similar to that in April 2014 after a dip in coverage for 18-20s in April 2015. However, it is also possible that coverage could increase, as employers may continue to make increased use of the youth rates (as they have generally done since the onset of recession in 2008) and this would also affect coverage.

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- 6.157** Overall, the total number of jobs that will be affected by the new rates in April 2016, including workers aged 16-20 as well as those aged 21 and over, but excluding apprentices, is estimated to be about 1.5 million-1.6 million (5.7-6.2 per cent of all jobs) if the wages of the low paid increase in line with these forecasts. This compares with some 1.3 million (5.1 per cent) in April 2014.
- 6.158** Using data from the BIS Apprentice Pay Survey (2014), 11.3 per cent of apprentices (54,900) were paid below the new Apprentice Rate (£2.80) in July 2014. Assuming the wages of apprentices increase according to actual average earnings growth between July 2014 and October 2014 (0.8 per cent) and then by forecast growth using either the OBR (2.0 per cent), or the median of the HM Treasury Panel (2.5 per cent) between October 2014 and October 2015, estimated coverage ranges from 10.5 per cent (50,600) to 10.6 per cent (51,400) in October 2015 when the new rate comes into effect.

Impact on Household Income

- 6.159** The adult minimum wage was £6.50 in October 2014, giving a gross weekly income of £227.50 for a 35-hour week. Using HM Treasury estimates for the 2014/15 tax year, this gross income was equivalent to a net income of £221.26 for a single person working full-time with no children (a net wage of £6.32 an hour for a 35-hour week). The corresponding amount for a couple with two children (one partner working and the other not) was around £409.52 (a net wage of £11.70 an hour).
- 6.160** Again assuming a 35-hour week, gross weekly income will increase by £7.00 to £234.50 if the minimum wage increases to £6.70 an hour in October 2015. Taking into account the minimum wage uprating and changes in the benefit system in the 2015/16 tax year,²⁷ the net weekly income for a single person will rise by £4.93 to £226.19. For a family with two children,²⁸ net income will rise by £10.88 to £420.00. The effective hourly rate for the single person will be £6.46 (14 pence higher than in October 2014), and for a family with two children will be £12.01 (31 pence higher than in October 2014).

Impact on Wage Bills

- 6.161** As the recommended increase in the National Minimum Wage in October 2015 is greater than the forecasts for average earnings growth or inflation, this is likely to lead to an increase in the wage bill for employers above that expected in its absence. We thus need to make assumptions about how the earnings of the lowest paid will have changed in the absence of a minimum wage increase. If wages were frozen between April 2014 (the latest data available) and October 2015, we estimate that the direct effect on the wage bill of the NMW increase to £6.50 in October 2014 was 0.12 per cent and that the increase to £6.70 in October 2015 would lead to an additional 0.11 per cent on the wage bill: in total an additional 0.23 per cent from the two increases. However, we believe that there will have been some increase in wages over those 18 months. Allowing for that wage growth, we estimate that the NMW increases in October 2014 and 2015 would have directly added up to 0.1 per cent to the total wage bill of

²⁷ This analysis has been done with the hourly wage at £6.50 in both 2014-15 and 2015-16, and for hours-based benefits like tax credits there will be some slight difference in net income dependent on the actual wage.

²⁸ This assumes the couple in the family are married, and as such benefit from the married couples tax allowance in 2015-16.

employers. Of course, the cost may be higher if there were some indirect effects on differentials. It is difficult to model these effects and we do not do so here.

6.162 The impacts on the wage bill, however, will vary across sectors. Although the wage bill is likely to increase by just 0.05 per cent in the non low-paying sectors, it is likely to increase by 0.33 per cent in the low-paying sectors. Among those low-paying sectors, we estimate that the wage bill impact will range from 0.15 per cent in food processing to 1.0 per cent in hairdressing. It will also be relatively high in cleaning (0.76 per cent) and hospitality (0.63 per cent). It will also vary by size of firm. The wage bills of micro firms are likely to rise by 0.37 per cent, compared with 0.16 per cent for other small firms and 0.07 per cent for large firms. Again, these estimates are of direct effects. Allowing for indirect effects, and the maintenance of differentials, would yield slightly higher estimates of the impact of the NMW increases on the wage bills of employers.

6.163 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. Further, we also recognise that our recommendation will increase the pressure on costs in the care sector, which is largely government-funded.

Exchequer Impact

6.164 Last year, as part of the evidence provided by the Government to the Low Pay Commission, HM Treasury (2014a) provided us with a dynamic analysis of the overall fiscal impact of increasing the NMW, including the wider effects.²⁹ This analysis concluded that there were no significant fiscal gains once dynamic impacts are taken into account. HM Treasury informed us that this was still likely to be the case. On this basis, we should expect a neutral fiscal impact from increasing the NMW, given the size of our recommended increase.

Conclusion

6.165 Our recommended rates for the National Minimum Wage reflect a careful assessment of the outlook for the economy and the labour market. The economy has grown faster in 2014 than in recent years and there are grounds for expecting the recovery to be maintained, although there are also uncertainties related to productivity, the oil price and the Eurozone. The performance of the labour market in creating jobs has continued to exceed many forecasters' expectations. The youth labour market has also picked up, with faster increases in employment and earnings for those aged 18-20 than those covered by the adult rate. However, employers are still absorbing last year's real terms increase and the minimum wage is now at a record level relative to typical earnings. After a very careful review of a wide range of evidence we have made recommendations for the year from October 2015 which balance the risk of recommending more than the business and the economy can afford against the risk of doing too little to make further progress in restoring the real value of the earnings of the lowest paid. We believe they are appropriate to a strengthening economy and a resilient labour market.

²⁹ HM Treasury provided us with estimates of fiscal impacts for an increase in the adult rate of the NMW to £7 in October 2015, taking into account employment effects and adjustment effects, and concluded that it is unlikely there will be a significant positive fiscal impact from increasing the NMW.

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. In addition to the organisations below 549 people responded to our snap shot on-line survey.

Action Press
Active Rehab Equipment
Adam Freeman
Adnams
Adopt an Intern
Allan McDonald
Alternative Futures Group
Anchor Recruitment
Anderson & Partners
Andrew Putt
Anti-Trafficking and Labour Exploitation Unit
Asda Stores Ltd
Asquith Supplies
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
AUK Group
Bank of England
Bargain Booze
Bernard Matthews
Bible and Gospel Trust
Blackdown Growers Marketing Ltd
Blake Envelopes
Blue Diamond STL
Brewers Fayre
Britannia Metador
British Beer & Pub Association
British Chambers of Commerce
British Growers Association
British Hospitality Association

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British Hospitality Association (Scotland)
British Independent Retailers Association
British Retail Consortium
British Youth Council
Broadcasting Entertainment Cinematograph & Theatre Union (BECTU)
Bull Products Ltd
Business in Leisure
Care England
Carlton Packaging
Castle Hotel, Conwy
CBI
Chairman, Llandudno Hospitality Association
Chartered Institute of Payroll Professionals
Chartered Institute of Personnel and Development
Chwarae Teg
citb
Citizens Advice Scotland
Colorminium Group
Communication Workers Union
Contec Landscape
Corgin Ltd
Costa Coffee
Creatif Architectural Products
Darrell King
David MacBrayne Ltd
David Parsons of Office Principles Ltd
Department for Employment and Learning Northern Ireland
Derby City Council
Diana Harmer
Duraflor Group
Durleigh
Eastpoint
EEF, the manufacturers' organisation
Ego Hair Salon
Empire Hotel, Llandudno
Enfield Safety Supplies
Equality and Human Rights Commission
Equity
Fair Play South West
Federation for Industry Sector Skills & Standards
Federation of Small Businesses
Fixfirm Limited
FLP Group
Food and Drink Federation
Forgeway

Forum of Private Business
Forward Products
GMB
Graphic Arts (Coventry) Ltd
Green Circle Windows
Green of Lincoln
Greenbank Group
Harrison Products
Haschem Safety
Hazel Products
HBS Group
Headoffice Interiors
Hewins Timber
Hilton Hotels
Hines of Oxford
HM Government
Home Bargains
Hotel Indigo, Glasgow
Incomes Data Services
Inspiring Interns
Institute for Fiscal Studies
Intern Aware
Irish Congress of Trade Unions
Isle of Wight College
J Brock & Sons
John Hume
John Lewis Partnership
Joseph Rowntree Foundation
Kalayaan
Kaydee Light Control Solutions Ltd
KB Packaging
Kingfisher Packaging
Kingsway Group
Klipspringer Ltd
L&N Services t/a Bluebird Care (York)
Labour Research Department
Leeds City College
Lockmetal
Lorri Craig
Lowestoft Tool Hire
Lubricants South West
Mack Wholesale
Marches Global Ltd
Mark Watson
Mayfield Books & Gifts

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Mckinleys Group
National Association of Schoolmasters Union of Women Teachers (NASUWT)
National Care Association
National Day Nurseries Association
National Farmers' Union
National Farmers' Union Scotland
National Federation of Retail Newsagents
National Hairdressers Federation
National Institute of Economic and Social Research
National Union of Students
Neil Bartholomey, The Abington
Norfolk and Norwich Hospital
Norfolk County UNISON
North Ayrshire Council
Northern Ireland Council for Voluntary Action
Norwich City College
NUS-USI
OnSite Support
Oriel Hotel and Spa
Otterdene Products
Parma Industries
Pineapple Contracts
Place UK Ltd
Plant Plan Ltd
Planteria Group (UK) Ltd
Protective Wear Supplies Ltd
Quest
Quiffy's Hair Salon
Rail, Maritime and Transport Workers' Union
Ramsey Joseph, JRJ Associates
Recruitment & Employment Confederation
Registered Nursing Home Association
Renaissance Curtain Accessories
Rhino Fire Control
Rooney Fish
RPH Hire Services
Rural Shops Alliance
RVT Rentavent
Safya Systems UK Ltd
Sanuex
Save the Children
Scottish Council for Development and Industry
Scottish Government
Scottish Opera
Scottish Salmon Company

Scottish Tourism Alliance
Scottish Trades Union Congress
Serco
Skanwear
Skills Active
Solmedia Limited
Southfield Windows
Spar Foodmarkets Ltd
Specialist Hygiene Solutions Ltd
St Enoch Shopping Centre
Stephen Hodgson of Resin Fix Ltd
Stirling Medical and Scientific Ltd
Store Direct
Stress Exchange Hair and Beauty Salon
Summit Hygiene
Supertemps, Colwyn Bay Head Office
Synergy
TaylorWest
TGS (UK) Ltd
The Prince's Trust
The Scottish Licensed Trade Association
The Women's Organisation
Thermogroup UK
Toffeln
TPI Packaging
Trades Union Congress
Trees Day Care Nursery
Trevor Gage
Trimline Group
Tudor Environmental
UK Commission for Employment and Skills
UK Fashion & Textile Association
Union of Shop, Distributive and Allied Workers
UNISON
UNISON Wirral Local Government Branch
Unite
United Kingdom Home Care Association
University of Glasgow
Valley Provincial Group
V-tec Group
W Hurst and Son
Wealden Rehab
Weavabel
Wee Care Nurseries
Welsh Government

National Minimum Wage

Wessex Packaging

West Lothian College

Westcountry Group

Whitbread Plc

White Horse Child Care Limited

Willow Coffee

Winch & Blatch Department Store

Woodalls Design

Woodford Investments Ltd

Working Links

wpswestward

XpertHR

Yewdale

Young Women's Trust

Appendix 2

Low Pay Commission Research

Overview

- 1** The Low Pay Commission was set up in 1997 to make recommendations to the Government on the introductory rate of the National Minimum Wage (NMW). As part of gathering evidence for that recommendation, we commissioned several qualitative and quantitative research studies to investigate the potential impact of introducing a minimum wage. Our evidence-based approach has continued since and we have now commissioned a total of around 140 research projects. We have been fortunate to engage with many of the leading researchers in this area and have made great use of their expertise. We are grateful to all those who have contributed over the years. In each of our previous reports we have provided a summary of the findings of our commissioned research. We do so again.
- 2** Bewley and Wilkinson (2015) investigated the impact of the minimum wage on employment and hours. They summarised the previous evidence that in general showed that, although the minimum wage had affected earnings, there had been little impact on employment in the UK. There was, however, some limited evidence from Dickens, Riley and Wilkinson (2012) of a negative employment retention effect on part-time female workers on introduction and in recession. This research used the Annual Survey of Hours and Earnings (ASHE) and the Labour Force Survey (LFS) to analyse employment retention, employment entry (from unemployment), the employment rate and the number of hours worked. The analysis looked at the impact in the aggregate as well as on some sub-groups, such as men, female part-time workers, female full-time workers, young workers and older workers.
- 3** Using ASHE, they identified emerging evidence of a negative effect of the NMW on employment retention of men working full-time during the recent recovery (when the bite was rising). In line with previous research by Dickens, Riley and Wilkinson (2012), they found an adverse impact of the introduction of the NMW on the employment retention of women working part-time. This effect was also apparent during the recession but has disappeared in the recovery. In contrast, no significant effects were found for women working full-time. A series of sensitivity checks indicated that the negative employment impacts that emerged over time should be regarded with caution. Furthermore, this analysis using ASHE was limited to job outflow and did not investigate job entry, which would give a rounded picture of the impact of the NMW on employment. Using an alternative data source, the LFS, no evidence was found of negative retention effects although that analysis found some positive impacts on job entry for low-wage men in the recovery period. No such job entry effects were found for unemployed women.

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- 4** The evidence on hours effects was less clear-cut. There was some weak evidence that female full-time workers, particularly in large firms, may have increased hours in response to upratings of the NMW before the recession, but experienced reductions in hours in the recovery. There were generally no hours effects for female part-time employees or male full-time employees, although female part-time employees in small firms tended to experience negative impacts on hours. Hours appeared more likely to have been reduced for those on the Youth Development Rate (YDR) in response to upratings from 2010 onwards, although no such conclusions could be drawn for 16-17 year olds.
- 5** In the local area analysis, the employment rate of female full-time employees did appear to increase in response to the uprating of the NMW, whereas the opposite was the case for female part-time employees. No other significant employment effects were found. However, it should be noted that the standard errors in the local area analysis were high, so a large change would be required to get significant results.
- 6** Riley and Rosazza Bondibene (2015) built on their previous work, Riley and Rosazza Bondibene (2013), which looked at the impact of the minimum wage on firm behaviour during the recession. They noted that existing evidence on the impact on businesses was mixed but there was some evidence that firms had responded to increases in the NMW by raising prices; absorbing costs through squeezed profit margins; and increasing labour productivity. Using data from the Annual Respondents Database (ARD) and Financial Analysis Made Easy (FAME), the researchers explored wage effects for firms in all sectors and for firms in low-paying sectors as well as by size of firm.
- 7** They demonstrated that average labour costs increased more among the treatment group of low-paying firms compared with higher-paying firms (the control group) over all periods analysed, but particularly upon the introduction of the NMW. This was true for both small and large firms. They found no robust evidence to suggest that trends in profit margins differed substantially between lower and higher average labour cost businesses over any of the periods analysed. They found no evidence that the NMW had led to an increased rate of business exit. Productivity, as measured by Gross Value Added per head, increased among low-paying firms compared with firms with higher average labour costs. This was mainly due to increases in total factor productivity (TFP) rather than capital deepening. Qualitatively similar results were found using both FAME and the ARD. They suggested that these findings were consistent with efficiency wage and training responses to increased labour costs from the NMW. But, placebo tests further up the distribution of labour costs suggested that the magnitude of these impacts may be exaggerated in the simple longitudinal model.
- 8** We also commissioned research that focused on the impact of the minimum wage on young people and apprentices. London Economics (2015) investigated four aspects of the impact of the minimum wage on young people. The first part looked at the impact of the recent freeze in the youth rates of the minimum wage. The second looked at the impact of reducing the age of entitlement to the adult rate to 21. The third investigated the extent of unpaid internships across the UK and the fourth assessed local labour market conditions and the determinants of young people's economic activity.

- 9** In October 2012, minimum wage rates for young people were frozen for the first time, while the adult rate increased. London Economics (2015) undertook descriptive and econometric analysis to estimate whether the freeze had been effective in protecting the youngest workers' employment outcomes. Descriptive analysis showed that the fall in the employment rate for the youngest workers, observed from the start of recession, had stalled following the freezing of the youth rates. The econometric analysis, using a difference-in-differences approach, explored the impact of the slowdown and subsequent freeze in the two youth rates on the probability of employment for young people. They looked at employment rates: in the 'before slowdown and freeze' period from October 2010 to September 2011 (when the NMW increased by 2 per cent for 16-20 year olds and 2.2 per cent for workers aged 21 and over); and in the 'after slowdown and freeze' period between October 2011 and September 2013 (when the youth rates increased by 1.1-1.2 per cent in October 2011, compared with 2.5 per cent for adults, and were then frozen until October 2013 while the adult increased by 1.8 per cent). They measured the difference in employment rates in the before and after periods, and compared the difference observed for 16-20 year olds, (the 'treatment' group) with 21 and 22 year olds, (the 'control' group).
- 10** Their analysis suggested that the slowdown and freeze in the youth rates protected young workers, as we had hoped. Overall, individuals aged 16-20 were 2.5 percentage points more likely to be employed compared with individuals aged 21 or 22 as a result of the slowdown and freeze in the two youth rates. Specifically, young people eligible for the 16-17 Year Old Rate were 3.6 percentage points more likely to be employed compared with 21-22 year olds following the slower growth and subsequent freeze in the 16-17 Year Old Rate from October 2011. Young people eligible for the Youth Development Rate (YDR) were 2.0 percentage points more likely to be employed compared with 21 and 22 year olds during the period of the freeze in the YDR. A similar positive impact was achieved when the estimation was carried out by gender and for 'low-skilled' individuals (those with highest qualification at or below 5 or more GCSEs at grades A*-C). They also looked at two other periods: the period of the freeze only; and the period starting with the announcement of the freeze. These did not find the same significant effects as the analysis covering the slowdown and freeze period. We will be seeking to commission research this year to supplement this analysis of the effect of the freeze.
- 11** London Economics further explored the impact of the freezing of the youth rates. One effect of the freeze for 16-20 year olds was that, on becoming 21 years old, there was a higher jump in earnings for a minimum wage worker moving from the YDR to the adult rate of the NMW. Using a regression-discontinuity approach, the study compared employment transitions in the 'lower-jump' period, before the youth rates were frozen, with those in the 'higher jump' period following the freeze. In the 'lower-jump' period, its results were consistent with previous studies which suggested that there was a positive impact on employment outcomes when low-skilled workers became entitled to the adult rate. However, in the 'higher-jump' period, when we might have expected these positive impacts to be greater, they observed a significant negative impact on employment outcomes for low-skilled workers. This initial analysis would suggest that the freeze in the Youth Development Rate had a detrimental impact on the employment prospects for low-skilled workers when they became eligible for the adult rate of the NMW. However, after a closer examination of the data and robustness checks, the authors

concluded that the results may be an artefact of the data, given the relatively small samples used, and that the true impact will only become clear as more data becomes available.

- 12** Comparing 21 year olds with those aged 20 and 22, the second part of the research looked at the impact of reducing the age of entitlement to the adult rate to 21. The analysis suggested that the labour market outcomes and trends were similar for all three age groups between 2003 and 2010. However, the labour market had been greatly affected by the recession, with 21 year olds suffering more than 22 year olds. The study found a small positive employment effect of the change in eligibility for women aged 21. There was some evidence of a negative impact on inactivity for men but this led to increased unemployment rather than employment. For men not in full-time education, the number of hours were reduced.
- 13** Analysing interns using data from recent graduates, London Economics (2015) estimated that the proportion of interns that were unpaid was at least 13-16 per cent and probably much higher but that only around 2 per cent of graduates were in internships.
- 14** The final part of the research investigated the determinants of economic activity. The decision of young individuals to stay in full-time education or enter the labour market is typically influenced by factors such as ability; socio-economic status; family background and education; and own expectations. It can also be influenced by local labour market conditions. The research investigated the magnitude and direction of this local labour market effect using data from Understanding Society and the British Household Panel Study (2004-2012). The main findings were that: individuals aged 18 living in areas of high adult unemployment were more likely to remain in education than become employed (the youth unemployment rate had a slightly weaker effect); young people living in more affluent areas were more likely to stay in education and delay entry into the labour market; and parental education appeared to play the most significant role on the decision to stay in education.
- 15** Drew, Ritchie, and Veliziotis (2015) investigated the measurement of apprentice pay in the BIS Apprentice Pay Surveys and ASHE. They set out the rules covering the Apprentice Rate and its age and duration conditions. The headline estimates of 'non-compliance', those paid below their NMW entitlement, were 20 per cent in 2011 and 29 per cent in 2012 but ASHE data for 2013 and 2014 suggested much lower levels of non-compliance of around 7-8 per cent. Their analysis found that non-compliance appeared greater for those who were not paid hourly and for those who were aged 19 and over in the second year of their apprenticeship. Longer tenure with an employer also lowered the probability of non-compliance. Regression analysis suggested that the probability of non-compliance was greater if the apprentice was: in the second year of an apprenticeship; new to the employer; worked long hours; and had an NVQ Level 2. The second year effect appears to persist across frameworks. Differences between frameworks could often be explained by differences in the characteristics of apprentices. For example, hairdressing apprentices were more likely to be aged 19-20 and in their second year, more likely to be on a Level 2 apprenticeship, less likely to hold a permanent job or be paid an hourly rate, and more likely to work longer hours. These were also the characteristics associated with higher non-compliance. Surprisingly, awareness of the Apprentice Rate appeared not to improve compliance, which prompted the researchers to suggest that the question may need improvement. There were no notable differences across the countries of the UK.

- 16** Bushe, Kenway, MacInnes, Tinson and Withers (2015) investigated the interaction of the minimum wage with the tax and benefit system. This was conducted in two parts. First, a case study analysis of employers in retail, hospitality, social care and childcare, looking at whether employers took the tax and benefit system into account when setting pay. The employers were generally aware of the NMW and its interaction with tax credits but were a little uncertain of the amounts and thresholds for tax and benefit purposes. They found that these were not important for setting pay rates but were important for determining hours worked. Employers generally found that hours thresholds introduced inflexibility, particularly for mothers working part-time. The higher hours threshold introduced in April 2013 for some tax credit beneficiaries had been difficult for employers to accommodate. There were also some instances of workers asking not to have bonuses or pay rises, as they perceived these would adversely affect benefits.
- 17** Second, their main analysis of the interaction of the minimum wage and the tax and benefit system used a spreadsheet model of different family and housing tenure types, the Household Tax and Benefit Model. Assuming that all benefits were taken up and that pay was regular, they looked at a few specific family types but the findings were broadly indicative across other family types. They demonstrated the relationship between net income (after housing costs) and hours worked under Universal Credit and the current system. This was generally smoother under Universal Credit, with fewer cliffs at particular thresholds, and net income was generally higher although there were some exceptions (for example, couples with children working more than 50 hours). Using the Family Resources Survey (FRS), they showed that minimum wage workers tended to be towards the bottom of the household income distribution although sizable proportions (around a quarter) were in the top two quintiles. They found that most minimum wage earners did not receive benefits or tax credits, although working adults receiving housing benefit were most likely to earn at or close to the NMW. There had been a large growth in Housing Benefit recipients in recent years but the marginal deduction rates were high.
- 18** They concluded that low-paid workers claiming benefits and tax credits received little increase in overall income when the NMW increases under the current benefit system. But only a half of part-time minimum wage workers and a quarter of full-time ones received in-work benefits or tax credits. Universal Credit should generally improve the situation for low-paid workers, although there remained some concerns about its effect on particular groups and for particular hours worked.
- 19** In summary, we again conclude that the research in general finds little adverse impact of the minimum wage on employment, although there is a growing body of evidence suggesting a negative impact on female part-time employment retention on introduction. However, these effects were not found across all specifications and data sources. There were also some negative effects found on hours and employment during the recession for some groups of workers. But these appear to have faded away as the economy has begun to recover. The research also found further evidence of positive productivity effects.

Table A2.1: Low Pay Commission Research Projects for the 2015 Report

Project Title and Researchers	Aims and Methodology	Key Findings
<p>The Impact of the National Minimum Wage on Employment and Hours Helen Bewley and David Wilkinson (National Institute of Economic and Social Research)</p>	<p>The aim of the research was to explore the impact of the upratings of the NMW on employment and hours through the recession and recovery. The issues addressed were:</p> <ol style="list-style-type: none"> the impact of the upratings of the NMW on employment and hours during the recession and subsequent recovery; the impact of the upratings of the NMW during and following the recession on the unemployed; whether the impact of recent upratings on employment and hours differed for different ages; the variation in impact by firm size; and the robustness of the findings to using different methods of analysis and different data sources. <p>Using data from the Labour Force Survey (LFS) and the Annual Survey of Hours and Earnings (ASHE), difference-in-differences methods were used to assess the impact of the NMW, with a particular focus on the impact of upratings since the economic downturn in 2008. The impact of the recession was assessed by extending the standard difference-in-differences model to capture the interaction between the impact of the NMW and the state of the economy.</p> <p>A number of approaches were used to assess the robustness of the results, including both ASHE and the LFS, varying the comparison groups and carrying out a local area analysis to supplement the analysis of individual-level data.</p>	<p>The main findings of the research were:</p> <ul style="list-style-type: none"> Using ASHE, they found that the introduction of the NMW had an adverse impact on employment retention of part-time women, which is consistent with recent evidence from Dickens, Riley and Wilkinson (2012) and Gregg and Papps (2014). This effect increased during the recession, but returned to pre-recession levels during the recovery. Consistent with the previous research by Dickens, Riley and Wilkinson (2012) they found evidence of a negative impact of the NMW on employment retention for men working full-time after 2009. These negative employment effects for men were concentrated in medium-sized and large enterprises. However, the sensitivity testing suggested that the emerging negative employment effects may be over-stated. Furthermore, using the LFS, few employment effects were found in the difference-in-differences or the local area models. They found some positive impacts on job entry for low-wage men in the recovery period but no such effects were found for unemployed women. The evidence on hours effects was less clear-cut. There was some weak evidence that female full-time workers in large firms increased hours in response to upratings of NMW before the recession, but experienced reductions in hours in the recovery. In contrast, female part-time employees in small firms tended to experience negative impacts on hours. Hours appeared more likely to have been reduced for those on the Youth Development Rate in response to upratings from 2010 onwards, although no such conclusions could be drawn for 16-17 year olds.
<p>The Impact of the National Minimum Wage on UK Businesses Rebecca Riley and Chiara Rosazza Bondibene (National Institute of Economic and Social Research)</p>	<p>This project built on a previous study by the same researchers, Riley and Rosazza Bondibene (2013), to address the following issues:</p> <ol style="list-style-type: none"> the evolution of the distribution of average labour costs across firms since the introduction of the NMW; the appropriate definition of NMW treatment and control groups when analysing firm-level data; the impact of the NMW on the behaviour of small and large firms and firms in the low-paying sectors; and whether these impacts have changed since 2008 and with the more recent NMW upratings. <p>They adopted a similar approach to that taken by Draca, Machin and Van Reenen (2005 and 2011) and Riley and Rosazza Bondibene (2013), using difference-in-difference modelling applied in the main to firm-level data. They analysed two business data sets – Financial Analysis Made Easy (FAME) and the Annual Respondents Database (ARD). They distinguished impacts by firm size and considered wages, productivity, profitability, employment and probability of exit.</p> <p>This study made several improvements and extensions to their previous work:</p> <ol style="list-style-type: none"> a more comprehensive database using annual historical FAME extracts; made the analysis of the ARD and FAME more comparable, exploiting the longitudinal aspects of both datasets; used post-recession data from the ARD; and provided more up-to-date analysis (up to 2012). 	<p>The main findings of the research were:</p> <ul style="list-style-type: none"> The negative correlation between firms' average labour costs and the share of NMW workers in the firm was evident across firm size and in low-paying sectors. The results were qualitatively similar using both datasets and were consistent with previous research findings on the impact of the NMW on productivity. Average labour costs increased more among the treatment group of low-paying firms compared to less low-paying firms (the control group) over all periods analysed. This was evident for both small and large firms. Similar to the findings of Draca, Machin and Van Reenen (2005 and 2011), they found that, in some models, trends in profit margins differed between lower and higher average labour cost businesses, however these differences were mostly not significant. Productivity (gross value added (GVA) per head) increased among low-paying firms compared with firms with higher average labour costs, mainly due to increases in total factor productivity (TFP) rather than capital deepening. This was consistent with efficiency wage and training responses to increased labour costs from the NMW. The results were qualitatively similar to the conclusions of some previous studies regarding firms' productivity responses to the NMW, such as Galindo-Rueda and Pereira (2004) and Croucher and Rizov (2011). But, placebo tests further up the distribution of labour costs suggested the magnitude of these impacts may be exaggerated in some of the estimated models, suggesting that these may partly be capturing dynamic adjustment or catch-up effects. There was no evidence that the NMW increased the rate of business exit.

Project Title and Researchers	Aims and Methodology	Key Findings
<p>The Impact of Minimum Wages on Young People</p> <p>Gavan Conlon, David Innes, Rohit Ladher, Pietro Patrignani, Viktoriya Peycheva (London Economics) and Steve McIntosh (University of Sheffield)</p>	<p>This project aimed to provide a comprehensive overview of the impact of minimum wages on young people and give important insights into the youth labour market. The study had four main elements:</p> <ol style="list-style-type: none"> First, to assess the impact of the freeze in both youth rates in 2011, that resulted in a widening differential to the adult rate. Second, to investigate the impact of the reduction in the age threshold for entitlement to the adult rate in October 2010. Third, to assess the extent of unpaid internships among graduates. Fourth, to explore the impact of raising the participation age on the determinants of undertaking education and training, and the extent to which local labour market conditions affect the labour force participation. <p>The researchers used data from the LFS, ASHE, BHPS/Understanding Society, and the Destination of Leavers from Higher Education (DLHE) and conducted various econometric analyses in order to achieve these aims.</p> <p>A literature survey was conducted to better understand the youth labour market and the use of the youth rates of the NMW.</p> <p>The study also attempted to provide a clear understanding of the extent of unpaid internships among graduates.</p>	<p>The main findings of the research were:</p> <ul style="list-style-type: none"> The analysis suggested that the slowdown and freeze in the youth rates protected young workers. Specifically, young people aged 16-20 were more likely to be employed compared with individuals aged 21- 22 as a result of the slowdown and freeze in the two youth rates. In assessing the impact of the relative freeze in the minimum wage rate for young people, they also looked at the change in the differential on becoming 21 or 22. Before the freeze, the increase to the adult rate was smaller. They found no impact at the aggregate level but did find a statistically significant impact for those with low skills (GCSE or lower) but this changed from positive before 2010 to negative thereafter. In contrast to the positive labour market impact of becoming eligible for the adult rate in the pre-recession period, they found a negative impact during the recessionary period. However, they concluded that there was a significant degree of uncertainty in relation to these results, given the relatively small samples. In relation to the change in the threshold age for adult minimum wage eligibility, they found no evidence that the change in the eligibility threshold had any adverse effects on the likelihood of 21 year olds being employed. However, there was some evidence of reduced inactivity rates, leading to higher unemployment rather than higher employment. There was also weak evidence that hours may have been reduced for those not in full-time education. Analysing interns using data from recent graduates, they estimated that the proportion of interns that were unpaid was at least 13-16 per cent but that only around 2 per cent of graduates were in internships. Young people were more likely to stay in education if: their parents had higher education qualifications; local area unemployment was high; and if the area had higher wages. They concluded that they found no compelling evidence, either way, to change the current age structure of the NMW.
<p>The Measurement of Apprentice Pay</p> <p>Hilary Drew, Felix Ritchie and Michail Veliziotis (University of the West of England)</p>	<p>This project built on previous work conducted by Behling and Speckesser (2013) for our 2013 Report. That study provided a detailed analysis of the impact of the introduction of the Apprentice Rate. This study aimed to provide:</p> <ol style="list-style-type: none"> a detailed analysis of the pay of apprentices; a descriptive analysis of the characteristics of apprentices; and an assessment of the extent of non-compliance with the NMW. <p>They used ASHE 2013 and 2014 and the BIS Apprentice Pay Surveys from 2011, 2012 and 2014 to look at the distribution of apprentice pay and assess the extent of non-compliance.</p> <p>In their assessment of pay and non-compliance, they looked at differences by:</p> <ol style="list-style-type: none"> those paid hourly and others (including weekly, monthly and annual); on- and off-the-job training hours; apprentice framework (sector); and duration of apprenticeship. <p>The study also looked at whether apprentices were aware of the Apprentice Rate and if this had an impact on the rates of non-compliance.</p>	<p>The main findings of the research were:</p> <ul style="list-style-type: none"> They found very high rates of non-compliance in both the 2011 and 2012 Apprentice Pay Surveys. The headline rate was 20 per cent in 2011 and 29 per cent in 2012. Their estimates of non-compliance using ASHE were much lower, just under 10 per cent. However, there was less information in ASHE about unpaid training hours and no information about level. They found large differences between those paid hourly and others. In 2011, only 5 per cent of hourly paid apprentices due the Apprentice Rate were paid less and most of those were aged over 19 and in their second year of their apprenticeship. In contrast, around 25 per cent of all non-hourly paid apprentices were paid less than their entitlement. In 2012, the levels of non-compliance were estimated to be much higher for both hourly-paid apprentices (21 per cent) and others (34 per cent). They found much higher non-compliance when apprentices undertook off-the-job training. In their regression analysis, they found that non-compliance was more prevalent among those in their second year, those that had not previously been employed by their employer, and those who worked long hours. They found country effects but these disappeared when the data was adjusted to take account of framework (sectoral) composition. They found that being aware of the Apprentice Rate did not affect non-compliance. They concluded that any future investigation of non-compliance should focus on new employees, those in the second year of their apprenticeship, and those not paid an hourly wage. They also thought that there should be an improvement in the knowledge of the incidence of on- and off-the job training, particularly aimed at those apprentices who claimed to receive zero training hours.

Project Title and Researchers	Aims and Methodology	Key Findings
<p>The Minimum Wage, Taxes and Benefits: How the Minimum Wage Interacts with the Tax and Benefit System</p> <p>Sabrina Bushe, Peter Kenway, Tom MacInnes, Adam Tinson (New Policy Institute) and Louisa Withers (Incomes Data Services)</p>	<p>This study looked at the way the tax and benefits system affects people on the minimum wage and their families. It investigated differences between the current system and Universal Credit (UC).</p> <p>The research contained four main elements:</p> <ol style="list-style-type: none"> i. a thorough review of the relevant literature; ii. NPI's Household Tax and Benefit Model was used to look at the interaction of earnings and benefits and their effects on household income. It enabled a thorough assessment of how the NMW affected household incomes and marginal tax rates of different family types with different benefit entitlements (singles and couples, with and without children). It also considered the impact of variations in the number of hours worked; iii. the analysis then used the Family Resources Survey (FRS) to quantify the size of the family types identified in the initial analysis using the Household Tax and Benefit Model; and iv. Incomes Data Services (IDS) conducted a small selection of case studies of employers. These ranged across different sizes of employer and were concentrated in low-paying sectors. IDS undertook 11 face-to-face interviews with employers to discuss issues around pay; the minimum wage; taxation; and awareness of the benefit system. It investigated whether there were various incentives/disincentives that affected hours worked and pay-setting. 	<p>The main findings of the research were:</p> <ul style="list-style-type: none"> ● The number of hours worked at the minimum wage is more important for determining net income in relation to the tax benefit system than the hourly rate of pay. This is because entitlement to benefits under the current system is often determined by the number of hours worked, for instance, a single adult must work at least 30 hours to qualify for Working Tax Credits. ● The way the current benefit system works means that many low-paid people claiming benefits and tax credits see little increase in overall income when the NMW rises. ● Most NMW earners do not receive benefits or tax credits. Only half of part-time NMW workers and a quarter of those working full-time receive these benefits. ● Universal Credit should iron out many problems, though some issues remain. ● Under UC, net income progression as hours at the minimum wage increase is much more even, due to the removal of hours conditions and a smoothing of taper rates. ● The treatment of owner-occupiers is a big difference between the current and proposed system. Under UC, support for renters is more generous but that for owner-occupiers is markedly less. ● Although Universal Credit lowers the taper rates and, hence the marginal deduction rates, these both remain quite high, at over 70 per cent for substantial parts of the distribution. So the issue of high marginal tax rates for low earners will not disappear with UC. ● In the case studies of employers, little evidence was found of employers adjusting pay rates to take advantage of the tax and benefits system. However, they were aware of employees requesting to work certain numbers of hours per week.

Appendix 3

Minimum Wage Systems in Other Countries

- 1** This year 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 all for their continued 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.
- 2** 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 NMW, including: their levels; how they were adjusted; variation by age or for those undergoing training. While our analysis compares minimum wages as at the end of 2014, this appendix also contains information for Germany, which introduced a national minimum wage on 1 January 2015. We will include the German minimum wage as part of our data analysis in future reports.
- 3** Table A3.1 sets out the respective minimum wage values at the end of 2014 in each national currency (and how these have changed over the past year) as well as the 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 picture is a similar one with the UK having a PPP rate higher than six comparator countries but lower than six others.
- 4** Changes made by countries to their NMW 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, The Netherlands and New Zealand) generally uprated their minimum wage, while those with a lower one (such as Spain and Greece) continued to freeze their rates. This latter group continues to face severe economic conditions and in some cases, has specific minimum wage terms linked to international loans. An exception to this rule is Portugal, which, following a two and a half year recession, uprated its minimum wage by 3.9 per cent in 2014 after its first full year of growth.

National Minimum Wage

Table A3.1: Comparison of Adult Minimum Wages, by Country, End 2014

	In national currency expressed as hourly rate ^a	In UK £, using:		Date of last uprating	% Increase in national currency from 2012/2013 to 2014	Age full minimum wage usually applies ^b
		Exchange rates	PPPs			
Australia^c	AUS\$16.87	9.37	8.44	Jul-14	3.0	21
Belgium	€ 8.67	6.88	7.80	Dec-12	0.0	21
Canada^d	C\$10.39	5.79	6.29	^e	1.5	16
France	€ 9.53	7.54	8.57	Jan-14	1.1	18
Greece	€3.52 ^f	2.73	3.82	Feb-12	0.0	25
Ireland	€ 8.65	6.84	7.20	Jul-11 ^g	0.0	20
Japan^h	JPY780	4.46	5.31	Oct-13	2.0	15/18 ⁱ
Netherlands	8.63 ^j	6.83	7.59	Jul-14	1.2	23
New Zealand	NZ\$14.25	7.12	7.05	Apr-14	3.6	16 ^k
Portugal^l	€ 2.91	2.30	3.33	Oct-14	4.0	16
Spain^l	€ 3.72	2.94	3.82	Jan-12	0.0	16
United Kingdom	\$6.50	6.50	6.50	Oct-14	3.0	21
United States	US\$7.25 ^m	4.45	5.63	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 2014. Exchange rates, Bank of England monthly average spot exchange rate, September 2014.

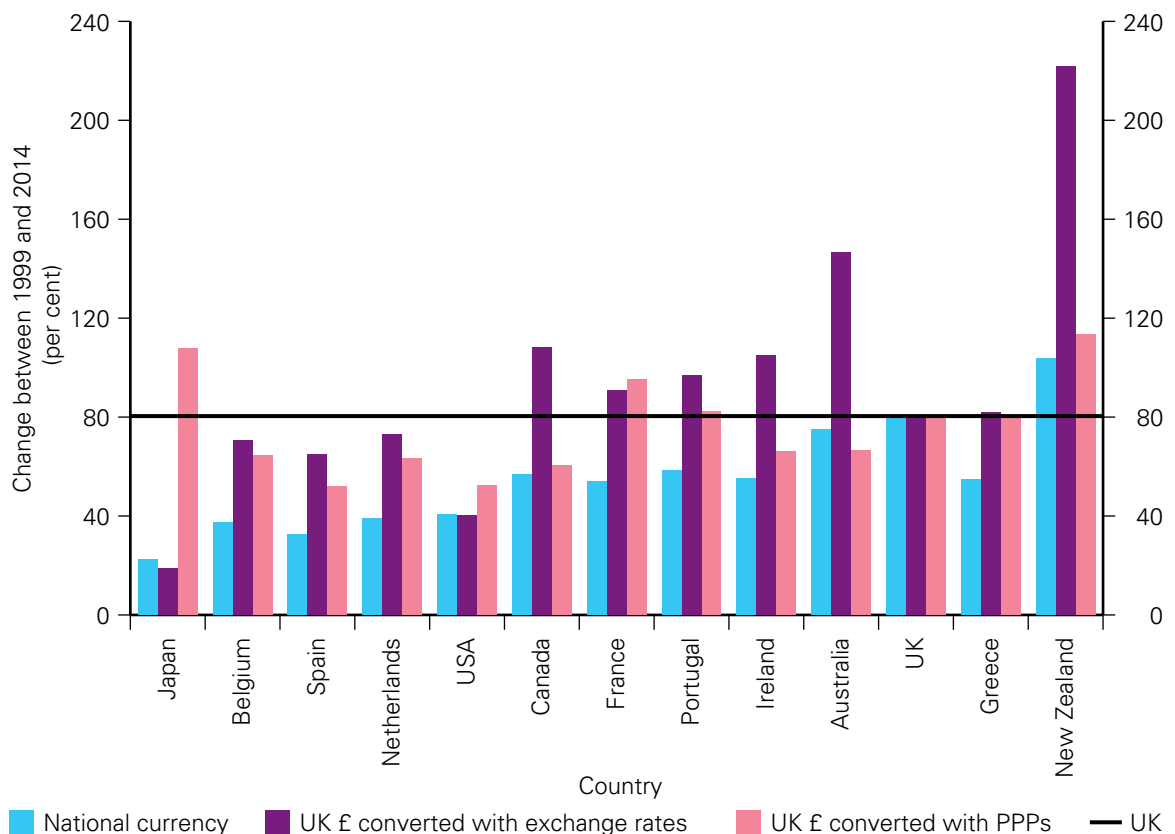
Notes:

- For countries where the minimum wage is not expressed as an hourly rate, the rate has been converted to an hourly basis assuming a working time of 8 hours per day, 40 hours per week and 173.3 hours per month.
- Exemptions and special rules apply in many cases. For example, in France and the US the full adult rate applies to young workers with a tenure of more than six and more than three months respectively.
- The Australian Federal National Minimum Wage Order, effective from first pay period on or after 1 July 2014.
- Weighted average of provincial/territorial rates.
- Date of last uprating varies between provinces.
- Minimum hourly rate for 'employees'. Different hourly rate operates for 'blue collar' workers.
- The hourly minimum rate was reduced from €8.65 to €7.65 for adult workers on 1 Feb 2011. That reduction was reversed and the hourly rate went back up to €8.65 on 1 July 2011.
- Weighted average of prefectural rates.
- Age 15 to receive the regional minimum wage. Age 18 to receive the sectoral minimum wage.
- Excludes 8 per cent supplement for holiday pay. Minimum wage based on a 40 hour working week. There are different minimum wage rates for those working a 38 or 36 hour week.
- For all employees aged 16 and over, who are not either on the training minimum wage or the starting out minimum wage.
- Not including annual supplementary pay of two additional months of salary for full-time workers.
- Federal minimum wage. Tipped employees receive a lower minimum wage depending on state laws.

5 We next look at countries where the minimum wage was frozen in 2014. In the US, changes to the federal minimum wage depends on votes in Congress and occur irregularly (although individual States have the flexibility to set their own higher rates). In Greece a 22 per cent cut in its minimum wage in 2012 was implemented under the terms of an international loan arrangement. Legislation passed in 2013 froze its minimum wage until January 2017. Thereafter Greece's minimum wage rates will be set annually by the Government, rather than by collective bargaining, as has previously been the case. At the time of our report, a new coalition Government in Greece, elected on an anti-austerity ticket, was campaigning for a renegotiation of its country's loan agreement, which may have implications for the level of its future national minimum wage.

- 6** There have been no changes to the minimum wage in Ireland since July 2011. 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. Ireland is now in the process of setting up its own equivalent to the Low Pay Commission, along similar lines to the UK's, where a group of employer representatives, employee representatives and independent experts will make recommendations to the Government.
- 7** In Spain, where the minimum wage has been frozen since 2012, two Spanish political parties Podemos and the Social Workers' Party are campaigning for a significant increase in the minimum wage. In Belgium, there was no change in the rate. At the time of our report the latest inflation forecast was 0 per cent for this year. Consequently, no indexation in wages or social allowances and no change in minimum wages rates were foreseen in 2015. Figure A3.1 shows how minimum wage rates have grown in each country since the NMW was introduced in the UK in 1999. Since 1999, in national currency terms, only New Zealand has increased its minimum wage more than the UK. In PPP terms the UK has experienced larger increases than seven countries (including Spain, US and Canada).

Figure A3.1: Changes in Adult Minimum Wages by Country 1999-2014



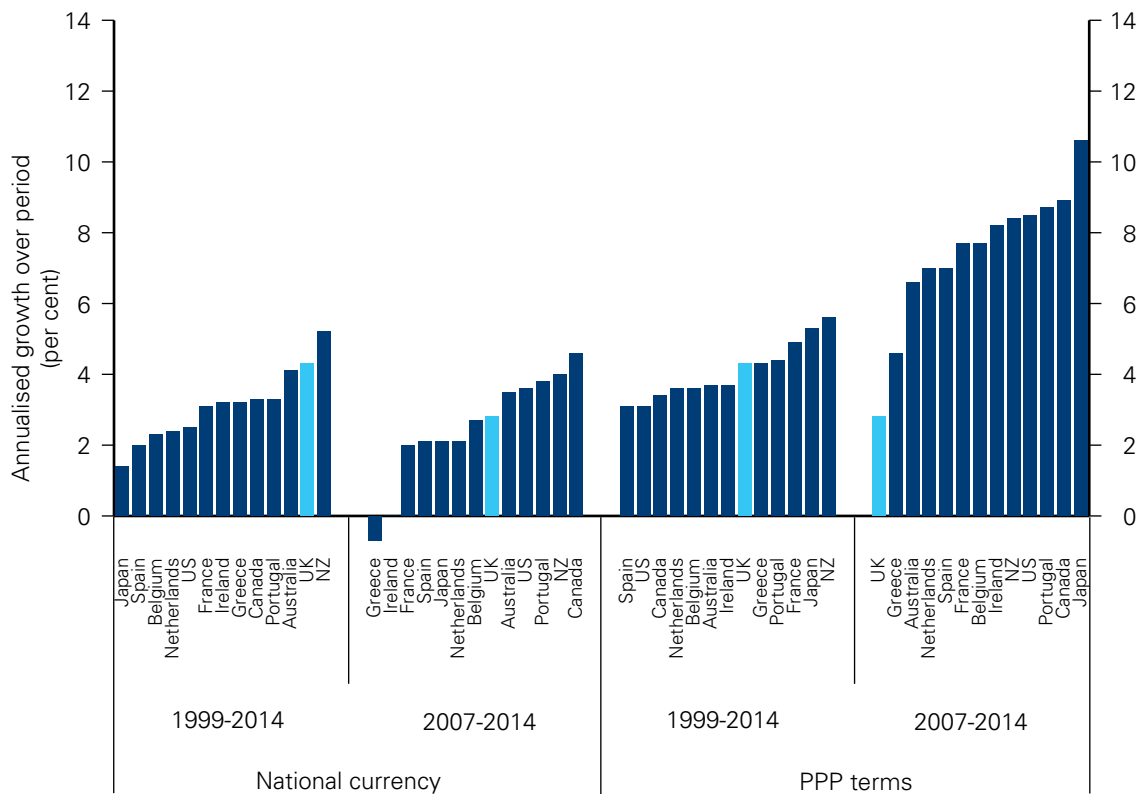
Source: British Embassies and High Commissions. LPC calculations of country minimum wage rates in pounds sterling using exchange rates and PPPs. PPPs derived from CPLs, OECD Main Economic Indicators, November 1999 and September 2014; and exchange rates, Bank of England monthly average spot exchange rate, November 1999 and September 2014.

Note: Figures for Ireland are from 2000 when its minimum wage was introduced.

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- 8 Figure A3.2 shows that between 1999 and 2014 the NMW grew on average by 4.3 per cent a year. This was higher than the annualised growth in the national currency values of all the other countries' minimum wages apart from New Zealand. Since 2007, the NMW has increased at a slower rate (on average 2.8 per cent a year). However, this rate of increase is still higher than seven comparator countries over that period.
- 9 In PPP terms, five countries (Greece, Portugal, France, Japan and New Zealand) have had higher average annualised increases than the UK between 1999 and 2014. The depreciation of sterling between 2007 and 2009, when the pound lost around 25 per cent of its value, combined with relatively higher UK inflation, meant that since 2007 all our comparator countries have experienced much higher average increases to their minimum wages in PPP terms than the UK. In Ireland there were no increases to its minimum wage in national currency terms from 2007-2014, and yet in PPP terms it increased by an average of over 8.2 per cent over the same period. This was due to a combination of inflation and depreciation of sterling during this period.

Figure A3.2: Annualised Growth in Adult Minimum Wages, by Country, 1999-2014



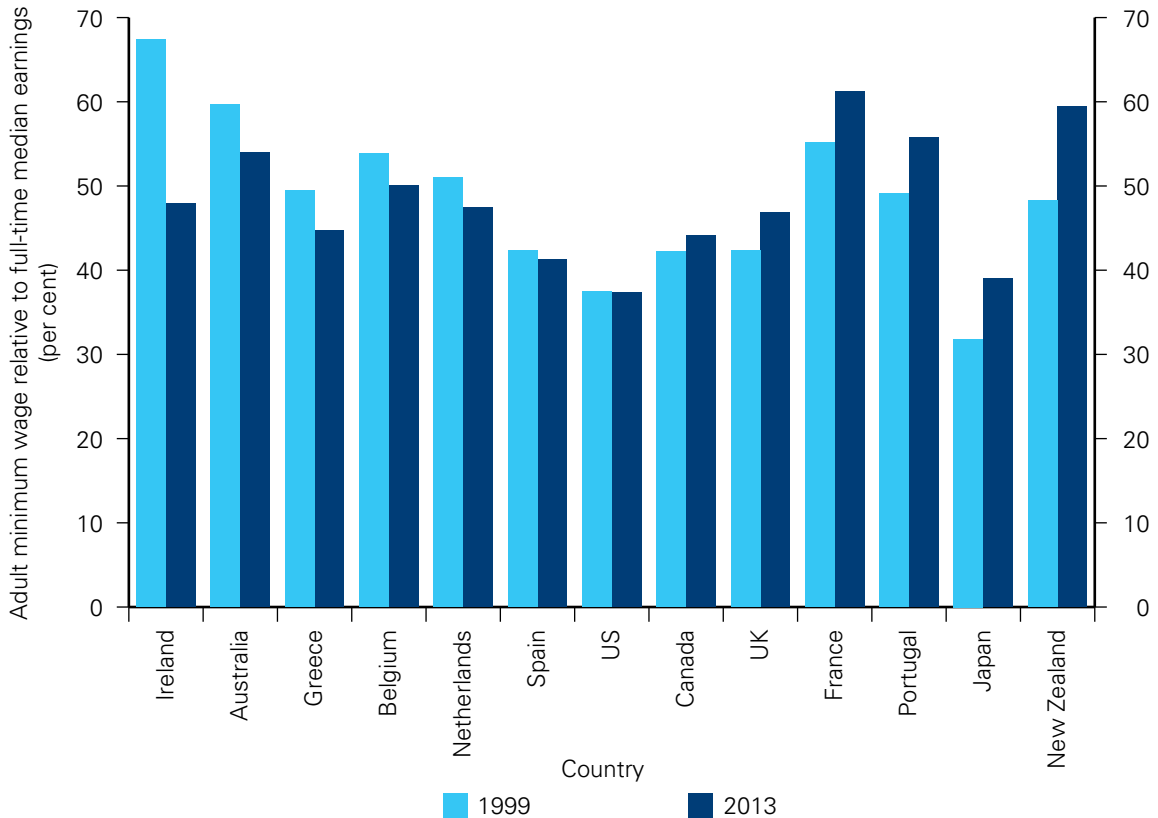
Source: British Embassies and High Commissions. LPC calculations of country minimum wage rates in pounds sterling using PPPs. PPP's derived from CPLs, OECD Main Economic Indicators, November 1999, September 2007 and September 2014; and exchange rates, Bank of England, monthly average spot exchange rate, November 1999, September 2007 and September 2014. Note: Figures for Ireland are from 2000 when its minimum wage was introduced.

- 10 Figure A3.3 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 (it should be noted that this measure of the bite – the only one available for international comparison – is different to the measure emphasised in Chapters 2 and 6, which is the bite for all workers, not just full-time). Figure A3.3 indicates that the bite of the minimum wage in the US has

stayed the same between 1999 and 2013. The countries indicated on the chart to the left and right of the US have reduced or increased their bite respectively.

- 11** In 2013, France, New Zealand and Portugal had the highest bites. Since the introduction of the NMW in the UK in 1999, the size of the bite of the UK minimum wage has increased slightly in comparison with the other countries. For example, in 2013 the UK minimum wage had a higher bite than five countries (US, Japan, Greece, Spain, Canada) up from three in 1999.

Figure A3.3: Adult Minimum Wages Relative to Full-Time Median Earnings, by Country, 1999 and 2013



Source: OECD estimates based on OECD minimum wage database and median earnings for full time workers, 1999 & 2013

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 change in the bite of their minimum wage rates.

- 12** Table A3.2 sets out the arrangements for adjusting each country’s minimum wage. As well as the recent development concerning Ireland as already discussed, Germany has introduced a new national minimum wage. It came into force with effect from 1 January 2015. The initial rate of €8.50 per hour was agreed by the governing parties during their coalition negotiations in October 2013. Future increases in the German national minimum wage will be agreed by a statutory minimum wage commission, consisting of employers and unions only, which will convene for the first time in 2016, with changes to be recommended by 30 June 2016. The statutory minimum wage rate in Germany will be reviewed every two years and any recommendations to change it must be adopted by the majority of the statutory minimum wage commission. It must also take account of wage agreements within the previous two years; labour productivity; and the competitive context of various sectors and regions.

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Table A3.2: Adjustment of Minimum Wages by Country, 2014

Country	Method of adjustment
Australia	Each year the Expert Panel of the Fair Work Commission reviews minimum wages and sets a national minimum wage order for employees not covered by enterprise agreements or modern awards. The decision and order generally come into operation on 1 July each 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	Rates are set independently by each of the 13 provinces/territories, resulting in various dates for increases. Of those, British Columbia and the Northwest Territories are the only ones that do not have a formal mechanism for calculating and adjusting the minimum wage.
France	The minimum wage is re-assessed each year on 1 January. It is uprated in line with inflation (for the 20 per cent of households with the lowest incomes), plus half of the increase in purchasing power at the average hourly wage for industrial and services workers (i.e. not professional or senior roles). The wage is automatically raised in-year if the CPI rises by 2 per cent or more compared with anticipated inflation. In this case, the minimum wage is increased at the same rate. The Government can also increase the minimum wage at any time.
Greece	The Greek national minimum wage has previously 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 national minimum wage and no uprating until the unemployment rate dropped to 10 per cent. Subsequent legislation, passed in July 2013, stated that the Greek minimum wage would remain unchanged until January 2017 (and there was no mention of the 10 per cent unemployment criterion) and after that, a new decision-making process for setting the NMW would come into force. According to this new process, the Greek minimum wage will no longer be decided through collective bargaining (as was the case prior to 2012), but instead will be set annually by the Government via ministerial decisions.
Ireland	The Irish 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. Ireland is currently in the process of establishing its own 'Low Pay Commission' along similar lines to the UK's.
Japan	The system operates regionally by prefecture. The minimum wage is reviewed and amended each autumn. The Central Minimum Wage Council makes recommendations by the end of July to 47 Regional Minimum Wage Councils, 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. Uprating twice a year is required by law and is subject to developments of the average wage (so it is not directly determined by inflation) of both the Government and the private sectors.
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 the 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 Low Pay Commission (comprised of employers, unions and independents), which reports each February 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 national minimum wage rates. Where federal and state laws stipulate different rates, the higher rate applies. Cities and municipalities can also legislate to impose local minimum wage rates.

Source: British Embassies, High Commissions and Low Pay Commission

13 Table A3.3 below 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 high minimum wage have an age-related wage structure. Of those who do not, Canada has a provincially set wage, while New Zealand abolished its youth rate in 2008 and now operates a 20 per cent discount for new entrants and trainees. Table A3.5 explains the treatment of apprentices under arrangements for those undergoing training in each comparator country. Most countries have arrangements where, a lower rate of minimum wage is applicable.

Table A3.3: Youth Minimum Wage Rates as a Percentage of Adult Minimum Wage Rates, by Country, 2014

Country	Percentage at age 16	Percentage at age 17	Average percentage at ages 18/19
Australia^a	47	58	68-83
Belgium	70	76	82/88
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^d	34.5	39.5	49
New Zealand^e	80-100	80-100	80-100
Portugal	100	100	100
Spain	100	100	100
UK	58	58	79
US^c	59	59	59

Source: OECD Minimum Wage Database, British Embassies High Commissions, and LPC.

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. Based on a working week of 40 hours. Different percentages apply for a 38 or 36 hour week.
- e. 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 training minimum wage applies to employees aged 16 and 17, who have not completed six months' continuous employment with their current employer. Employees aged 18 and 19, who have received unemployment benefit for more than six months, will receive the training minimum wage until they have completed six months work for a single employer, after which they will be paid the adult minimum. The training wage also applies to apprentices.

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Table A3.4: Age Variations under Minimum Wage Systems, by Country, 2014

Country	Treatment by age
Australia	Junior rates are a percentage of the national minimum wage: age 16, 47.3 per cent; age 17, 57.8 per cent; age 18 68.3 per cent; age 19 82.5 per cent; and age 20, 97.7 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. British Columbia also has a special minimum wage rate for employees with little or no previous paid-employment experience. Regular minimum wage rate entitlement is granted once they have accumulated 500 hours of work with one or more employers.
France	Full minimum wage at age 18. Younger 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 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; 72.4 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.
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 58 and 79 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. Workers with disabilities may also be paid less than the minimum wage. This special wage rate is determined by the productivity rate of the worker who has the disability compared with workers doing the same job with no disability. Source: US Bureau of Labour Statistics.

Source: British Embassies, High Commissions, and Low Pay Commission.

Table A3.5: Minimum Wage and Apprenticeships, by Country, 2014

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 as a percentage of the national minimum wage. For apprentices: year 1 of apprenticeship (55 per cent), \$9.29; year 2 of apprenticeship (65 per cent), \$10.97; year 3 of apprenticeship (80 per cent), \$13.50; year 4 of apprenticeship (95 per cent), \$16.03.
Belgium	Apprentices are paid a percentage of the minimum salary depending on age. Those aged 21 (and over) 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).
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 are paid at a percentage of the minimum salary depending on age and year of study. Under 18s are paid 25 per cent of the adult minimum wage rate in year 1, 37 per cent in year 2, and 53 per cent in year 3. 18-20 year olds receive 41 per cent of the adult minimum wage rate in year 1, 49 per cent in year 2 and 65 per cent in year 3. Finally, apprentices aged 21 or over receive 53 per cent of the adult minimum wage rate in year 1, 61 per cent in year 2 and 78 per cent in year 3. Trainees (whose education involves a mixture of classroom learning and practical experience) receive different levels of pay according to their age and qualifications.
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 aged 16 and over.
Ireland	The Irish minimum wage 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.
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. However, it is common for interns to be remunerated. Students studying under the Learning by Doing Learning Path Arrangement are with an employer for up to four days a week, spending the remaining time in school. They almost always have a labour contract (dependent on the sector), are paid at least the minimum wage (dependent on age) and are subject to the collective sectoral labour agreement. The Government also stimulates apprenticeships by providing tax breaks for employers.
New Zealand	The training wage applies to apprentices who are enrolled in recognised training. It applies to those employees aged 20 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. Individuals 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 aged 16 to 18 and older workers (19 and over) in the first year of an apprenticeship are entitled to the Apprentice Rate of the minimum wage, set at £2.73 per hour from 1 October 2014.
US	Anyone aged 16 or over can apply to enter 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.

International Work

- 14** Over the last twelve months we have met representatives from a number of other countries including Germany, the Republic of Ireland, South Korea and New Zealand to discuss the operation of the NMW and to spread knowledge and best practice. We continue to note significant overseas interest in particular features of the National Minimum Wage including how the Low Pay Commission has achieved unanimity in its recommendations, and flexibility to respond to economic circumstances.
- 15** These activities included a two-day Peer Review on the UK's National Minimum Wage, organised by the EU and hosted by ourselves and BIS. Held in London, over 30 delegates attended the meeting to learn about how the UK had introduced and operated its minimum wage since 1999. Representatives were from national ministries and independent experts from Belgium, Germany, Greece, Ireland, Italy, Latvia, the Netherlands and Norway as well as the European Commission, Eurofound and the International Labour Organisation.

Appendix 4

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 occurred since our 2014 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 In addition to employment and earnings data, we also look at a variety of macroeconomic data and statistics. This appendix outlines the two main macroeconomic series on inflation and gross domestic product (GDP) used in our analyses, as well as summarising the revisions that ONS has recently made to GDP estimates.
- 3 In our 2013 Report, we reviewed and updated our definitions of the low-paying sectors based on the latest Standard Occupation Classification (SOC) 2010 codes. The final section of this appendix sets out full definitions of each low-paying occupation and industry.

Annual Survey of Hours and Earnings

- 4 ASHE is currently the main source of structural earnings data in the UK and is regarded by ONS as the best source of earnings information for cross-sectional analysis. It provides information on the level, distribution, and composition of earnings, as well as information on hours, 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. Employees not on an adult rate of pay are excluded from ASHE earnings estimates used by ONS, but are included in our own analysis of earnings from ASHE. This means that our earnings estimates may differ to those from ONS. The 2014 ASHE was based on approximately 189,000 returns and related to the pay period which included 9 April.

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- 5** From 2011, 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 reviewed and updated our definitions of the low-paying occupations in our 2013 Report. The results and methodology of the review were outlined in Appendix 6 of our 2013 Report.
- 6** In 2013 HMRC changed the criteria which determined how businesses reported employees' earnings via their PAYE schemes. Previously businesses only needed to operate PAYE for employees earning above the Lower Earnings Limit (LEL) for National Insurance contributions (NICs); and they did not need to report all new jobs until the end of the tax year. From 2013 employers have been required to report details of all employees via their PAYE scheme, including those below the LEL, provided they had at least one employee earning above the LEL. In addition, they have been required to report all jobs in 'real-time', rather than at the end of the year. ONS advise that it is not possible to precisely quantify the impact of these changes as many employers (particularly large firms) already provided information for all employees, including those below the LEL, and it is not possible to identify specific jobs that are included as a result of the changes. However, ONS judges that the impact of the changes is negligible, although there may be larger effects at a lower level of disaggregation.
- 7** Owing in part to these changes, 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 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. In order to produce a consistent series over time, we have used the annual increases in the older data series to adjust the level of earnings to make the previous series compatible with the current series. This generally has the effect of reducing the estimates of the mean and median in years prior to 2011, which increases our estimates of the bite (the NMW relative to the median or mean) for that period.
- 8** In 2013 two new questions on apprentices were included in ASHE as experimental statistics. These required employers to identify whether an employee was an apprentice and, if so, to record the date that the apprenticeship had commenced. The 2013 data were not fully validated and have not been published by ONS. In the 2014 ASHE the apprentice questions were fully validated by ONS. The new data allow us to analyse non-compliance with the Apprentice Rate and, for apprentices aged 19 and over in their second year of apprenticeship, compliance with the Youth Development Rate and adult rate of the NMW. It also allows us to separately identify minimum wage jobs held by apprentices.
- 9** The identification of apprentices also means that we can examine earnings and non-compliance separately for workers and apprentices. Until 2014 the grouping together of apprentices and non-apprentice workers had a downward effect on earnings for young people, as apprentices tend to have lower earnings. From 2014 onwards we are able to produce three distinct time-series: an adjusted time series from 1997 onwards, combining workers and apprentices; a new series from 2014 onwards for non-apprentice workers only; and a new series from 2014 onwards for apprentices only.

Average Weekly Earnings

- 10** AWE is a short-term measure of the level of average weekly earnings per employee in Great Britain which is based on data from the Monthly Wages and Salaries Survey. It replaced the previous measure of short-term changes in earnings, the Average Earnings Index (AEI). AWE provides a monthly measure of regular pay, bonus pay and total pay. This measure 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 results from changes in employment across sectors. The AWE estimates are not just a measure of pay as they also reflect compositional changes within the workforce.
- 11** There have also been changes to the data resulting from the reclassification of major employers between the private and public sectors. New guidance, as a result of the introduction of the 2010 European System of Accounts (ESA10) from 1 September 2014, meant that Network Rail was reclassified from the private sector to the public sector. This affected the estimates of Average Weekly Earnings (AWE) released in December 2014, resulting in revisions to the AWE and PSE estimates. The revisions to the AWE estimates only go back to 2010. Apart from Network Rail, Lloyds Banking Group plc was reclassified to the private sector from April 2014 following the sale of some government owned shares to private sector investors. It had been classified to the public sector between July 2009 and March 2014. ONS estimates that, if the April 2014 reclassification had not occurred, the public sector single month growth rates from April 2014 would have been around 0.3 percentage points higher and the corresponding private sector growth rates would have been around 0.1 percentage points lower.
- 12** During 2013, ONS released three AWE historic time series, all of which are monthly in frequency and include bonus payments: the whole economy series runs from January 1963 to 2010, while public and private sector series are available from January 1990 to 2010. The method used to compile these time series takes into account the observed relationship between AEI and AWE, in particular that AWE increased faster than AEI for most of the period between January 2000 and July 2010. Therefore, these new AWE historic time series show more growth than the AEI. The differences are relatively small between 1990 and 1999, but larger when earlier periods are considered. The difference between the AEI and AWE wage growth should not be over-interpreted, as there is considerable uncertainty introduced by the estimation process. As these historic time series are only available up to 2010, when the AEI was discontinued, there is no fully consistent complete time series for these data sets up to the present time.

Labour Force Survey

- 13** 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.

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- 14** 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, which is different from the seasonality adjustment method used by ONS. Consequently our analyses based on LFS Microdata produce estimates of levels that differ from the headline aggregates published by ONS.
- 15** ASHE contains no information on disability, ethnic background, country of birth, nationality or education level. The LFS is, therefore, our only timely source of data on earnings for disabled people, ethnic minorities, migrants and people with no qualifications. However, data on pay and hours in the LFS tend to be less reliable than in ASHE. Reasons for this include: a smaller sample; people 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 the LFS is lower than 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 in estimating the median earnings of various groups of workers. 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.
- 16** In this report the estimates we present on disabled people use 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 for consistency 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. In April 2013 the disability questions on the LFS were harmonised to other ONS social surveys. This was to bring these questions in line with the Equality Act. But this change does not appear to have led to noticeable discontinuity in the time series data for employment of disabled people (those with a work-limiting disability).
- 17** LFS Microdata are usually revised on an annual basis, resulting from reviews of the seasonal adjustment process and reweighting to new population estimates. In August 2014, ONS reweighted the LFS Microdata back to 2001 to account for the 2011 Census population estimates. Reweighting appeared to have a very small impact on the labour market data, and trends reported in the past remained largely unchanged. Our consistent back-series of estimates takes account of this revision.

Employee Jobs

- 18** 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-on-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.
- 19** In the latest release in December 2014 for data up to September 2014, ONS revised estimates of workforce jobs, including the employee jobs series, back to 1981. These revisions were caused by benchmarking to the latest estimates from the annual Business Register and Employment Survey (BRES), updating the seasonal factors and taking on board late information such as later responses to the survey. A consistent back-series, based on the Standard Industry Classification (SIC) 2007, is also available back to the second quarter of 1978.

Inflation

- 20** 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).
- 21** 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. The RPI is never revised and the CPI, although revisable in theory, has only ever been revised in exceptional circumstances.
- 22** In early 2013, the RPI was assessed against the Code of Practice for Official Statistics and found not to meet the required standard for designation as a National Statistic due to the formulae not meeting internationally-recognised best practices. 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 the RPI remains unchanged, ONS has constructed a new price index (known as RPIJ) which is based on a new methodology and has been published since March 2013. The only difference between the methodologies used to compile the RPI and RPIJ arises from different formulae used in calculating the average of price changes relative to a different period. This results in the RPIJ measure of inflation being lower than or equal to the RPI.

- 23** In January 2015, the UK Statistics Authority published an independent review of UK consumer prices statistics led by Paul Johnson (2015), Director of the Institute for Fiscal Studies. This review considered what changes are needed to the range of consumer price statistics produced for the UK to best meet current and future user needs. It recommended that ONS should move towards making CPIH (the measure of consumer price inflation including owner occupiers' housing costs) its main measure of inflation. In the meantime, the CPI should continue to be the main measure of inflation. The National Statistician will now consider the review and make recommendations to the Board of the UK Statistics Authority. The Authority expects to launch a formal public consultation in the summer of 2015 and to make a final response later in 2015.
- 24** However, the RPI measure continues to be used by forecasters; it is still the main measure of inflation used in wage negotiations; and the time series goes back to 1948. Further, following an independent exercise looking at consumer price indices, Courtney (2014) came to the opposite conclusion with regards to the relative merits of CPI and RPI. Until RPIJ or another measure of inflation becomes as widely used as RPI, we will continue to use RPI and RPIJ, along with CPI, as our main measures of consumer price inflation.

Gross Domestic Product

- 25** 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. Since 2011, ONS has made several changes to the methodology used to produce GDP estimates, resulting in revisions to the data.
- 26** In 2011 ONS implemented significant methodological changes in the production of GDP figures, which brought the UK in 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 inflation; 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.
- 27** Since the 2014 Report, ONS has made several other revisions to the GDP estimates. The main revisions, undertaken by ONS in September 2014, were the result of methodological changes implemented in the National Accounts to be compatible in measuring National Income across EU countries. The latest GDP data released in December 2014 showed that the recession still started in the second quarter of 2008 and lasted for 6 quarters. But the recession was not as deep as previously estimated – output fell by 6.0 per cent between the first quarter of 2008 and the second quarter of 2009. The latest data also suggested that the economy returned to its pre-recession level of GDP in the third quarter of 2013, three quarters earlier than previously thought.

Definitions of Low-paying Sectors

28 Throughout this report, and particularly in Chapter 2, we refer to the low-paying sectors. We define these as occupations or industries which contain a high number or proportion of low-paid workers based on the SOC and SIC codes published by ONS. We have two distinct definitions of low-paying sectors, one based on industries and one on occupations. Table A4.1 sets out a list of low-paying sectors defined by SIC 2007 and SOC 2010 respectively. These definitions are used when conducting detailed analysis of low-paying sectors using ASHE or the LFS.

Table A4.1: Definitions of Low-paying Industries and Occupations, by SIC and SOC Codes

Low-paying industry/ occupation	Old industry definition	New industry definition	Old occupation definition	New occupation definition
	(SIC 2007)	(SIC 2007)	(SOC 2000)	(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	-	-
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	-	9241, 9245, 9249	-
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	-	-	4141, 4216, 9219	4129, 4216, 7213, 9219
Non-food processing	-	-	-	5211, 5441, 8112, 8114-8116, 8125, 8131, 8134, 8139, 9120, 9139
Storage	-	-	-	9260
Transport	-	-	-	5231, 8135, 8212, 8214

Note: '-' denotes not applicable.

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- 29** Industry definitions will capture many workers, such as managers and supervisors, who will not necessarily be low paid while occupational definitions can be more focused on specific low-paid jobs. Ideally we would like our earnings and employment analyses to be based on occupational definitions. However, official employment data using these definitions are not available although we can estimate them quarterly using LFS Microdata and annually using ASHE. There is no regular, official data series on employment by occupation but ONS does provide one on employment by industry, the ONS employee jobs series. In addition, policymakers and stakeholder groups tend to be industry-based. Therefore, we tend to focus our analysis on industries.
- 30** Unfortunately, the ONS employee job series does not have a detailed breakdown of sectors up to four-digit SIC codes. We therefore use broader industry-based classifications when considering the ONS employee jobs series. Table A4.2 contains SIC2007 codes used to define low-paying sectors in our analysis of the ONS employee jobs series. In our 2013 Report and reports prior to that time, we only used the SIC code '87' to define social care in our analysis of employee jobs. However, this definition only covers social care workers who undertake residential care activities. In this report, we also add SIC code '88' to our definition of social care in order to include a large number of domiciliary care and childcare workers.

Table A4.2: Definitions of Low-paying Industries by SIC 2007

Low-paying industry	SIC 2007
Textiles, clothing	13, 14
Retail	45, 47
Hospitality	55, 56
Cleaning	81, 96.01
Hairdressing	96.02
Agriculture	01, 03
Food processing	10
Leisure/Travel/Sport	92, 93
Employment agencies	78.2-3
Residential care	87
Domiciliary care/childcare	88

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