Resolution Foundation

Low Pay Britain 2013

Matthew Whittaker

Alex Hurrell

September 2013

RF

E: info@resolutionfoundation.org T: 020 3372 2960 F: 020 3372 2999

Contents

Summary and report outline

In each of the past three years, the Resolution Foundation has published a major annual audit of low pay in Britain, describing in detail the scale and shape of our low paid labour market and the people it affects. The reports cover key trends and changes in low pay and form part of our wider body of work on pay and policy responses. Over this period the statistics – and the debate about pay – have changed quickly. Where previously attention had focused on the fact that the pay of low and middle earners appeared to be stagnating even during years of economic growth, concern has more recently centred on cost of living pressures and low earnings growth which have combined to form a wage squeeze across the entire earnings distribution. As we enter a new phase of economic recovery, the key question for the coming years is whether or not renewed jobs growth will help to reverse or reinforce the apparent longer-term shift towards a two-tier workforce.

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 being two-thirds of gross hourly median pay 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 changed very little – as at April 2012 the number stood at 5.1 million, or 21 per cent**[1] – reflecting a shift in the nature of pay inequality in recent years. 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 inequality has tended to *shrink* across the distribution since the onset of 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. **Since 2009 in particular, the number of workers earnings less than a living wage – the amount considered adequate to achieve a minimum standard of living – has rocketed, from 3.4 million to 4.8 million in April 2012**.[2] Annual median pay now stands at £21,300, some £3,300 lower (adjusted for inflation) than the pre-recession peak.

For many, gains in pay have not kept pace with increases in overall economic output and productivity since the early-2000s, reflecting 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, the growth of non-wage costs and technological changes that have reduced demand for many middle-skilled and middle-paying jobs. The jobs market has thus become more polarised, with new jobs increasingly falling into two distinct camps: high-skilled and high-paying or low-skilled and low-paying.

---

[1] These figures relate to employees only, as captured by the ONS *Annual Survey of Hours and Earnings.* As at April 2012, the total number of employees in Britain was around 25 million, with a further 4 million self-employed.

[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).

Perhaps inevitably, the proportion of workers finding themselves in the bottom tier of this divide has increased since the financial crisis of 2008, with a higher share of those entering or returning to the workforce in this period taking on part-time and temporary roles. Yet, while the flexibility inherent in this shift has undoubtedly played a key role in the surprising resilience of Britain's labour market during this period, the concern now is that the change will be locked-in during recovery.

Clearly it is very early days in the return to growth and the findings set out here are tentative at best. But, while no firm conclusion is possible, the signs to date on the extent to which recovery might lock-in the shift to a two-tier workforce are mixed: part way through 2013, we have not yet seen any reversal of the increased share of new jobs which are part-time or temporary and, while we are seeing some improvement in the pay of 'new' employees, typical pay among such workers remains some way below its 2007 level. The development of these trends, and the extent to which economic recovery puts the emphasis once again on the growth of low quality and low paying jobs, will have important implications not just for wages, but for wider living standards in the coming years.

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 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 three low pay measures: two relative and one needs-based threshold.

- ❖ Our core **low pay** definition relates to *hourly wages below two-thirds of gross median hourly pay for all employees*, equivalent to **£7.44 an hour**.
- ❖ A second relative measure focuses on **extreme low pay**, taken as *hourly wages below one-half of gross median hourly pay for all employees*, equivalent to **£5.58 an hour**.
- ❖ We derive a needs-based **living wage** measure which captures *hourly wages below living wage rates*. We use a combination of the two widely accepted rates in place at April 2012: the London living wage rate of **£8.30** set by the Greater London Authority and the UK living wage rate of **£7.20** set by academics at the Centre for Research in Social Policy.

A full breakdown of low pay characteristics is provided in Table 1. In summary:

- ❖ **One-in-five employees (21 per cent, or just over five million individuals) in Britain earned less than the low-pay threshold in 2012**. Similarly, **one-in-five (20 per cent) earned less than a living wage**. Extreme low pay affected just 2 per cent of employees, reflecting the fact that the threshold falls below the main adult NMW rate.
- ❖ 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**.

At the national level we have seen that levels of relative low pay climbed rapidly in the 1980s and early-1990s, before plateauing in the subsequent period. More recently, needs-based low pay levels have increased very significantly as the general wage squeeze has taken hold. Yet beneath these headlines, low pay trends have varied across different employee and job characteristic groups. In summary:

- Unlike the average, the prevalence of *relative* low pay 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 among **older workers**, **women**, those employed in **higher skilled occupations** and those working in the **public** and **third sectors**.

Navigating this report

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

- **Section I** forms the main body of the report and touches briefly on the latest developments in 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 the **quality of new jobs** being created as Britain enters economic recovery;
    - Brings out some of the most interesting features of **low pay today and its evolution over recent decades**; and
    - Discusses definitions of low pay and how these relate to the **living standards of households**.

- **Section II** 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**.

A final **Section III** provides **technical details** of the data sources used and the methods adopted to produce consistent low pay time series.

I Low Pay Britain 2013

Prospects for Britain's two-tier workforce depend on the shape of economic recovery

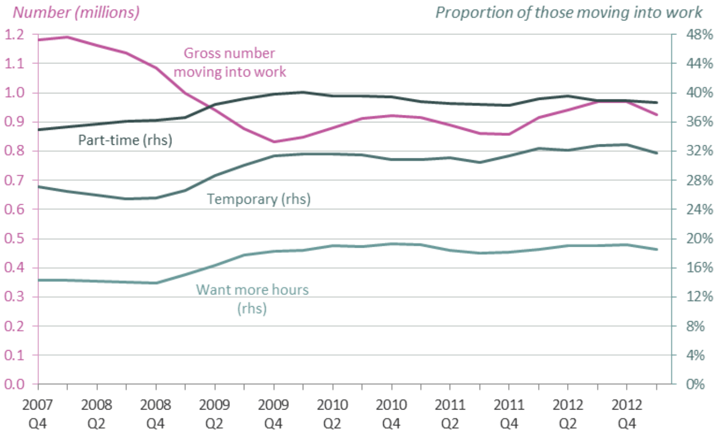
Britain's labour market has been changing over recent decades. Alongside economic growth, increases in part-time, temporary and service-based jobs have been associated with an enduring problem of low pay. Following the financial crisis of 2008 however, the British model has been hailed by many for its surprising resilience: while unemployment has climbed, it has been less dramatic than many expected given the depth of the downturn. This flexibility has undoubtedly helped many to weather the storm of recent years, but there have been clear trade-offs: a wage squeeze in which pay has fallen relative to the cost of living across the entire earnings distribution, and an acceleration of longer-term drift towards a two-tier workforce. While these trade-offs might be considered difficult but inevitable – temporary – reactions to the difficulties of recent years, the key question for the coming decade is whether or not these trends will be reversed or solidified by economic recovery.

Here we take a first look at this issue by focusing on the jobs being occupied in recent years by those either moving into work for the first time or returning to work after a spell of unemployment or inactivity. Figure 1 shows both the number of such workers recorded in each quarter and the proportion who are employed on a part-time or temporary basis. It also shows the proportion of these employees stating that they would like to work more hours at the given rate of pay.

Specifically, we capture employees in each quarter who have been in *continuous* employment for less than three months. We exclude employees moving directly from one job to another and therefore limit our attention to 'new' workers.

The reaction to the financial crisis is clear: numbers of 'new' workers fell (from 1.2 million a quarter to a low of just 830,000), while the proportion who were part-time, temporary or under-employed increased.[4] More recently, we can be encouraged that the number of 'new' employees appears to be on an upward curve, reaching 920,000 by 2013.

Figure 1: Number and quality of 'new' employees before and after the financial crisis: UK 2007-2013



Notes: Four-quarter moving averages showing the gross number of employees entering or re-entering employment in the previous three months. Due to an absence of weighting data in the raw numbers, figures for Q1 2012 are imputed on the basis of figures in Q4 2011 and Q2 2012. The figures relate to *gross* jobs only – they take no account of the number (or quality) of jobs being lost in the same period.

Sources: RF analysis of ONS, *Quarterly Labour Force Survey*

[3] J Plunkett, *Sizing the UK's 'Jobs Gap'*, Resolution Foundation, March 2013

[4] Although not shown here, there is also evidence to suggest a significant increase in the use of zero- and short-hours contracts. See M Pennycook, *A Matter of Time: The rise of zero-hours contracts*, Resolution Foundation, June 2013.

More worryingly however, neither the proportion of such employees working part-time nor the proportion employed on a temporary basis show any signs as yet of falling back to pre-crash norms: trends in both have been remarkably flat since 2009. Similarly, there is no sign to date of the nascent economic recovery feeding through into a reduction in the proportion of 'new' employees who want to work more hours. Given how recent the improvement in employment is, it is clearly too early to draw any firm conclusions, but this lack of movement is an issue of concern.

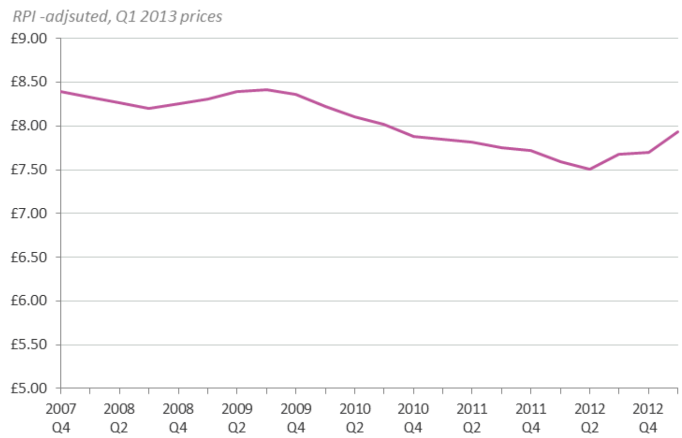
We can also look at wage trends among this group. The median wages presented in Figure 2 are not directly comparable with overall median wage data from ASHE used elsewhere in this report (due to measurement differences), but consideration of the trend over this period allows us to understand the extent to which downturn and subsequent recovery have impacted on the wages of 'new' workers.

It shows that median pay among those entering or re-entering work fell significantly following the financial crisis, from a peak of £8.42 an hour in Q3 2009 to a low of just £7.51 an hour in Q2 2012.

To some extent, this decline is likely to reflect compositional factors, with the typical 'new' employee becoming somehow less skilled or more likely to be lower paid over the course of the period. We might speculate for instance that, among those losing their jobs in the immediate aftermath of the crash, the highest skilled and those most likely to command a higher wage would return more quickly to the labour market, meaning that a higher share of those returning to work in, say, Q2 2012 would be lower-skilled.

However, by the same reckoning we might expect the average skill mix among the out-of-work to increase during periods of high unemployment, making the initial post-crisis decline in median wages among 'new' workers harder to explain.

Figure 2: Median wage among 'new' employees before and after the financial crisis: UK 2007-2013



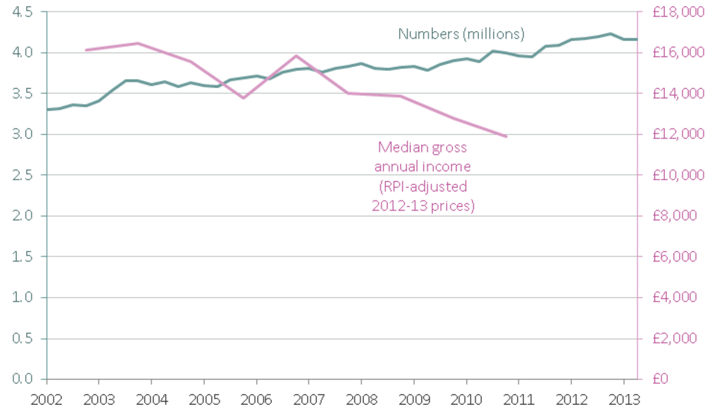
Notes: Four-quarter moving averages showing the median wage among employees entering or re-entering employment in the previous three months. Due to an absence of weighting data in the raw numbers, figures for Q1 2012 are imputed on the basis of figures in Q4 2011 and Q2 2012. Hourly wage data in the *Labour Force Survey* is derived, and tends to be lower than comparable date from ASHE. The figures should therefore be treated with caution, but the trend should be consistent.

Sources: RF analysis of ONS, *Quarterly Labour Force Survey*

This shift may therefore better be explained as a reaction to the weakness of economic output and might again be viewed as an example of the flexibility of the UK labour market which has helped to keep unemployment below the peak levels recorded following previous recessions. Nevertheless, the clear decline in pay among 'new' workers acts as something of a counter to the contention that the labour market is well on the road to recovery. Encouragingly, median pay within this group has shown signs of increasing in recent quarters, though it remains some way below its pre-crisis level.

It is worth reflecting on another group of workers not captured in this data: the self-employed. Rates of self-employment have been increasing steadily for a number of years, and appear to have played a particularly important role in reducing the jobless count during the downturn. Yet the typical incomes associated with self-employment have been falling, suggesting that many of those moving into this category might also be considered to be part of the bottom tier of Britain's labour market.

Figure 3: Numbers in self-employment and median self-employment income: UK 2002-2013



Notes: Income is only for those whose main employment status is 'self-employed'; it does not include amounts earned from self-employment by others e.g. employees.

Sources: ONS, *Labour Market Statistics*; ONS analysis of *Family Resources Survey* in ONS, *Regional Economic Analysis, Changes in real earnings in the UK and London, 2002 to 2012*

Figure 3 shows that the number classified as self-employed increased by around 1 million (or 26 per cent) between 2002 and 2013, with a 10 per cent increase occurring *after* the onset of economic downturn.

In contrast, the median annual income reported by self-employed workers fell by £4,000 (or 28 per cent) between 2001-02 and 2010-11. Again, the trend appeared to accelerate post-2008, with a 15 per cent decline in evidence between 2007-08 and 2010-11.

Clearly it is very early days in the economic recovery and the findings here are tentative at best. To date the signs are mixed: we have not yet seen any reversal of the downturn-inspired acceleration of the longer-term trend towards a two-tier workforce, but we are seeing some improvement in the pay of those entering or re-entering the workforce. The development of these trends, and the extent to which economic recovery puts the emphasis once again on low quality and low paying jobs growth, will have important implications not just for wages, but for wider living standards in the coming years.

The low pay debate has been complicated by the general wage squeeze of recent years

As noted above, the persistent presence of low pay in Britain has been overshadowed to some extent in recent years by a wider wage squeeze. Yet, while it has undoubtedly been intensified – and more broadly felt – as a result of economic downturn, there is evidence to suggest that the phenomenon was in place for many workers even before the financial crisis of 2008. Economic recovery alone may therefore be insufficient to bring an end to the squeeze, pointing to a continued need to tackle the causes of low pay.

Highlighting these trends, Figure 4 compares average annual growth in hourly wages across the earnings distribution (from the lowest paid in percentile 1 to the highest in percentile 99) in three distinct periods. Between 1997 and 2003, real-terms wage growth was relatively strong for all workers, with the lowest (boosted in particular by the introduction of the National Minimum Wage (NMW)) and highest paid tending to fare better than those in the middle of the distribution. Unlike the 1980s, when the pay distribution widened, with the top moving away from the middle and the middle moving away from the bottom, this period was characterised by continued growth in upper half inequality but a compression of pay in the bottom half.

In contrast, between 2003 and 2008, hourly wage growth was flatter across the distribution, and close to zero for most, though once again those towards the very bottom appeared to do slightly better.

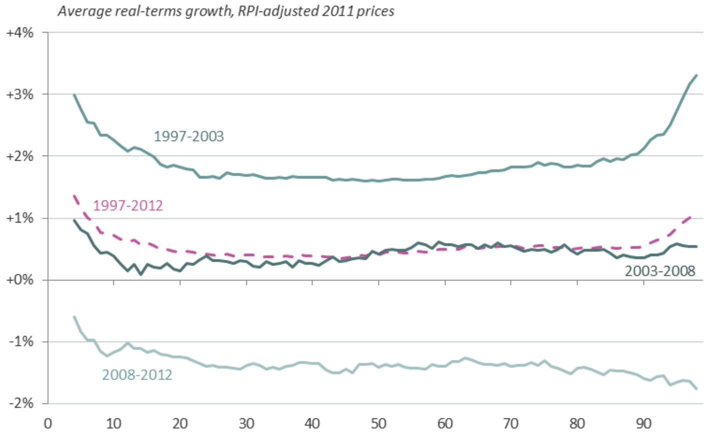
Finally, following the onset of the financial crisis in 2008, wages *fell* relative to prices across the entire distribution, with the shape of this decline producing a slight reduction in earnings inequality.

Looking instead at *annual* earnings – which incorporate trends in working hours as well as hourly rates of pay – Figure 5 highlights a growing divergence between the top and bottom across three broadly similar time periods.[5]

In this instance, we observe just how poorly earnings fared during the economic growth years of 2003 to 2008, with workers at the median and below experiencing flat or falling pay in real-terms and only those at the very top recording significant increases.

More strikingly still, the chart shows that those towards the bottom end of the distribution experienced average annual falls in real-terms wages between 2007-08 and 2010-11 of 4 per cent and higher.

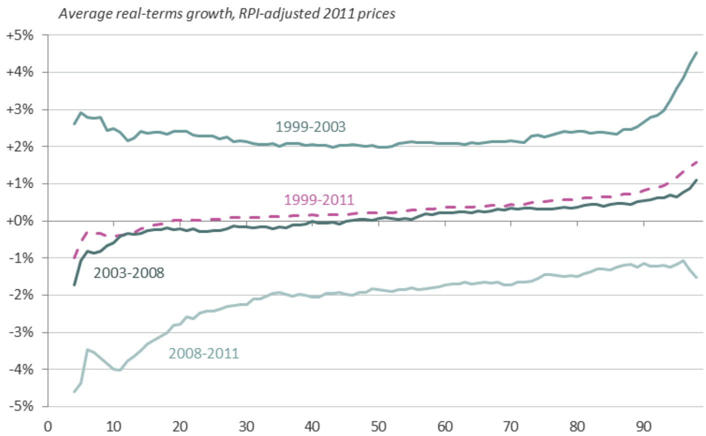
Figure 4: Real-terms growth in hourly wages by position in earnings distribution: UK 1997-2012



Notes: We omit figures for the top and bottom five percentiles of jobs. Growth rates are calculated to account for discontinuities in the series in 2004 and 2006.

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

Figure 5: Real-terms growth in annual wages by position in earnings distribution: UK 1998-99 to 2010-11



Notes: See notes to Figure 4.

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

Taking the period as a whole, we can see that annual pay was broadly unchanged between 1999-00 and 2010-11 for a majority of workers, with even those at the 75th percentile experiencing average real-terms growth of just 0.3 per cent a year.

[5] Annual wage data in the *Annual Survey of Hours and Earnings* is not available for the same periods as the hourly and weekly metrics. The time periods set out in Figure 5 therefore do not quite match those shown in Figure 4.

Wages have failed to keep up with gains in productivity

In recent years we have gained a better understanding of the slowdown in wage growth experienced during the pre-financial crisis years of economic growth, which is likely to reflect a combination of shifts in the industrial structure of Britain, a growing focus on shareholder returns, the decline of labour market institutions, technological changes which have reduced demand for many middle-skilled and middle-paying jobs and non-wage costs such as employer pension and national insurance contributions.[6]

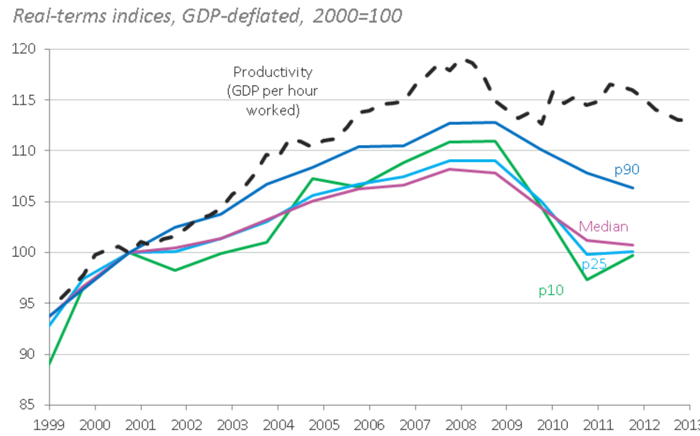
As a result of these trends, workers in general, and low and middle earners in particular, failed to share equally in the gains from economic growth in the period before the crash. It is a trend that is in evidence in a number of advanced economies, with the apparent 'decoupling' of productivity growth from wage growth appearing more or less established depending on the country considered.

In the UK context, Figure 6 sets out real-terms trends in productivity – measured as GDP per hour worked – alongside annual wage growth at the median and at the 10th, 25th and 90th percentiles of the earnings distribution.

Prior to 2000, wage gains appeared to be broadly in line with productivity, with the main exception coming among the lowest paid who experienced significant gains following the introduction of the NMW.

However, wage growth at the median and below increased much more slowly than overall productivity from 2000 onwards, with a further widening of the gap occurring from 2008 as real-terms wages fell rapidly during the economic downturn.

Figure 6: Real-terms growth in productivity and annual wages at selected points in the earnings distribution: UK 1999-2013



Notes: The real-terms wage trends shown here differ slightly from those in other charts in this report because they are adjusted using the GDP-deflator (in order to allow direct comparison with productivity) rather than the RPI as elsewhere (which provides a better indication of consumer inflation).

Source: RF analysis of ONS, *Annual Survey of Hours and Earnings* and ONS, *Labour Market Statistics*, series CDID

Further up the earnings distribution, pay continued to broadly reflect gains in overall labour productivity until the mid-2000s. Even here however, there was subsequently some evidence of an apparent decoupling, reflecting the fact that the share of overall value generated in the economy that flowed to workers fell in this period, with an increasing share instead being delivered in the form of profits (and to those at the extreme top end of the earnings distribution (p95 and above)).[7]

---

[6] See for example, J Plunkett, *Gaining from growth: The final report of the Commission on Living Standards*, Resolution Foundation, 2012.

[7] See for example, M Whittaker & L Savage, *Missing Out*, Resolution Foundation, 2011.

Pay at the median and below has fallen significantly since the mid-2000s

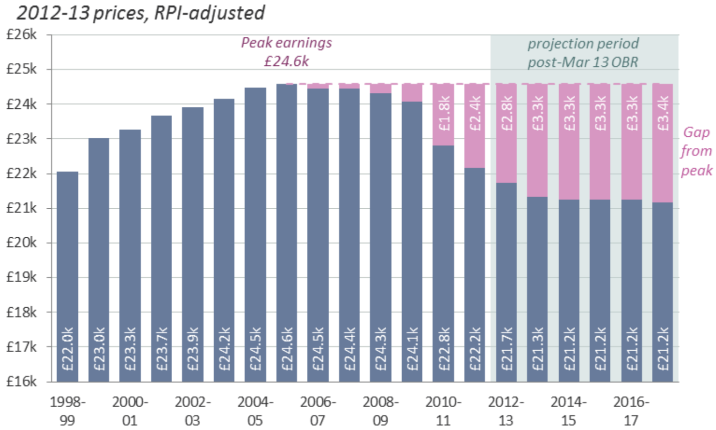
In its March 2013 projections, the Office for Budget Responsibility (OBR) indicated that it expected the squeeze on average earnings to begin to ease in 2014, but that the mean wage wouldn't return to its 2010 level until some point in 2016. Improvements in several economic indicators since then may well point to a more optimistic set of projections alongside the Autumn Statement, but it remains unlikely that workers will be able to recover the wage losses of the downturn for some time.

Indeed, there is some evidence that the relationship between wages and unemployment has changed in recent years, such that the UK's unemployment rate will need to be pushed below its pre-crisis norm before significant real-terms wage increases can be recorded.[8] And if the distribution of wage gains follows the pattern of previous periods of economic growth, then we might expect the picture to look bleaker still for low and middle earners.

Figure 7 sets out our projections for *median* earnings through to 2017-18, calculated by applying historic ratios between mean and median wage growth to the OBR's forecasts. Our projections also differ from the OBR's in that we use the broader (and usually higher) Retail Prices Index (RPI) measure of inflation rather than the Consumer Prices Index (CPI) measure.[8]

Reflecting the findings in Figure 5, it shows that median annual pay increased relatively rapidly year-on-year between the late-1990s and early-2000s, but that these gains slowed markedly during the mid-2000s. Indeed, real-terms median annual earnings were falling from 2006-07, two years prior to start of the wider economic downturn.

Figure 7: Median annual earnings among all employees: outturn and projections 1998-99 to 2017-18



Notes: Projections are calculated with reference to OBR projections for average earnings. We apply an adjustment to reflect how closely median wage growth has tracked average earnings in the period 1999-2011.

Source: RF analysis of ONS, *Annual Survey of Hours and Earnings*, ONS, *Quarterly National Accounts*, ONS, *Labour Force Survey* and OBR, *Fiscal and economic outlook*

Subsequent sharp falls means that the median salary in Britain is now estimated to stand at around £21,300, some £3,300 lower than its peak in 2005-06. And, according to these projections, the picture shows no signs of recovering in the medium-term. By the end of the forecast period in 2017-18, median pay is set to amount to £21,200, still significantly lower than the level recorded at the turn of the century.

---

[8] The RPI is no longer considered a *National Statistic* and the government now uses CPI as its main measure for uprating tax credits and benefits. However, the CPI is imperfect because it fails to include many housing costs. The new CPIH updates the CPI measure to include housing costs, while the new RPIJ uses an internationally-recognised method for calculating RPI. Both measures are improvements on the existing CPI and RPI but, as yet, the OBR includes no projections for these measures, meaning that we are limited in our modelling to using either the CPI or RPI. We continue to use RPI because we believe the housing costs omitted from the CPI measure are important pressures for low and middle earners.

[9] P Gregg & S Machin, *What a drag: The chilling impact of unemployment on real wages*, Resolution Foundation, 2012

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

The extent to which these disappointing trends have stretched up the earnings distribution 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, the earnings squeeze of recent years has 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 for example.[10] 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[11] and a revival of living wage campaigns whose aim has been to ensure that wages deliver a 'minimum acceptable quality of life' for their recipient.[12]

In this report we take both approaches, adopting two relative and one needs-based low pay thresholds:

- Our core **low pay** definition relates to *hourly wages below two-thirds of gross median hourly pay for all employees*. We calculate median hourly pay in Britain at April 2012 to be £11.15[13] making the low pay threshold we use throughout this report **£7.44**, equivalent to gross earnings of £13,530 a year for a 35-hour working week.

- 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 **£5.58** an hour. This is below the level of the April 2012 adult NMW rate of £6.19 (55 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 derive a needs-based **living wage** measure which captures *hourly wages below (location-specific) living wage rates*. We use a combination of the two widely accepted rates in place at April 2012: the London living wage rate of **£8.30** set by the Greater London Authority and the UK living wage rate of **£7.20** set by academics at the Centre for Research in Social Policy.[14] 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.

---

[10] 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.

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

[12] 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.

[13] This figure is based on analysis of raw data taken from the Office of National Statistics (ONS), *Annual Survey of Hours and Earnings* (ASHE). It is distinct from the ONS published median hourly pay figure of £11.26 (which covers the UK and excludes employees not on adult rates of pay). See Section III for full details.

[14] 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.

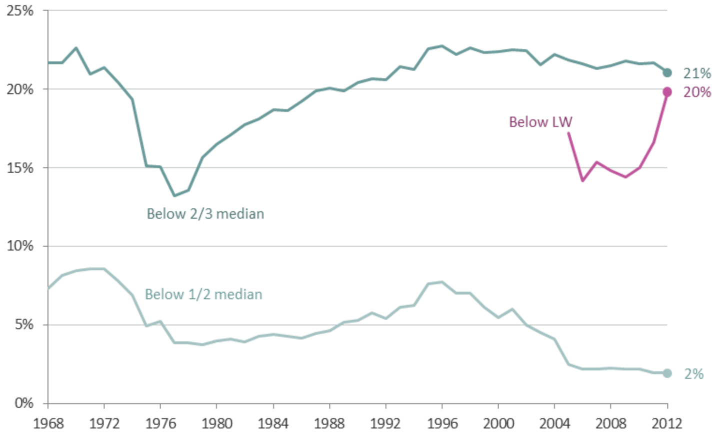
Figure 8 sets out trends in each of these three measures. It shows that **5.1 million (21 per cent) employees earned less than the main low pay threshold in April 2012**. While this proportion is remarkably similar to the levels recorded in the late-1960s, much has happened in the intervening years.

Following major improvements associated with the Equal Pay Act of 1970 and the incomes policy of the mid-1970s, the incidence of low 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 8 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 9 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 2012 by a clear spike of workers paid at or around the adult NMW rate.

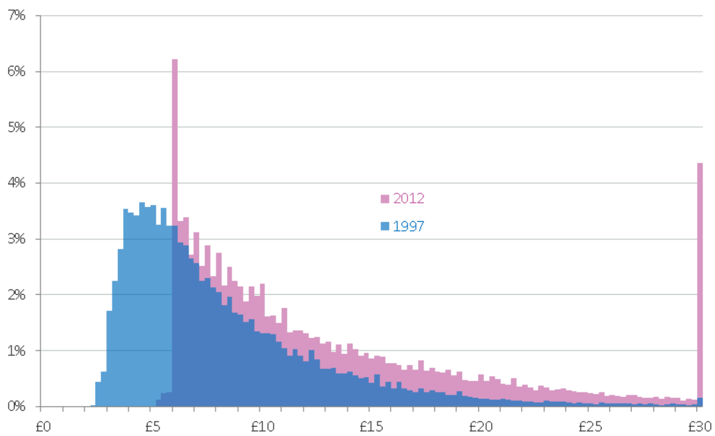
Figure 8: Proportion of all employees below selected low pay thresholds: GB 1968-2012



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.

Sources: RF analysis of DWP, *Family Expenditure Survey* (1968-1981); ONS, *New Earnings Survey Panel Data* (1975-2012); and ONS, *Annual Survey of Hours and Earnings* (1997-2012)

Figure 9: Hourly pay distribution: GB 1997 & 2012



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

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

According to estimates from the Low Pay Commission (LPC), 1.4 million workers (5.3 per cent of all employees) earned the NMW in April 2012.[15] Given that the adult rate of £6.19 an hour was equivalent to 55 per cent of the median, 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) and contraventions of the legal minimum by employers breaking (knowingly or otherwise) the law.

Lastly, Figure 8 shows that **4.8 million (20 per cent) employees earned less than a living wage in 2012**, 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[16] living wage rate in 2011, compared with increases of 3.3 per cent and 2 per cent in the previous two years. 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.

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

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.[17] 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 10 shows.

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 2011 (compared with 22 per cent using our measure), marking the UK out as one of the worst performers on the international stage, with a share of low pay more than four percentage points higher than the average across those OECD countries in which data is available. Workers in Britain are twice as likely as counterparts in Italy (10 per cent) and five times more likely than employees in Belgium (4 per cent) to earn below the low paid threshold.

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.

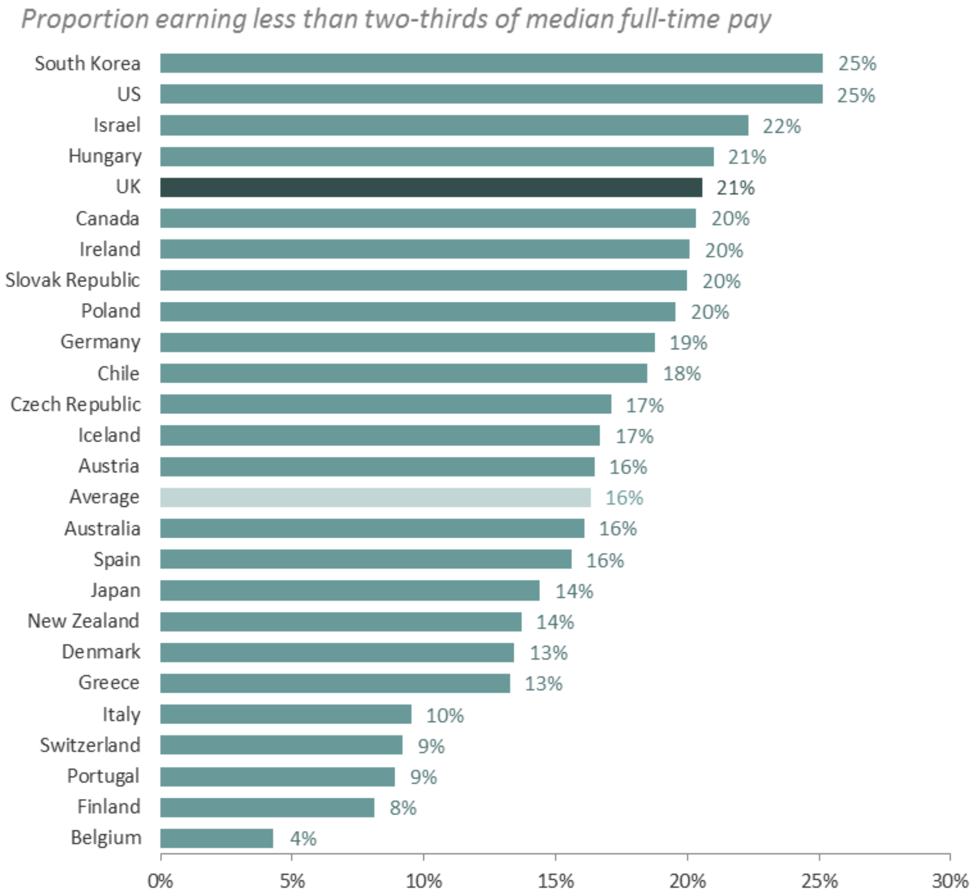
---

[15] The Low Pay Commission (LPC) defines a minimum wage job to be one that, in April 2012, paid at or below the relevant NMW rate. They also include those paid up to five pence above the minimum wage. Source: LPC, *National Minimum Wage: Low Pay Commission Report 2013*, April 2013.

[16] 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.

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

Figure 10: Share of full-time employees in low paid work across advanced economies: *2009-2011*



Note: 'Low pay' here covers full-time workers only and is measured with reference to gross weekly earnings.

Source: OECD Labour Market Statistics

Certain employee and job profiles are particularly associated with low pay

While Britain is not the worst performing country, low paid work in Britain is associated with a number of negative attributes not shared by other advanced economies. These include higher pay penalties for part-time work[18] and a greater risk that women will find themselves in low paid work.[19] Compared with many other economies, the distinction between the two tiers of Britain's workforce appears particularly stark.

While full details of the characteristics of the low paid, and the evolution of this group over time are provided in Section II, Box 1 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.

[18] A Manning & B Petrongolo, *The part-time pay penalty*, London School of Economics and Centre for Economic Performance, 2004

[19] W Salverda & K Mayhew, "Capitalist economies and wage inequality", *Oxford Review of Economic Policy*, Volume 25, Number 1, 2009, p. 133

- 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.

Box 1: A summary of those most at risk of low pay in April 2012

Overall
- **5.1 million employees are low paid**, representing 21% of all workers.
- **0.5 million** (or 2%) are **in extreme low pay**.
- **4.8 million** (or 20%) **earn less than the prevailing living wage in their area.**

By employee profile
- **3.1 million women** (or 26%) are low paid.
- **1 million** (or 78%) **of those aged 16-20** are low paid; as are 0.9 million (or 38%) of 21-25 year olds.
- **16-20 year olds account for 83%** of the total number in **extreme low pay.**
- **0.2 million** (or 20%) of workers **aged 61-65** are low paid; as are **0.1 million** (or 33%) **of those aged 66 and above.**
- **25%** of employees in **Wales,** the **East Midlands**, **Yorkshire & the Humber** and the **West Midlands** are low paid.
- **London** is the only region in which **more workers earn below living wage** (16%) **than are low paid** (11%).

By job profile
- **2.9 million** (or 43%) **part-time workers** are low paid, comprising 58% of all low paid.
- **33%** of workers on **temporary contracts** are low paid, but they account for just 13% of the total.
- **1.7 million workers** (or 59%) in ***elementary occupations*** are low paid.
- **1.2 million** (56%) in ***sales & customer services*** occupations.
- **0.8 million** (34%) in ***personal services*** .
- These **three occupations together account for 73%** of **low paid** total, and of those in extreme low pay.

By industrial sector
- **0.8 million** (or 68%) of workers in the ***hotels & restaurants*** sector are low paid.
- **1.5 million** (or 41%) in ***wholesale & retail*** are low paid, representing **30% of the total.**
- **0.5 million** (or 36%) in ***admin & support services*** are low paid.
- ***Health & social work*** and ***education*** sectors **account for 22% 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 6%** of workers **earning less than a living wage** are employed in the **public sector.**

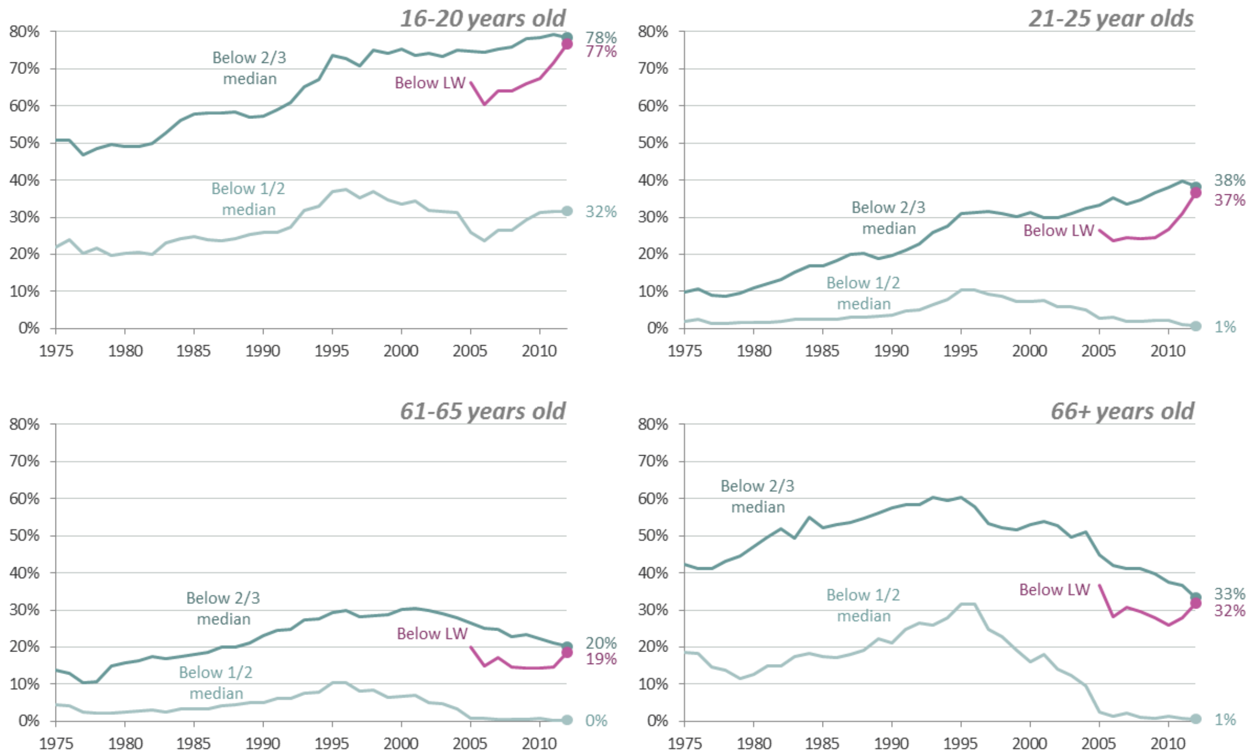
The low pay picture continues to change

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 II provides full details, but here we consider some of the more striking trends: specifically in relation to age, sex and occupation.

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. 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 11, which charts the proportions found below each of our three low pay thresholds since 1975 in the two younger and two older age groups with the highest levels of prevalence in 2012.

Figure 11: Proportion of employees below selected low pay thresholds by selected age group: *GB 1975-2012*



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.

Sources: RF analysis of ONS, *New Earnings Survey Panel Data* (1975-2012) and ONS, *Annual Survey of Hours and Earnings* (1997-2012)

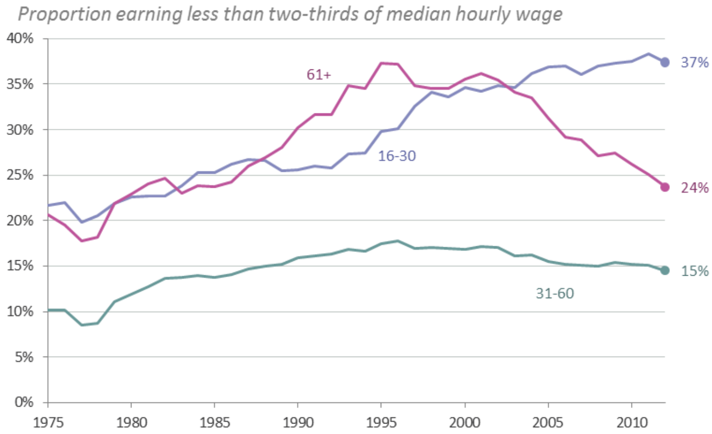
Most strikingly, four-in-five (78 per cent) employees aged 20 and under were low paid in April 2012, with one-in-three (32 per cent) in extreme low pay. These levels are likely to be explained in part by the traditional trajectory of earnings over the life course, while the prevalence of extreme low pay reflects the fact that – unlike the main rate – youth minimum wages fall below the extreme low pay threshold. As with the overall trend described in Figure 8, low pay increased steadily over the course of the 1980s and early-1990s. However, while the overall trend subsequently remained relatively stable, here we see that the proportion of younger workers in low pay continued to *increase*.

In contrast, among older workers the level has *decreased* over the last 15 years or so. It is worth noting, however, that levels of low pay among older workers remain much higher than the national average. We might look for explanations in the fact that those staying on in work – driven by increased longevity, improved health, rising living costs and inadequate pension provision – tend to be lower skilled and lower earning than are those who take the option of retirement. There may be other factors at play however, with barriers to employment for older workers – such as caring responsibilities and age discrimination – persisting, as too does the gender pay gap. These divergent trends are clearer still in Figure 12, in which we aggregate changes across broader age groups.

The trend among younger workers may in part reflect the growth of student employment,[20] 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.

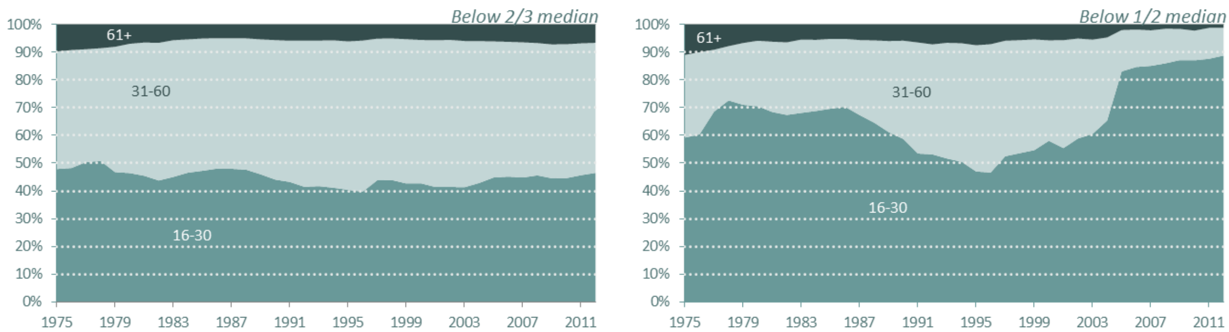
Figure 12: Proportion of low paid employees by broad age group: *GB 1975-2012*



Notes: See notes to Figure 11.
Sources: RF analysis of ONS, *New Earnings Survey Panel Data* (1975-2012) and ONS, *Annual Survey of Hours and Earnings* (1997-2012)

Despite these trends, Figure 13 makes clear that 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.

Figure 13: Distribution of low pay across age groups: *GB 1975-2012*



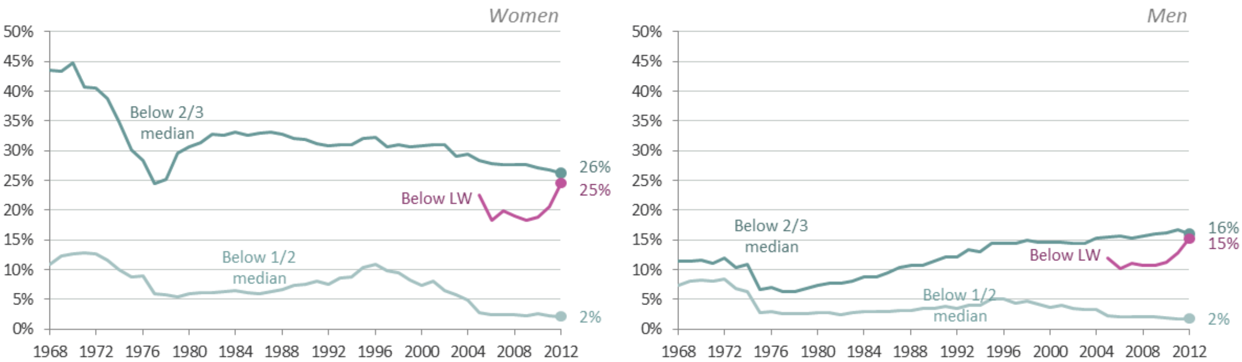
Notes: See notes to Figure 11.
Sources: RF analysis of ONS, *New Earnings Survey Panel Data* (1975-2012) and ONS, *Annual Survey of Hours and Earnings* (1997-2012)

[20] Between 1996 and 2006, numbers of student workers increased by 54 per cent. Students are overwhelmingly employed in low-wage sectors (see Section 6), with more than 40 per cent of full-time student employees in the *wholesale, retail and motor trade* sector, and just over 20 per cent in the *hotels and restaurants* sector. See the TUC website.

Where we *do* see a significant shift in the age breakdown of low pay is in relation to extreme low pay. The second chart in Figure 13 shows that the proportion of those earning less than one-half of median hourly pay accounted for by workers aged 30 and under increased from a low of one-half (47 per cent) in 1996, to a peak of nine-in-ten (89 per cent) in 2012. As previously discussed, this reflects the introduction of the NMW, with the main adult rate consistently set above the extreme low pay threshold, while the youth rates fall below it.

Turning next to **gender**, Figure 14 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.[21]

Figure 14: Proportion of employees below selected low pay thresholds by sex: *GB 1968-2012*



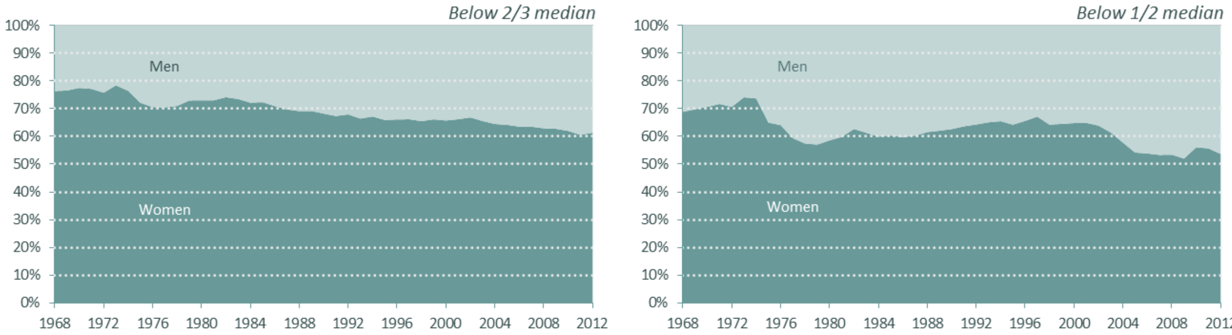
Note: See notes to Figure 8.
Source: RF analysis of DWP, *Family Expenditure Survey* (1968-1981); ONS, *New Earnings Survey Panel Data* (1975-2012); and ONS, *Annual Survey of Hours and Earnings* (1997-2012)

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. In contrast, 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. 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.

Figure 15 looks at trends in the distribution of low pay between the sexes over time. It makes clear that while the proportion of low paid work accounted for by men 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. It is worth noting, however, that the split among those in extreme low pay is much closer to 50/50.

[21] 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 15: Distribution of low pay across sex: GB 1968-2012

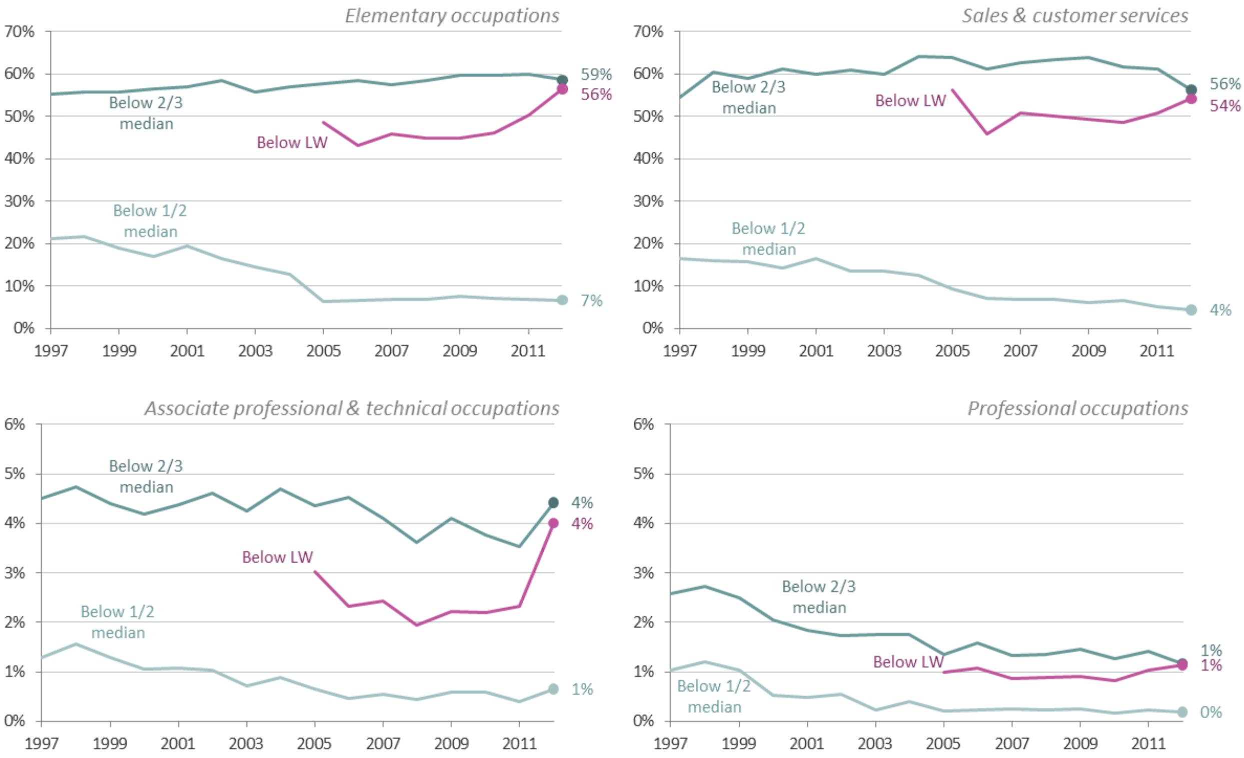


Note: See notes to Figure 8.

Source: RF analysis of DWP, *Family Expenditure Survey* (1968-1981); ONS, *New Earnings Survey Panel Data* (1975-2012); and ONS, *Annual Survey of Hours and Earnings* (1997-2012)

Finally in this summary of recent trends in low pay, we consider **occupations**. Figure 16 compares changes in low pay prevalence in the two occupations with the highest levels of low pay in 2012 (*elementary occupations* and *sales & customer services*) with changes in the two occupations with the lowest levels of prevalence (*associate professional & technical occupations* and *professional occupations*).

Figure 16: Proportion of employees below selected low pay thresholds by selected occupations: *GB 1997-2012*



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.

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

It should be noted that – for clarity – the scales on the charts differ significantly, meaning that the movements in the final two occupational groups are exaggerated somewhat. Nevertheless, it is apparent that the prevalence of low pay among both *elementary* and *sales & customer service* workers increased over the period – from already high bases. In contrast, the proportion of *professional* and *technical* workers who are low paid fell, despite starting the period significantly lower than the overall average.

These trends would appear 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.

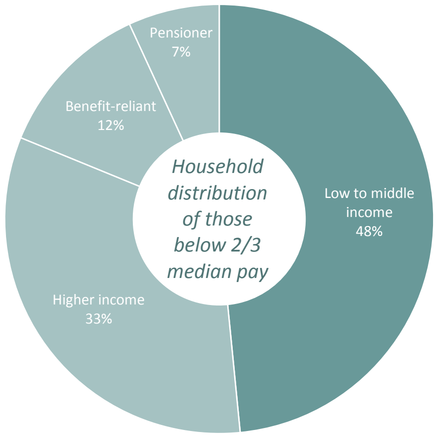
There is a clear link between low pay and living standards

Low pay will, in turn, be a key driver of trends in living standards. The link is clear when we look at how individual *earnings* relate to broader family *incomes*. Specifically, we consider here the distribution of low paid *individuals* across and within low to middle income *households*.[22]

Figure 17 makes clear that, despite making up less than one-quarter (23 per cent) of the total population and just over one-quarter (28 per cent) of the in-work population, individuals from low to middle income households accounted for close to half (48 per cent) of all low paid workers in 2010-11.

Those in benefit-reliant households – who we might also expect to be acutely affected by the continuing squeeze on living standards – accounted for a further 12 per cent of the total.

Figure 17: Distribution of low paid workers across household income groups: *UK 2010-11*



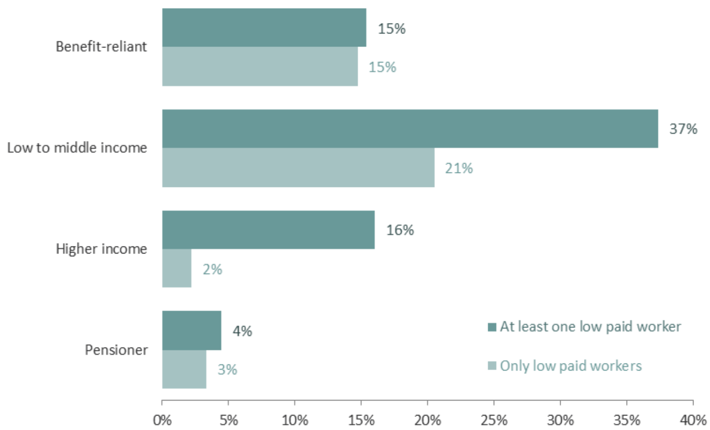
Notes: Figures based on derived hourly pay variable which should be treated with some caution due to potential inaccuracies and misalignments in self-reported hours and earnings data.
Source: RF analysis of DWP, *Family Resources Survey 2010-11*

[22] We define those on low to middle incomes as households with before-tax incomes that are below median 'equivalised' (that is, adjusted for the size of the household) working age income, but above the poorest 10 per cent of working-age households. For a couple with no children, this is equivalent to an annual income of £12,000 to £30,000. We exclude those obtaining more than one-fifth of their total income from means tested benefits and find that earnings from employment account for around four-fifths of gross annual income on average. Alongside this low to middle income group, we define households in the poorest tenth of the working-age distribution and those who receive more than one-fifth of their gross household income from means tested benefits as 'benefit reliant.' We define those above the middle as 'higher income.'

Looking within each of the income groups, Figure 18 shows that more than one-third (37 per cent) of low to middle income households contained at least one low paid worker, compared with 16 per cent in higher income households.

The distinction between the two income groups becomes even starker when we consider the proportions which have *only* low paid workers in employment. On this measure, one-in-five (21 per cent) of low to middle income households relied solely on low paid work – either a single earner or multiple, low paid earners – compared with just 2 per cent of higher income households.

Figure 18: Proportion of households containing low paid workers, by household income group: *UK 2010-11*



Notes: The 'only low paid workers' measure relates to households in which at least one person is in employment.
Source: RF analysis of DWP, *Family Resources Survey 2010-11*

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.

Reducing the share of workers who are low paid is not a political objective that can be easily addressed. There is a limit to the government's role in directly regulating and shaping wage-setting. However, in these fiscally straitened times, there is a strong case for looking again at how government can build or better utilise labour market institutions, its interaction with employers and unions and its ability to influence social norms to ensure that we reduce our reliance on large numbers of low paid workers.

To this end, we have recently launched three major new projects designed to delve deeper into the issue of low pay:

- Our work on *pay progression* looks at pay dynamics and the extent to which low pay outcomes persist for some people across the life cycle.
- A second project is considering a range of options for the future roles of the *NMW and the Low Pay Commission* in tackling low pay.[23]
- A final project is focusing on the extent and impact of *precarious employment*.[24]

We will report back on each of these in the coming months.

[23] See J Plunkett, *Fifteen years later: A discussion paper on the future of the UK National Minimum Wage and Low Pay Commission*, Resolution Foundation, July 2013.
[24] See M Pennycook, *A Matter of Time: The rise of zero-hours contracts*, Resolution Foundation, June 2013

II Detailed low pay statistics

In this section we present reference data detailing the characteristics of low pay in 2012, along with the evolution against each of our three measures over the past 40 years.

Low pay in April 2012

Table 1 presents a summary snapshot of low pay in April 2012, setting out the total number of employees in 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 (21 per cent, or just over five million individuals) in Britain earned less than the low-pay threshold in 2012**. Similarly, one-in-five (20 per cent) earned less than a living wage.

- **Female workers are at particular risk of low pay, with 26 per cent earning below the main threshold in 2012**, compared with 16 per cent of male workers. Extreme low pay was relatively low in both instances (at 2 per cent), but once again it is female workers who were 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 30 and 55. Four-in-five (78 per cent) of employees aged 20 and under were low paid in April 2012, with one-in-three (32 per cent) being in extreme low pay. Low pay rates remain high among those aged 21-25, before falling to a low of 13 per cent among workers in their 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-ten (11 per cent) workers earned less than two-thirds of median hourly pay in April 2012 in London, compared with one-in-four (25 per cent) in many other parts of Britain, such as Wales. 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 2012 (£8.30) was more than £1 higher than the figure used for the rest of the country (and higher than the low pay threshold of £7.44). As such, while London once again recorded the lowest level of below-living wage pay of any region (16 per cent), it was only 4 percentage points lower than the national average.

- 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 2012, as were one-in-three workers in *personal services* (covering social care and childcare for example), compared with just 5 per cent of *managers & senior officials* and 1 per cent of those in *professional* occupations.

- **Part-time workers face a particular low pay risk, with two-in-five (43 per cent) of such employees being low paid in 2012**, compared with 12 per cent of those working full-time. In the context of the growth of part-time employment over the last three decades[25] and recent rises in (often involuntary) part-time work and under-employment,[26] the prevalence of low pay among part-time workers is concerning.

- As might be expected, **the risk of low pay is closely associated with precarious forms of employment**. One-in-three (33 per cent) workers employed on a temporary or casual basis were low paid in April 2012, compared with one-in-five (20 per cent) permanent employees. Temporary workers (5 per cent) were also much more likely to be in extreme low pay than 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 2012**, despite the high levels of low pay prevalence within this group.

- There are **wide variations in the prevalence of low pay across industrial sectors, ranging from more than two-in-three (68 per cent) employees in the *hotels & restaurants* sector to just 2 per cent in the *public administration & defence* sector**. In addition to *hotels & restaurants*, five other classifications reported low pay prevalence above the national average of one-in-five: *wholesale & retail* (41 per cent), *arts, entertainment & recreation* (36 per cent), *administrative & support service activities* (36 per cent), *agriculture, forestry & fishing* (35 per cent) and *other service activities* (30 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* (12 per cent), *arts, entertainment & recreation* (5 per cent) and *other service activities* (5 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 (30 per cent) in 2012**, followed by *hotels & restaurants* (16 per cent). Despite recording below-average low pay prevalence, the relatively large sectors of *health & social work* (11 per cent), *education* (10 per cent) and *manufacturing* (6 per cent) also accounted for significant shares of the total.

- **Low pay prevalence was highest in 2012 within the private sector**, with sole proprietors (47 per cent), partnerships (35 per cent) and private companies (26 per cent) recording much higher rates of low pay than local authorities (15 per cent), central government (3 per cent) and public corporations (1 per cent). A similar distribution held for workers in extreme low pay as well.

---

[25] IPPR, *Trends in part-time and temporary work*
[26] TUC, *Under-employment crisis: A TUC analysis of under-employment across the UK*, 2012; G Cory, "Looking under the lid of employment figures", Resolution Foundation, 2012

Table 1: Profile of those falling below selected low pay thresholds in April 2012: GB

	Below 2/3 median hourly pay			Below 1/2 median hourly pay			Below 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
Total	5,080,000	21%	100%	468,000	2%	100%	4,787,000	20%	100%
Sex									
Women	3,118,000	26%	61%	251,000	2%	54%	2,917,000	25%	61%
Men	1,962,000	16%	39%	217,000	2%	46%	1,870,000	15%	39%
Age group									
16-20	969,000	78%	19%	391,000	32%	83%	947,000	77%	20%
21-25	890,000	38%	18%	17,000	1%	4%	851,000	37%	18%
26-30	504,000	18%	10%	9,000	0%	2%	474,000	17%	10%
31-35	363,000	13%	7%	8,000	0%	2%	347,000	13%	7%
36-40	369,000	13%	7%	8,000	0%	2%	347,000	12%	7%
41-45	454,000	14%	9%	10,000	0%	2%	417,000	13%	9%
46-50	469,000	15%	9%	6,000	0%	1%	430,000	13%	9%
51-55	402,000	15%	8%	9,000	0%	2%	365,000	14%	8%
56-60	323,000	17%	6%	6,000	0%	1%	293,000	15%	6%
61-65	209,000	20%	4%	3,000	0%	1%	193,000	19%	4%
66+	127,000	33%	3%	2,000	1%	0%	122,000	32%	3%

Table 1 cont…

	Below 2/3 median hourly pay			Below 1/2 median hourly pay			Below 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
Region									
Wales	276,000	25%	5%	23,000	2%	5%	252,000	23%	5%
East Midlands	430,000	25%	8%	42,000	2%	9%	388,000	22%	8%
Yorkshire & the Humber	505,000	25%	10%	51,000	2%	11%	456,000	22%	10%
West Midlands	534,000	25%	11%	48,000	2%	10%	473,000	22%	10%
North East	234,000	24%	5%	22,000	2%	5%	213,000	22%	4%
North West	629,000	24%	12%	59,000	2%	13%	571,000	21%	12%
South West	502,000	24%	10%	49,000	2%	11%	452,000	21%	9%
East	522,000	23%	10%	48,000	2%	10%	466,000	20%	10%
Scotland	461,000	21%	9%	43,000	2%	9%	416,000	19%	9%
South East	598,000	18%	12%	61,000	2%	13%	530,000	16%	11%
London	389,000	11%	8%	23,000	1%	5%	572,000	16%	12%
Occupations									
Elementary occupations	1,719,000	59%	34%	197,000	7%	42%	1,656,000	56%	35%
Sales & customer service	1,181,000	56%	23%	92,000	4%	20%	1,138,000	54%	24%
Personal services	785,000	34%	15%	54,000	2%	11%	713,000	31%	15%
Process, plant & machinery operatives	346,000	25%	7%	7,000	1%	2%	314,000	22%	7%
Skilled trades	317,000	17%	6%	49,000	3%	11%	296,000	16%	6%
Admin & secretarial	408,000	14%	8%	29,000	1%	6%	367,000	12%	8%
Managers & senior officials	116,000	5%	2%	8,000	0%	2%	110,000	5%	2%
Associate professional & technical	150,000	4%	3%	22,000	1%	5%	136,000	4%	3%
Professional	58,000	1%	1%	9,000	0%	2%	56,000	1%	1%
Hours worked									
Part-time	2,946,000	43%	58%	294,000	4%	63%	2,804,000	40%	59%
Full-time	2,134,000	12%	42%	175,000	1%	37%	1,982,000	12%	41%
Contract type									
Temporary/casual	674,000	33%	13%	101,000	5%	21%	652,000	32%	14%
Permanent	4,405,000	20%	87%	368,000	2%	79%	4,135,000	19%	86%

Table 1 cont…

	Below 2/3 median hourly pay			Below 1/2 median hourly pay			Below 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
Industry									
Hotels & restaurants	830,000	68%	16%	150,000	12%	33%	823,000	67%	17%
Wholesale & retail	1,501,000	41%	30%	121,000	3%	26%	1,429,000	39%	30%
Admin & support services	523,000	36%	10%	17,000	1%	4%	506,000	35%	11%
Arts, entertainment & recreation	172,000	36%	3%	26,000	5%	6%	172,000	36%	4%
Agriculture & fishing	43,000	35%	1%	5,000	4%	1%	39,000	32%	1%
Other service activities	120,000	30%	2%	19,000	5%	4%	115,000	29%	2%
Households as employers	10,000	20%	0%	:	:	:	10,000	20%	0%
Health & social work	569,000	17%	11%	24,000	1%	5%	509,000	15%	11%
Education	530,000	14%	10%	33,000	1%	7%	468,000	12%	10%
Manufacturing	318,000	14%	6%	21,000	1%	4%	283,000	12%	6%
Real estate	36,000	12%	1%	4,000	1%	1%	36,000	12%	1%
Water supply & waste management	14,000	11%	0%	:	:	:	13,000	9%	0%
Transportation & storage	90,000	9%	2%	3,000	0%	1%	79,000	8%	2%
Construction	84,000	10%	2%	15,000	2%	3%	80,000	9%	2%
Professional & technical	112,000	8%	2%	11,000	1%	2%	104,000	7%	2%
Information & communications	61,000	7%	1%	11,000	1%	2%	60,000	6%	1%
Financial & insurance services	37,000	4%	1%	:	:	:	33,000	3%	1%
Public admin & defence	22,000	2%	0%	:	:	:	21,000	2%	0%
Unclassified	*8,000*	*3%*	*0%*	*:*	*:*	*:*	*7,000*	*3%*	*0%*
Public/private sector									
Private sector	4,303,000	27%	85%	427,000	3%	91%	4,109,000	26%	86%
Third sector	296,000	15%	6%	16,000	1%	4%	267,000	14%	6%
Public sector	478,000	8%	9%	:	:	:	408,000	6%	9%
Unclassified	*439,000*	*40%*	*9%*	*:*	*:*	*:*	*414,000*	*38%*	*9%*

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 2012. Low paid thresholds are determined in relation to a median hourly pay rate (for all employees) of £11.15. Living Wage thresholds are determined in relation to rates of £8.30 in London and £7.20 in the rest of the country.

Sources: Authors' analysis of ONS, *Annual Survey of Hours and Earnings*

The evolution of low pay

Having looked at the picture of low pay in Britain in April 2012, we now turn to the evolution of this landscape over the last four decades. Figures 19-30 below set out trends in low pay prevalence *within*, and the distribution of low pay *across*, different employee and job characteristics. In summary:

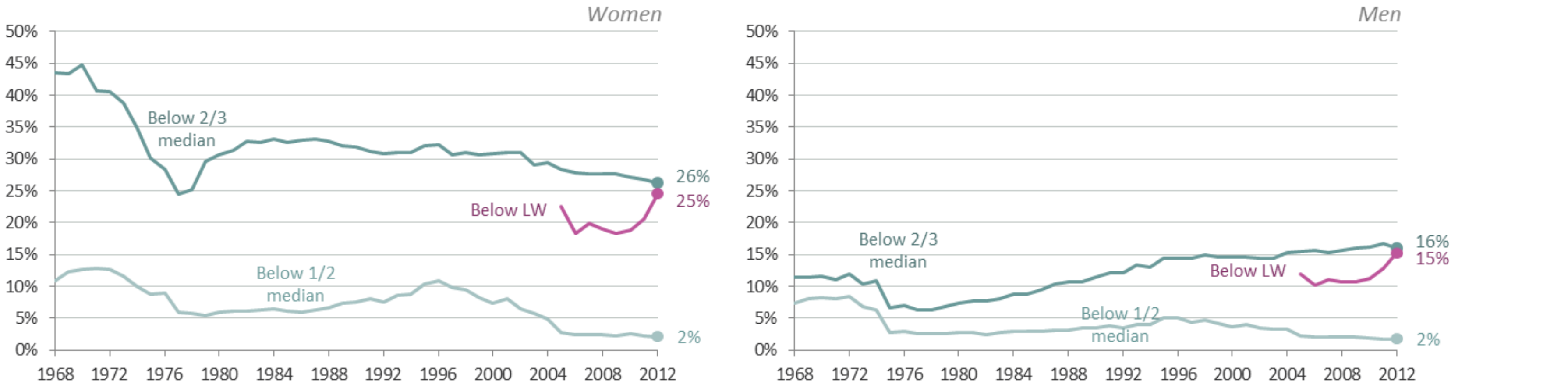
- The **proportion of low paid women fell rapidly in the early-1970s** (from a peak of around 45 per cent to a low of just 25 per cent in just over a decade). And, while the figure subsequently increased, reaching around one-third in the early-1980s, the **trend over the last three decades has been one of slight but steady improvement**. In contrast, the **proportion of low paid male workers climbed relatively rapidly between the mid-1970s and late-1990**s, albeit from (6 per cent), and to (15 per cent), levels that remained well below those recorded among women.
- While the proportion of men in 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**.
- The proportion in low pay increased steadily over the course of the 1980s and early-1990s for all age groups. 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 altered little over time**.
- 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 7 percentage points lower by 2012.
- The **prevalence of low pay among both *elementary* and *sales & customer service* workers increased over the period from 1997** – from already high bases. In contrast, the **proportions of *professional* and *technical* workers who are low paid fell,** despite starting the period significantly lower than the overall average.
- **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 2012. 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 2012**. 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 21 per cent over the same period.

- **Rates of low pay rose slightly from 1997 in the two industrial sectors with the highest prevalence in 2012, but fell across other sectors**. For example, the proportion of low paid employees in the *hotels & restaurants* sector fell from 67 per cent in 1997 to a low of 63 per cent in 2003, before climbing 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 2012, falling even as public sector pay more generally has been subject to a freeze.

- The overall **incidence of low paid work in the private sector has grown marginally since 1997** (from 26 per cent to 27 per cent of all employees), while it has **fallen in both the third sector** (from 20 per cent in 1997 to 15 per cent in 2012) **and, more sharply, the public sector** (from 14 per cent to just 8 per cent).

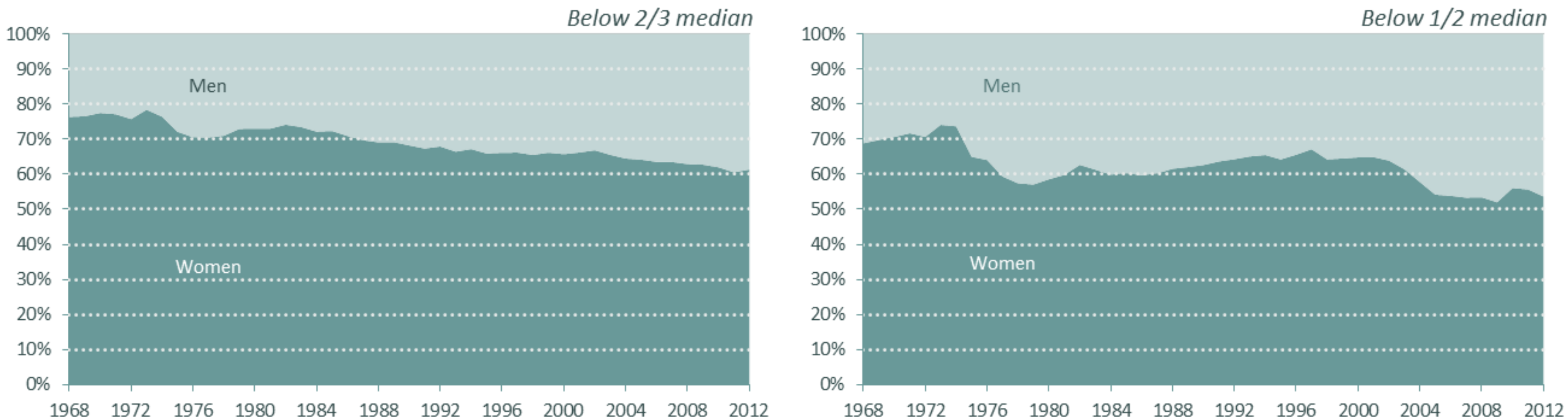
Figure 19: Proportion of employees below selected low pay thresholds by sex: *GB 1968-2012*



Notes: See notes to Figure 8.

Sources: RF analysis of DWP, *Family Expenditure Survey* (1968-1981); ONS, *New Earnings Survey Panel Data* (1975-2012); and ONS, *Annual Survey of Hours and Earnings* (1997-2012)

Figure 20: Distribution of low pay across sex: *GB 1968-2012*



Notes: See notes to Figure 8.

Sources: RF analysis of DWP, *Family Expenditure Survey* (1968-1981); ONS, *New Earnings Survey Panel Data* (1975-2012); and ONS, *Annual Survey of Hours and Earnings* (1997-2012)

Figure 21: Proportion of employees below selected low pay thresholds by age group: ***GB 1975-2011***

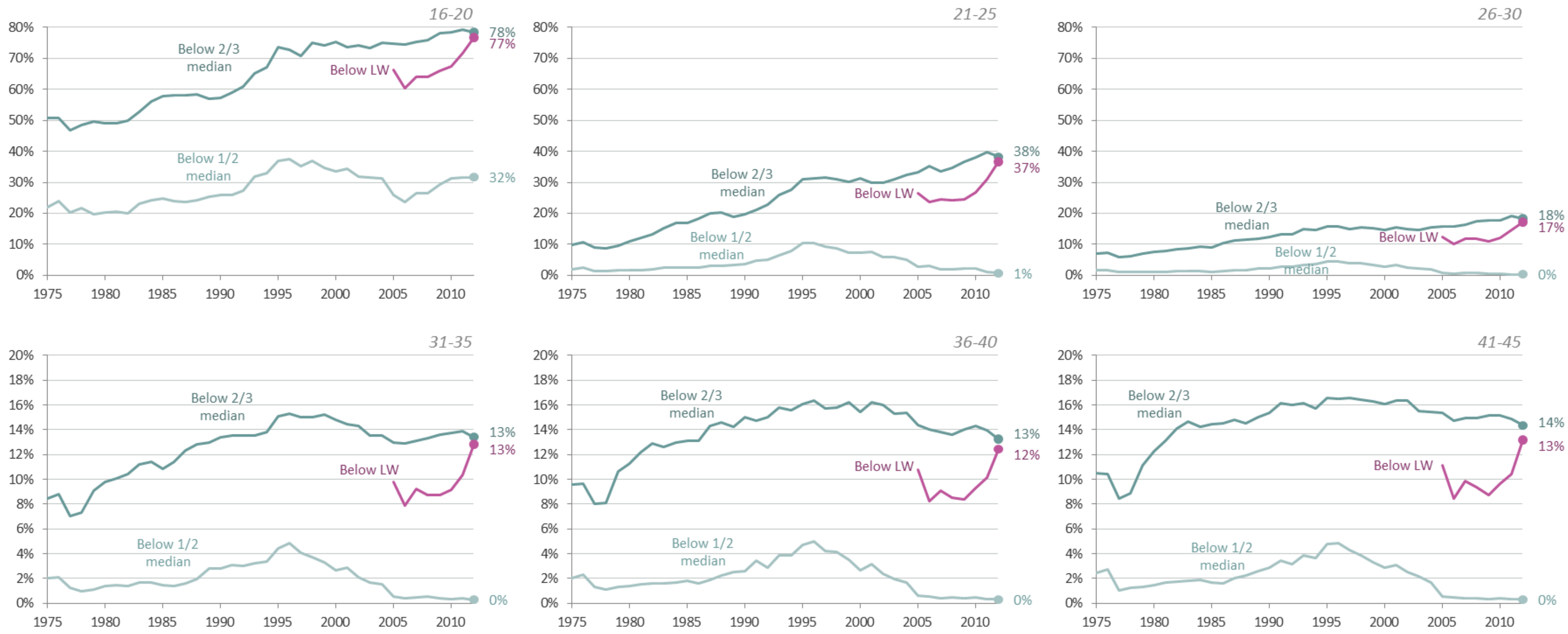
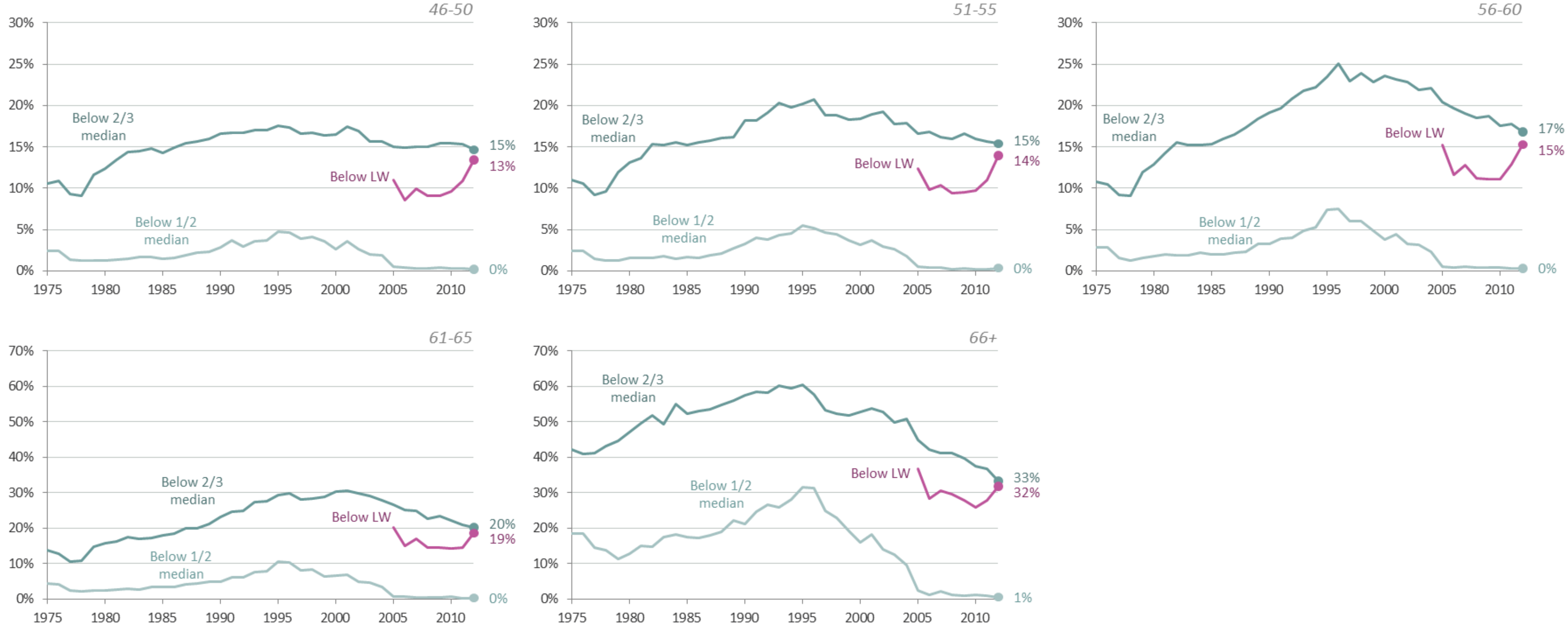


Figure 21 cont...



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.

Sources: RF analysis of ONS, *New Earnings Survey Panel Data* (1975-2012) and ONS, *Annual Survey of Hours and Earnings* (1997-2012)

Figure 22: Proportion of employees below selected low pay thresholds by region: *GB 1975-2012*

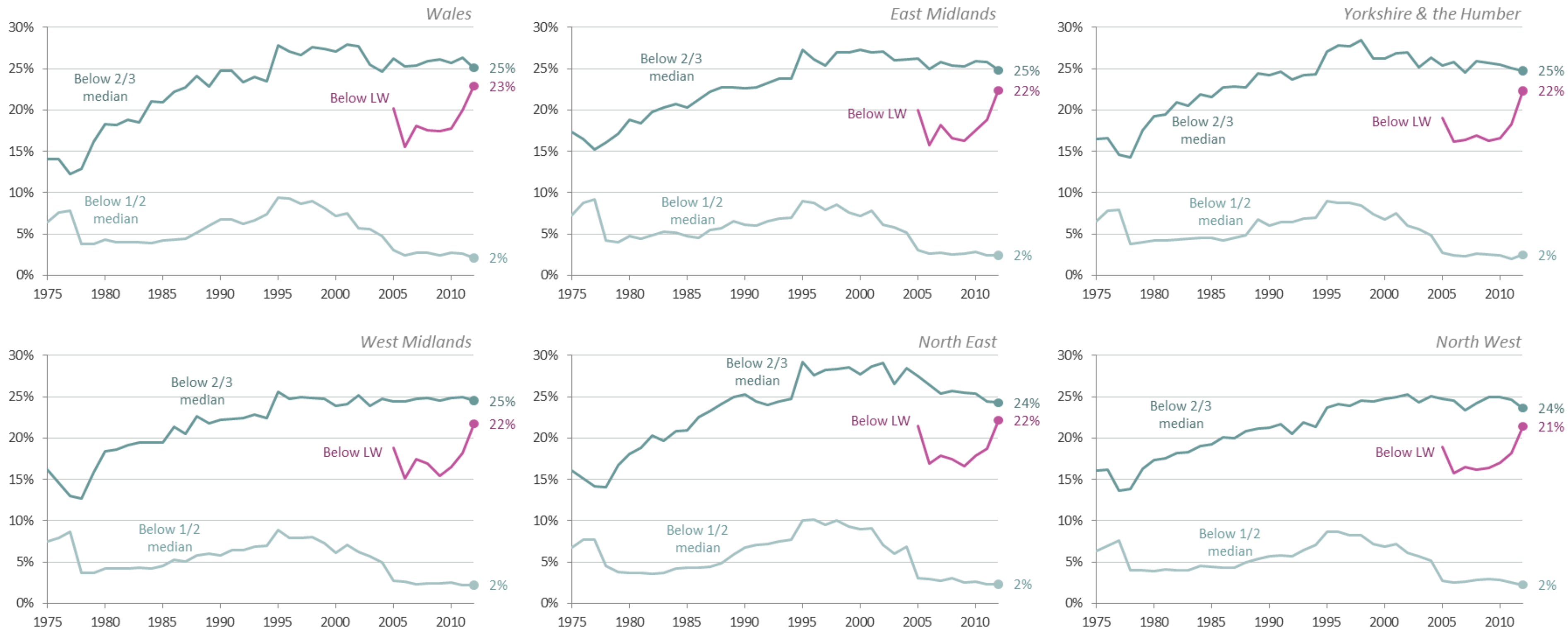
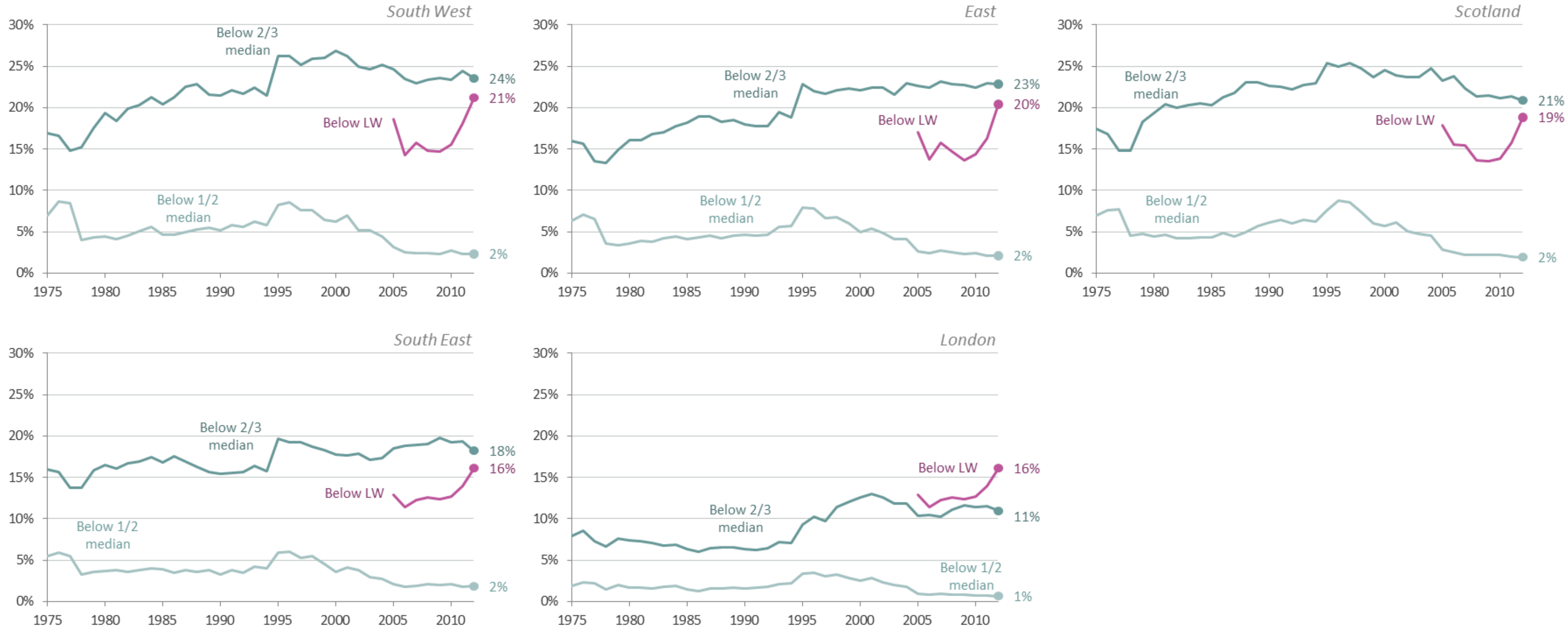


Figure 22 cont…



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.

Sources: RF analysis of ONS, *New Earnings Survey Panel Data* (1975-2012) and ONS, *Annual Survey of Hours and Earnings* (1997-2012)

Figure 23: Proportion of employees below selected low pay thresholds by occupation: *GB 1997-2012*

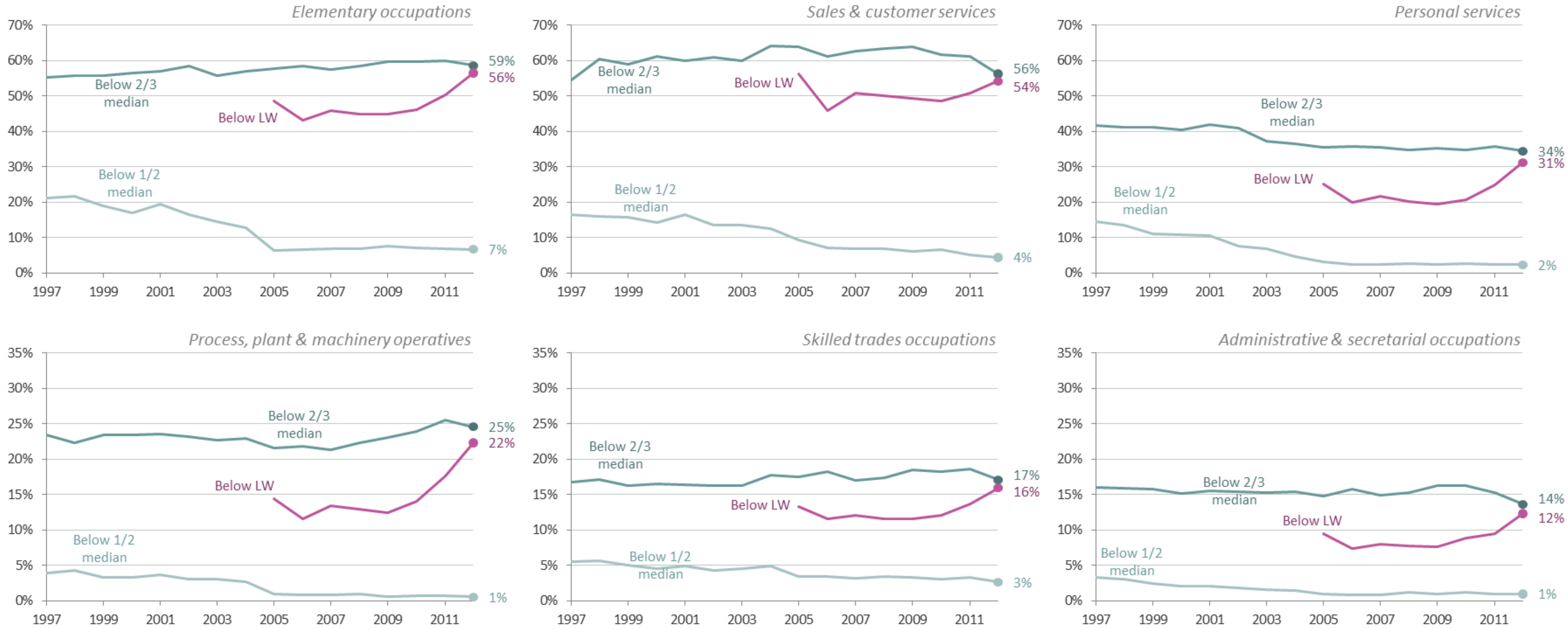
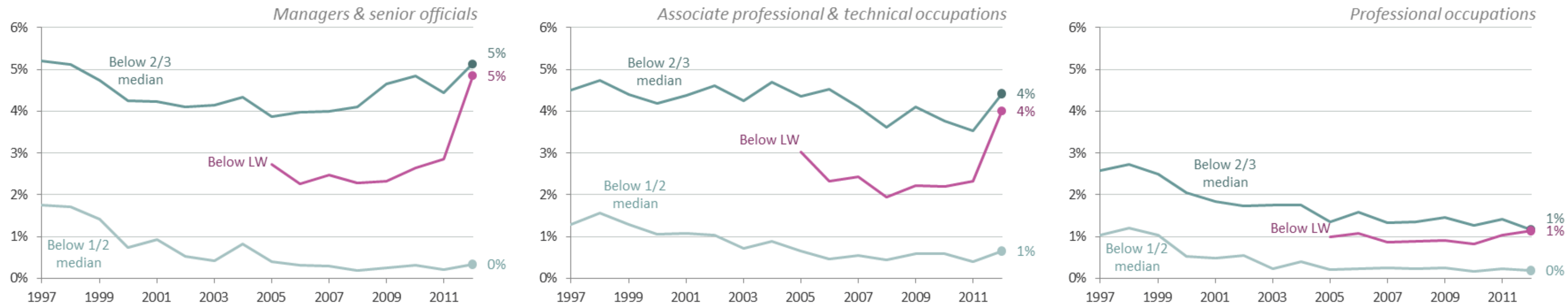


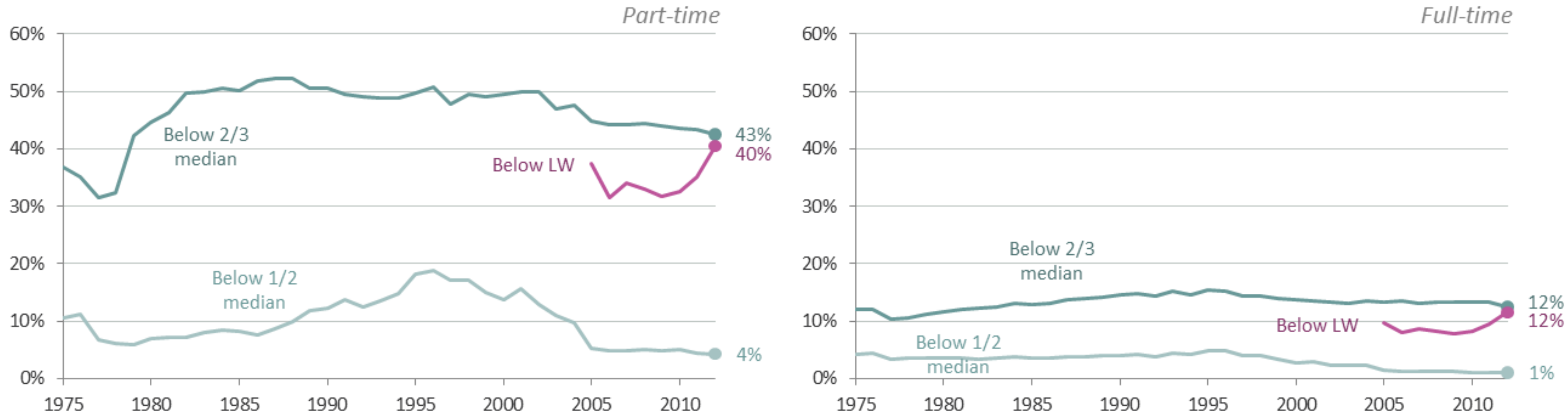
Figure 23 cont...



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.

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

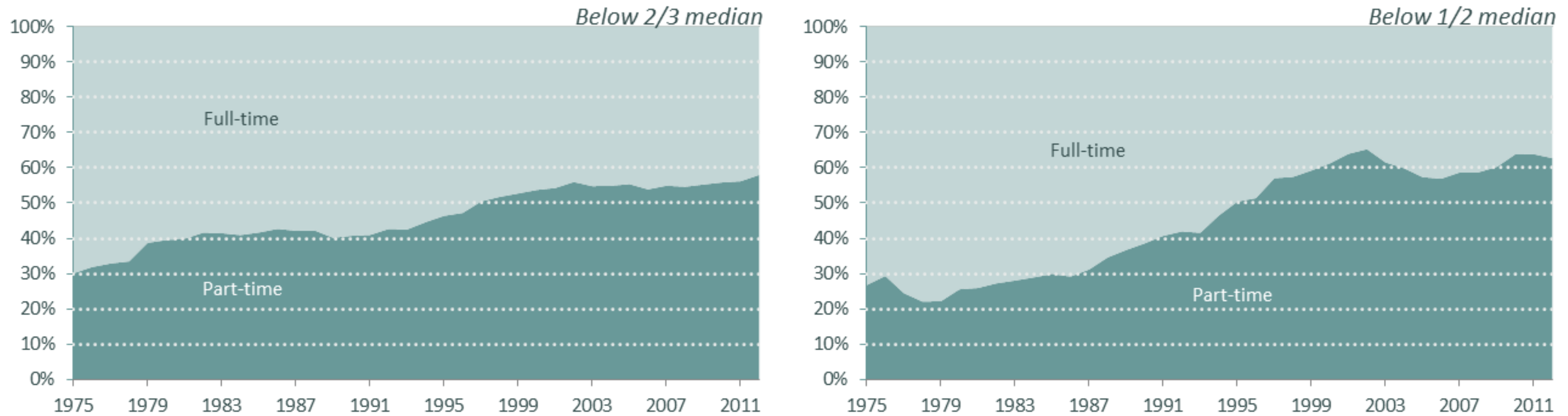
Figure 24: Proportion of employees below selected low pay thresholds by hours worked: *GB 1975-2012*



Notes: See notes to Figure 21.

Sources: RF analysis of ONS, *New Earnings Survey Panel Data* (1975-2012) and ONS, *Annual Survey of Hours and Earnings* (1997-2012)

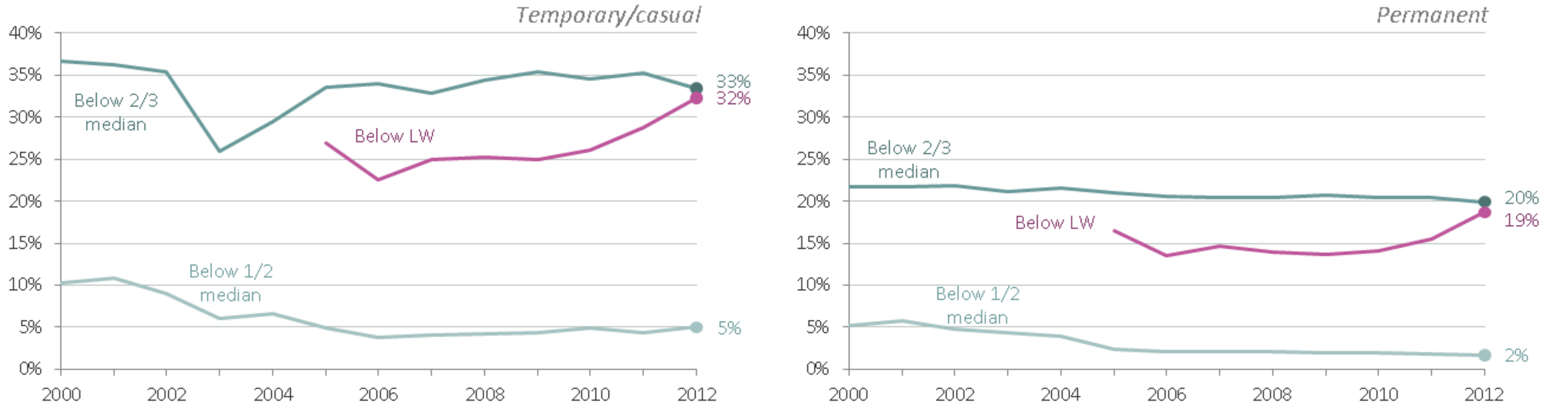
Figure 25: Distribution of low pay across hours worked: *GB 1975-2011*



Notes: See notes to Figure 21.

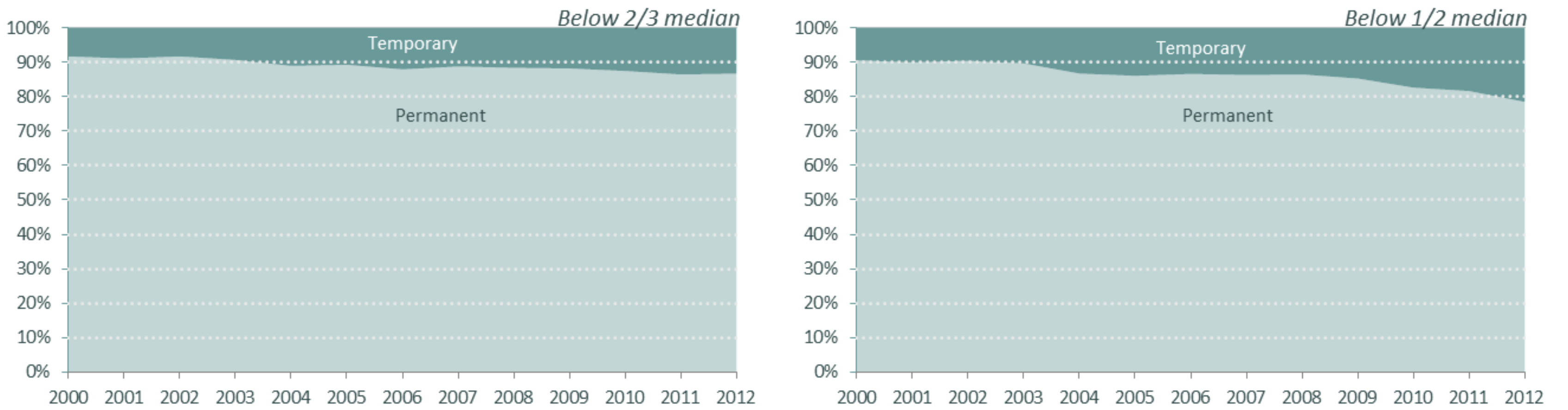
Sources: RF analysis of ONS, *New Earnings Survey Panel Data* (1975-2012) and ONS, *Annual Survey of Hours and Earnings* (1997-2012)

Figure 26: Proportion of employees below selected low pay thresholds by work status: GB 2000-2012



Notes: See notes to Figure 23.
Sources: RF analysis of ONS, *Annual Survey of Hours and Earnings*

Figure 27: Distribution of low pay across work status: *GB 2000-2012*



Notes: See notes to Figure 23.
Sources: RF analysis of ONS, *Annual Survey of Hours and Earnings*

Figure 28: Proportion of employees below selected low pay thresholds by selected industrial sectors: ***GB 2008-2012***

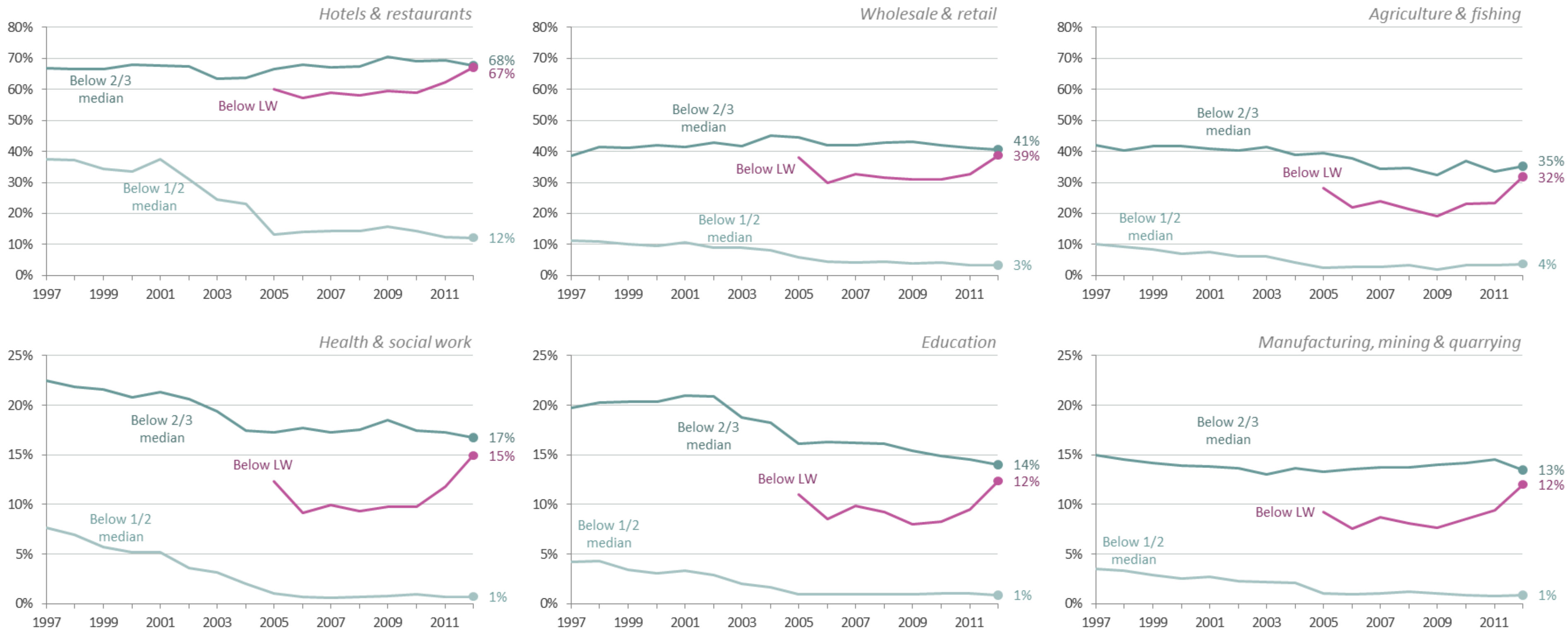
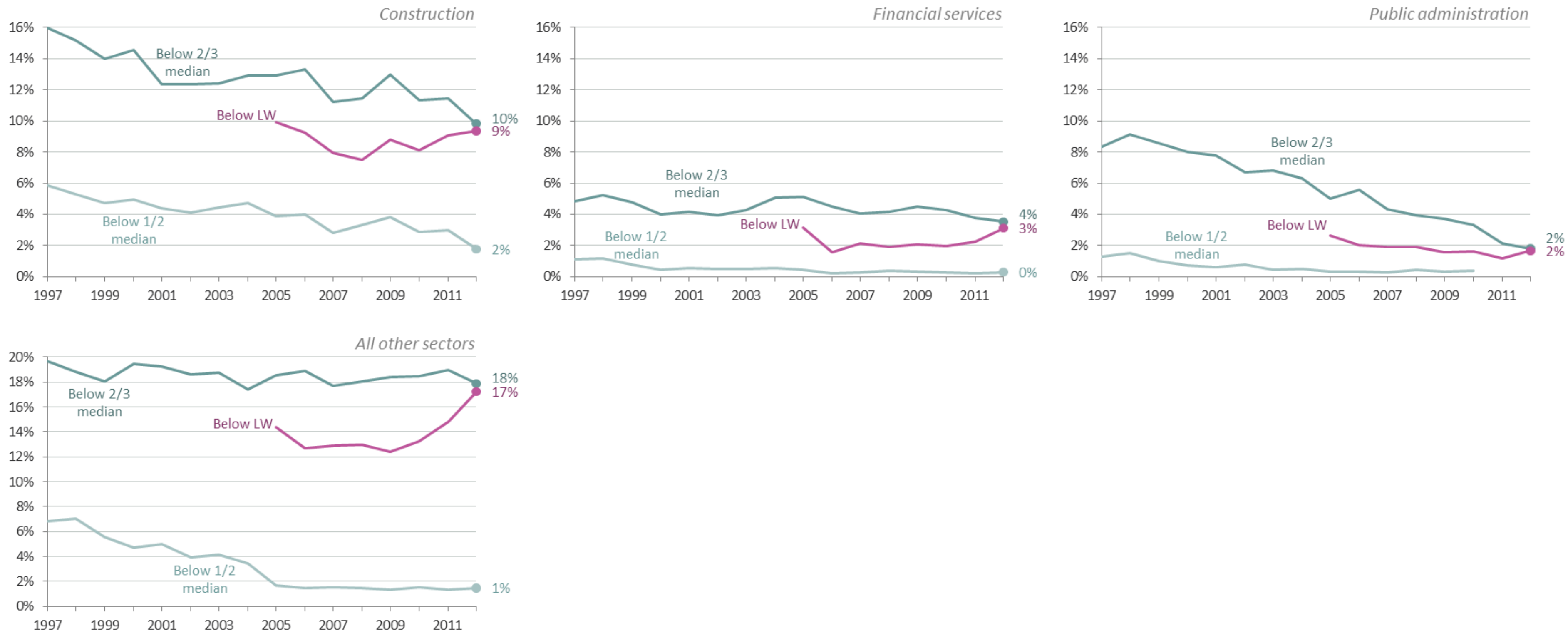


Figure 28 cont…



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.

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

Figure 29: Proportion of low paid employees by firm structure: *GB 1997-2012*

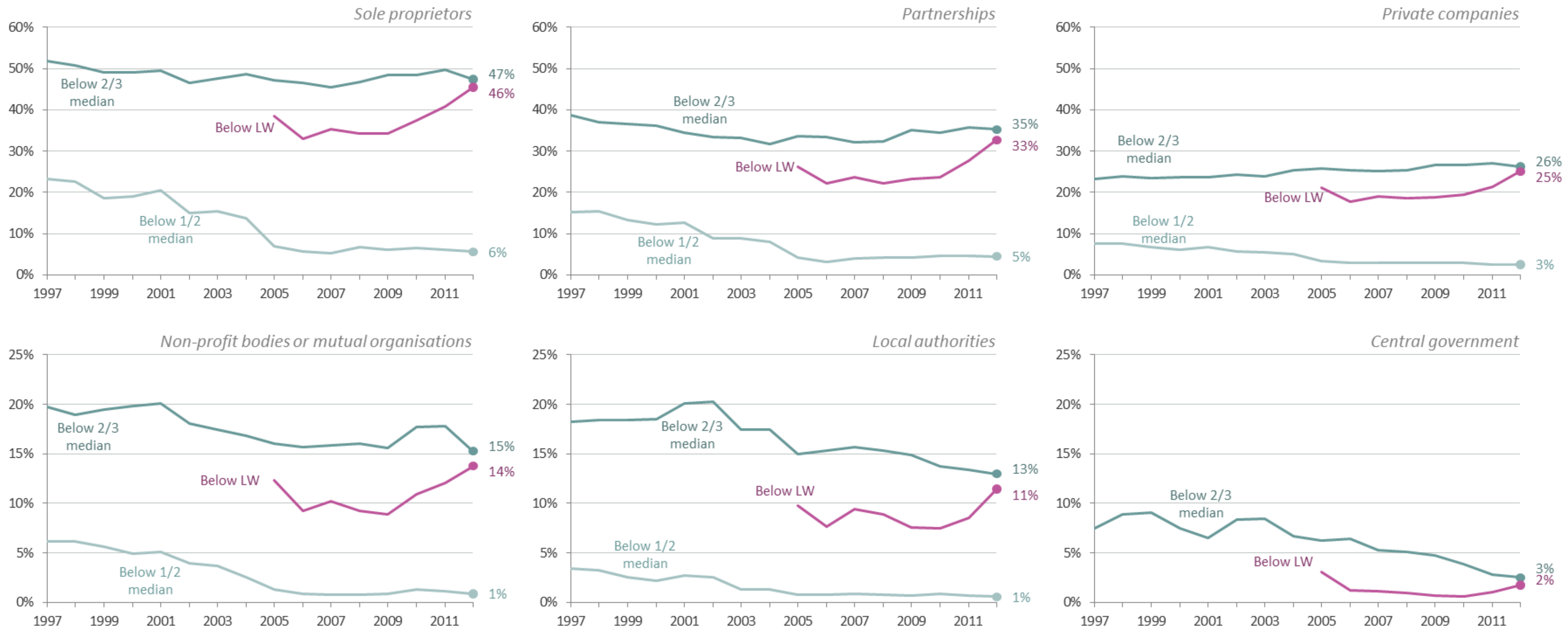
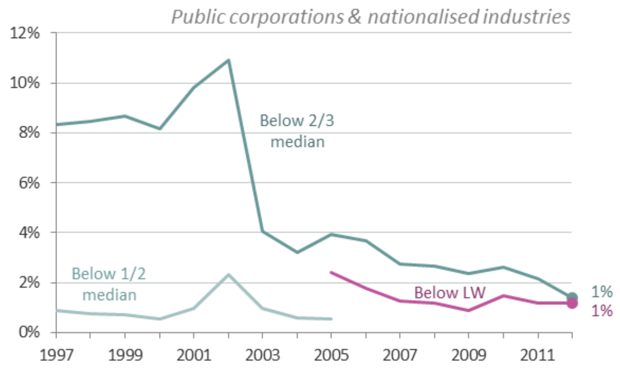
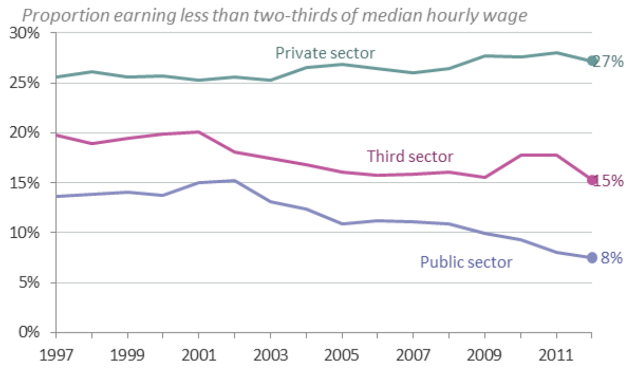


Figure 29 cont...

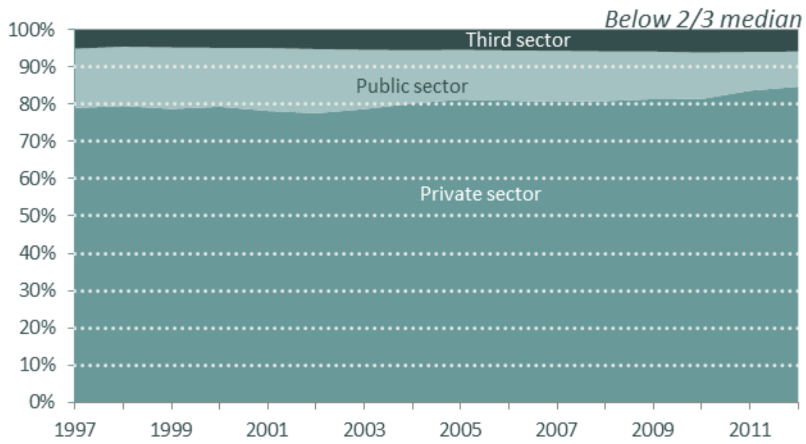


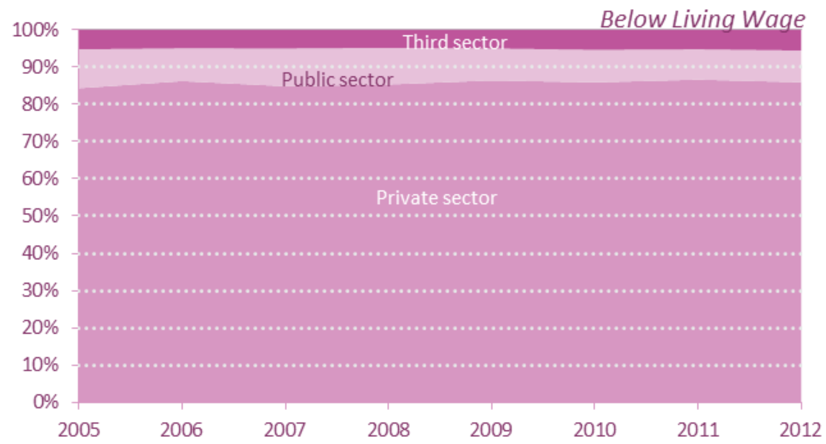


Notes: See notes to Figure 23.

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

Figure 30: Distribution of low pay across broad firm structure: *GB 1997-2012*





Notes: See notes to Figure 23.

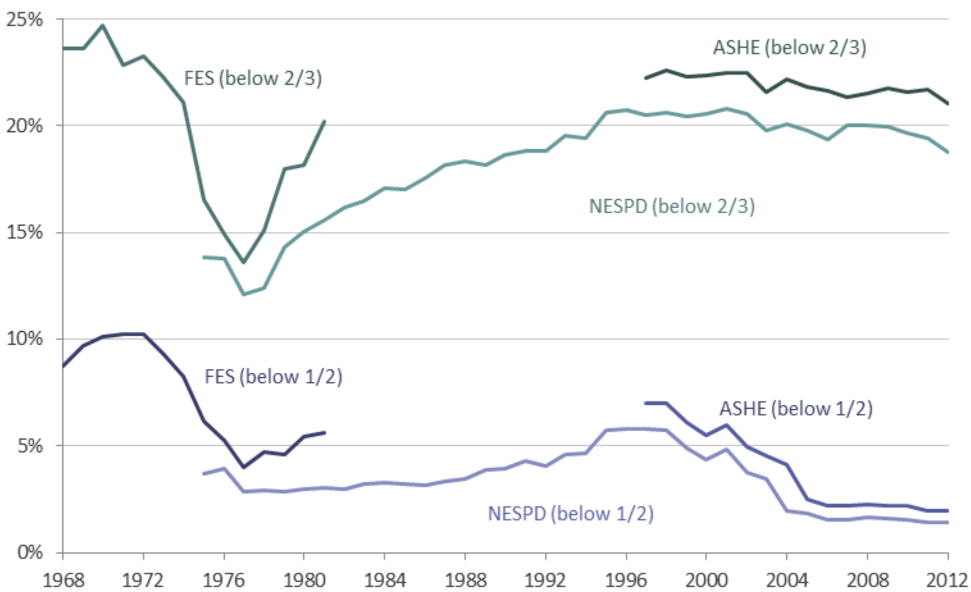
Sources: RF analysis of ONS, *Annual Survey of Hours and Earnings*

III Data sources and methodology

As detailed in the main 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 in total: the *Family Expenditure Survey* (FES) covering 1968 to 1981; the *New Earnings Survey Panel Data* (NESPD) between 1975 and 2012; and the *Annual Survey of Hours and Earnings* (ASHE) for the period between 1997 and 2012.

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 31 presents figures from the three sources in their raw form.

Figure 31: Proportion of all employees below selected low pay thresholds: GB 1968-2012 (separate data sources)



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.

Sources: RF analysis of DWP, *Family Expenditure Survey* (1968-1981); ONS, *New Earnings Survey Panel Data* (1975-2012); and ONS, *Annual Survey of Hours and Earnings* (1997-2012)

It 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.

The Resolution Foundation

The Resolution Foundation is an independent research and policy organisation. Our goal is to improve the lives of people with low to middle incomes by delivering change in areas where they are currently disadvantaged. We do this by:

- undertaking research and economic analysis to understand the challenges facing people on a low to middle income;
- developing practical and effective policy proposals; and
- engaging with policy makers and stakeholders to influence decision-making and bring about change.

For more information on this Briefing Note contact:

Matthew Whittaker Senior Economist
matthew.whittaker@resolutionfoundation.org
020 3372 2958