



Resolution Foundation

REPORT



Low Pay Britain 2014

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Summary and report outline

This report is our fourth annual audit of low pay in Britain. It describes in detail the scale of the problem in the latest year for which data is available (2013) and the people it affects. As with many advanced economies, the British labour market has been characterised in recent decades by a growing polarisation. Employment growth has been strongest at the top (high-skill, high-paying jobs) and the bottom (lower-skill, lower-paying jobs) with a decline in employment rates in the middle. It has therefore become consistent for economies to develop high-skill sectors and achieve strong economic growth, while at the same time maintaining sizeable rumps of low paid work.

Since the first *Low Pay Britain* publication in 2011, the debate about pay has changed quickly and we can consider three distinct phases. First, in the five years or so before the financial crisis, workers across much of the earnings distribution found that real wages stagnated even as the economy continued to grow. Secondly, in the immediate post-crisis period, real wages fell, as nominal pay growth slowed and inflation rose above target. More recently, we appear to have entered a new phase in which nominal pay growth has slowed still further, meaning that real pay continues to fall even as inflation has dropped well below target.

As economic recovery builds, the key question for the coming years is whether or not renewed jobs growth will feed through into pay growth that is shared across all workers.

The evolution of low pay and prospects for the coming years

Over the course of the 1980s and 1990s, growing wage inequality – in which the highest earners moved away from middle earners and those in the middle moved away in turn from those at the bottom – meant that increasing numbers of workers found themselves falling below the relative low pay threshold (defined here as two-thirds of gross hourly median pay (excluding overtime) among all employees).

From a low of just 15 per cent of employees in 1975, the proportion of low paid workers peaked at 23 per cent in 1996. Since then, the proportion has

“Growing numbers of workers over the last decade have found that being in work no longer guarantees economic security”

changed very little – as of April 2013 the number stood at 5.2 million, or 22 per cent – reflecting a shift in the nature of pay inequality in recent years.^[1] While the top has continued to move away from the middle, the gap between the bottom and

the middle (helped in no small part by the introduction of the National Minimum Wage (NMW)) has remained relatively constant, and there is some evidence to suggest that standard measures of inequality have tended to *shrink* across the distribution since the onset of the economic downturn in 2008.

Yet, general wage stagnation has meant that growing numbers of workers over the last decade have found that being in work no longer guarantees economic security. Hourly median pay (excluding overtime) stood at £11.56 in April 2013, some 95p lower (adjusted for RPIJ inflation) than the 2009 peak, taking it back to its level in 2003. **Since 2009, the number of workers earning less than a living wage** – the amount that is assumed to provide a full-time worker (averaged across household types) with the means to achieve a minimum standard of living as defined by members of the UK public – **has rocketed, from 3.4 million to 4.9 million in April 2013.**^[2]

Over the longer term, many workers have found that gains in pay have not kept pace with increases in overall economic output and productivity since the early-2000s. This reflects a combination of shifts in the industrial structure of Britain, a rise in the share of GDP going to profits, the decline of labour market institutions, strong growth in non-wage costs and technological changes that have reduced demand for many middle-skilled and middle-paying jobs.

[1] These figures relate to GB employees only, as captured by the ONS *Annual Survey of Hours and Earnings* (ASHE) and deposited at the Virtual Microdata Laboratory (VML). As of April 2013, the total number of employees in Britain was around 25 million, with a further 4 million self-employed. We establish low pay thresholds relative to the median pay recorded in the VML sample (£11.53); that figure differs slightly from the published ASHE median (£11.56) which covers the UK.

[2] We use *location-specific living wages*, reflecting the accepted rates in London and elsewhere in Britain. Because the outside-London rate was introduced for the first time in 2011, we have constructed a hypothetical rate for the earlier period by assuming that it reached its 2011 level by growing at the same rate as the London living wage (which has been in place since 2005).

Who is low paid and how has the picture changed?

As noted, wage stagnation in the mid-2000s and the general wage squeeze of recent years has meant that *relative* measures of low pay have been largely unchanged since the late-1990s. But, with increases in the cost of

“With increases in the cost of living outstripping wage gains for most in the period since the financial crisis of 2008, *needs-based* low pay measures have been rising rapidly”

living outstripping wage gains for most in the period since the financial crisis of 2008, *needs-based* low pay measures have been rising rapidly. We capture these divergent trends in this report by adopting four low pay measures: two relative and two needs-based thresholds.

- » Our core **low pay** definition is based on the standard approach and relates to *hourly wages below two-thirds of gross median hourly pay (excluding overtime) for all employees*, equivalent to **£7.69 an hour** in April 2013.
- » A second relative measure focuses on **extreme low pay**, taken as *hourly wages below one-half of gross median hourly pay (excluding overtime) for all employees*, equivalent to **£5.77 an hour**.
- » We report also a needs-based **living wage** measure which captures *hourly wages below official living wage rates*. We use a combination of the two widely accepted rates in place at April 2013: the London living wage rate of **£8.55** set by the Greater London Authority and the UK living wage rate of **£7.45** set by academics at the Centre for Research in Social Policy.
- » For 2013 only, we present a second needs-based measure, the **reference living wage**. Annual changes in the UK living wage are capped each year, in order to avoid placing an ‘unreasonable’ burden on employers to meet sharp increases in living costs, meaning that they can fall behind the actual cost of living. The uncapped reference living wage figure is rarely quoted: it is not the same as the standard living wage. But it might be considered to better reflect the wage needed to deliver an acceptable standard of living. Averaged across all household types, it stood at **£8.80** in April 2013.

i Box 1: What this report covers

Low Pay Britain focuses on gross pay among employees. It therefore excludes a number of workers and forms of compensation that have important bearings on overall living standards.

The focus on employees – which is driven by the limitations of UK data sources on pay – means that it includes no indication of pay trends among the growing number of self-employed workers in the British labour market. Separate Resolution Foundation work has shown that such workers tend to be lower paid than employees and experience sharper pay falls over the course of the economic downturn.^[1]

The focus on gross pay rather than net – again a product in part of the data source – means that it takes no account of

[1] See for example, L Gardiner, *All accounted for: the case for an 'all worker' earnings measure*, Resolution Foundation, July 2014.

improvements in take-home pay associated with increases in the personal tax allowance. While these changes in income tax are important, they must be balanced against other interactions with the state at the household level. Most obviously, many households will find that any gains from tax cuts in recent years will have been more than offset by reductions in tax credits and other forms of benefits. The Resolution Foundation looks at the changes in net incomes and living standards more generally in its annual report into living standards.

The focus on wages rather than the broader measure of employee compensation – which includes employer social contributions such as employer NICs and pension contributions – means that the report deals specifically with pay packets rather than the overall benefits of work or the cost of labour. We intend to look at this issue in future editions.

A full breakdown of low pay characteristics is provided in Section 3. In summary:

- » **One-in-five employees (22 per cent, or just over five million individuals) in Britain earned less than the low-pay threshold in 2013.** This is a slight – but statistically significant – increase (0.8 percentage points, or 250,000 people) on 2012, reversing a slight fall in the previous year.
- » **Extreme low pay affected just 2 per cent of employees** – likely to be young people and apprentices – reflecting the fact that the threshold falls below the main adult NMW rate.
- » **One-in-five employees (20 per cent, or around 4.9 million individuals) earned less than a living wage.** As with the relative low pay measure, this is a slight – and statistically significant – increase (0.5 percentage points, or 180,000 people) on 2012.
- » **One-in-three employees (32 per cent or around 7.7 million individuals) earned less than the reference living wage.**
- » Across each measure, those most at risk of low pay include **female workers**, the **young**, those **in lower skilled occupations**, **part-time** and **temporary workers** and those employed in **hospitality, retail and care**.

As noted, the proportion of low paid employees has been quite stable since the mid-1990s. But beneath the headline, low pay trends have varied across different employee and job characteristic groups. In summary:

- » Unlike the trend in overall low pay, the prevalence of those earning less than two-thirds of the median has continued to increase in recent years among **younger workers, men**, those employed in **elementary and sales & customer services occupations** and those working in **hotels & restaurants** and in **retail**.
- » In contrast, it has been falling over recent years among **older workers, women**, those employed in **higher skilled occupations** and those working in the **public** and **third sectors**. There was, however, a slight increase in low pay in many of these groups in 2013.

Navigating this report

This year's *Low Pay Britain* report is divided into two main sections:

- » **Section 1** forms the main body of the report and touches briefly on the latest developments in employment and wage growth, before sharing the most interesting findings from our more general analysis of low pay. More specifically:
 - » It highlights **recent wage trends** and considers **how the wage squeeze has been shared across workers**; and
 - » Brings out some of the most interesting features of **low pay today and its evolution over recent decades**;
- » **Section 2** considers the **role the National Minimum Wage plays** in tackling low pay.
- » **Section 3** provides fuller, descriptive statistics on low pay for researchers who want a more comprehensive and detailed account. It sets out low pay trends by a variety of worker and job characteristics, including:

- » **Age, sex and region;**
- » **Occupation, working hours and contracts;** and
- » **Industrial sectors.**

The **Annex** provides **technical details** of the data sources used and the methods adopted to produce consistent low pay time series.

Section 1

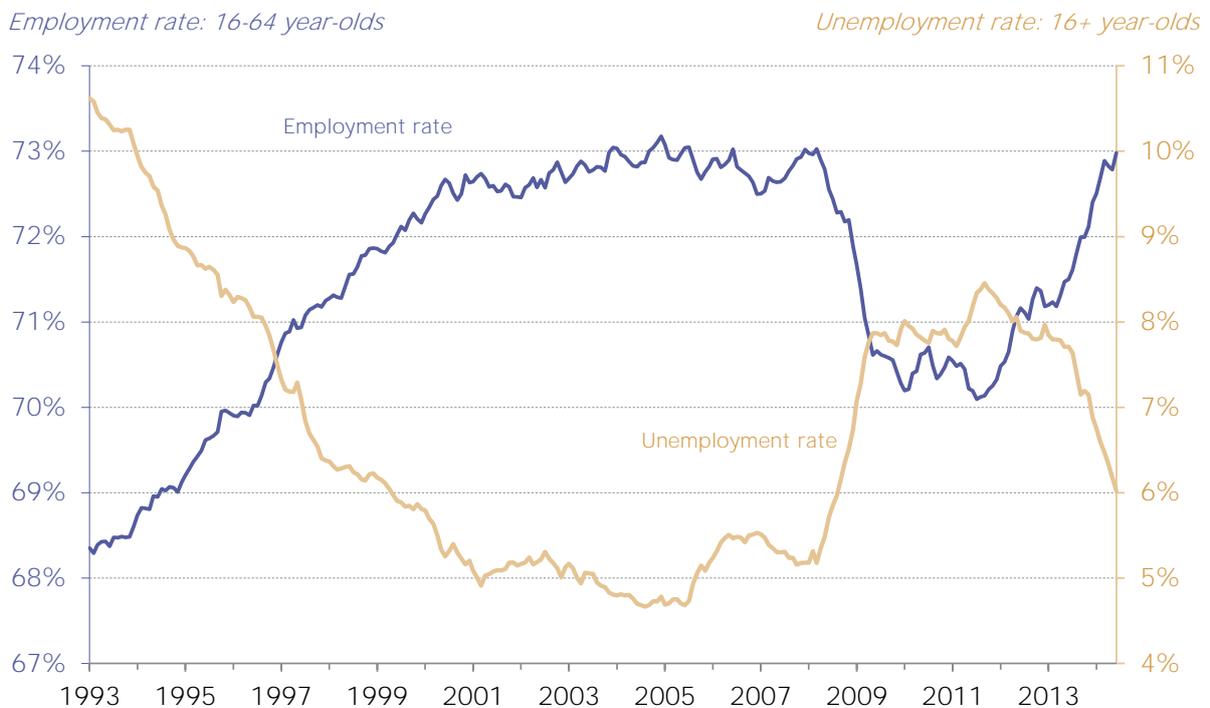
Low Pay Britain 2014

In this section we consider some of the more interesting low pay findings from this year’s analysis, including headline changes in each of our low pay measures, a consideration of the UK’s performance relative to other countries and a comparison of recent trends among different types of workers and across different types of jobs. In order to understand each of these findings however, we begin with an outline of recent trends in employment and in pay more generally.

The economic downturn and subsequent recovery have been marked by unexpectedly resilient employment

After rising sharply during the economic growth years of the 1990s, the UK’s employment rate plateaued at around 73 per cent during the 2000s. As Figure 1 shows, the financial crisis of 2008 sparked a dramatic fall in employment, and a corresponding spike in unemployment. However, given the scale of the subsequent economic downturn – the deepest since ONS records began in 1948 – and the unusually slow pace of recovery, the resilience of the UK labour market stands out as something of a success story.

Figure 1:
Employment and unemployment rates: UK 1993-2014



Source: ONS, Labour Market Statistics

Notes: The headline employment rate is the number of people aged 16 to 64 in employment divided by the population aged 16 to 64. The headline unemployment rate is the number of unemployed people (aged 16+) divided by the economically active population (aged 16+). The economically active population is defined as those in employment plus those who are unemployed.

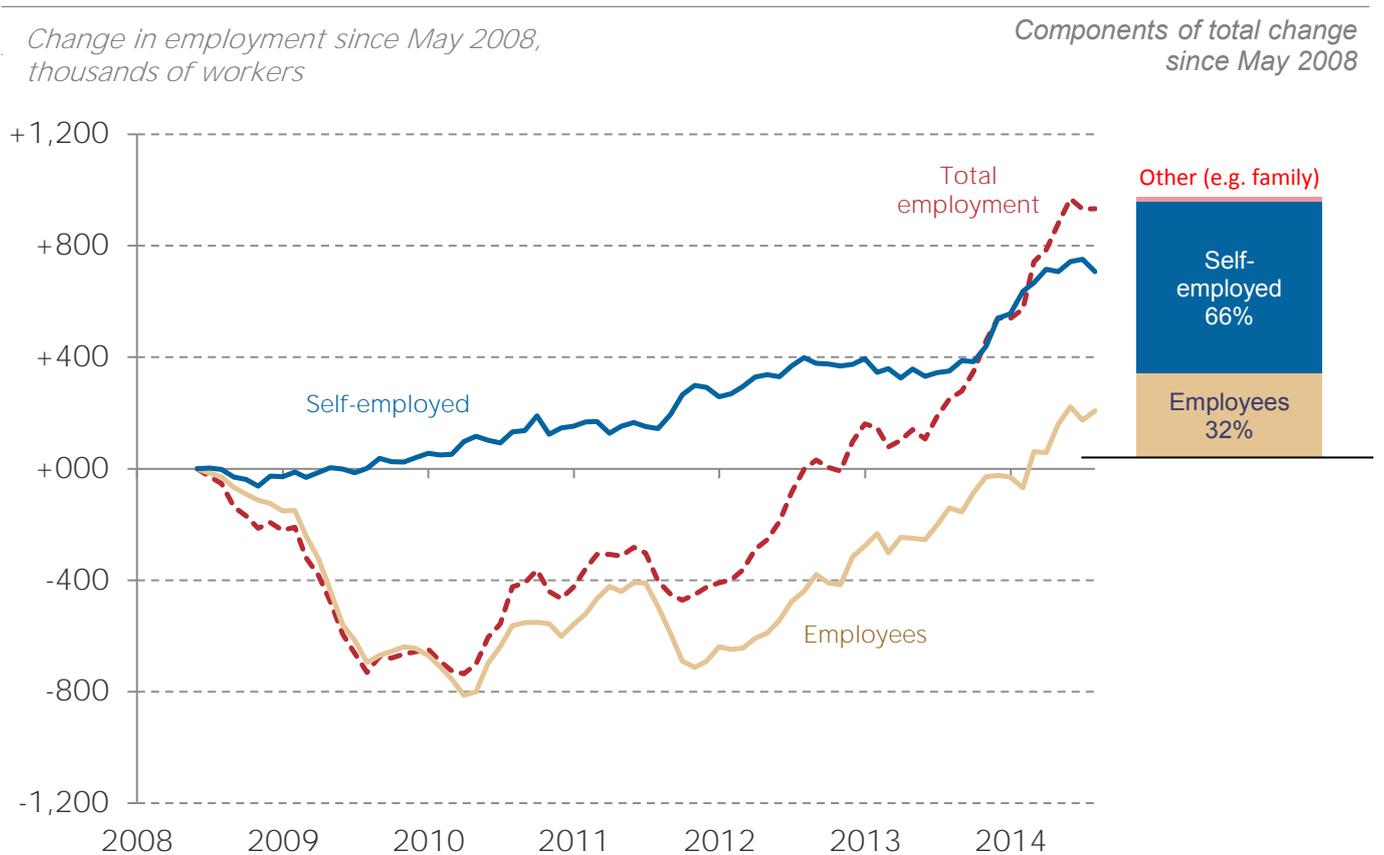
Even at its lowest, the employment rate remained significantly above the level recorded in the early 1990s, and the particularly sharp rebound since 2012 means that the rate has returned to its pre-crisis peak. Unemployment has followed a similar pattern though, at 6 per cent in August 2014, it remains elevated relative to its pre-crisis low of 4.7 per cent.

With self-employment playing a particular key role in this outcome

The strong recovery in employment has been driven to a large extent by increases in the number of self-employed workers. As Figure 2 shows, self-employment accounts for around two-thirds (66 per cent) of the overall increase in employment since May 2008. The number of such workers fell only slightly at the start of the downturn and subsequently rose steadily, adding some 670,000 to the overall employment figure by August 2014.^[3]

In contrast, the number of employees fell sharply between 2008 and 2010 and only returned to its pre-crisis level in 2014. Taken together, the recovery in employees and the self-employed has increased the overall workforce by just over 1 million since May 2008.

Figure 2:
Changes in employment: UK 2008-2014



Source: RF analysis of ONS, Labour Market Statistics

Notes: In addition to employees and the self-employed, a small portion of total employment comprises unpaid family workers and those on government-supported training and employment schemes.

[3] See C D'Arcy & L Gardiner, *Just the Job or a Working Compromise? The changing nature of self-employment*, Resolution Foundation, May 2014 for a fuller discussion of recent trends in self-employment.

But pay growth among employees has been extremely weak

Welcome though the relatively strong employment picture has been, it has come alongside an unprecedented squeeze on pay. While a variety of measures of pay are available (see Box 2), the most timely measure is provided by the ONS's Average Weekly Earnings (AWE) data. As Figure 3 shows, nominal AWE growth (we focus on 'regular pay' here – that is, excluding bonuses) has fallen significantly from its pre-crisis average since 2008, reaching a new low of just 0.7 per cent year-on-year in the middle of 2014. Earnings growth has thus been below CPI inflation for the majority of the past six years. Measured against RPIJ the picture is similar, with the one difference coming in 2008-09, when dramatic cuts in interest rates (which feed through to mortgage interest payments that are captured in RPIJ but not in CPI) meant that inflation turned briefly negative.

i Box 2: Sources of pay data

Statistics on low pay are calculated from samples of the population rather than knowledge of every individual's wages. There are a number of surveys that are used for these pay distributions and trends. Each has its own strengths and limitations. They include the following.

- » The Annual Survey of Hours and Earnings (ASHE) is based on a random 1 per cent sample of employee jobs, asking *employers* about the pay of these staff in April of each year. It is considered the most accurate measure of employee earnings, though not the most timely. The ASHE microdata forms the basis of most of the analysis in *Low Pay Britain*.
- » The Labour Force Survey (LFS) is a quarterly survey of households, including the earnings of individuals within each household. It is considered a timely indicator of pay trends, but a less reliable source of the *levels* of pay (particularly in instances where a household member provides proxy responses to earnings questions on behalf of someone else).
- » Average Weekly Earnings (AWE) is a survey of businesses with at least 20 employees (with corrections made to account for smaller firms). Its monthly releases make it the most up-to-date barometer of both regular and bonus pay, but its focus on averages hides the distribution.

- » The Family Resources Survey (FRS), a survey of *households* rather than individuals. While invaluable for household incomes, it is not commonly used for individual earnings, not least because it is usually 12-30 months out of date. However, it is the only survey listed here to include the self-employed.

Other data sources include the Living Costs and Food Survey, the Survey of Personal Incomes (which uses a sample of HMRC's own records), pay settlement data, and qualitative indicators such as the REC (Recruitment and Employment Confederation) index.

Hourly pay is the best measure of an individual's place in the earnings distribution independent of the number of hours they work, and allows comparison with the minimum wage and living wage, but as not everyone is paid hourly the conversion of reported hours and earnings into hourly pay can introduce extra error.

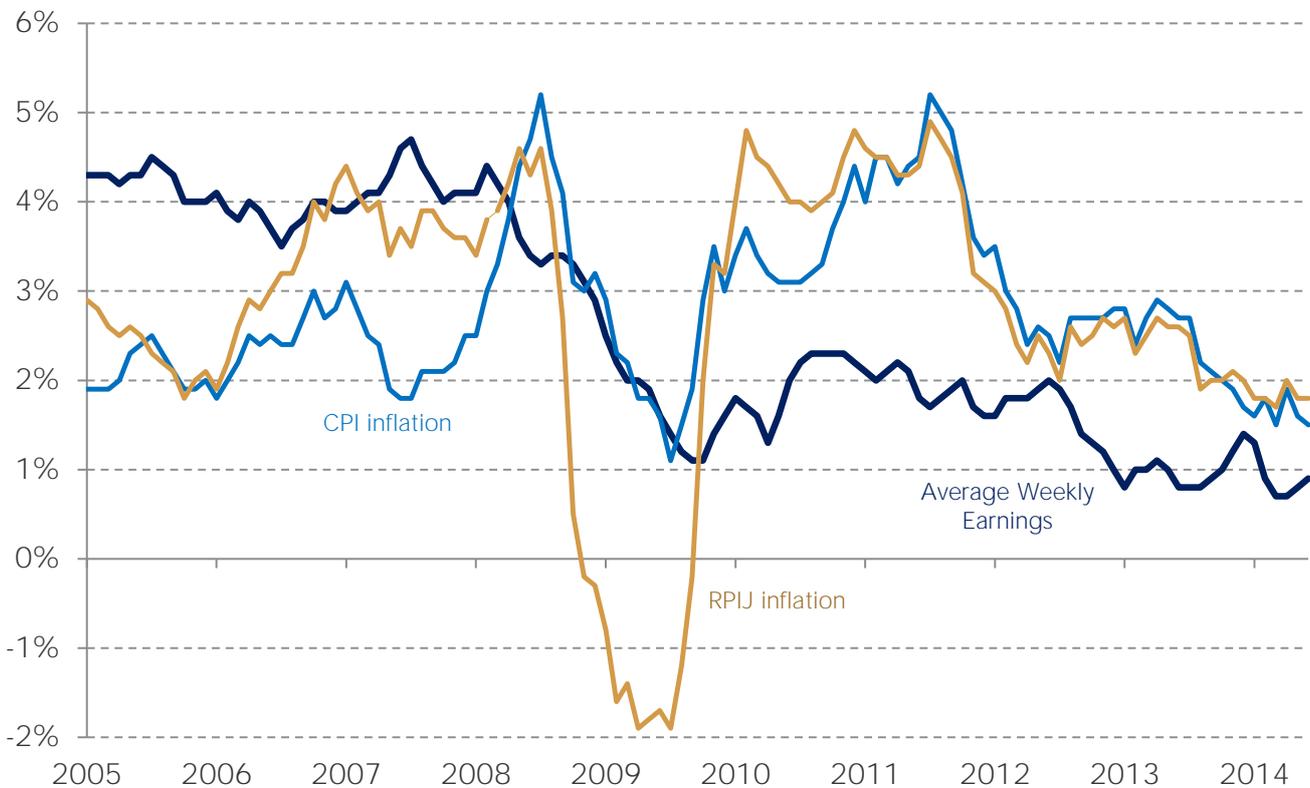
The Institute for Fiscal Studies judges that figures based on ASHE (including ours) likely *underestimate* the prevalence of low pay. By combining data from the LFS and FRS, and attempting to predict the errors in pay data, it estimated that 29 per cent of employees were paid below the living wage (London and non-London) in their main job in 2011-12, compared to the 20 per cent reported in *Low Pay Britain 2013*. The IFS concluded that the true figure is likely to lie somewhere in between ours and theirs.^[1]

[1] IFS, *Green Budget 2014*, February 2014

Despite hopes of a return to real-terms pay growth at the start of the year, unexpectedly low outturns to date in 2014 mean that the six-year pay squeeze shows no signs of ending in the immediate future. The Bank of England’s latest assessment suggests that the recovery in pay will begin in the “middle of next year”.^[4] It expects acceleration thereafter, with nominal annual growth reaching 4 per cent by the end of its forecast horizon, though it is worth noting that the Bank – in line with nearly all economic forecasters – has consistently over-estimated wage growth in its projections over recent years.^[5]

Figure 3:
Average weekly earnings growth and inflation: UK 2005-2014

Annual growth in average weekly earnings (regular pay)/Inflation



Source: RF analysis of ONS, Labour Market Statistics

Notes: The chart covers 'regular pay', thereby excluding bonuses which tend to be more erratic.

[4] “Speech given by Mark Carney, Governor of the Bank of England, At the 146th Annual Trades Union Congress, Liverpool”, Bank of England, 9 September 2014

[5] Even this poor wage performance is likely to understate the true extent of the deterioration in pay levels in recent years. That’s because the official Average Weekly Earnings measure covers employees only, taking no account of the growing number of self-employed workers. This omission matters because evidence from household surveys such as the Family Resources Survey (FRS) suggests that self-employed earnings fell more sharply than employee earnings in the early stages of the downturn. By combining self-employed and employee data to create an ‘all workers’ earnings measure, it becomes apparent that pay fell faster than previously thought between 2008 and 2011. See L Gardiner, *All accounted for: the case for an ‘all worker’ earnings measure*, Resolution Foundation, July 2014 for more details.

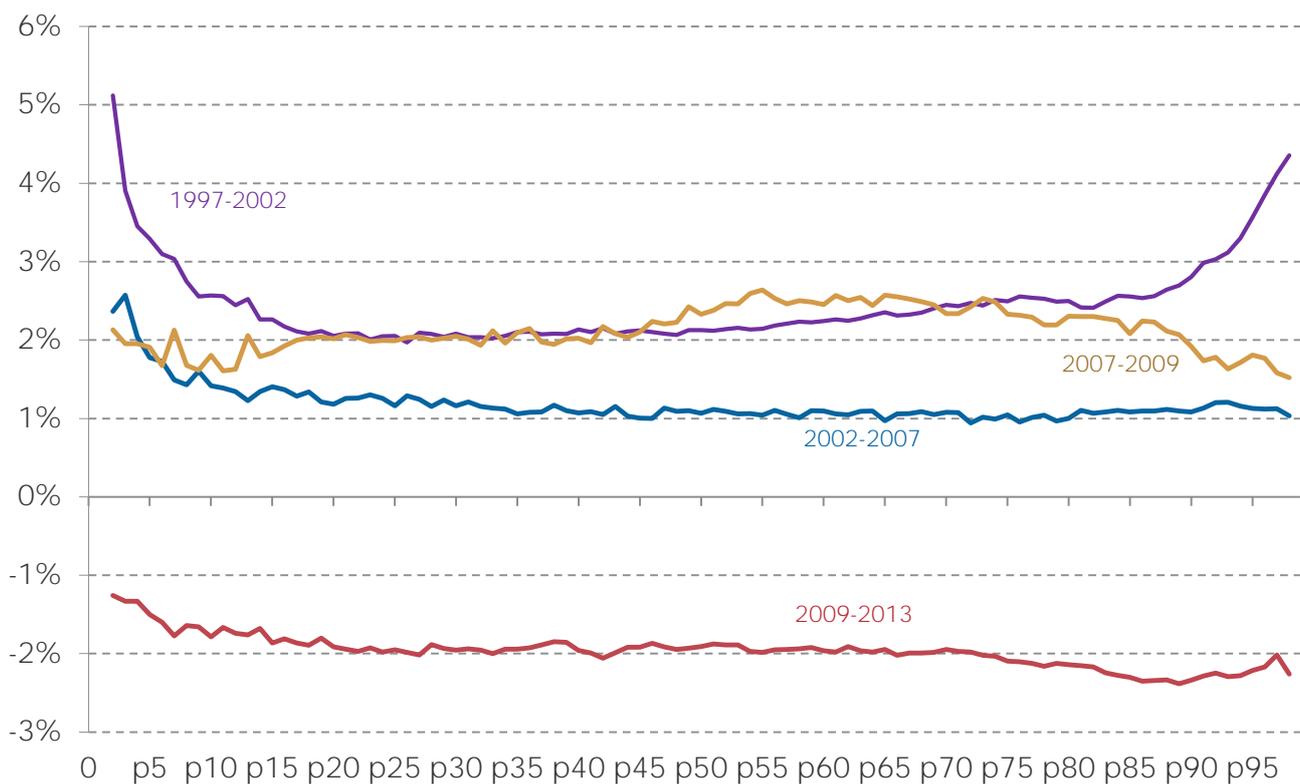
The recent wage squeeze has been felt relatively evenly across the earnings distribution

The fall in real pay over recent years has affected workers across the earnings distribution. Turning to the Annual Survey of Hours and Earnings (ASHE) data source, Figure 4 sets out average annual growth in hourly pay by pay percentile in four different periods:

- » The relatively strong pay growth years of 1997-2002;
- » The slowdown years of 2002-2007;
- » The early downturn period of 2007-2009 when pay continued to rise; and
- » The falling pay years of 2009-2013.

Figure 4:
Average annual growth in hourly earnings excluding overtime by earnings percentile: UK 1997-2013

Average annual real-terms growth (RPIJ-adjusted)



Source: RF analysis of ONS, Annual Survey of Hours and Earnings

Notes: Growth rates are calculated to account for discontinuities in the series in 2004 and 2006. First and 99th percentiles are removed due to statistical uncertainty.

Between 1997 and 2002 pay increased in real-terms by at least 2 per cent a year at all points of the distribution. Increases were higher at the bottom – reflecting the introduction of the National Minimum Wage – and at the top – reflecting growing wage inequality. In contrast, annual growth dropped to around 1 per cent for most parts of the distribution between 2002 and 2007, with the bottom faring slightly better thanks to above average increases in the minimum wage. This slowdown

in wage growth was felt even at the very top, though it is likely that other forms of remuneration, such as bonus payments, continued to boost incomes in this part of the distribution.^[6]

Pay growth briefly returned to around 2 per cent a year between 2007 and 2009, driven by the fact that RPIJ turned negative in 2008-09 as interest rates (and therefore mortgage interest payments) were slashed. The pattern would look less positive measured against CPI. Clearly, however, the spread of growth was largely uniform across the distribution. Since 2009 pay has fallen by between 1 per cent and 2 per cent a year, with the highest earners tending to do a little worse and the lowest earners (again insulated to some extent by the national minimum wage – though this too has fallen in real-terms) doing a little better.

Meaning it is important to focus on needs-based as well as relative low pay measures

The extent to which the wage squeeze has stretched up the earnings distribution over recent years has had somewhat perverse effects on some measures of low pay. This stems from the fact that the definition of low pay often used is primarily a *relative* one, focusing on hourly wages which are low in comparison to the wages of others in the labour market. With pay at the median and below stagnating or falling more or less in line for much of the last decade, such relative measures have altered little, giving the impression that low pay is no more of an issue today than it was at the start of the 2000s.

Yet in truth, stagnating and falling wages have meant that increasing numbers of workers have found it hard to get by on pay alone, as evidenced by the steady but gradual rise since the mid-1990s in the proportion of families in poverty in which at least one person is in work.^[7] Such trends have sparked a renewed interest in low pay thresholds linked to socially defined levels of subsistence or basic needs, as manifested in the calculation of minimum income standards^[8] and a revival of living wage campaigns whose aim has been to ensure that wages deliver a ‘minimum acceptable quality of life’ for their recipients.^[9]

In this report we take both approaches, adopting two relative and two needs-based low pay thresholds:^[10]

- » Our core **low pay** definition is based on the standard definition and relates to *hourly wages below two-thirds of gross median hourly pay (excluding overtime) for all employees*. We calculate median hourly pay in Britain at April 2013 (the latest year for which data is available) to be £11.53^[11] making the low pay threshold we use throughout this report **£7.69**, equivalent to gross earnings of around £14,000 a year for a 35-hour working week.

[6] Although the ASHE survey aims to capture bonuses, such irregular payments tend to be under-reported when measuring hourly pay.

[7] While child poverty rates fell during the late-1990s and early-2000s, the proportion of families in poverty that were in work rose. See for example, P Gregg, A Hurrell & M Whittaker, *Creditworthy: Assessing the impact of tax credits in the last decade and considering what this means for Universal Credit*, Resolution Foundation, June 2012.

[8] See for example, D Hirsch, *A Minimum Income Standard for the UK in 2013*, Joseph Rowntree Foundation, June 2013.

[9] Living wages are calculated with reference to focus groups definitions of the basket of goods that is required – at the household level – for a minimum standard of living (for example, basic foods and transport needs). The living wage thereby gives an absolute measure of the wage that is needed for families simply to get by in modern Britain.

[10] The cash equivalents for a variety of pay thresholds are set out in Table 1 in Section 3.

[11] This figure relates to GB employees only, as captured by the *ONS Annual Survey of Hours and Earnings* (ASHE) and deposited at the Virtual Microdata Laboratory (VML). It is distinct from the ONS published median hourly pay figure of £11.56 (which covers the UK and excludes employees not on adult rates of pay). See Section 3 for full details.

- » A second relative measure focuses on **extreme low pay**, taken as *hourly wages below one-half of gross median hourly pay for all employees*, or **£5.77** an hour. This is below the level of the April 2013 adult NMW rate of £6.19 (54 per cent of our gross median hourly pay figure) and therefore affects relatively few people, but consideration of a time series of extreme low pay allows us to explore the impact of the NMW on low pay differentials below the standard threshold.
- » We report a needs-based **living wage** measure which captures *hourly wages below official (location-specific) living wage rates*. We use a combination of the two widely accepted rates in place at April 2013 the London living wage rate of **£8.55** set by the Greater London Authority and the UK living wage rate of **£7.45** set by academics at the Centre for Research in Social Policy.^[12] The fact that the UK living wage rate is lower than our standard low pay threshold highlights that receipt of a living wage does not, in itself, lift its recipient out of low pay.
- » Despite its aim, the UK living wage is not a pure needs-based measure. Annual increases are capped in order to avoid placing an ‘unreasonable’ burden on employers to meet sharp increases in living costs. We also therefore look at the **reference living wage**, which is the uncapped figure and, while not commonly used, might in some respects be considered to better reflect the wage needed to deliver an acceptable standard of living (averaged across household types). We use the UK reference wage of **£8.80** and establish a London equivalent by applying the ratio of the London living wage to the UK living wage (implying a figure of **£10.10**).

Relative low pay measures have been flat, but needs-based low pay measures have increased

“Having returned to its late-1960s level in the mid-1990s, the proportion of workers in low pay has subsequently changed very little”

Trends in each of these low pay measures are set out in Figure 5. Looking first at our core low pay measure, it shows that **one-in-five (22 per cent, or 5.2 million) employees earned less than two-thirds of the hourly median in April 2013.**

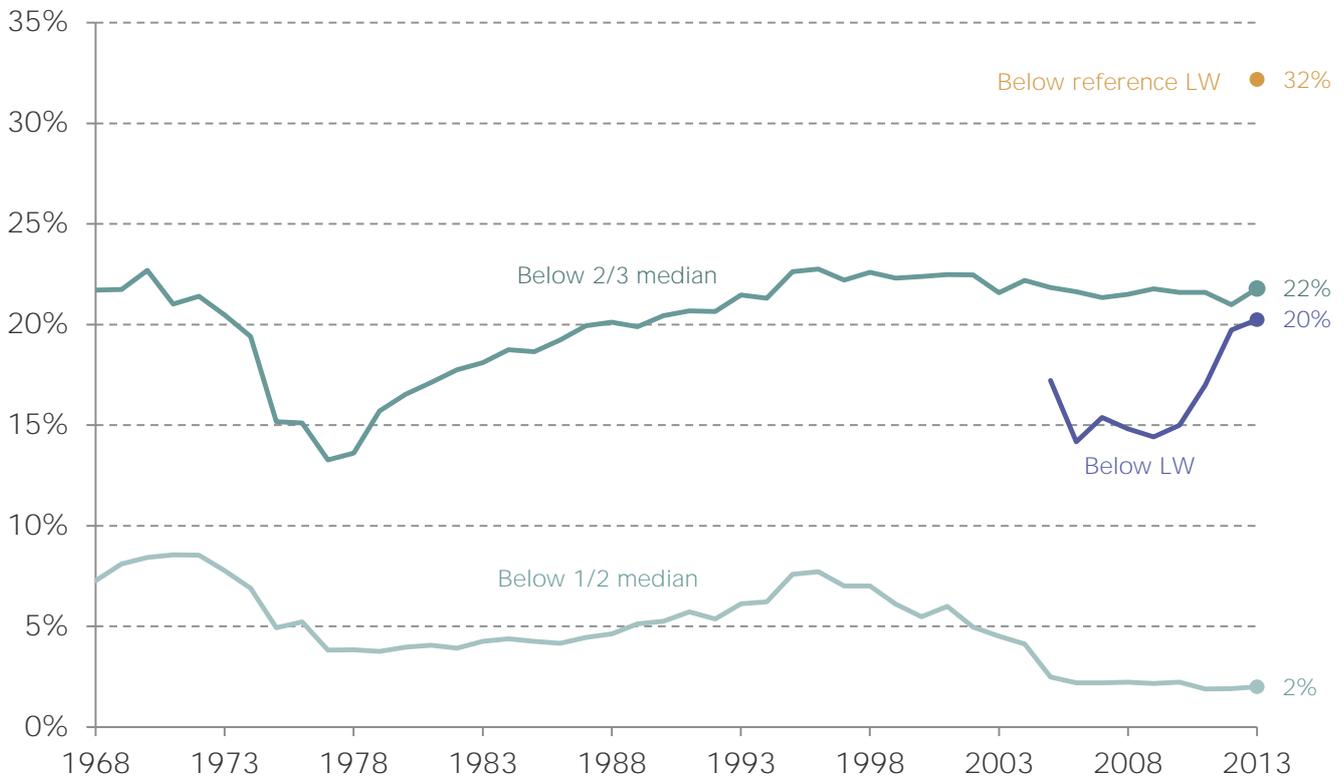
Following major improvements associated with the Equal Pay Act of 1970 and the incomes policy of the mid-1970s, the incidence of low pay – as captured by our core

measure of two-thirds of median hourly pay – climbed steadily over the course of the 1980s and 1990s. As discussed above, this reflects the pattern of wage inequality in evidence in this period, in which gaps between the top and the middle and between the middle and the bottom became more stretched. Having returned to its late-1960s level in the mid-1990s, the proportion of workers in low pay has subsequently changed very little, with wage inequality in the lower half compressing slightly even as the highest earners continued to move away from the rest of the workforce.

Figure 5 also highlights the steep decline in extreme low pay from 1997 onwards, reflecting a squeezing of wage differentials below the standard low pay threshold as employers responded in advance to the introduction of the NMW in 1999. Figure 6 reinforces this point. It makes clear that a relatively long-tail of low pay in 1997, stretching a significant way down the hourly wage scale, has been replaced in 2013 by a clear spike of workers paid at or around the adult NMW rate.

[12] The calculation method used by the GLA is set out on their website, and the calculation method used by Loughborough University’s Centre for Research in Social Policy is set out on the Citizens UK website.

Figure 5:

Proportion of all employees below selected low pay thresholds: GB 1968-2013

Source: RF analysis of DWP, *Family Expenditure Survey* (1968-1981); ONS, *New Earnings Survey Panel Data* (1975-2013); and ONS, *Annual Survey of Hours and Earnings* (1997-2013)

Notes: Figures are drawn from three separate data sources. Where these sources overlap, differences exist in the proportions of employees reported to be below the various low pay thresholds. Figures prior to 1997 have been adjusted to account for the magnitude of difference recorded in these overlapping periods, in order to create a consistent time series. The original, unadjusted, data is presented in Section III. The living wage has been calculated in London from 2005, but an outside London rate has only been in place from 2011. To allow for the estimates shown above, we project the outside-London living wage backwards, on the assumption that it has been subject to the same year-on-year growth rates as the London figure.

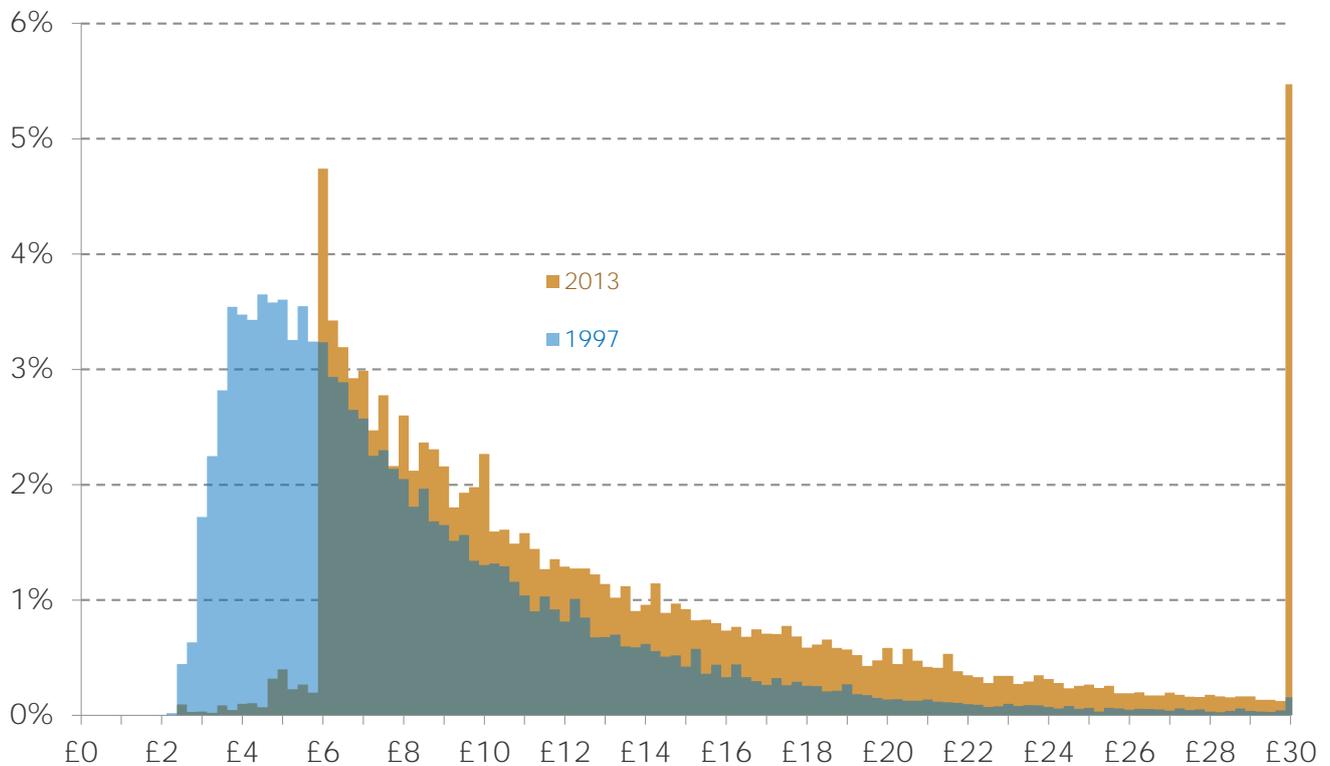
Given that the adult NMW rate of £6.19 an hour was equivalent to 54 per cent of the median in April 2013, it is unsurprising that the **proportion of employees experiencing extreme low pay was just 2 per cent**. This small group comprises a combination of legitimate exceptions to the main NMW (youth and apprentice rates), contraventions of the legal minimum by employers breaking (knowingly or otherwise) the law and erroneous data. In dealing with the important minority of cases where extreme low pay remains an issue due to employer contravention, there is a clear need for stronger enforcement of the NMW legislation by government.

Turning to the first of our two needs-based measures, Figure 5 shows that **4.9 million (20 per cent) employees earned less than a living wage in 2013**, up sharply from 14 per cent in 2009. This dramatic increase – even as overall rates of low pay remained relatively flat – reflects a 5.7 per cent uprating in the London living wage rate in 2011, compared with increases of 3.3 per cent and 2 per cent in the previous two years.^[13] With typical pay levels growing much more slowly (in nominal terms) since the start of the economic downturn, the living wage has therefore become significantly more generous in relation to median earnings (which have been falling), reflecting the squeeze on living standards that has characterised the recent downturn. Although it has increased only slightly between 2012 and 2013, the proportion earning less than a living wage reached its highest rate yet in the latest data.

[13] The outside-London living wage was only introduced in 2011 and has therefore been projected backwards on the basis of past London living wage rates.

Figure 6:
Hourly pay distribution: GB 1997 & 2013

Proportion of all employees in each 25p pay band



Source: RF analysis of ONS, Annual Survey of Hours and Earnings

Notes: Gross hourly pay excluding overtime, set out in 25p bands. The final column shows the proportion earning in excess of £30 an hour.

Finally, Figure 5 shows that **one-in-three employees earned less than the reference living wage in April 2013**. That is, one-third of employees do not earn enough in full-time employment (when added to with top-ups from the state in the form of tax credits and other benefits) to achieve (when averaged across different household types) what the UK public believes constitutes an acceptable minimum standard of living.

Britain remains at the wrong end of the low pay league table

To put these figures into context, it is worth looking at how Britain's performance on low pay compares internationally.

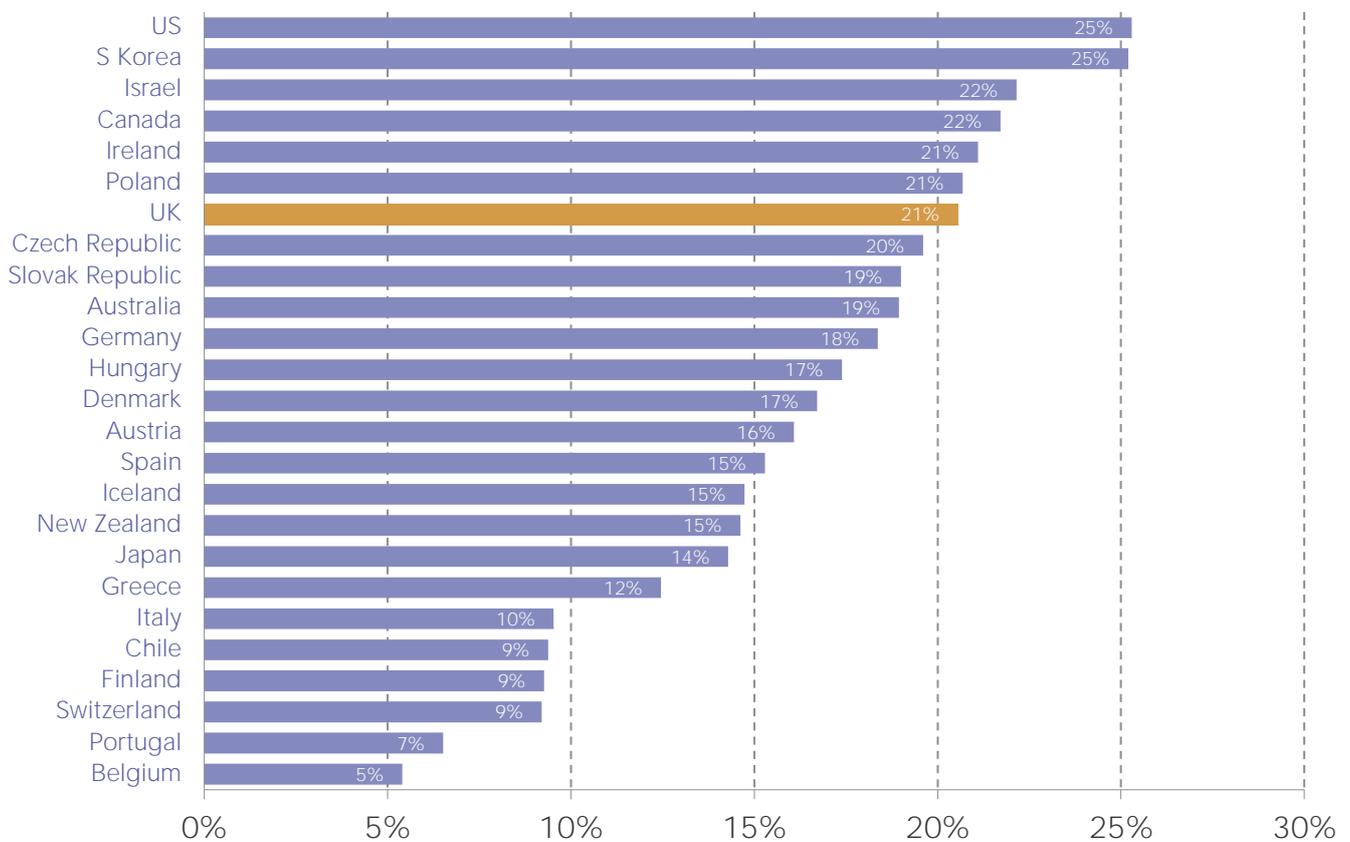
Low paid work is a feature of labour markets in all advanced economies and, in part, the growth in wage inequality and therefore in relative low pay that Britain experienced in the 1980s and 1990s was common to much of the developed world in the final quarter of the 20th century.^[14] Yet despite the stability of (relative) low pay rates since the mid-1990s, Britain continues to stand out as having one of the highest incidences of low paid work in the OECD, as Figure 7 shows.

[14] J Plunkett, *Growth without gain?* Resolution Foundation, 2011, p. 31

The figures are based on the OECD’s alternative (relative) low pay threshold of two-thirds of gross median hourly earnings for *full-time employees* (rather than *all employees* as we use). On the basis of this definition, 21 per cent of all employees in the UK were low paid in 2012 (coincidentally, the same as the figure using our measure), marking the UK out as one of the worst performers on the international stage. Workers in Britain are twice as likely as counterparts in Switzerland (9 per cent) and four times more likely than employees in Belgium (5 per cent) to earn below the low paid threshold.

Figure 7:
Share of full-time employees in low paid work across advanced economies: latest data (2010-2012)

Proportion earning less than two-thirds of median full-time pay



Source: OECD Labour Market Statistics

Notes: 'Low pay' here covers full-time workers only and is measured with reference to gross weekly earnings. Labels are rounded, but the data underlying the bars is not.

In explaining this, we might consider the extent to which Britain is creating notably lower quality, lower paying versions of roles in sectors such as hospitality, retail and social care than many other developed economies. We might also point to a range of public policy choices over the past three decades that have eroded those labour market institutions that have done much in other countries to mitigate the forces bearing down on pay at the bottom of the labour market. Taken together it is apparent that, while the particular incidence and composition of low-wage work in any given country is the result of unique patterns of production and employment, we must acknowledge that these patterns are shaped in part by the choices of policymakers.

Certain employee and job profiles are particularly associated with low pay

While full details of the characteristics of the low paid, and the evolution of this group over time are provided in Section 3, Box 3 provides a summary of the current position. Although there is evidence of low pay across all groups and industries, it shows that:

- » In terms of *employee characteristics*, women, the young, older workers and those outside of London are most at risk.
- » In terms of *job characteristics*, prevalence is highest among workers in lower- and middle-skilled occupations such as *elementary occupations* (including cleaners, security guards, catering assistants and leisure workers), *sales & customer services* (retail assistant, cashiers, telephone salespersons and customer services for example) and *personal services* (covering social care and childcare for instance). The risk of low pay is also higher among those who work part-time or on temporary contracts
- » Looking across *industrial sectors*, low pay is most likely to occur among those who work in the *hotels & restaurants* sector, *wholesale & retail* and *admin & support services*. It is also much more prevalent in the private sector than in the public or third sectors.

i Box 3: A summary of those most at risk of low pay in April 2013

Overall

- » 5.2 million employees are low paid, representing 22% of all workers.
- » 0.5 million (or 2%) are in extreme low pay.
- » 4.9 million (or 20%) earn less than the prevailing living wage in their area.
- » 7.7 million (or 32%) earn less than the prevailing reference living wage in their area.

By employee profile

- » 3.2 million women (or 27%) are low paid.
- » 0.9 million (or 81%) of those aged 16-20 are low paid; as are 0.9 million (or 40%) of 21-25 year olds.
- » 16-20 year olds account for 84% of the total number in extreme low pay.
- » 0.2 million (or 21%) of workers aged 61-65 are low paid; as are 0.1 million (or 33%) of those aged 66 and above.
- » One-in-four employees in the North East, Yorkshire & the Humber, the East Midlands and Wales are low paid.
- » London is the only region in which more workers earn below the living wage (17%) than are low paid (12%).

By job profile

- » 2.9 million (or 43%) part-time workers are low paid, comprising 56% of all the low paid.

- » 34% of workers on temporary contracts are low paid, but they account for just 13% of the total.
- » 1.7 million workers (or 61%) in elementary occupations are low paid.
- » As are 1.1 million (57%) in sales & customer services occupations.
- » And 0.9 million (38%) in personal services.
- » These three occupations together account for 71% of the low paid total, and 73% of those in extreme low pay.

By industrial sector

- » 0.8 million (or 70%) of workers in the hotels & restaurants sector are low paid.
- » 1.4 million (or 41%) in wholesale & retail are low paid, representing 27% of the total.
- » 0.5 million (or 38%) in admin & support services are low paid.
- » Health & social work and education sectors account for 23% of the low paid, despite below average prevalence.
- » 4.3 million (or 27%) of workers in the private sector are low paid, accounting for 85% of the total.
- » Just 10% of workers earning less than a living wage are employed in the public sector.

The low pay picture continues to change, with differing recent experiences among younger and older workers

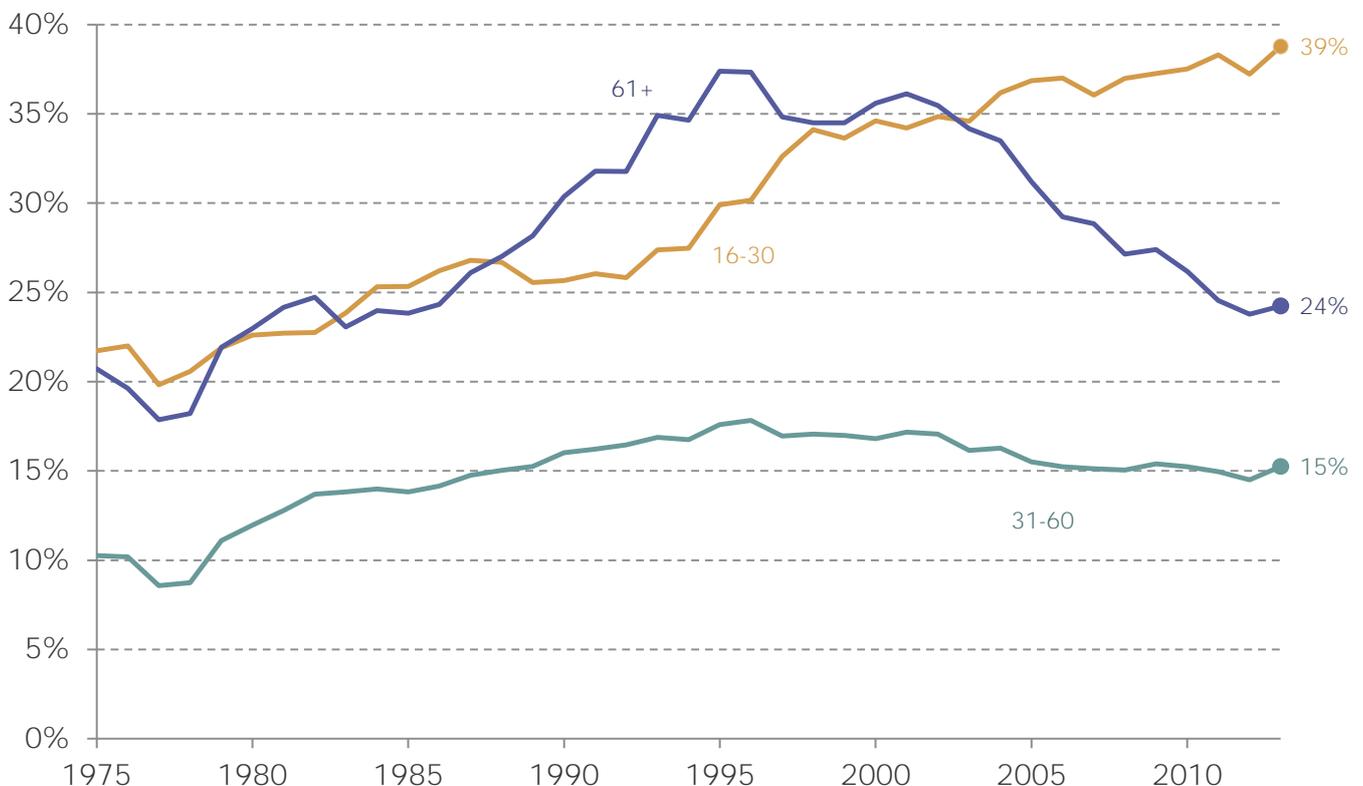
Many of the headline figures relating to relative low pay have changed little in recent years, while those relating to needs-based low pay have tended to increase in line with the overall trend as the earnings squeeze has taken hold. However, over a longer timeframe there are some interesting differences across employees and job types. Again, Section 3 provides full details, but here we consider some of the more striking trends.

We look first at trends by age. As noted above, younger and older workers are significantly more likely to be low paid than are those aged between 30 and 55, reflecting in part the traditional trajectory of earnings over the life course. Yet, despite sharing above-average levels of low pay, recent trends in prevalence look somewhat different across younger and older workers.

These divergences are highlighted in Figure 8. It shows the proportion of low paid employees in three broad age groups: a younger group of 16-30 year olds, a middle group of those aged 31-60 and an older group of those aged 61 and above. While the trend among the middle group largely reflects that identified in Figure 5 – with low pay increasing steadily over the course of the 1980s and early-1990s before plateauing more recently – the recent direction of travel looks very different in the younger and older groups.

Figure 8:
Proportion of workers on low pay by broad age group: GB 1975-2013

Proportion earning less than two-thirds of median hourly wage



Source: RF analysis of ONS, *New Earnings Survey Panel Data* (1975-2013) and ONS, *Annual Survey of Hours and Earnings* (1997-2013)

Notes: Figures are drawn from two separate data sources. Where these sources overlap, differences exist in the proportions of employees reported to be below the various low pay thresholds. Figures prior to 1997 have been adjusted to account for the magnitude of difference recorded in these overlapping periods, in order to create a consistent time series.

Among 16-30 year olds, the proportion in low pay has continued to increase, rising from 30 per cent in 1996 to 39 per cent in 2013. In contrast, among older workers the level has fallen over the same period, from 37 per cent to 24 per cent. It is worth noting, however, that levels of low pay among older workers remain higher than the national average.

The trend among younger workers may in part reflect the growth of student employment, although it is noticeable that the pattern is not restricted to workers aged 21 and under – the most common years of study. For older workers, we might speculate that the improvement is down to a combination of a general increase in older employment, the impact of the NMW, cohort effects (with today's older workers likely to be higher skilled than those that went before) and the introduction of age discrimination legislation.

Despite these trends, the proportion of the low paid accounted for by each of these three broad age groups has altered little over time. That is, while the risk of being low paid for younger and older workers *has* changed (prevalence is up for younger workers and down for older workers), the overall *composition* of low pay looks much as it did in earlier decades. Such stability can be explained by the fact that reductions in low pay among older workers and increases among younger workers have been offset by a shift in the *composition of the workforce*, with older workers accounting for an increasing share of the overall labour market.

However, rapid increases in employment over the course of the last 12 months have been driven by younger workers, suggesting that compositional factors might be expected to increase low pay in the 2014 data when it is available.

The gap between low pay levels among men and women has narrowed over recent decades

Turning next to sex, Figure 9 illustrates the rapid wage gains made by low paid women in the early 1970s (falling from a peak of around 45 per cent to a low of just 25 per cent in just over a decade). It is difficult to determine the precise cause of this reduction, but the Equal Pay Act of 1970 and the incomes policy of the 1974–77 Labour Government (which had positive effects on the earnings of the lowest-paid workers then, as now, predominantly women) are likely to have been key factors.^[15]

Although the proportion of low paid female workers subsequently increased once more, reaching around one-third in the early-1980s, the trend over the last three decades has been one of gentle but steady improvement. What's noticeable in the latest data, however, is that this improvement halted in 2013. Although only slight, the proportion of low paid women rose by a statistically significant 1 percentage point – its biggest increase in a single year since 1995.

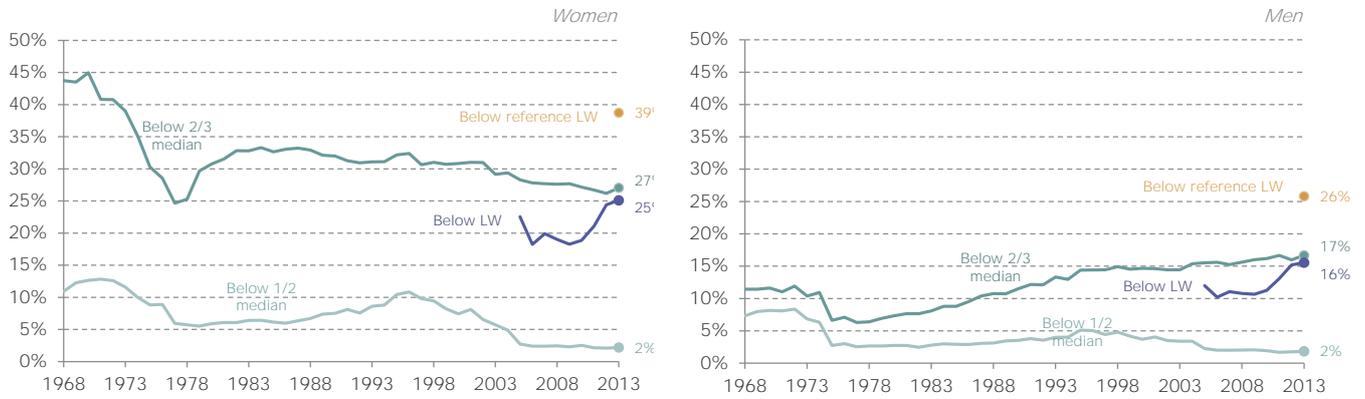
In contrast to the longer-term trend among women, the proportion of low paid male workers climbed relatively rapidly between the mid-1970s and late-1990s, albeit from (6 per cent), and to (15 per cent), levels that remained well below those recorded among women. A further increase since the onset of the financial crisis means that 17 per cent of male employees were low paid in 2013.

As with the overall trends, the proportions in extreme low pay declined significantly for both men and women alongside the introduction of the NMW, while the proportions earning below the living wage threshold increased sharply from 2009.

Despite the divergent experiences of men and women in recent years, women continue to account for around 61 per cent of all low paid employees – though this is down from a peak of 77 per cent in the early 1970s. In relation to extreme low pay, the split is much closer to 50/50.

[15] See D Coats et al, *From the Poor Law to Welfare to Work: what have we learned from a century of anti-poverty policies*, the Smith Institute, 2012; and R Taylor 'The rise and fall of the Social Contract,' in A Seldon & K Hickson (eds.), *New Labour, Old Labour: the Wilson and Callaghan government, 1974-79*, London: Routledge 2004.

Figure 9:
Proportion of employees below selected low pay thresholds by sex: GB 1968-2013



Source: RF analysis of DWP, Family Expenditure Survey (1968-1981); ONS, New Earnings Survey Panel Data (1975-2013); and ONS, Annual Survey of Hours and Earnings (1997-2013)

Notes: See notes to Figure 5

But the gap in low pay levels between lower-skilled and higher-skilled occupations continues to widen

Finally in this summary of recent trends in low pay, we consider occupations. Figure 10 compares changes in low pay prevalence in the two occupations with the highest and lowest levels of low pay in 2013 (*elementary occupations* and *professional occupations*).

Figure 10:
Proportion of employees below selected low pay thresholds by selected occupations: GB 1997-2013



Source: RF analysis of ONS, Annual Survey of Hours and Earnings

Notes: See notes to Figure 5. Occupations based on harmonisation of SOC 2000 (1997-2010) and SOC 2010 (2011-2013) categories.

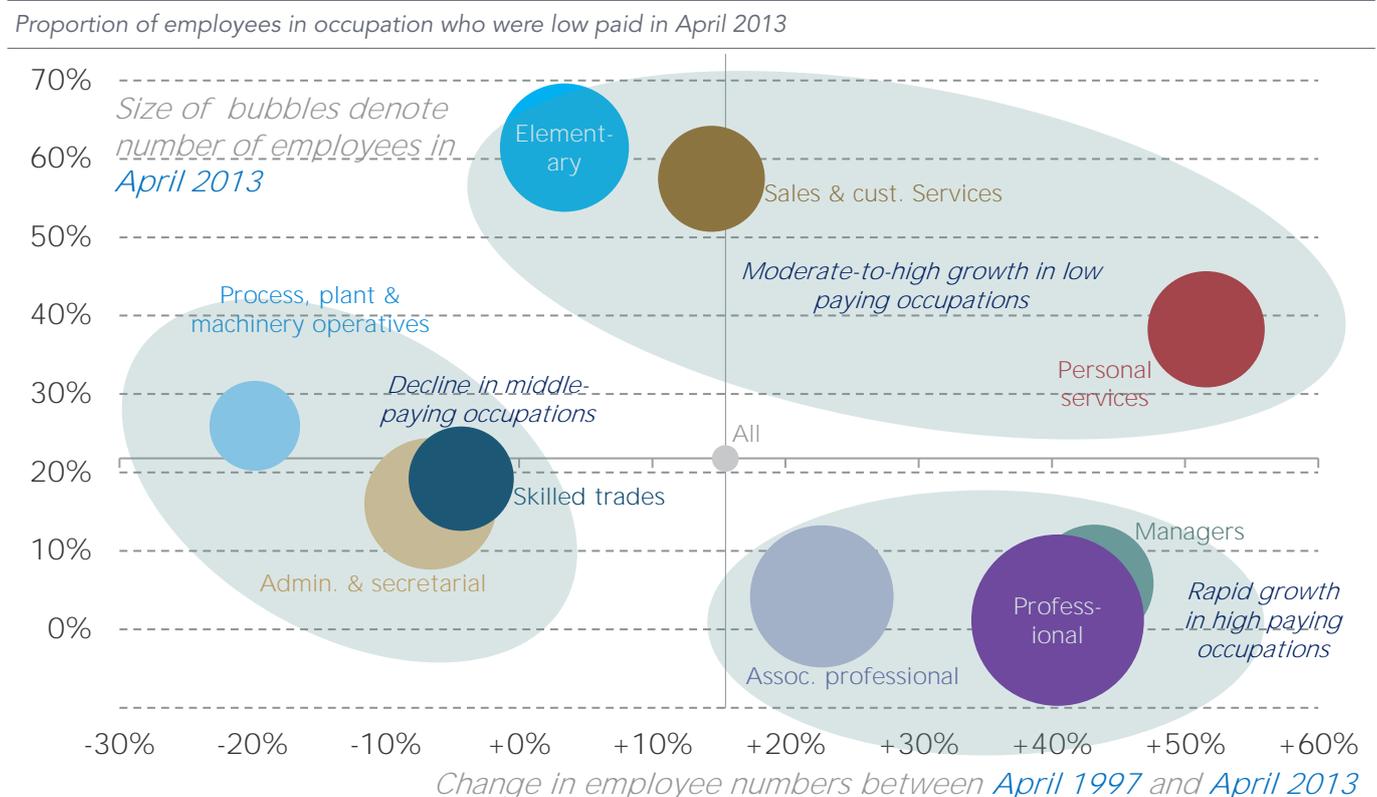
It should be noted that – for clarity – the scales on the charts differ significantly, meaning that the movements in the *professional* group are exaggerated somewhat. Nevertheless, it is apparent that the prevalence of low pay among *elementary* workers increased over the period – from an already high base. In contrast, the proportion of *professional* workers who are low paid fell, despite starting the period significantly lower than the overall average.

Trends in other occupational groups are less clear cut – with evidence of an increase in low pay levels among *managers & senior officials* over the course of the downturn for example – but pre-crisis figures certainly appear to suggest that low pay has tended to rise in lower-skilled occupations and fall in higher-skilled ones. Such trends seem to correspond to structural changes in the UK labour market. These developments involve Britain – along with other advanced economies – experiencing a steady polarisation between high-skilled, white-collar and low-skilled, low paid jobs as a result of new technology replacing repetitive “routine” tasks that were previously fulfilled by middle-wage workers.

As Figure 11 shows, employment growth between 1997 and 2013 was strongest in those occupations with the lowest and highest levels of low pay. In contrast, employment has fallen in those occupations with low pay levels closest to the economy-wide average.

A decline in managerial roles and a rise in elementary ones over the last 12 months suggests that – as with age – changes in the occupational composition of the labour market is likely to contribute to a rise in low pay in 2014.

Figure 11:
Low pay and employment growth by occupation: GB 1997-2013



Source: RF analysis of ONS, Annual Survey of Hours and Earnings

Notes: Occupational codes were changed in 2011, resulting in a switch between the managerial and professional occupations. The data is adjusted to account for this switch.

Section 2

The role of the minimum wage in tackling low pay

Having set out the magnitude of Britain's low pay problem in the previous section, we turn now to consider ways in which it might be tackled, with a specific emphasis on the role the National Minimum Wage (NMW) might play.

Fixing the problem requires new thinking

While low pay is not a new problem, the nature of the issue appears to have changed over time. The challenge looks to be an increasingly structural one, with new technologies and changing consumption patterns increasing demand for low paid service work at the same time as many middle-skilled roles have disappeared. It is a phenomenon which is evident across a number of countries, but Britain continues to stand out as a particularly poor performer.

In tackling the low pay problem, the Resolution Foundation (Bain) review of the future of the NMW argued that "the government should make it an explicit long-term ambition of economic policy to reduce the incidence and persistence of low pay in the UK". More specifically, the review recommended that:

The government should commit to reducing the share of employees who earn below two-thirds of the hourly median wage. An ambitious but achievable long-term goal, based on international benchmarks, would be to reduce the share of low pay in the UK economy from 21 per cent to 17 per cent of employees.^[16]

The review recognised that achieving this aim would be difficult, not least because there is a limit to the government's role in directly regulating and shaping wage-setting. However, it pointed to options for building or better utilising labour market institutions – in particular via broadening the remit of the Low Pay Commission (LPC) and strengthening the role that the NMW could play.

Among a series of recommendations, it called for the establishment of a clear political ambition for the NMW over the medium-term. It argued that it would be "reasonable" to set a medium-term ambition of raising the NMW 'bite' – its value as a share of median hourly pay, while at the same time maintaining the year-on-year flexibility provided by the LPC's annual approach.

The focus on a relative measure of 'bite', rather than an absolute cash target, was designed to account for the inherent uncertainty associated with making projections and to avoid presenting inflation-driven measures as real gains. It argued that, based on international evidence, a bite of 60 per cent is probably as high as could be achieved over the medium-term.

[16] *More than a minimum: The Resolution Foundation Review of the Future of the National Minimum Wage: The Final Report*, March 2014

This approach reflects the fact that assessing the relative ambition and plausibility of any given cash target for the NMW rests on consideration of three things:

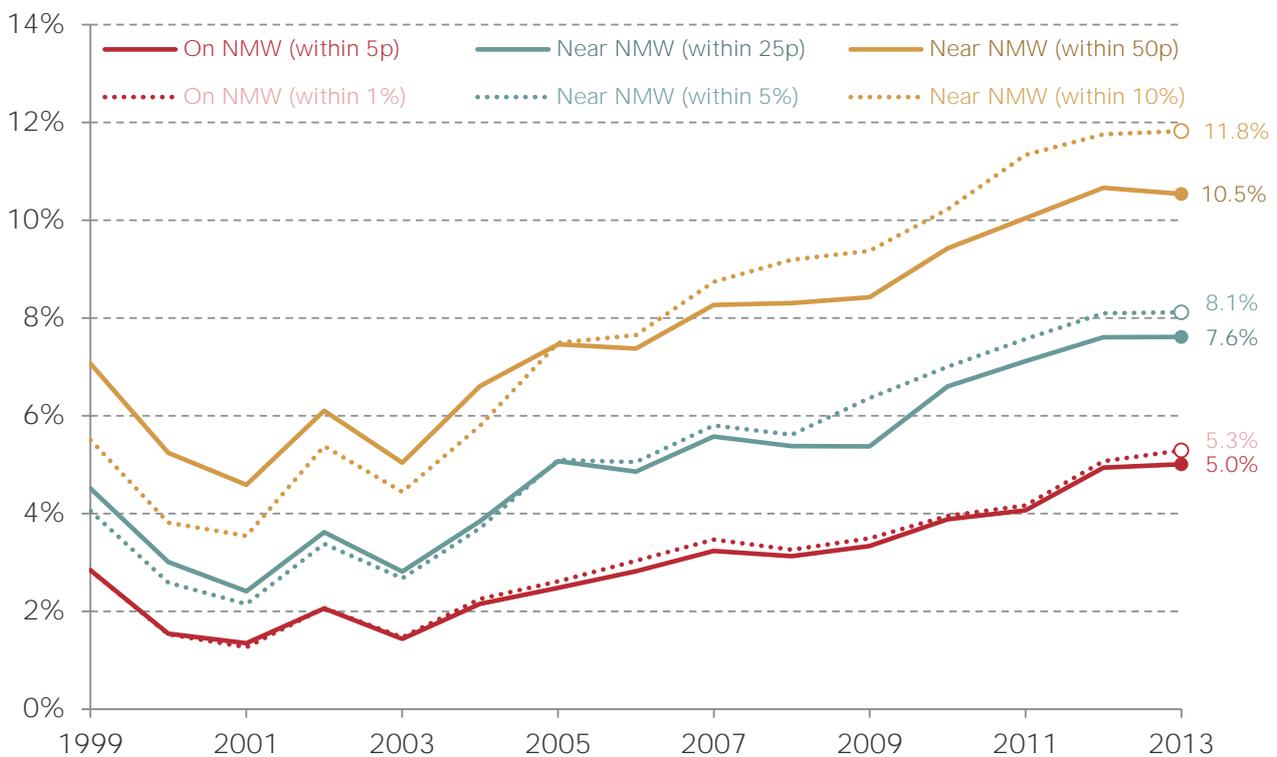
- » How quickly inflation rises (i.e. how much of any given increase is absorbed by rising prices?);
- » How quickly median pay grows (i.e. how high would the NMW need to increase simply to keep pace with median pay?); and
- » How much the bite relative to median pay increases (i.e. what proportion of any given increase is driven by a narrowing of the gap between the minimum and the median?).

The NMW is affecting increasing numbers of low paid workers

As touched on in Section 1, the NMW was introduced in 1999 and is the legal minimum that can be paid by employers. Its introduction helps explain the rapid decline in extreme low pay in the early 2000s, because the main rate is above 50 per cent of the median. However, the introduction and rise of the minimum wage appears not to have dented rates of low pay.

Figure 12:
Proportion of employees paid the age-specific minimum wage, 1999-2013

Proportion of employees paid close to the NMW



Source: RF analysis of ONS, Annual Survey of Hours and Earnings

Notes: We assume that anyone within 5p of the NMW is 'on the NMW' in line with the approach taken by the Low Pay Commission. Our estimate of the proportion in this position is slightly lower than the LPC's.

In April 2013, the minimum wage for those aged 21 and over – the ‘adult rate’ – was £6.19. For those under-18, the rate was £3.68 an hour, while for those aged 18-20 it was £4.98.^[17] Figure 12 sets out the proportions of employees at or close to their age-specific minimum wage in each year since 1999. We present two different ways of looking at these proportions: the solid lines show those within specified cash boundaries, while the dotted lines show those paid within specified proportional boundaries. The former give an intuitive sense of proximity to the NMW, but the latter correct for inflationary changes in the value of each penny.

The chart on the previous page shows that an increasing number of workers are directly affected by the NMW. In April 2013, **1-in-20 employees were paid only the minimum wage in 2013, the highest proportion since its introduction.**^[18] Looking higher up the earnings distribution, we see that 7.6 per cent of employees were paid within 25p of the minimum wage, while 10.5 per cent were within 50p. The proportion paid within 10 per cent of the NMW has increased from 3.5 per cent in April 2001 to 11.8 per cent in April 2013. The impact and what might be considered the ‘shadow effect’ of the NMW is therefore significant.

[17] The NMW is increased in October of each year, so the relevant rate when looking at April 2013 pay data from the ONS is the October 2012 level.

[18] We assume that anyone within 5p of the NMW is ‘on the NMW’ in line with the approach taken by the Low Pay Commission. Our estimate of the proportion in this position is slightly lower than the LPC’s.

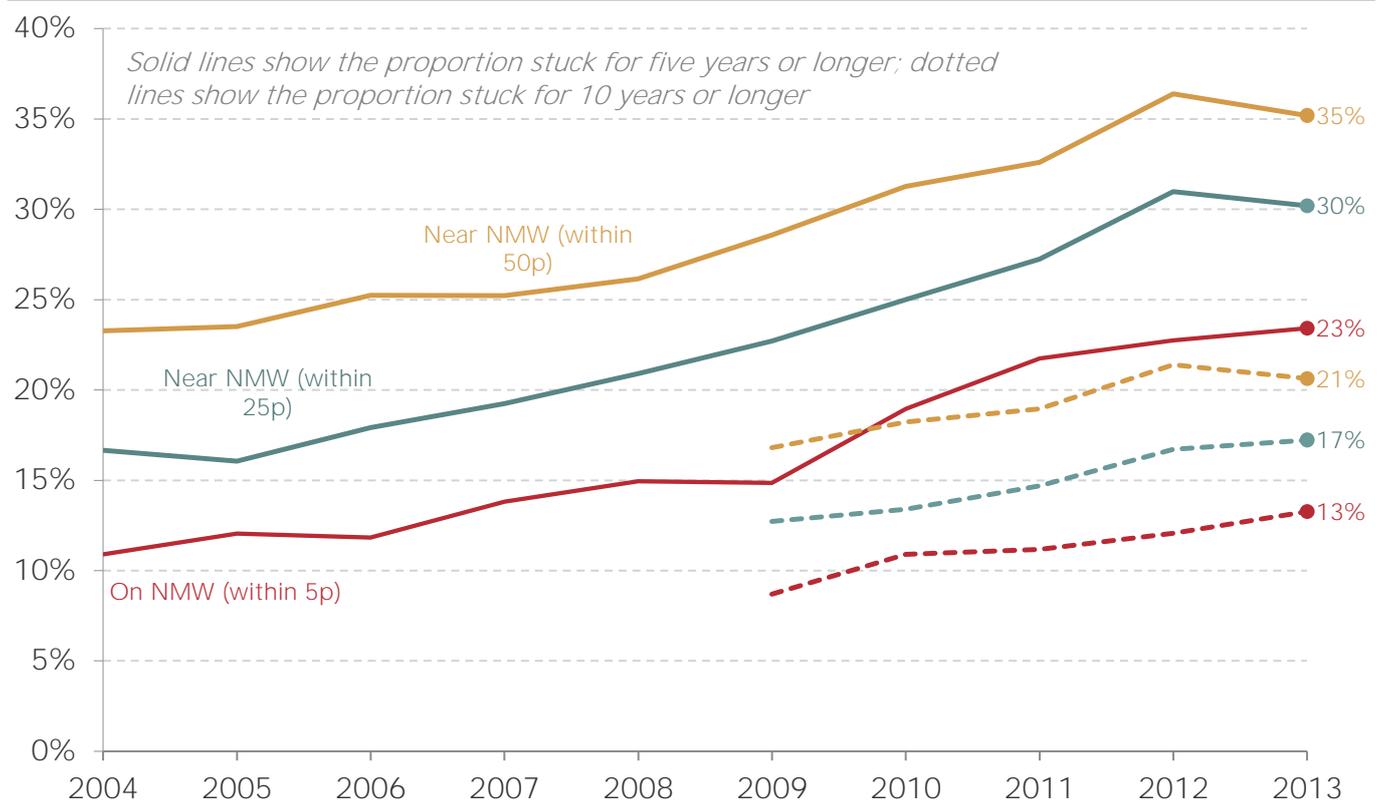
And a growing share are remaining at or around the NMW for a significant period of time

While for many workers, the NMW can represent an entry-level rate of pay – one that they quickly surpass – for some it has the potential to persist. Figure 13 sets out the proportion of employees at or close to the NMW each year who have been ‘stuck’ there for at least five years in one instance (solid lines) and for at least ten years in another (dotted lines).

In defining the ‘stuck’, we begin by focusing on those NMW employees who have been in the workforce long enough to qualify for the five or ten years measures. That is, we exclude employees who have only been in the labour market for four (or nine) years or fewer. We consider these NMW employees to be stuck if they have never earned above the NMW (or the 25p or 50p threshold) over the previous five (or ten) years. They may have been out of the workforce (or self-employed and therefore not captured in the ASHE data) for some of that period, but when in employment they have only ever held NMW jobs.

Figure 13:
Proportion of employees stuck on or near the NMW: 2004-2013

Proportion of employees currently on the NMW who have been ‘stuck’ for five/ten years or longer



Source: RF analysis of ONS, Annual Survey of Hours and Earnings

Notes: An employee is considered ‘stuck’ if they have only ever recorded wages within the specified threshold over the past five or ten years. They may have faced some period out of the workforce (or have been self-employed and therefore not captured in the dataset). The proportions are calculated as a share of those employees who have been in the workforce long enough to qualify for the five or ten years measures.

Among those who had been in the workforce long enough to be captured by the measure, **just under one-in-four (23 per cent) minimum wage workers in April 2013 had been stuck for at least five years** and 13 per cent had faced 10 years or longer in this position. Shifting our focus to those paid within 50p of the NMW, one-in-three (35 per cent) found themselves in this position for five years plus, while one-in-five (21 per cent) had been similarly stuck for at least 10 years.

On all measures, there has been a clear upward trend in recent years – particularly since the onset of the financial crisis. This is likely in large part to reflect the generalised slowdown in wage growth experienced across the earnings distribution in this period. We might hope, therefore, that a return to economic growth and an – eventual – associated recovery in wages will result in this trend reversing.

What is clear is that increasing numbers of individuals are affected by the NMW. And a growing number of such employees are finding that the minimum is becoming the going rate rather than a steppingstone. With that in mind, the trajectory of the NMW and the extent to which growth ‘ripples’ up the earnings distribution over the course of the next parliament take on added importance.

Scenarios for recovering lost ground on minimum pay

The adult rate minimum wage increased to £6.50 on 1 October 2014. The 19p increase represents the first real-terms rise in the NMW since October 2008, but leaves the rate some 4.1 per cent lower in real-terms than its peak in October 2008. And of course, if we factor in the five years of ‘lost growth’ in the rate, then the NMW appears even further from where it might otherwise have been.

With the economy recovering and employment growth in particular proving strong, there appears to be a new political interest in recovering some of the ground lost by the NMW over the course of the downturn. For example, prior to the LPC’s recommendation for this year’s rate, the Chancellor stated that he favoured an above-inflation increase:

The exact figure has to be set by the Low Pay Commission, which talks to business, talks to other bodies in our economy, but if, for example, the minimum wage had kept pace with inflation, it would be £7 by 2015-16 – it’s £6.31 at the moment – so that’s an increase.^[19]

Similarly, Vince Cable has called for a restoration of the real value of the NMW over a period of two to four years.^[20] For his part, Ed Miliband has set a cash target for the medium-term, promising that a future Labour government would aim to increase the NMW by at least £1.50 (to £8) by the end of the next parliament (which means October 2019, given that this is the last point at which the rate will be increased during the parliament).^[21] The move is reportedly designed to raise its value relative to median pay, though clearly whether or not this is achieved will depend on the – still uncertain – trajectory for median pay over the coming years.^[22]

To help us interpret these different aspirations for the NMW, we can consider five scenarios for the wage floor over the course of the next parliament. All are based on highly uncertain assumptions about the future path of prices and wages and should be considered as indicative – and liable to change – rather than definitive. Nevertheless, starting with the October 2014 rate as given, we can speculate about the nominal path of the NMW where:

- » It rises in line with the OBR’s projection for **CPI inflation** in every year from October 2015;

[19] “Osborne: UK can afford NMW rise”, Politics Home

[20] “Liberal Democrats to push for minimum wage increase”, The Guardian, 13 September 2013

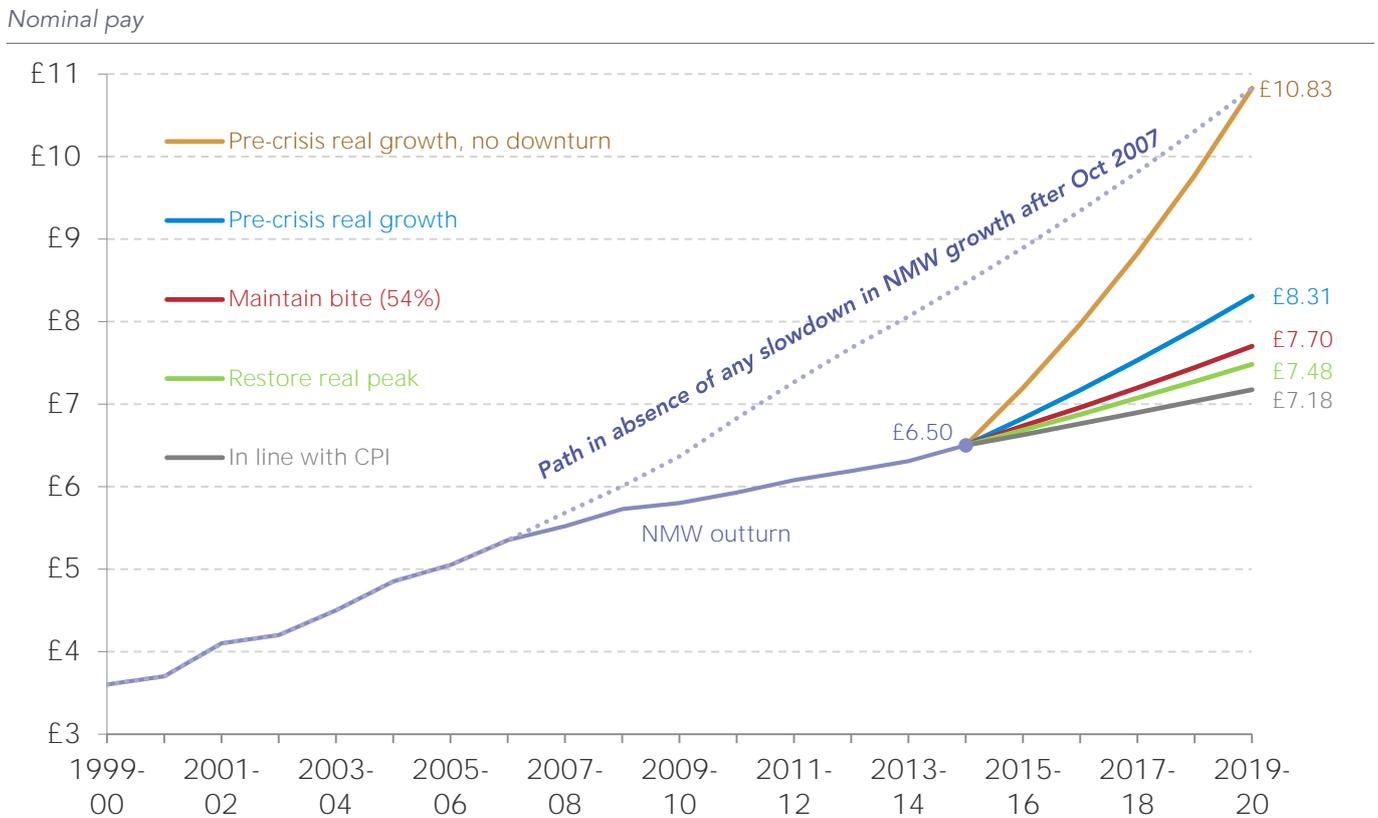
[21] “Speech by Ed Miliband to Labour’s Annual Conference 2014 in Manchester”, Labour press release, 23 September 2014

[22] “Labour’s Plan for Britain’s Future: an £8 national minimum wage”, Labour press release, 20 September 2014

- » It **returns to its pre-crisis real-terms peak** (as measured by CPI) over the parliament (which means by October 2019);
- » The **'bite' of the NMW** in 2014-15 relative to our projections for median hourly pay (which are based in turn on the Bank of England's and the OBR's projections for average pay) **is held constant** over the period. This effectively means that the NMW moves in line with median pay;
- » The **annual rate of growth in the NMW returns to that recorded during the pre-crisis years** from October 2015. Specifically, we use the real-terms rate of growth (in order to control for differences in inflation before and after the crisis) recorded between October 2002 and October 2007. We have chosen to remove the effect of the very sizeable increases in evidence in the first few years of the NMW, on the basis that they are unlikely to be replicable over the coming period. Similarly, we have focused on the pre-crisis years as representative of what is achievable alongside a strongly performing labour market. Even having removed these years, it is worth noting that the NMW was growing at around 3 per cent a year above CPI inflation;
- » Finally, and most ambitiously, it reaches the level it might have stood at in October 2019 **in the absence of any economic downturn**. This is calculated by again applying the 3 per cent average annual rate of real-terms growth recorded pre-crisis, but this time assuming that such growth had continued uninterrupted after 2007-08.

Figure 14 sets out what each of these scenarios would imply for the nominal level of the NMW by October 2019.

Figure 14:
Selected scenarios for the NMW by the end of the next parliament: 2000-2020



Source: RF analysis of ONS & OBR

Notes: Figures to 2015-16 are outturn/plans. In all instances we use OBR projections for CPI through to 2018-19 and assume it remains at 2 per cent thereafter. In estimating the future path of median pay, we apply an adjustment to the projections for average pay from the Bank of England and the OBR based on the historic ratio of median pay growth to mean pay growth.

Figure 14 shows that keeping pace with CPI inflation would take the NMW to £7.18 over the course of the parliament (with a higher level required if we were to use RPI inflation instead). This suggests that, of the £1.50 increase favoured by Labour over this period, close to half arises simply due to inflation.

Restoring the October 2008 real-terms peak would imply a cash value of £7.48 by October 2019. Clearly, the value by the end of the parliament would be higher if the aim of restoration was achieved more quickly, as Vince Cable argued for. If we instead assume that the real-terms peak is restored by October 2017 and thereafter maintain the bite relative to median pay, the NMW would stand at £7.69 in October 2019.

In practice, this is broadly equivalent to our third scenario, in which the NMW rises in line with median pay, thereby maintaining its bite at 54 per cent. Under this approach, our estimate is that the NMW would reach £7.70 by the end of the parliament – a figure close to one reported to have been calculated by HM Treasury for the position in 2019-20.^[23]

Restoring the pre-crisis rate of growth in the NMW from October 2015 would push the level somewhat higher – to £8.31 – by October 2019.

By way of illustration, our fifth scenario describes how far short each of the other scenarios would fall relative to a world in which there had been no economic downturn and no slowdown in the pace of growth of the NMW. The nominal value of £10.83 is in stark contrast to all of the other figures presented – and is unlikely to be considered a reasonable target over the course of a single parliament – but it highlights just how much of a permanent hole the downturn has punched in earnings. This is true not just at the minimum, but across much of the distribution.

Table 1 sets out the real-term NMW values in October 2019 associated with each of these scenarios, along with the implied bite relative to median pay. It shows that restoration of the pre-crisis growth in the NMW from October 2015 would imply a bite by October 2019 that approaches the 60 per cent lodestar set out in the Bain Review.

Table 1: 2019-20 outcomes associated with selected scenarios for the NMW

Hypothetical scenario for NMW	NMW rate				NMW 'bite' as a share of median pay	
	Nominal		Real (2014 prices)		Oct-15	Oct-19
	Oct-15	Oct-19	Oct-15	Oct-19		
In line with CPI	£6.50	£7.18	£6.37	£6.37	54%	50%
Restore real peak	£6.50	£7.48	£6.37	£6.64	54%	52%
Maintain bite	£6.50	£7.70	£6.37	£6.84	54%	54%
Pre-crisis real growth	£6.50	£8.31	£6.37	£7.38	54%	58%
Pre-crisis real growth, no downturn	£6.50	£10.83	£6.37	£9.61	54%	76%

Source: RF analysis of ONS & OBR

Notes: See notes to Figure 14.

The arrival of the first real-terms increase in the NMW since October 2008 is very welcome. But its future path – and the debate about the role that politicians might play in setting the appropriate course – remains uncertain. Our analysis suggests that the NMW in October 2019 might reasonably be expected to sit somewhere between £7.18 (as implied by simply keeping pace with inflation) and £8.31 (as implied by returning to the historic rate of growth) by the end of the next parliament.

[23] "Minimum wage on course to hit £8.06 by 2020", *The Sun*, 26 September 2014

Tellingly, all of these potential outcomes remain a long way below the level the NMW might have stood at in the absence of economic downturn. But equally, the differences between them will strike some as relatively small – in real-terms the spread between them is around £1. Bearing in mind the inherent uncertainty surrounding the projections for inflation and median pay that underpin each of them, they should be considered to provide nothing more than an indication of the potential spread between different approaches. Clearly though, relatively small differences in these approaches will have very material effects on outcomes for those paid at or close to the NMW.

Section 3

Detailed low pay statistics

In this section we present reference data detailing the characteristics of low pay in 2013, along with the evolution against each of our measures over the past 40 years.

Low pay in April 2013

Table 2 presents a summary snapshot of low pay in April 2013, setting out the total number of employees on low pay, extreme low pay and below the living wage. It also details the distribution of low pay, within and across different groups. In summary:

- » Overall, **one-in-five employees (22 per cent, or just over 5.2 million individuals) in Britain earned less than the low-pay threshold in 2013**. Similarly, one-in-five (20 per cent) earned less than a living wage.
- » **Female workers are at particular risk of low pay, with 27 per cent earning below the main threshold in 2013**, compared with 17 per cent of male workers. Extreme low pay was relatively low in both instances (at 2 per cent), but female workers were slightly more likely to find themselves in this position.
- » **Younger and older workers are significantly more likely to fall below low pay and living wage thresholds** than are those aged between 31 and 55. Four-in-five (81 per cent) employees aged 20 and under were low paid in April 2013, with one-in-three (35 per cent) being in extreme low pay. Low pay rates remain high among those aged 21-25, before falling to a low of 14 per cent among workers in their mid-to-late 30s.
- » Low paid workers can be found in every region of Britain, although there is a **clear distinction between the South East – and more particularly London – and the rest of the country**. Just one-in-eight (12 per cent) workers earned less than two-thirds of national median hourly pay in April 2012 in London, compared with one-in-four in many other parts of Britain, including the North East (27 per cent), Yorkshire and the Humber (26 per cent) and the East Midlands (26 per cent). Similarly, the proportion in extreme low pay was significantly lower in London.
- » However, this **distinction is less marked when we instead consider the living wage thresholds**. The London living wage rate in place in April 2013 (£8.55) was more than £1 higher than the figure used for the rest of the country (and higher than the low pay threshold of £7.69 used in this report). As such, while London once again recorded the lowest level of below-living wage pay of any region (17 per cent), it was only 3 percentage points lower than the national average.
- » **Part-time workers face a particular low pay risk, with two-in-five (43 per cent) of such employees being low paid in 2013**, compared with 13 per cent of those working full-time. While only 28 per cent of workers are part-time, they make up 56 per cent of the low paid.
- » As might be expected, **the risk of low pay is closely associated with precarious forms of employment**. One-in-three (34 per cent) workers employed on a temporary or casual basis were low paid in April 2013, compared with one-in-five (21 per cent) permanent employees. Temporary workers (5 per cent) were also much more likely to be in extreme low pay than their permanent counterparts (2 per cent).

- » Of course, **permanent jobs still make up a majority of all positions in Britain, meaning that temporary workers accounted for just 13 per cent of all low paid employees in 2013**, despite the high levels of low pay prevalence within this group.
- » While low paid work exists across all occupational groups, there is a **clear bias towards lower skilled occupations**. More than half of *elementary* (cleaners, security guards, catering assistants, leisure workers and bar staff for example) and *sales & customer service* (retail assistants, cashiers, telephone salespersons and customer services for example) workers were low paid in 2013, as were close to two-in-five workers in *personal services* (covering social care and childcare for example), compared with just 6 per cent of *managers & senior officials* and 1 per cent of those in *professional* occupations.
- » There are **wide variations in the prevalence of low pay across industrial sectors, ranging from more than two-in-three (70 per cent) employees in the hotels & restaurants sector to just 3 per cent in the public administration & defence sector**. In addition to *hotels & restaurants*, six other classifications reported low pay prevalence above the national average of one-in-five: *wholesale & retail* (41 per cent), *administrative & support service activities* (38 per cent), *arts, entertainment & recreation* (36 per cent), *agriculture, forestry & fishing* (35 per cent), *other service activities* (30 per cent) and *households as employers* (24 per cent).
- » As with the national picture, there were **relatively few cases of extreme low pay in most sectors, with the exceptions of hotels & restaurants (13 per cent), arts, entertainment & recreation (5 per cent), wholesale and retail (4 per cent) and other service activities (4 per cent)**. We might speculate that such industries are likely to employ relatively high numbers of younger workers who are not subject to the adult NMW rate.
- » Taking account of the relative size of each category, **wholesale & retail made up the largest share of low paid workers (27 per cent) in 2013**, followed by *hotels & restaurants* (16 per cent). Despite recording below-average low pay prevalence, the relatively large sectors of *health & social work* (13 per cent), *education* (11 per cent) and *manufacturing* (6 per cent) also accounted for significant shares of the total.
- » **Low pay prevalence was highest in 2013 within the private sector**, with sole proprietors (50 per cent), partnerships (38 per cent) and private companies (27 per cent) recording much higher rates of low pay than local authorities (14 per cent), central government (4 per cent) and public corporations (2 per cent). A similar distribution holds for workers in extreme low pay.

i Box 4: Median national pay or median regional pay?

London has by far the lowest proportion of employees earning below two-thirds of the national median. By this usual national measure, London's rate of low pay is 12 per cent, compared to the nationwide figure of 22 per cent and a high of 27 per cent in the North East. However, it might be argued that this fails to account for regional variations in the cost of living – particularly housing – and the importance of pay inequality within regions.

If we calculate a separate low pay threshold for each region, based on two-thirds of the regional median, we

get very different results. Summing across all regions, aggregate low pay measured against each regional median would amount to 22.5 per cent – slightly higher than the standard figure of 21.8 per cent. On this measure, London has by far the highest rate of regional low pay at 30 per cent, followed by the South East (second lowest on the national measure) with 25 per cent. The East Midlands and Yorkshire and the Humber have the lowest rates of regional low pay at 19 per cent.

Table 2: Profile of the low paid in April 2013: GB

	Below 2/3 median hourly pay			Below 1/2 median hourly pay			Below Living Wage			Below Reference Living Wage		
	Number	% in group below threshold	% of all below threshold	Number	% in group below threshold	% of all below threshold	Number	% in group below threshold	% of all below threshold	Number	% in group below threshold	% of all below threshold
Total	5,234,000	22%	100%	480,000	2%	100%	4,865,000	20%	100%	7,731,000	32%	100%
Sex												
Women	3,204,000	27%	61%	258,000	2%	54%	2,973,000	25%	61%	4,589,000	39%	59%
Men	2,030,000	17%	39%	223,000	2%	46%	1,892,000	16%	39%	3,143,000	26%	41%
Age group												
16-20	924,000	81%	18%	404,000	35%	84%	900,000	79%	19%	1,024,000	90%	13%
21-25	903,000	40%	17%	18,000	1%	4%	846,000	37%	17%	1,274,000	56%	16%
26-30	549,000	20%	10%	9,000	0%	2%	517,000	19%	11%	881,000	32%	11%
31-35	399,000	15%	8%	6,000	0%	1%	370,000	14%	8%	647,000	24%	8%
36-40	372,000	14%	7%	6,000	0%	1%	346,000	13%	7%	616,000	23%	8%
41-45	474,000	15%	9%	8,000	0%	2%	431,000	14%	9%	741,000	24%	10%
46-50	502,000	16%	10%	8,000	0%	2%	451,000	14%	9%	797,000	25%	10%
51-55	422,000	16%	8%	9,000	0%	2%	382,000	14%	8%	680,000	25%	9%
56-60	339,000	17%	6%	5,000	0%	1%	301,000	15%	6%	544,000	28%	7%
61-65	209,000	21%	4%	4,000	0%	1%	187,000	18%	4%	322,000	32%	4%
66+	142,000	33%	3%	3,000	1%	1%	133,000	31%	3%	207,000	48%	3%
Region												
North East	256,000	27%	5%	29,000	3%	6%	234,000	24%	5%	349,000	36%	5%
Yorkshire & the Humber	514,000	26%	10%	48,000	2%	10%	456,000	23%	9%	725,000	37%	9%
East Midlands	444,000	26%	8%	41,000	2%	9%	398,000	23%	8%	638,000	37%	8%
Wales	277,000	25%	5%	25,000	2%	5%	249,000	23%	5%	391,000	36%	5%
West Midlands	536,000	25%	10%	55,000	3%	11%	477,000	22%	10%	750,000	35%	10%
North West	655,000	25%	13%	61,000	2%	13%	581,000	22%	12%	909,000	35%	12%
South West	506,000	24%	10%	49,000	2%	10%	448,000	21%	9%	726,000	35%	9%
East	521,000	23%	10%	48,000	2%	10%	461,000	20%	9%	742,000	33%	10%
Scotland	448,000	20%	9%	42,000	2%	9%	393,000	18%	8%	656,000	30%	8%
South East	640,000	19%	12%	56,000	2%	12%	557,000	17%	11%	950,000	29%	12%
London	436,000	12%	8%	26,000	1%	5%	609,000	17%	13%	895,000	24%	12%
Hours worked												
Part-time	2,925,000	43%	56%	300,000	4%	62%	2,762,000	41%	57%	3,823,000	56%	49%
Full-time	2,309,000	13%	44%	180,000	1%	38%	2,103,000	12%	43%	3,908,000	23%	51%
Contract type												
Temporary/casual	696,000	34%	13%	95,000	5%	20%	664,000	33%	14%	953,000	47%	12%
Permanent	4,538,000	21%	87%	385,000	2%	80%	4,201,000	19%	86%	6,778,000	31%	88%

Table 2 continued

	Below 2/3 median hourly pay			Below 1/2 median hourly pay			Below Living Wage			Below Reference Living Wage		
	Number	% in group	threshold	Number	% in group	threshold	Number	% in group	threshold	Number	% in group	threshold
Occupations												
Elementary occupations	1,721,000	61%	33%	208,000	7%	43%	1,647,000	59%	34%	2,132,000	76%	28%
Sales & customer service	1,104,000	57%	21%	96,000	5%	20%	1,061,000	55%	22%	1,396,000	73%	18%
Personal services	882,000	38%	17%	46,000	2%	10%	801,000	35%	16%	1,354,000	59%	18%
Process, plant & machinery operatives	358,000	26%	7%	9,000	1%	2%	316,000	23%	6%	588,000	43%	8%
Skilled trades	357,000	19%	7%	54,000	3%	11%	317,000	17%	7%	574,000	31%	7%
Admin & secretarial	472,000	16%	9%	30,000	1%	6%	409,000	14%	8%	968,000	33%	13%
Managers & senior officials	137,000	6%	3%	13,000	1%	3%	126,000	5%	3%	262,000	11%	3%
Associate professional & technical	145,000	4%	3%	16,000	0%	3%	131,000	4%	3%	323,000	9%	4%
Professional	58,000	1%	1%	9,000	0%	2%	55,000	1%	1%	133,000	3%	2%
Industry												
Hotels & restaurants	844,000	70%	16%	154,000	13%	32%	832,000	69%	17%	989,000	82%	13%
Wholesale & retail	1,419,000	41%	27%	125,000	4%	26%	1,345,000	39%	28%	1,918,000	55%	25%
Admin & support services	531,000	38%	10%	16,000	1%	3%	508,000	37%	10%	734,000	53%	10%
Arts, entertainment & recreation	171,000	36%	3%	22,000	5%	5%	168,000	36%	3%	249,000	53%	3%
Agriculture & fishing	41,000	35%	1%	5,000	4%	1%	36,000	31%	1%	63,000	54%	1%
Other service activities	119,000	30%	2%	17,000	4%	4%	113,000	28%	2%	168,000	42%	2%
Households as employers	12,000	24%	0%	;	;	;	10,000	20%	0%	27,000	55%	0%
Health & social work	670,000	19%	13%	26,000	1%	5%	595,000	17%	12%	1,027,000	29%	13%
Education	555,000	15%	11%	31,000	1%	7%	493,000	13%	10%	959,000	25%	12%
Manufacturing	339,000	14%	6%	22,000	1%	5%	297,000	13%	6%	553,000	24%	7%
Real estate	41,000	13%	1%	4,000	1%	1%	38,000	12%	1%	75,000	24%	1%
Water supply & waste management	13,000	10%	0%	;	;	;	10,000	8%	0%	24,000	19%	0%
Transportation & storage	100,000	10%	2%	3,000	0%	1%	86,000	8%	2%	213,000	20%	3%
Construction	92,000	11%	2%	23,000	3%	5%	82,000	10%	2%	158,000	19%	2%
Professional & technical	133,000	9%	3%	14,000	1%	3%	118,000	8%	2%	234,000	16%	3%
Information & communications	67,000	7%	1%	12,000	1%	3%	63,000	7%	1%	119,000	13%	2%
Financial & insurance services	44,000	4%	1%	;	;	;	35,000	3%	1%	112,000	11%	1%
Public admin & defence	35,000	3%	1%	;	;	;	28,000	2%	1%	95,000	8%	1%
Unclassified	9,000	4%	0%	;	;	;	8,000	4%	0%	15,000	7%	0%
Public/private sector												
Private sector	4,369,000	28%	83%	434,000	3%	90%	4,118,000	26%	85%	6,152,000	39%	80%
Third sector	334,000	16%	6%	20,000	1%	4%	299,000	15%	6%	549,000	27%	7%
Public sector	527,000	8%	10%	;	;	;	444,000	7%	9%	1,026,000	16%	13%
Unclassified	438,000	43%	8%	;	;	;	402,000	39%	8%	595,000	58%	8%

Source: RF analysis of ONS, Annual Survey of Hours and Earnings

Notes: Data cover all employees who have not had their pay affected by absence in the time covered. Industry categories correspond with SIC 2007 and occupation categories correspond with SOC 2010. Figures relate to hourly pay recorded as at April 2013. Low paid thresholds are determined in relation to a median hourly pay rate (for all employees) of £11.53. Living wage thresholds are determined in relation to rates of £8.55 in London and £7.45 in the rest of the country.

The evolution of low pay

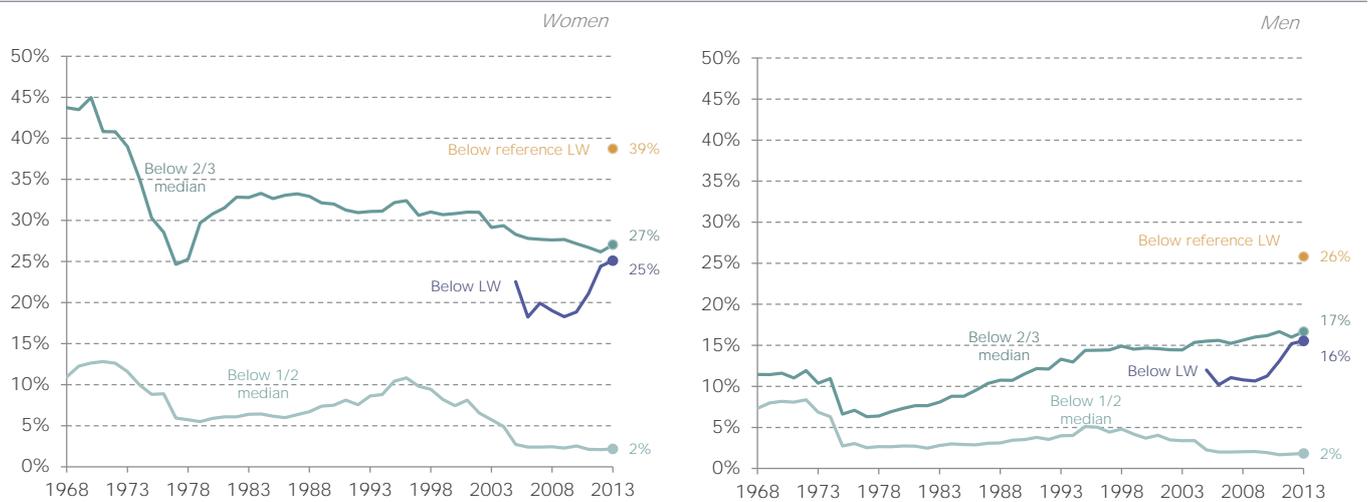
Having looked at the picture of low pay in Britain in April 2013, we now turn to the evolution of this landscape over the last four decades. Figures 15-27 below set out trends in low pay prevalence *within*, and the distribution of low pay *across* different employee and job characteristics. In summary:

- » The **proportion of low paid women fell rapidly in the early-1970s** (from a peak of around 45 per cent to a low of just 25 per cent in just over a decade). And, while the figure subsequently increased, reaching around one-third in the early-1980s, the **trend over the last three decades has been one of slight but steady improvement**. In contrast, the **proportion of low paid male workers climbed relatively rapidly between the mid-1970s and late-1990s**, from 6 per cent to 15 per cent, though remaining well below the levels recorded among women.
- » While the male proportion of low paid work has gradually risen over the past three decades (from just under one-quarter (24 per cent) of all low paid workers to nearly two-fifths (39 per cent)), **women continue to comprise the bulk of all low paid workers**.
- » For all age groups, the proportion in low pay increased steadily over the course of the 1980s and early-1990s. However, while the overall trend subsequently remained relatively stable, **the proportion of younger workers in low pay continued to increase, while the proportion of older workers in this position decreased**.
- » Despite these trends, the **proportions of the low paid accounted for by younger and older workers have grown only slightly over time, however extreme low pay is now dominated by those aged 16-20**.
- » The trajectory of low pay follows the national pattern across most regions. The **one distinction relates to trends in the pre-1995 period in London and the South East**. Rather than increase, as was the case across the rest of the country, **low pay was flat or falling slightly in these two regions throughout the 1980s**, such that the proportion in low pay went from being higher in the South East (16 per cent) than in Wales (14 per cent) in 1975, to being some 6 percentage points lower by 2013.
- » The **prevalence of low pay among both elementary and sales & customer service workers increased over the period from 1997 to 2009** – from an already high base – but have since plateaued or fallen slightly. The **proportion of *personal services* workers who are low paid has fallen significantly, as has that amongst *professional* occupations, yet since the financial crisis the rate of low pay amongst managers and senior officials has increased markedly**, rising from 4 per cent to 6 per cent.
- » **As the number of people working part-time has increased over the last three decades, so the proportion who are low paid has declined slightly**. The impact of the NMW is clear, with levels of extreme low pay among part-time workers falling particularly sharply, from 19 per cent in 1996 to just 4 per cent in 2013. In contrast, **the proportion of full-time workers falling below the main low pay threshold is little changed from its mid-1980s level**.
- » **However, growth of part-time work means that the overall share of low pay accounted for by such workers has increased over recent decades**. In 1975, just 30 per cent of the low paid were employed in part-time work; shifts during the late-1970s and again in the early-1990s means that this share has stood at more than half since 1997.
- » The **proportion of low paid workers who are employed on a temporary or casual basis increased from 8 per cent in 2000 to 13 per cent in 2013**. This trend is **even more marked in relation to extreme low pay**, with the proportion accounted for by temporary workers increasing from 9 per cent to 20 per cent over the same period.
- » **Rates of low pay rose slightly from 1997 in the two industrial sectors with the highest prevalence of employees below the low pay threshold in 2013, but fell across other sectors**. For example, the proportion of low paid employees in the *hotels & restaurants* sector

climbed from a low of 63 per cent in 2003 to a peak of 71 per cent in 2009. In contrast, the proportion of low paid workers in the *public administration* sector declined from 8 per cent in 1997 to just 2 per cent in 2011 – though it has since risen slightly to 3 per cent.

- » The overall **incidence of low paid work in the private sector has grown marginally since 1997** (from 26 per cent to 28 per cent of all employees), while it has **fallen in both the third sector** (from 20 per cent in 1997 to 16 per cent in 2013) **and, more sharply, the public sector** (from 14 per cent to just 8 per cent). The number of low paid workers in central government rose by 66 per cent in 2013 (while the total number of employees in that sector rose by only 3 per cent). This statistically significant change reversed a longstanding trend of falling low pay within central government.

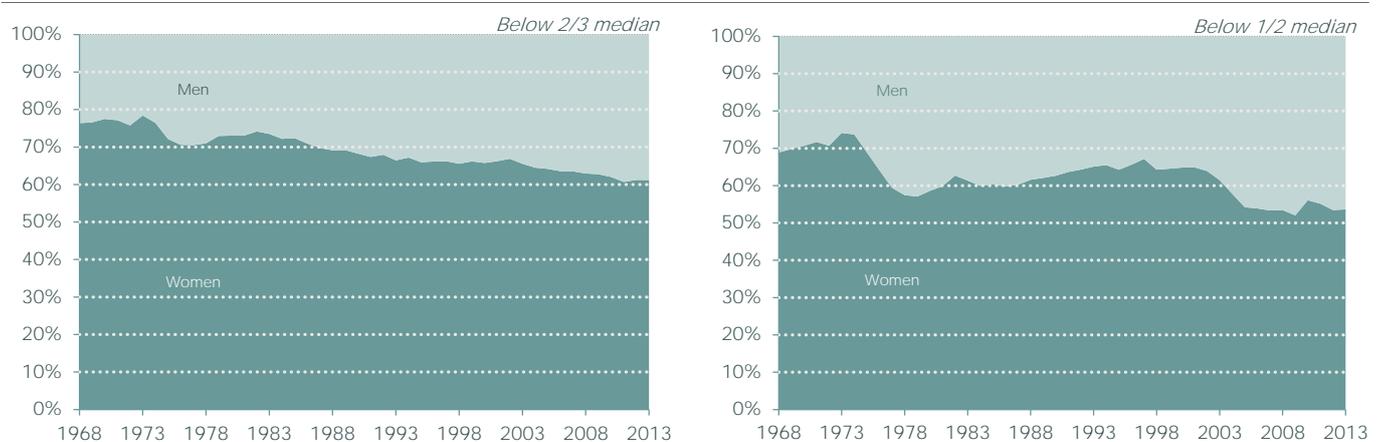
Figure 15:
Proportion of employees below selected low pay thresholds by sex: GB 1968-2013



Source: RF analysis of DWP, Family Expenditure Survey; ONS, New Earnings Survey Panel Data; and ONS, Annual Survey of Hours and Earnings

Notes: See notes to Figure 5

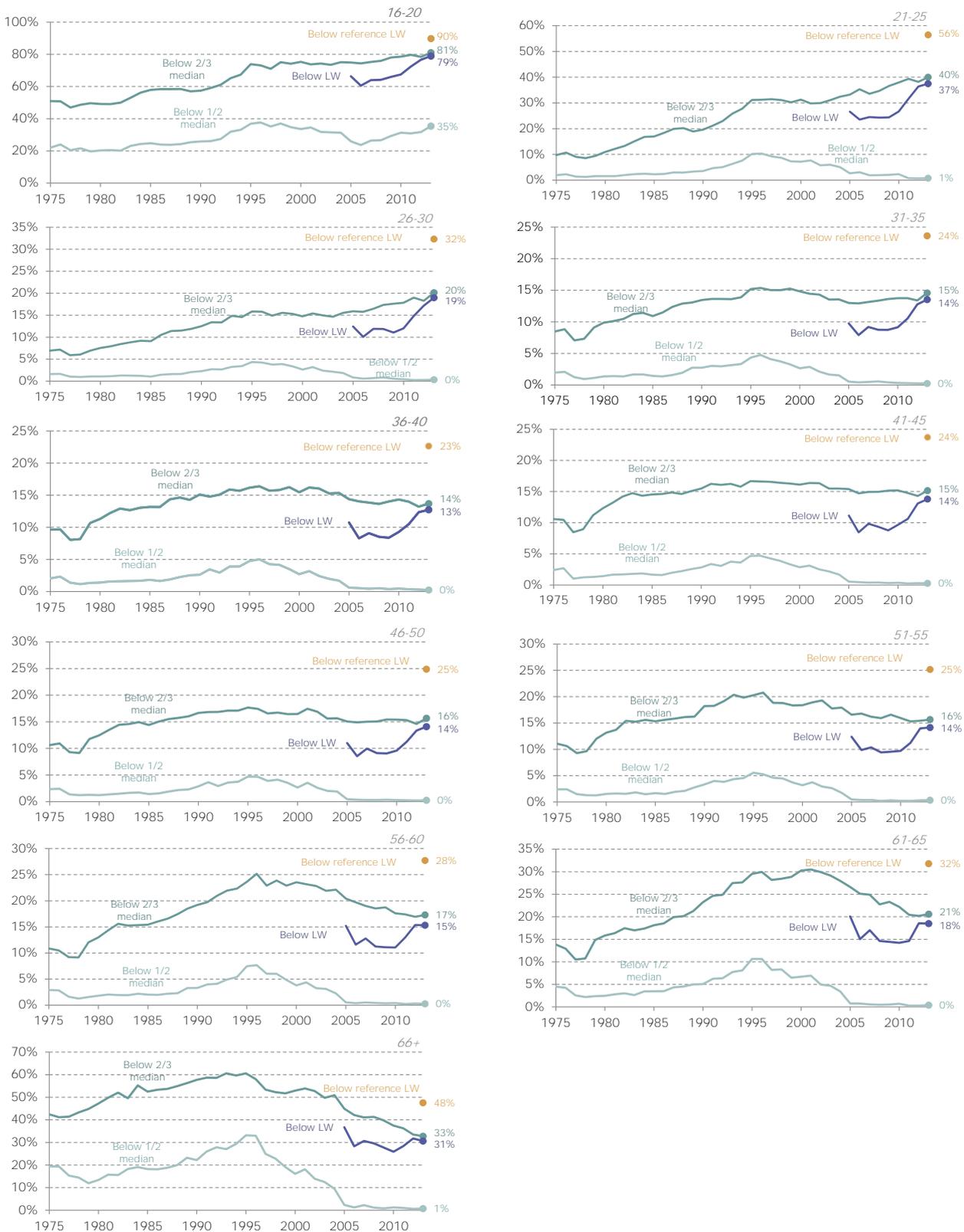
Figure 16:
Distribution of low pay across sex: GB 1968-2013



Source: RF analysis of DWP, Family Expenditure Survey; ONS, New Earnings Survey Panel Data; and ONS, Annual Survey of Hours and Earnings

Notes: See notes to Figure 5

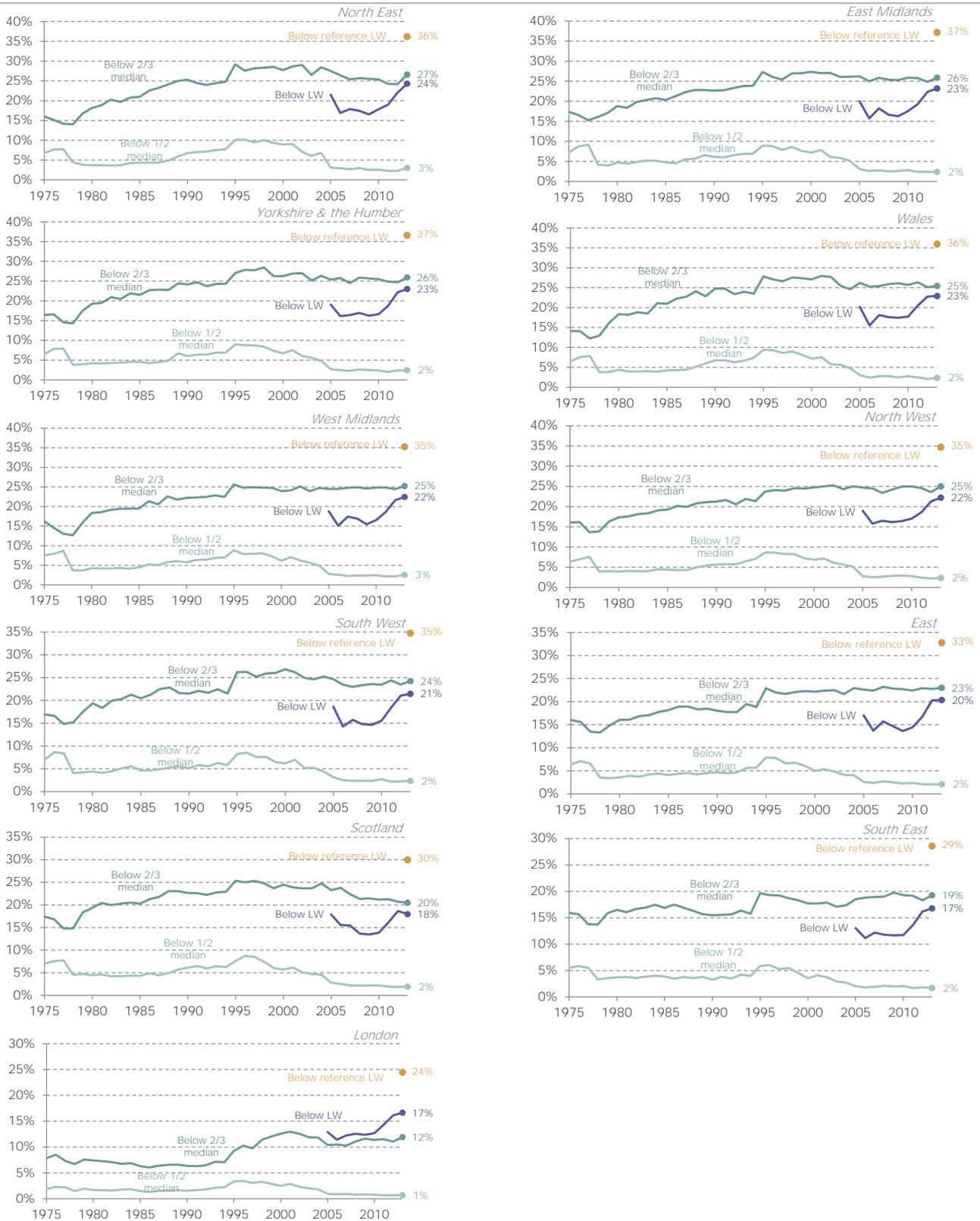
Figure 17:
Proportion of employees below selected low pay thresholds by age group: GB 1975-2013



Sources: RF analysis of ONS, New Earnings Survey Panel Data and ONS, Annual Survey of Hours and Earnings

Notes: Figures are drawn from two separate data sources. Where these sources overlap, differences exist in the proportions of employees reported to be below the various low pay thresholds. Figures prior to 1997 have been adjusted to account for the magnitude of difference recorded in these overlapping periods, in order to create a consistent time series. The living wage has been calculated in London from 2005, but an outside London rate has only been in place from 2011. To allow for the estimates shown above, we project the outside-London living wage backwards, on the assumption that it has been subject to the same year-on-year growth rates as the London figure.

Figure 18:
Proportion of employees below selected low pay thresholds by region: GB 1975-2013



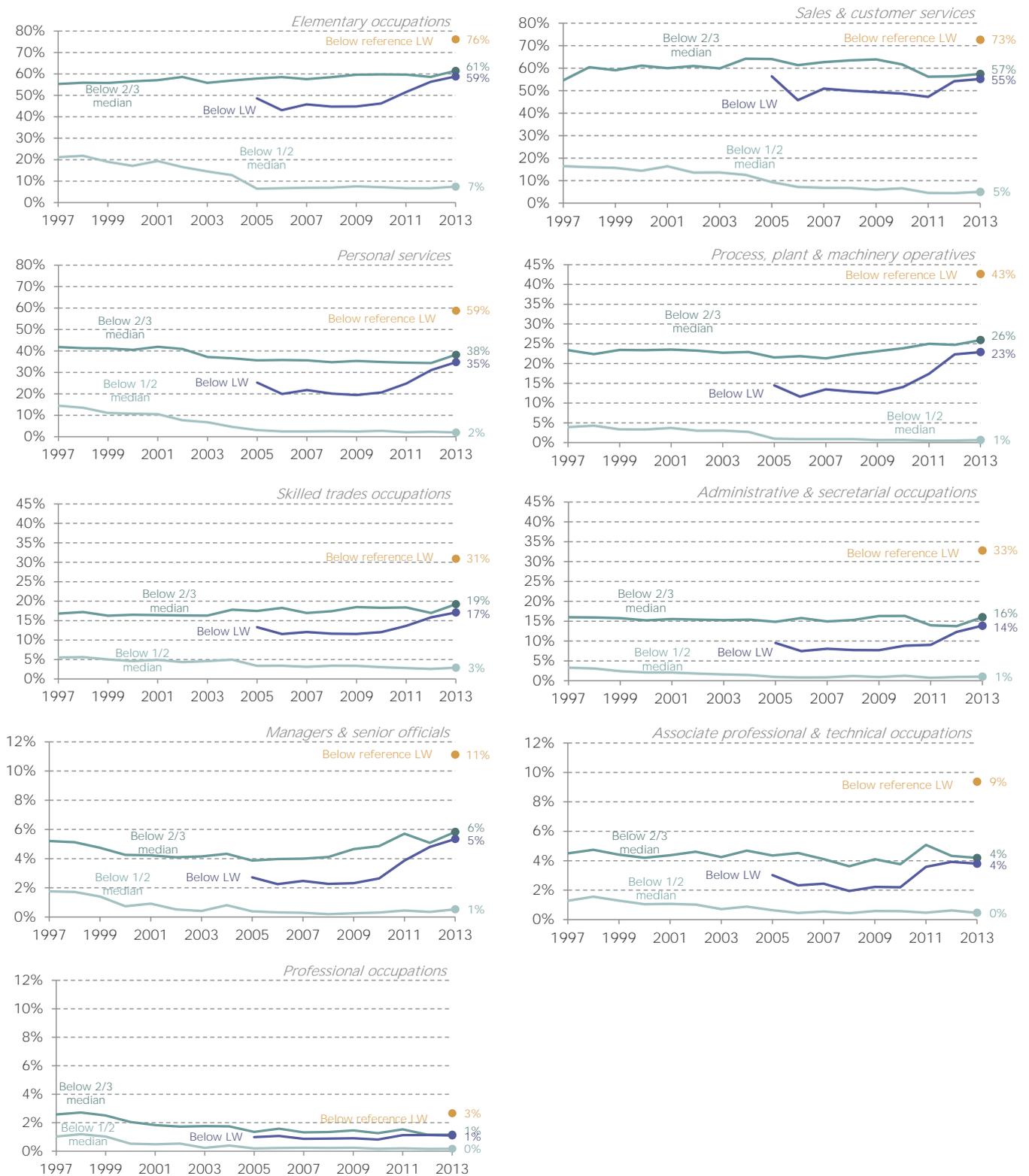
Sources: RF analysis of ONS, New Earnings Survey Panel Data and ONS, Annual Survey of Hours and Earnings

Notes: Figures are drawn from two separate data sources. Where these sources overlap, differences exist in the proportions of employees reported to be below the various low pay thresholds. Figures prior to 1997 have been adjusted to account for the magnitude of difference recorded in these overlapping periods, in order to create a consistent time series. The living wage has been calculated in London from 2005, but an outside London rate has only been in place from 2011. To allow for the estimates shown above, we project the outside-London living wage backwards, on the assumption that it has been subject to the same year-on-year growth rates as the London figure.

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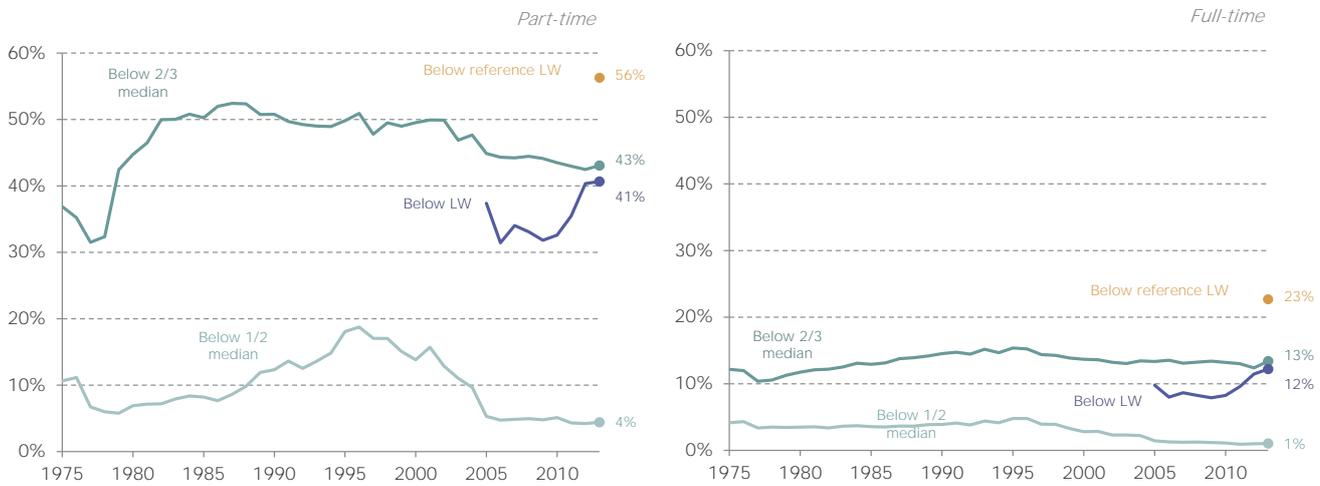
Figure 19:
Proportion of employees below selected low pay thresholds by occupation: GB 1997-2013



Sources: RF analysis of ONS, Annual Survey of Hours and Earnings

Notes: The living wage has been calculated in London from 2005, but an outside London rate has only been in place from 2011. To allow for the estimates shown above, we project the outside-London living wage backwards, on the assumption that it has been subject to the same year-on-year growth rates as the London figure. Occupations based on harmonisation of SOC 2000 (1997-2010) and SOC 2010 (2011-2012) categories.

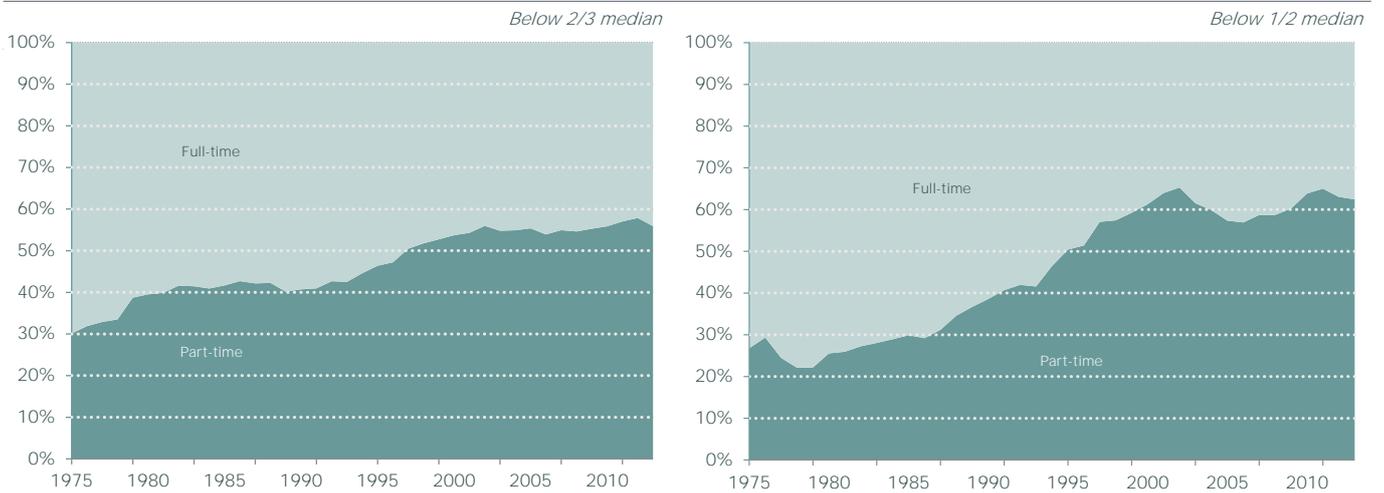
Figure 20:
Proportion of employees below selected low pay thresholds by hours worked: GB 1975-2013



Source: RF analysis of ONS, *New Earnings Survey Panel Data* and ONS, *Annual Survey of Hours and Earnings*

Notes: See notes to Figure 18

Figure 21:
Distribution of low pay across hours worked: GB 1975-2013



Sources: RF analysis of ONS, *New Earnings Survey Panel Data* and ONS, *Annual Survey of Hours and Earnings*

Notes: See notes to Figure 18

Figure 22:
Proportion of employees below selected low pay thresholds by work status: GB 2000-2013



Sources: RF analysis of ONS, Annual Survey of Hours and Earnings

Notes: See notes to Figure 19

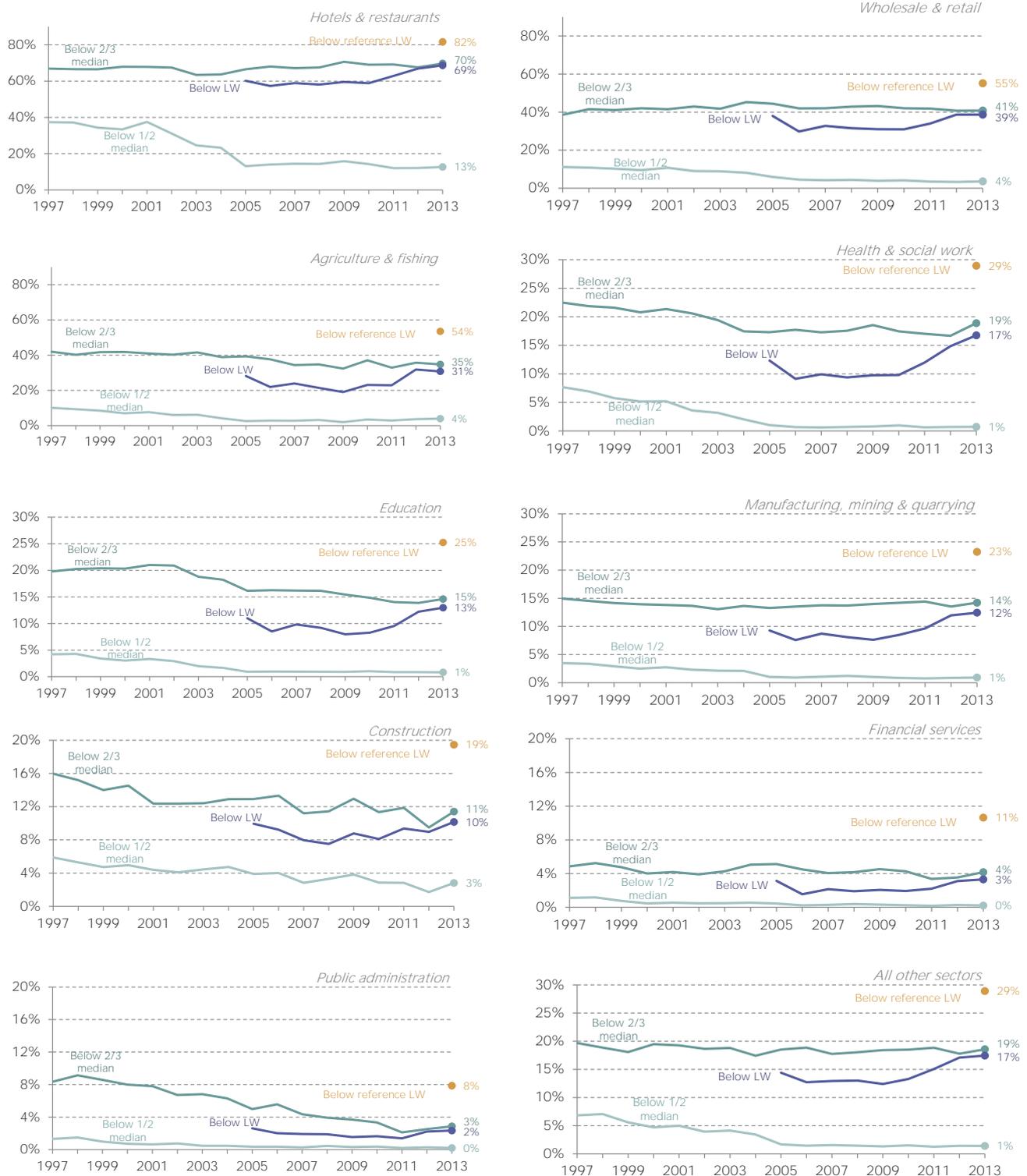
Figure 23:
Distribution of low pay across work status: GB 2000-2013



Sources: RF analysis of ONS, Annual Survey of Hours and Earnings

Notes: See notes to Figure 19

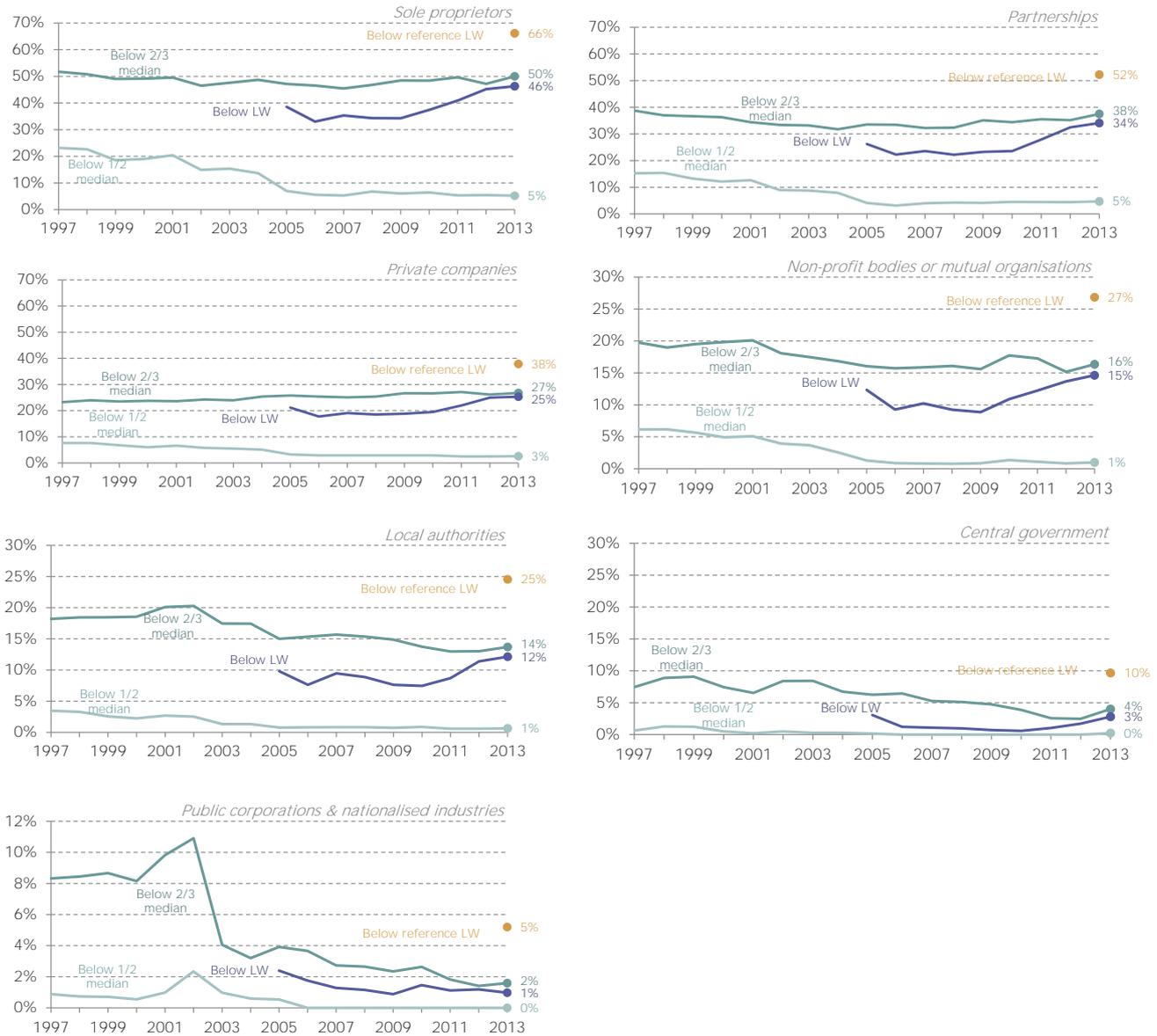
Figure 24:
Proportion of employees below selected low pay thresholds by selected industrial sectors: GB 1997-2013



Source: RF analysis of ONS, Annual Survey of Hours and Earnings

Notes: The living wage has been calculated in London from 2005, but an outside London rate has only been in place from 2011. To allow for the estimates shown above, we project the outside-London living wage backwards, on the assumption that it has been subject to the same year-on-year growth rates as the London figure. Industries based on harmonisation of one-digit SIC 2003 (1997-2011) and SIC 2007 (2009-2012). Where such harmonisation appears invalid (that is, where data do not match in the overlapping years (2009-2011)), industries are allocated to the 'all other sectors' category.

Figure 25:
Proportion of low paid employees by firm structure: GB 1997-2013

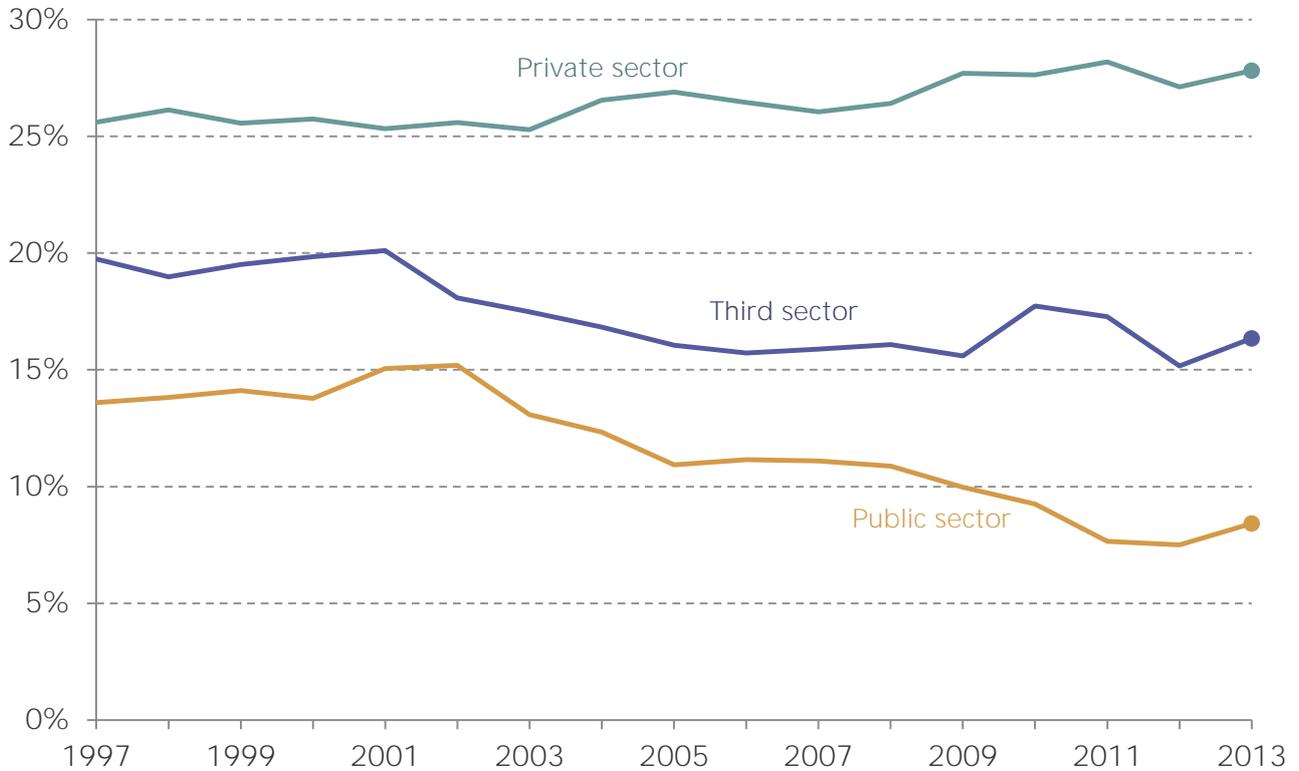


Sources: RF analysis of ONS, Annual Survey of Hours and Earnings

Notes: See notes to Figure 19

Figure 26:
Proportion of low paid employees by broad firm structure: GB 1997-2013

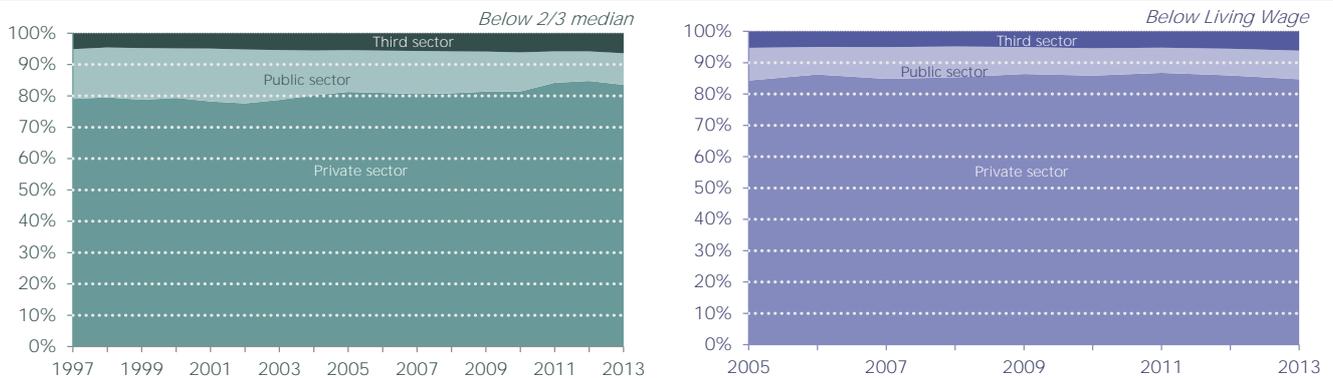
Proportion earning less than two-thirds of median hourly wage



Source: RF analysis of ONS, Annual Survey of Hours and Earnings

Notes: See notes to Figure 19

Figure 27:
Proportion of low paid employees by broad firm structure: GB 1997-2013



Source: RF analysis of ONS, Annual Survey of Hours and Earnings

Notes: See notes to Figure 19

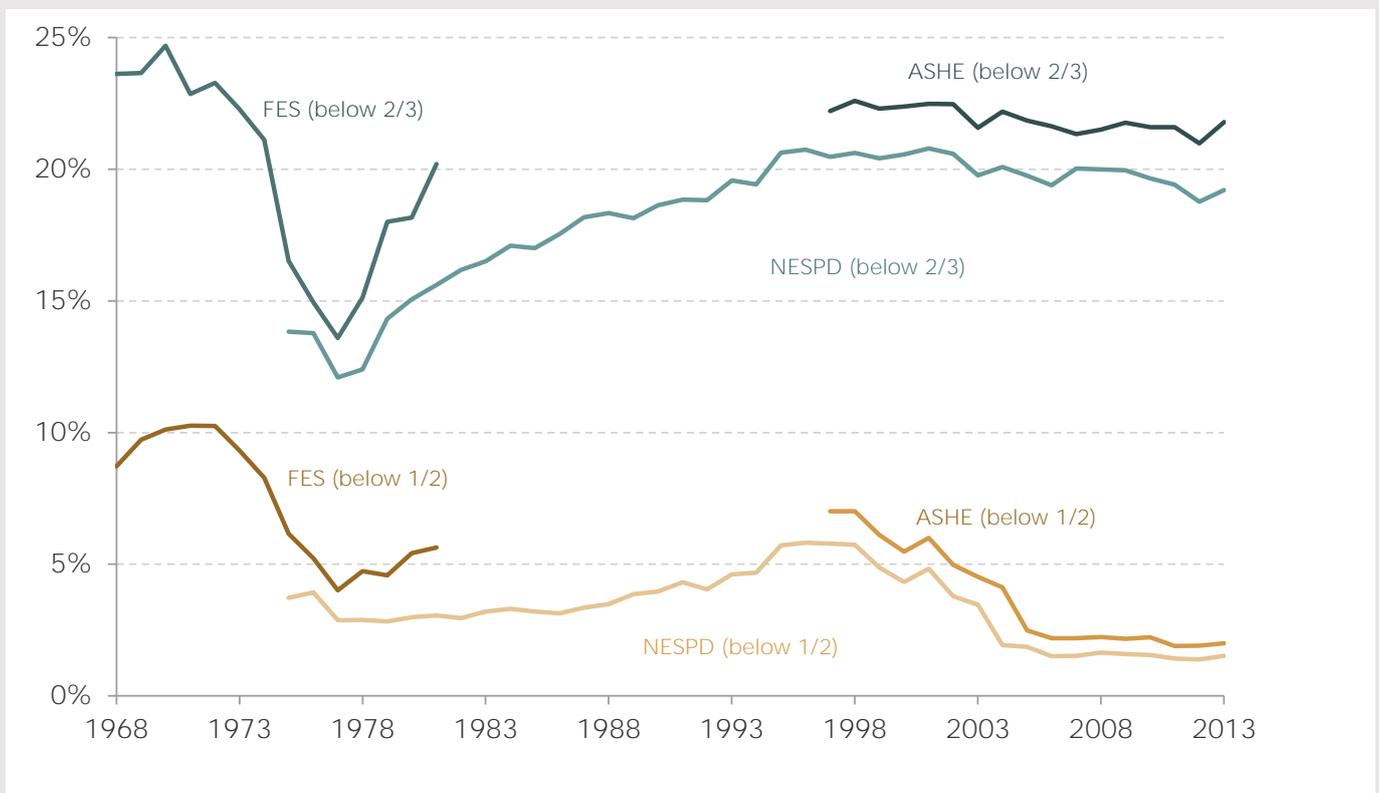
Annex: Data sources and methodology

As detailed in the report, where we present time series stretching back before 1997, the figures are drawn from multiple sources. We use hourly pay data across full-time and part-time employees from three sources: the *Family Expenditure Survey* (FES) covering 1968 to 1981; the *New Earnings Survey Panel Data* (NESPD) between 1975 and 2013; and the *Annual Survey of Hours and Earnings* (ASHE) for the period between 1997 and 2013.

As the largest of the three surveys, ASHE provides the greatest level of accuracy. The FES data in particular should be treated with caution, with its derivation depending on the self-recording of 'normal weekly pay' and 'normal weekly hours worked'. In order to provide a consistent basis for our time series, we have adjusted both the FES and NESPD data to bring them into line with the ASHE figures. To do this, we consider the size of the gap between the various sources in the years in which they overlap and inflate or deflate over the remaining period accordingly. Figure 28 presents figures from the three sources in their raw form.

Figure 28:

Proportion of all employees below selected low pay thresholds: GB 1968-2013 (separate data sources)



Source: RF analysis of DWP, *Family Expenditure Survey* (1968-1981); ONS, *New Earnings Survey Panel Data* (1975-2013); and ONS, *Annual Survey of Hours and Earnings* (1997-2013)

Notes: Family Expenditure Survey data is based on the derived hourly normal pay figure (code: p011) for all adults aged 18 and over. New Earnings Survey Panel Data and Annual Survey of Hours and Earnings data cover all employees aged 16 and over who report a valid work office region and who have not had their pay affected by absence in the time covered.

Figure 28 shows the overlap between the *FES* and *NESPD* figures in the late 1970s, and between the *NESPD* and *ASHE* data from the mid-1990s. The gap between *NESPD* and *ASHE* appears relatively consistent (and relatively small), suggesting that it is reasonable to apply the same adjustment across the *NESPD* period. The gap between *NESPD* and *FES* appears less uniform (and a little larger), but the trends still appear to be in line. Having adjusted the *FES* data down to match the *NESPD* and then adjusted it back up to match *ASHE*, we end up with figures not far removed from the raw *FES* numbers.

Table 3: Selected pay thresholds as at April 2013

Threshold	Rate (Apr 2013)	Bite (as proportion of median)	Cumulative proportion below
Apprentice NMW	£2.65	23%	:
Under-18 NMW	£3.68	32%	:
18-20 NMW	£4.98	43%	:
Extreme low pay threshold	£5.77	50%	2%
Reference living wage (couple)	£6.00	52%	:
Adult NMW	£6.19	54%	5%
UK living wage	£7.45	65%	:
Low pay threshold	£7.69	67%	22%
Part-time median	£8.29	72%	:
Reference living wage (single)	£8.38	73%	:
London living wage	£8.55	74%	:
Reference living wage (couple and one child)	£8.62	75%	:
Reference living wage (all households)	£8.80	76%	:
Reference living wage (couple and two children)	£9.56	83%	:
Female median	£10.33	90%	:
<i>Median</i> ^[24]	£11.53	100%	50%
Reference living wage (single parent and one child)	£12.33	107%	:
Male median	£12.86	112%	:
Full-time median	£13.03	113%	:
Reference living wage (single parent and two children)	£14.80	128%	:

[24] The published median in the ONS *Annual Survey of Hours and Earnings* release is £11.56 which differs from the figure we have derived in this report due to the exclusion of some records in the raw *ASHE* dataset.

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