RF

Resolution Foundation
REPORT

The Living Standards Audit 2017

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Acknowledgements

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Executive Summary

At the start of a new parliament and the opening of Brexit negotiations, our latest Audit takes stock of the state of UK living standards, looking at the most recent economic data as well as longer-term trends in incomes and inequalities.

The UK's economic performance has been mixed since the EU referendum

Employment has continued to outperform expectations, reaching new record highs. There are even tentative signs of a tight labour market feeding through into progress on the quality and security of jobs – though there is a long way to go on these. And the focus of employment growth at the bottom of the household income spectrum means it has had a positive effect on inequality.

However the positive news on jobs has had to compete with countervailing forces in the form of higher inflation, lower pay rises and frozen benefits. The large fall in the value of Sterling following the referendum of 23 June 2016 has contributed to rising inflation that is now significantly above the Bank of England's 2 per cent target. Far from responding to keep pace with rising inflation, nominal pay growth has further weakened, now running at less than half the pre-crisis norm. As a result real pay has been falling since late 2016, and this renewed pay squeeze follows only a partial recovery from pay falls during the financial crisis and its aftermath. For some, such as public sector workers, the current pay squeeze is particularly strong, while the National Living Wage has ensured that the earnings of lower income workers are rising nevertheless.

Even more than average earnings, rapidly rising prices have combined with the government's benefits freeze to significantly reduce the real value of many working-age benefits. The value of child benefit, for example, has fallen by more than 11 per cent since April 2010.

There was a slowdown – or even a reversal – of real income growth in 2016-17

We won't know for some time exactly how households' incomes grew in 2016-17, ahead of the 2017 General Election, but given the factors above and the data available we are able to 'nowcast' how living standards are likely to have developed. Our nowcast suggests a very significant slowdown for typical household incomes, with real growth more than halving from 1.6 per cent in 2015-16 to 0.7 per cent in 2016-17 as a whole. Worse – and as an indication of what has happened *within* 2016-17 – National Accounts data for the household sector as a whole points to negative growth, with real incomes per capita declining in each of the last three quarters.

In the past year changes in housing costs may have actually provided a boost to disposable incomes, although crucially this has not been equally shared and does not outweigh the drags on income growth noted above. After housing costs, the typical real income overall is estimated to have grown by 1.3 per cent in 2016-17 – again a slowdown from the preceding years. Mortgagors stand out for having benefited from further falls in interest rates, while the typical incomes of renters are estimated to have grown very little, if at all.

Housing costs have also played a role in the long-term convergence of typical pensioner and non-pensioner incomes, and contributed to a squeeze on young people's incomes that began in the early 2000s. In fact, our nowcast suggests that typical incomes after housing costs for those in the 25-34 age group – and for single non-pensioners as a whole – are no higher than they were in 2002-03.

Emerging inequality trends are concerning at the bottom, while the top one per cent have made up some lost ground

Our nowcast suggests that income growth has slowed down right across the income spectrum, though with growth weakest for the bottom third of the working-age distribution. This means the UK has likely failed to meet a new international Sustainable Development Goal – in the first year of its operation – for income growth of the bottom 40 per cent to be faster than those on higher incomes, despite political commitments to deliver on these goals.

Weaker growth for those on low incomes may also have led to a small increase in headline inequality in 2016-17. If so, this would continue a trend of gently increasing inequality since 2010-11. Longer term inequality trends have also been driven in large part by the income changes of those at the opposite end of the distribution – the very richest one per cent of the population. After a large fall in 2010-11 in the share of income going to the top one per cent, this figure has recovered. In 2015-16 the share of income going to the top one per cent reached 8.5 per cent, broadly returning to pre-crisis levels although below 2009-10's record peak of 8.7 per cent. Both these years of high income shares reflect, in part, income being shifted between years in response to tax changes.

The longer term importance of the top one per cent to overall measures of inequality has also led to differences between income surveys depending on the strength of their top income coverage. Inequality among the bottom 99 per cent – before housing costs – has actually fallen slightly over the past two decades rather than risen, and this is also reflected in surveys that only poorly capture the top one per cent. Where their significant income gains over that period are accounted for as best we can (though there is evidence that these are probably still understated) we see a small trend upwards in inequality.

Low and middle income families have not seen the living standards gains we would like

The income growth of the top one per cent over the past few years – and over the past two decades – is in contrast to those of low to middle income families. As with young people and single adults, we find that typical incomes after housing costs of this group – working families in the bottom half of the non-pensioner income distribution – are still lower than they were in 2003-04 and that poverty for this group has risen. This group are the focus of the Resolution Foundation's work and, as such, this paper also explores their living standards in more detail – finding for example that 38 per cent of this group say they are unable to afford to save £10 per month, while 42 per cent of those with children cannot afford a holiday away at least one week per year – up from 37 per cent pre-crisis. Despite the welcome political focus on such 'just managing families', we estimate that income growth for this group in 2016-17, ahead of the election, was lower than for higher income groups.

Finally, we observe that inequalities between different parts of the UK have remained persistent. However, a combination of employment growth, wage changes and uneven housing pressures have narrowed the gap very slightly in the recent recovery period. Whether that will continue remains to be seen.

This report does not attempt to forecast future years, instead focusing on understanding the development of living standards in the immediate pre-election period and earlier, but previous Resolution Foundation work has shown that working-age welfare cuts are likely to weigh very heavily on a large proportion of the population. The danger is that 2016-17 may have been just the beginning of a slowdown in income growth for low to middle income families and a rise in inequality for us all.

Section 1
Introduction

Source: NASA Goddard Space Flight Center (taken by the Suomi National Polar-orbiting Partnership satellite)

Notes: Made available under a Creative Commons licence (CC BY 2.0), cropped

Section 1

Introduction

Just over a year after the Brexit vote, the UK has undeniably experienced some political and economic turbulence. We have a new, minority, government and Sterling has fallen by well over 10 per cent since last June. Employment remains a good news story, but real earnings are falling once again. With inflation rising sharply over recent months – now standing well above the Bank of England's 2 per cent target – pre-planned benefit cuts are biting ever harder. Having held up over the second half of 2016, consumer confidence – and spending – has fallen markedly since the turn of the year.

The future is perhaps even more uncertain than usual, with much depending on just what form the ultimate Brexit deal takes. We'll update our forward look in the winter,[1] but in this report we take a closer look at the recent past. We make use of large-scale household survey data (covering the period to 2015-16) and innovative 'nowcasting' techniques (utilising more timely economic and demographic data to make estimates for 2016-17) to provide a comprehensive assessment of recent changes in UK living standards – overall and across different parts of society.

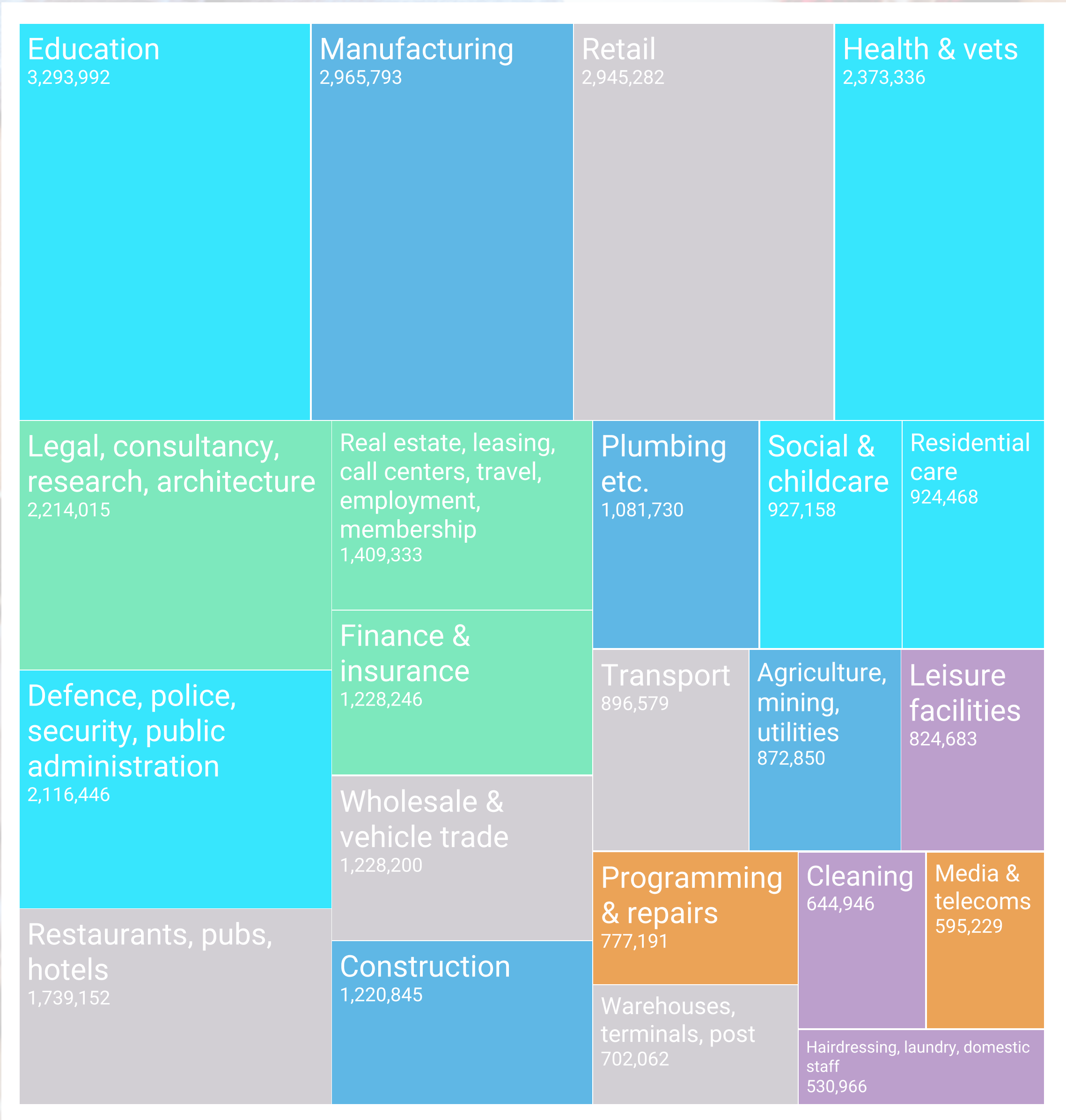
- **Section 2** explores some of the key building blocks of household income, assessing recent trends in the **labour market, welfare benefits and prices**;
- **Section 3** brings these trends together to consider how **average household incomes** have changed in 2016-17, and the impact of **housing** costs on broader living standards;
- **Section 4** breaks this living standards analysis down by **age**, exploring the contrasting fortunes of younger and older families;
- **Section 5** considers how growth has been shared across the **income distribution**, and thus how inequality has changed;
- **Section 6** presents much more detail on the changing living standards of those **low to middle income families** that sit at the heart of the Resolution Foundation's work;
- **Section 7** provides an overview of the UK's **regional and sub-regional differences**;
- **Section 8** offers some concluding thoughts.
- For those who'd like to know more, the **Annex** provides details of the sources and assumptions used in our 'nowcasting' methodology.

[1] In past years we have published one living standards 'audit' a year, looking both at recent outturn data and casting forward into the future. This publication marks a new approach, with a more timely retrospective analysis provided in the summer and forward projections published in the winter.

Section 2

A tale of two halves: the 2016-17 living standards backdrop

Breakdown of the UK workforce by industry, 2016-17



Source: Resolution Foundation analysis of the *Labour Force Survey*

Notes: Includes the self-employed. Individuals' main jobs only.

Section 2

A tale of two halves: the 2016-17 living standards backdrop

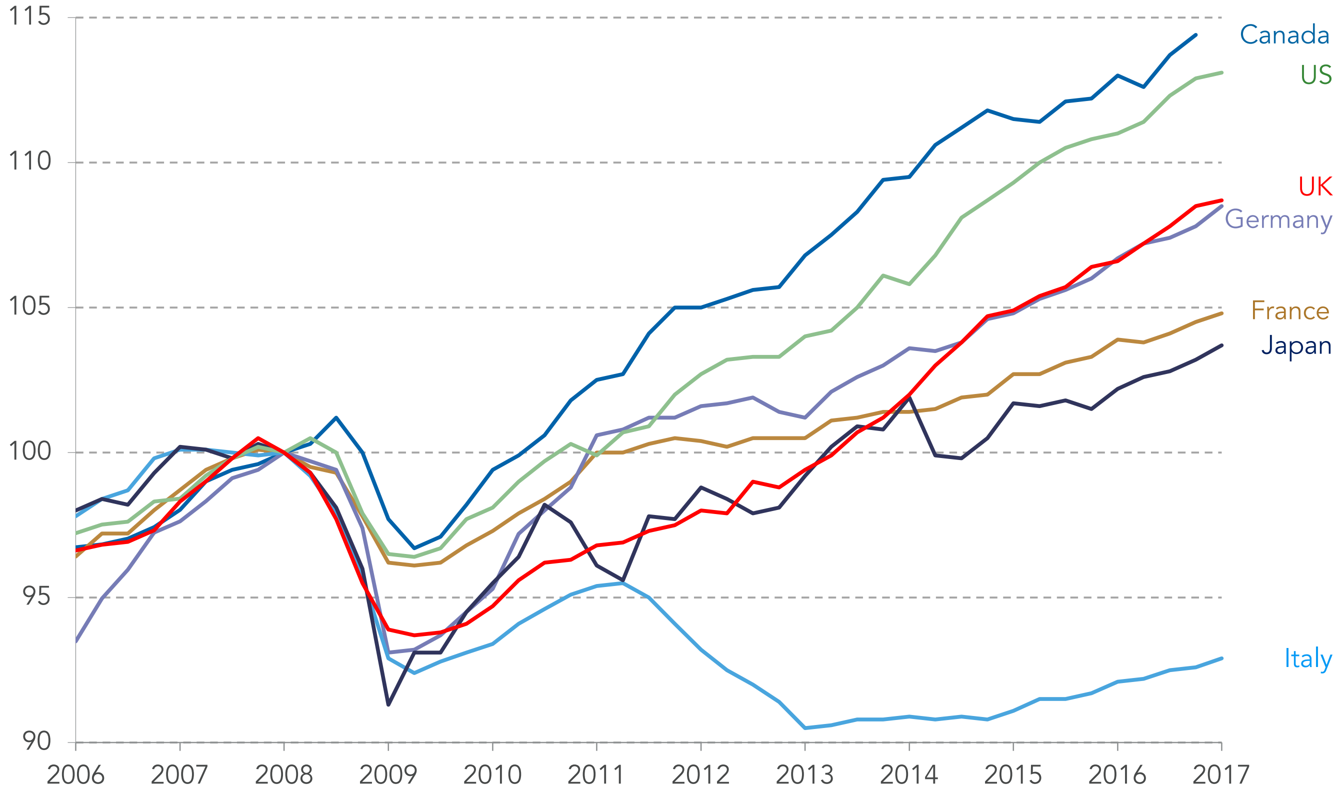
Living standards are driven by a multitude of factors. Incomes are determined by developments in the labour market, by family size and structure, by returns on investment and by interactions with the tax and benefit system. And on the other side of the living standards equation, spending power is affected by movements in prices. These various components of real-terms income have pulled in different directions over the last 12 months, with some good news for households and some bad news. In this section we provide an overview of some the most important developments and show that, as the year has progressed, so the bad news has come to dominate the good. In doing so, we draw attention to several inputs of the 2016-17 income 'nowcast' that we present in Section 3 and which underpins parts of the analysis in later sections.

Economic growth has slowed, with signs the consumer spending 'engine' is faltering

Following the shock of the 2008 global financial crisis, economic growth has slowed across many advanced economies. The UK has been no exception but, judged against many of its peers, its headline performance has stood up relatively well over the past few years. As Figure 1 shows, GDP fell sharply in the UK between the end of 2007 and the middle of 2009. But it has since overtaken Japan, France and Germany, to record the third best performance across the G7 in the post-crisis era.

Figure 1: The UK's post-crisis GDP growth has stood up relatively well against the rest of the G7

ndices of GDP (chained volume measures): Q1 2008 = 100



Source: ONS, *Second estimate of GDP: Jan to Mar 2017*

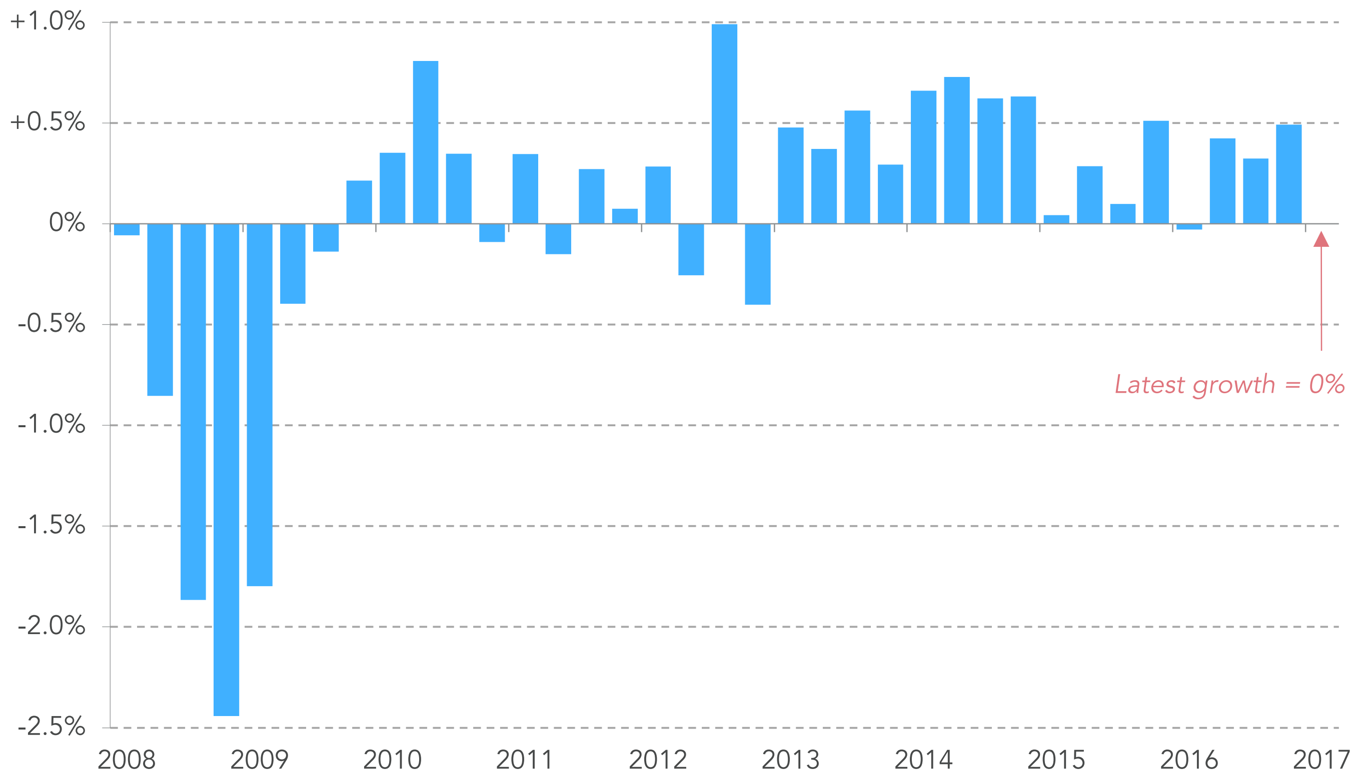
However this is only part of the story. From a living standards perspective, GDP *per person* matters far more than the overall level of economic output in the country. On that measure, the UK has performed less well: falling to fifth in the G7 ranking. And this post-crisis performance compares particularly poorly against earlier economic recoveries.

We compared the trajectory of GDP per capita in the UK in the period after three recessions: 2008, 1980 and 1990. The current recovery is weaker than might have been expected based on past experience. In those earlier periods, it took three years for GDP per person to return to its pre-downturn peak; this time it took seven years. By the same stage of recovery that we are at today (just short of nine years), output per person was 16.3 per cent above peak in the 1990s and 24.5 per cent up in the 1980s. Today it remains just 1.7 per cent higher today than its 2008 peak.

Taking the 2016-17 financial year as a whole, GDP per capita grew by 1.2 per cent in real-terms relative to 2015-16, somewhat below historical norms. And there is evidence to suggest that growth slowed markedly towards the end of this period. Figure 2 details quarter-on-quarter growth in the period since the financial crisis, and shows that it slowed to 0 per cent at the start of 2017.

Figure 2: GDP per capita growth ground to a halt in the UK at the start of 2017

Quarter-on-quarter growth (chained volume measures)



Source: ONS, *Second estimate of GDP: Jan to Mar 2017*

The chart highlights that growth also fell substantially in the first quarters of 2015 and 2016, but the trends underlying the 2017 slowdown indicate that we are less likely to see a second quarter rebound this time around. Private consumption accounted for 100 per cent of overall GDP per capita growth in 2016, but – in contrast to slowdowns at the start of 2015 and 2016 – this element of spending was a key drag on output growth in the first quarter of 2017.

This slowdown in household spending growth is likely to be related to trends in consumer confidence. This measure has fallen over the course of the last 12 months, with the latest GfK *Consumer Confidence Barometer*[2] falling in June 2017 to its lowest level since the immediate post-EU referendum period– comparable to the level at the start of 2014 when the post-crisis income squeeze was still biting.

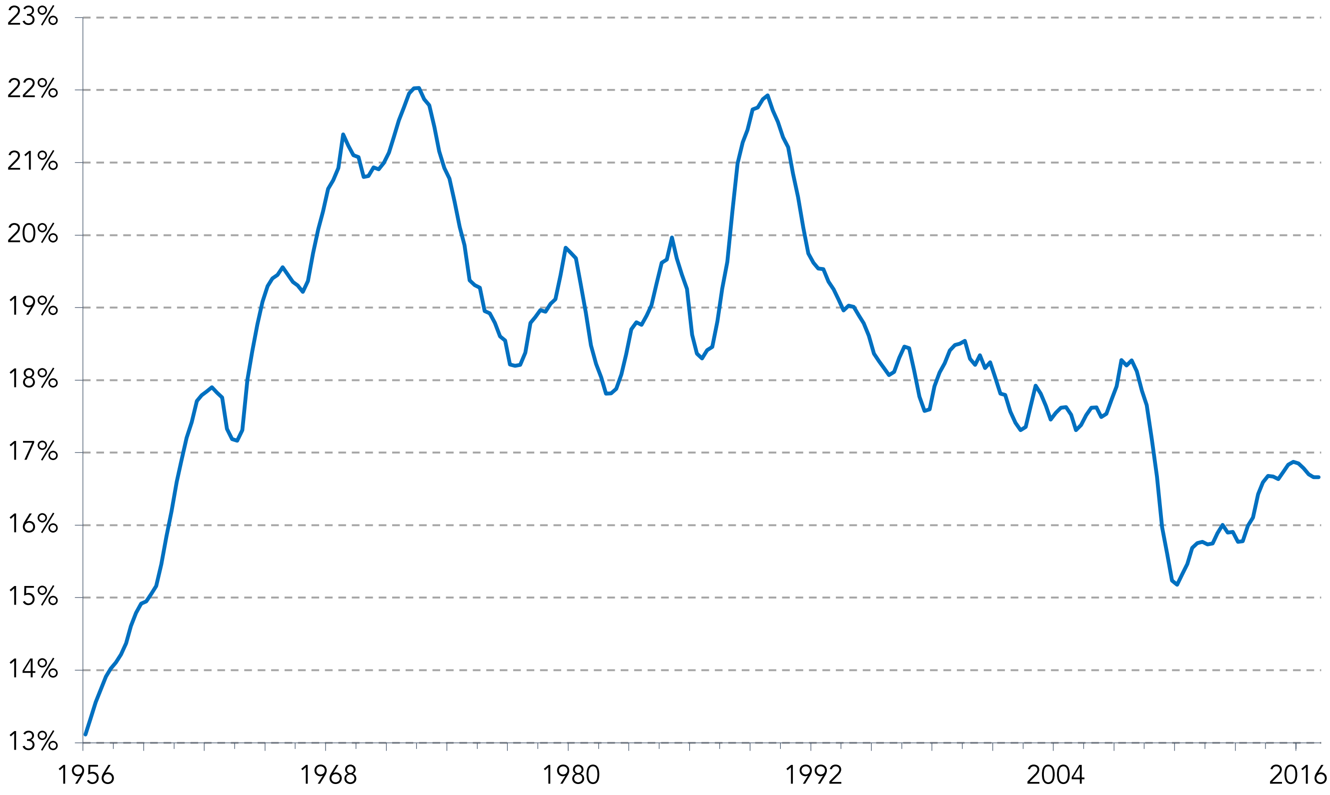
There has been some limited improvement in fixed capital formation over recent years, and business investment intention indicators provide some cause for optimism.[3] But, as Figure 3 shows, progress has slowed over the past 12 months and investment remains well below its pre-crisis norm when measured as a share of overall GDP.

[2] The *UK Consumer Confidence Barometer* is conducted by GfK on behalf of the European Commission and covers 2,000 individuals aged 16 and over. The index score is derived from the average of averages from core retrospective and forward-looking questions on personal finances and general economic conditions and on attitudes to making major purchases.

[3] A Haldane, "Work, Wages and Monetary Policy" *speech at National Science and Media Museum, Bradford*, 20 June 2017, Chart 17

Figure 3: UK investment has picked up as a share of GDP in recent years, but remains well below pre-crisis levels

Fixed capital formation as a share of GDP: rolling four-quarter average



Source: ONS, *Second estimate of GDP: Jan to Mar 2017*

With both business and consumer confidence remaining subdued, it is likely that economic growth in the second quarter of the year will again disappoint.

Inflation is back, with clear implications for living standards

The slowdown in consumer spending (and the more general reduction in GDP per capita growth) towards the end of the financial year has coincided with a significant change in the UK's level of inflation.

As reported on in our last review of living standards,[4] households enjoyed something of a 'mini-boom' in incomes from 2014. That was supported in part by strong gains in employment, but it also owed much to a sharp fall in inflation driven by falling oil prices. With the headline measure of consumer inflation hovering around zero for most of 2015, nominal income gains translated directly into real-terms living standards improvements. That boost was always going to prove temporary, and things have moved rapidly over the course of 2016-17.

Inflation has shifted back towards, and then some way beyond, the Bank of England's 2 per cent target over the past year as a result of two factors. In the first instance, global crude oil prices picked back up from March 2016. These increases were not enough to return oil prices to those prevailing in 2014, and the trend has reversed over the course of 2017. But the second factor – the feed-through from sharp sterling movements to import prices – has underpinned faster increases in inflation since the turn of the year.

[4] A Corlett & S Clarke, *Living Standards 2017: The past, present and possible future of UK incomes*, Resolution Foundation, February 2017

As Figure 4 shows, the effective sterling exchange rate fell by 16 per cent between the EU referendum on 23 June and 12 October. It has since recovered slightly, but remains some 12.5 per cent down on the pre-referendum level. The feed-through from the devaluation to higher prices takes some time, with importing businesses often protected in the near-term by pre-existing contracts and then reluctant to pass costs onto consumers over the medium-term in order to retain market share. There is, however, clear evidence that price effects from sterling movements are now being felt.[5]

Figure 4: Sterling is down more than 10 per cent from its pre-referendum level

Effective sterling exchange rate: January 2005 = 100

Source: Bank of England, *series XUDLBK67*

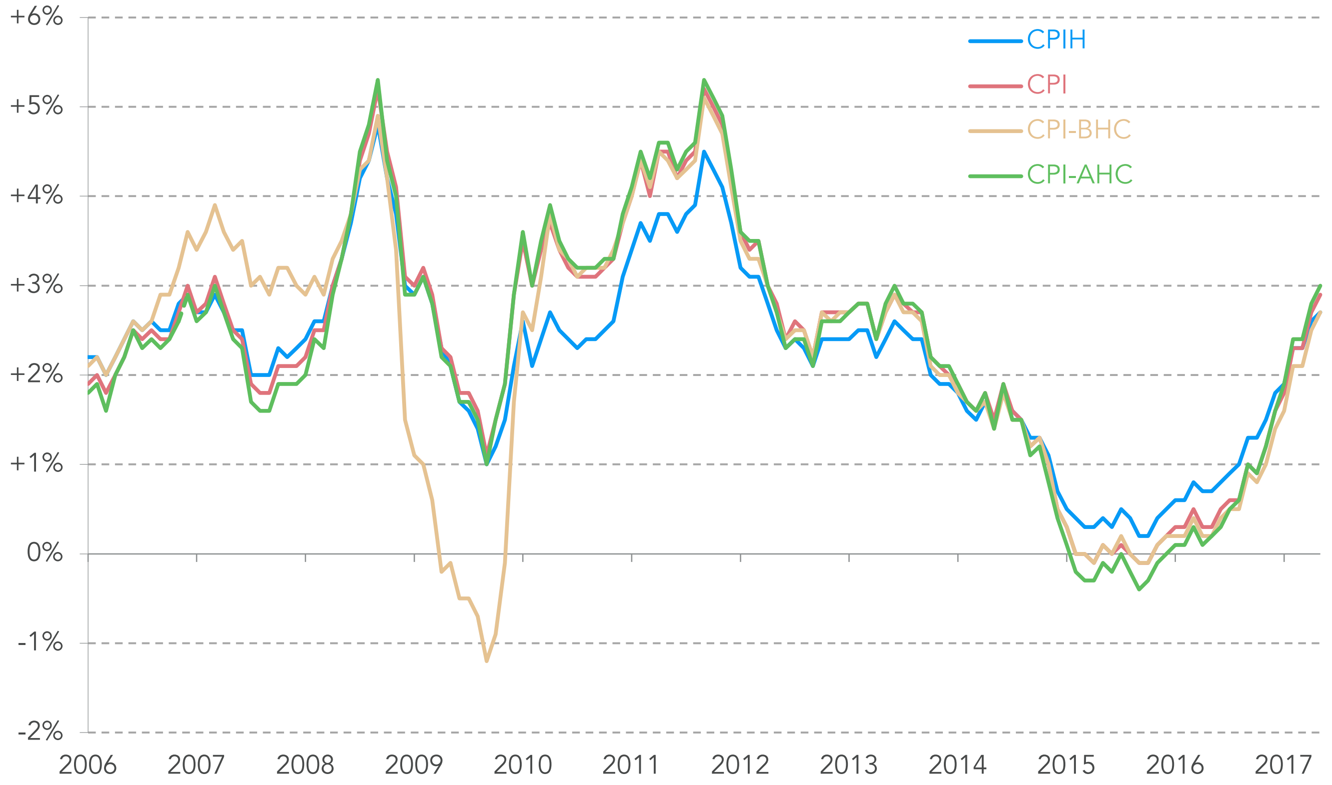
The UK's headline rate of inflation (measured since March 2017 by the CPIH) stood at 2.7 per cent in May 2017, up from just 0.7 per cent one year earlier. The previous headline measure (CPI)[6] – the one underpinning the Bank of England's target – was higher still at 2.9 per cent. As Figure 5 shows, the pick-up in this measure over the past year has been every bit as rapid as CPIH.

[5] The switch from an oil-price driver to a sterling-related import cost one is potentially important from a distributional perspective. While any stated inflation rate provides an average picture of changing price levels in an economy, individual households will face differing rates of inflation depending on what they consume. Evidence suggests that higher-income households face relatively higher levels of inflation when oil prices are driving inflation upwards, whereas lower-income households faced relatively higher levels of inflation when the impetus comes from devaluation. See S Clarke, *The going rate: Moving from CPI to CPIH and the inflation experiences of UK households*, Resolution Foundation, March 2017

[6] Identical to CPIH other than the exclusion of Owner Occupier Housing (OOH) costs.

Figure 5: UK consumer inflation has risen sharply over the second half of 2016-17

Year-on-year change



Notes: The 2016-17 CPI-BHC and CPI-AHC measures are based on ONS ad-hoc releases.

Sources: ONS, series L55O & D7G7; DWP, *Households Below Average Income*

Figure 5 sets out two further inflation measures used in this report. When analysing household incomes in subsequent sections, we make use of variants of the CPI published by the Department for Work and Pensions (DWP) as part of its *Households Below Average Income* publication. These measures better match the precise elements of income included and excluded in the survey data than do the standard Office for National Statistics (ONS) deflators.

The 'CPI-BHC' measure is used when deflating incomes captured *before* the removal of housing costs. It includes housing cost inflation, and therefore applies the effect of movements in housing prices across all households equally. The 'CPI-AHC' measure is used when deflating incomes captured *after* the removal of housing costs. In this instance, housing costs are directly removed from each household in the survey in order to better capture differences in impact across different groups. The deflator therefore excludes any housing cost element in order to avoid double counting when expressing incomes in real terms.[7]

All four deflators follow broadly similar patterns over the period shown, with some notable exceptions related to specific housing cost movements (such as the sharp cut in Bank of England base rate that impacted on mortgage costs in 2009). Whatever measure is used it is clear that relative to 2015-16, the headwind to living standards growth associated with consumer price inflation has strengthened markedly over the past 12 months.

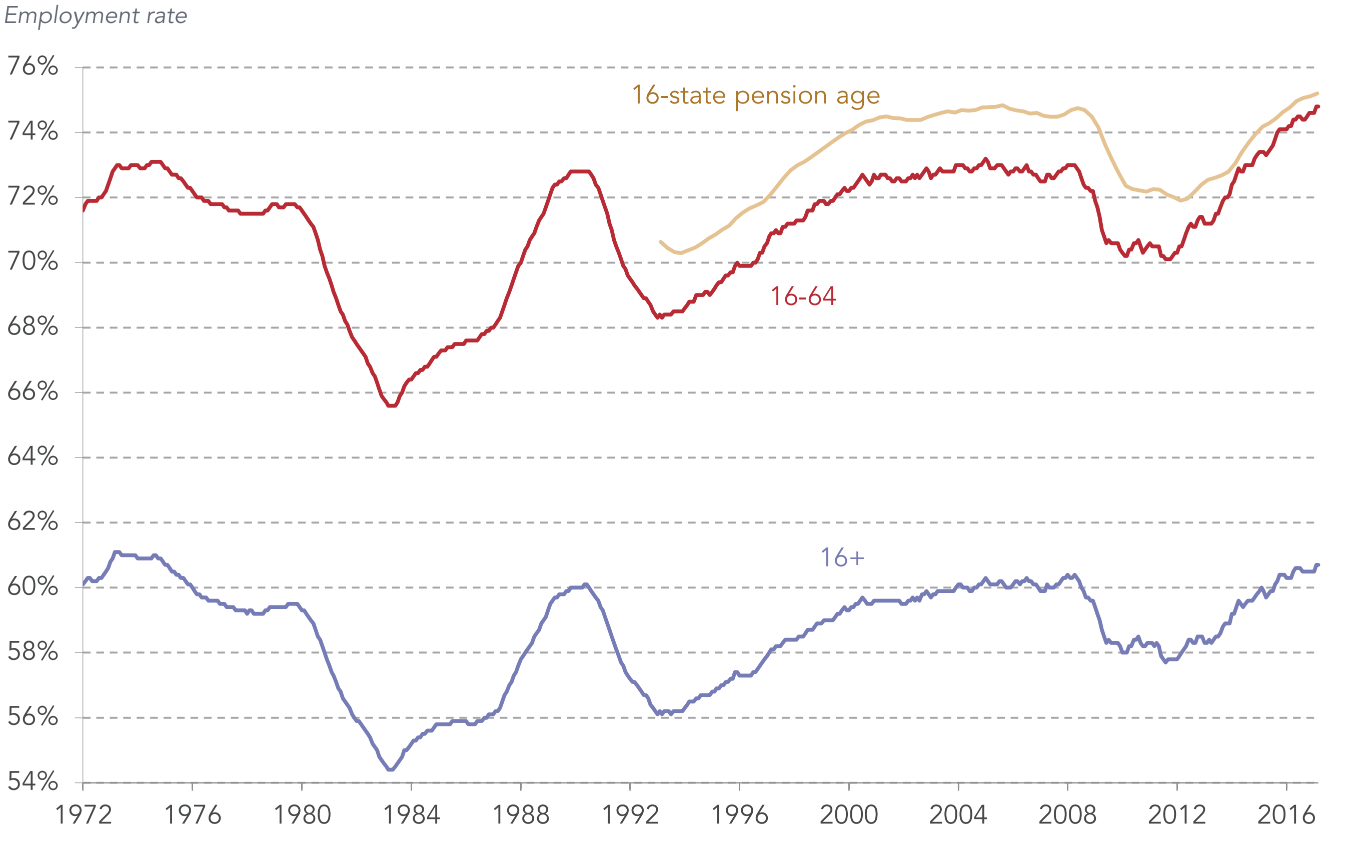
[7] In more detail, the BHC deflator adds to CPI by including mortgage interest payments and insurance and ground rent for owner-occupiers, while the AHC measure removes rent and water costs from the standard CPI.

Employment remains a good news story, with growth especially favouring lower income groups

As touched on above, the 'mini-boom' in incomes from 2014 was a product not just of ultra-low inflation, but also of strong gains in employment. Despite employment reaching a record high at the end of the 2015-16 financial year, the picture has improved still further over the latest 12 months.

Figure 6 presents this improvement across three different measures. The ONS headline focuses on the 16-64 employment rate, with this figure reaching an unprecedented 74.8 per cent by February 2017. While some of the gains made on this measure in the period since 2012 will be related to increases in female state pension age, the other two indicators (the broader 16+ measure and the more specific 16-state pension age measure) make it clear that the drivers are much broader than this. The pace of employment growth has slowed a little in recent months, but it remains the case that employment levels increased by 381,000 over the course of 2016-17.

Figure 6: UK employment rates have hit historical highs in 2016-17



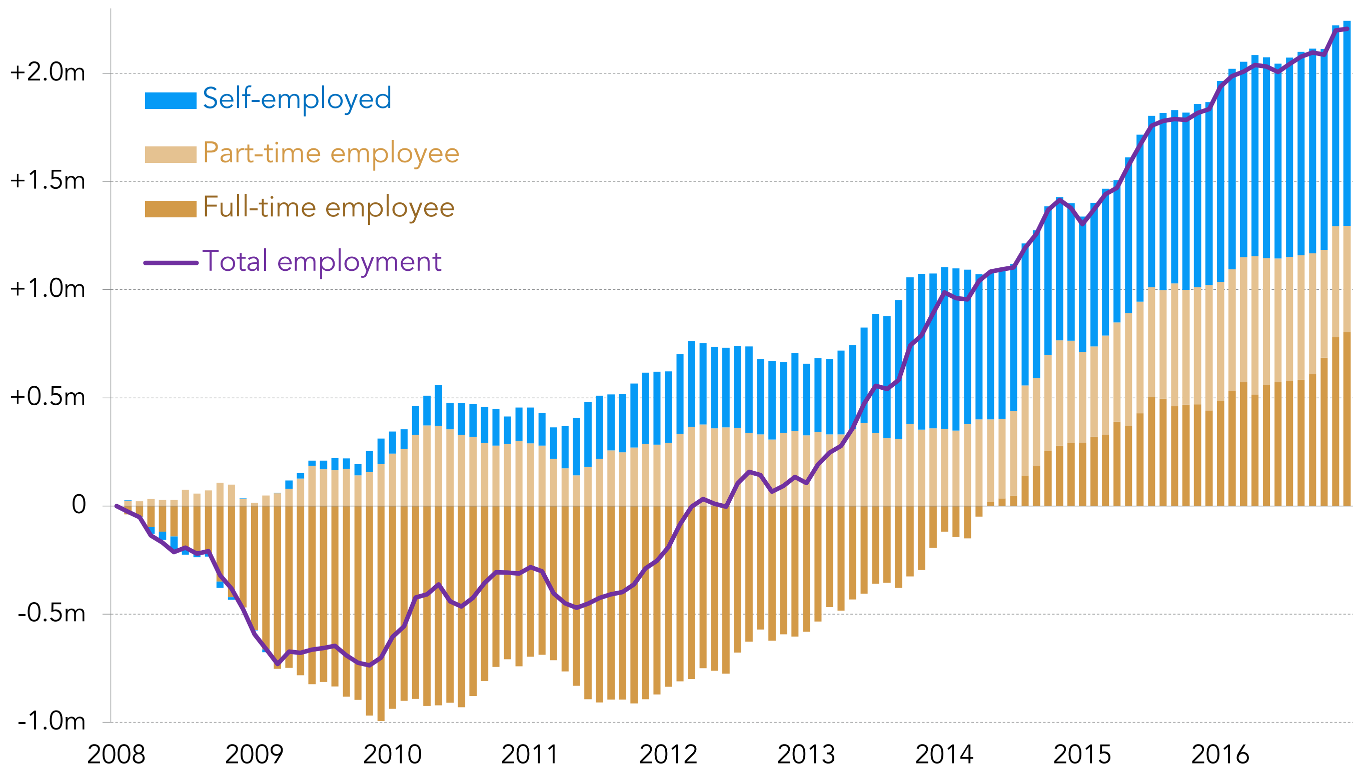
Notes: 16-SPA measure is a four-quarter moving average. Between April 2010 and November 2018 the state pension age for women is gradually increasing from 60 to 65. From April 2010 to April 2016 the female state pension age increased by one month every two months. From April 2016 to November 2018, it is increasing by one and a half months every two months.

Sources: ONS, series *MGSR* & *LF24*

In the context of poor earnings performance (discussed in detail below), the strong employment turnaround of recent years has caused some to worry about the quality of jobs being created: are there just more employees doing worse work? As Figure 7 shows, 43 per cent of the overall increase in employment since the start of the financial crisis has taken the form of self-employment and just 36 per cent has been in full-time employee roles. There have also been large increases in reported numbers working on zero-hours contracts and via agencies.

Figure 7: Self-employment has made a major contribution to overall employment growth in recent years

Absolute cumulative change since May 2008

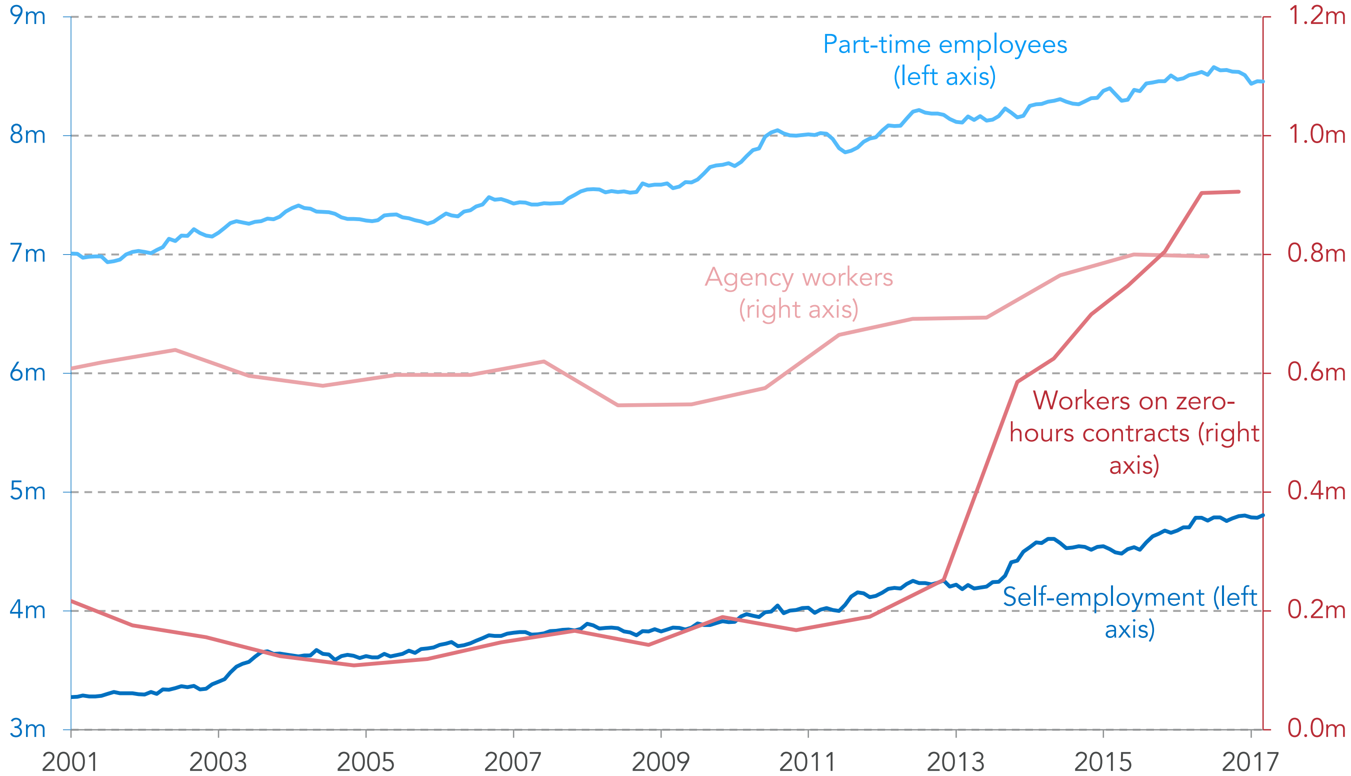


Sources: ONS, *Labour Market Statistics*

There is, however, some suggestion that the UK labour market has passed 'peak insecurity' over the course of 2016-17. Of the 381,000 jobs added over the year, 81 per cent came in full-time employee roles. In contrast, the numbers of people working in self-employment, in part-time work, in zero-hours contracts and via agencies appears to have flat-lined or even fallen slightly, as Figure 8 makes clear. The implication is that the tightening labour market has started to feed through into an improvement in job *quality* over the course of 2016-17 – though clearly that is very different from concluding that today's high levels of insecure work will unwind fully over time.

Figure 8: 'Atypical' employment numbers appear to have plateaued

Absolute number of workers



Notes: Part of the sharp increase in the number of workers reported as being on zero-hours contracts from 2013 is assumed to be related to growing awareness of the status among survey respondents.

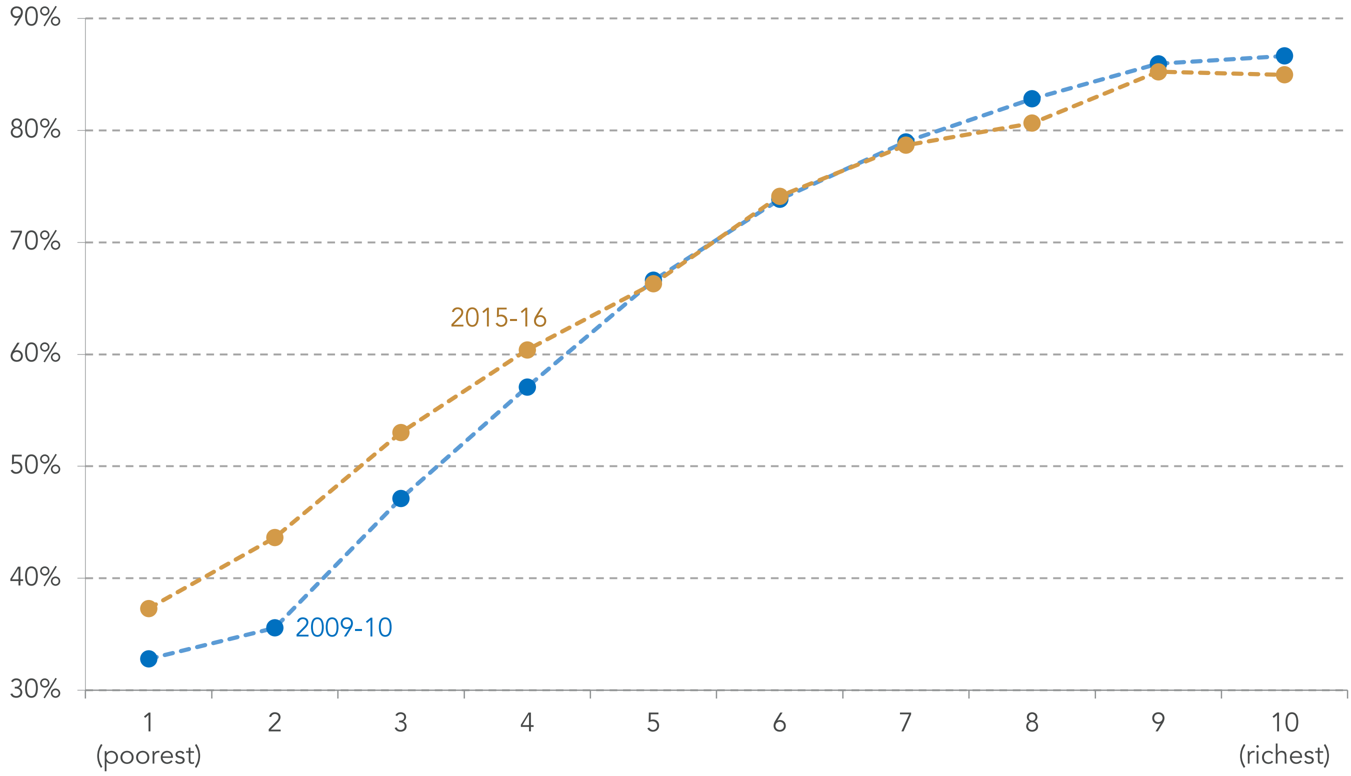
Sources: ONS, *Labour Market Statistics*; RF analysis of ONS, *Labour Force Survey*

The overall increase in employment over recent years has played a key role in supporting living standards. And crucially, post-crisis employment growth has been about more than just unwinding cyclical unemployment. Instead, employment rates have risen thanks to increased *participation* in the workforce. This matters because the groups being brought into the labour market in recent years have been predominantly drawn from lower-income households. This means that as well as narrowing the (still too-wide) gap in employment between 'prime' groups and those who have traditionally experienced labour market disadvantages, including those with disabilities and single parents, the shape of the post-crisis employment recovery has been unusually progressive.

Figure 9 compares employment rates across household income deciles (excluding those with no members aged under-70) in 2009-10 and 2015-16. It shows that the largest employment gains in this period were in the bottom half of the income distribution, with some *reduction* in employment rates towards the top. This stands in marked contrast to the last period of sustained employment recovery (from the mid-1990s to the early-2000s), when employment gains were shared roughly evenly across the population.[8] Further jobs growth in 2016-17 is likely to have followed the more recent pro-poor pattern, and that is the assumption used in the nowcast we present in Section 3.

Figure 9: Recent employment gains have been greatest towards the bottom of the household income distribution

Employment rates by decile of the equivalised net household income distribution



Notes: Households are included in this analysis if they contain at least one adult aged 16-69.

Sources: RF analysis of DWP, *Family Resources Survey*

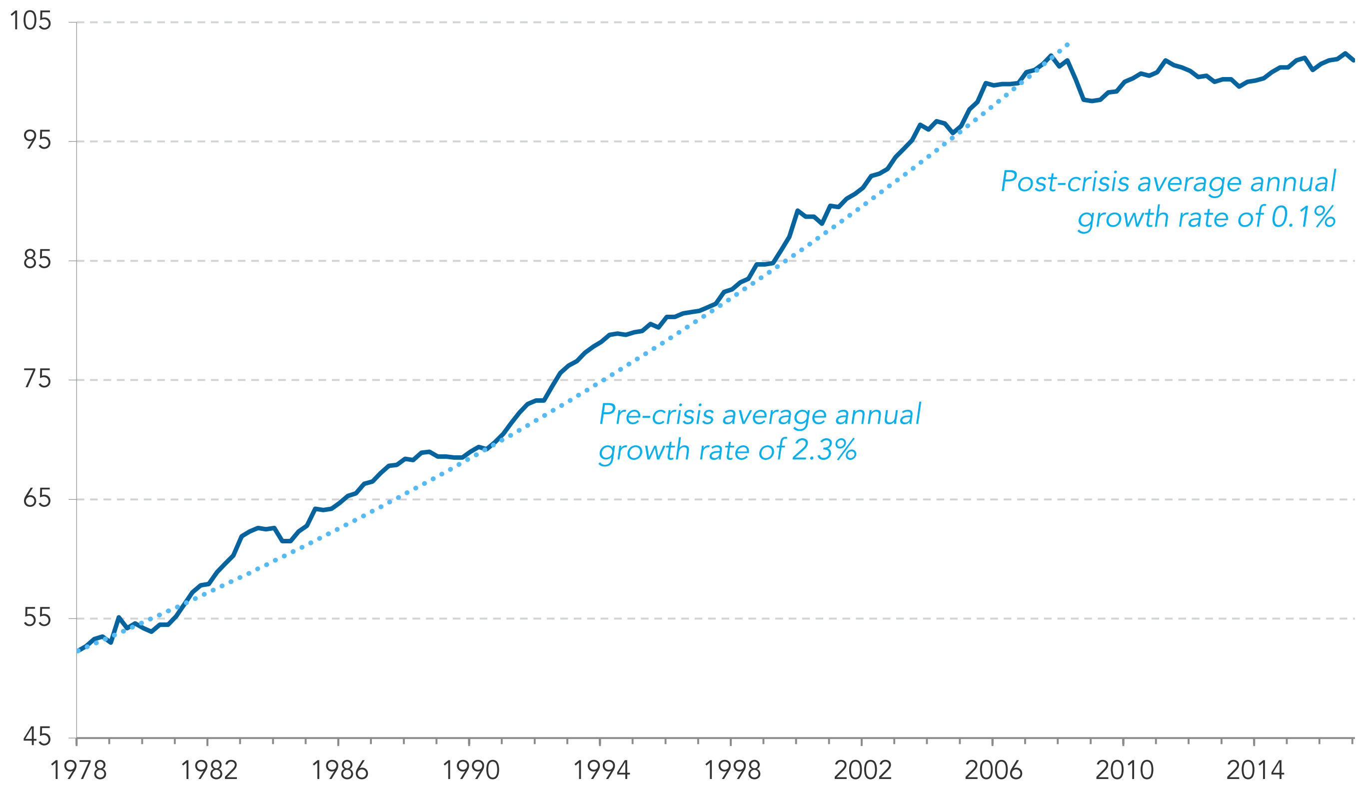
[8] See L Gardiner & P Gregg, *The road to full employment: What the journey looks like and to make progress*, Resolution Foundation, March 2016 for more detail.

Productivity growth continues to disappoint, making this the worst decade in a century

While there is much to celebrate in the UK's performance on employment, the picture on productivity growth remains disappointingly familiar. Figure 10 presents a long-term perspective, contrasting the steady growth in output per hour worked recorded between 1978 and 2008 with stagnation in the subsequent period.

Figure 10: The UK productivity stagnation now stretches back eight years

Index of output per hour worked (2013 = 100)

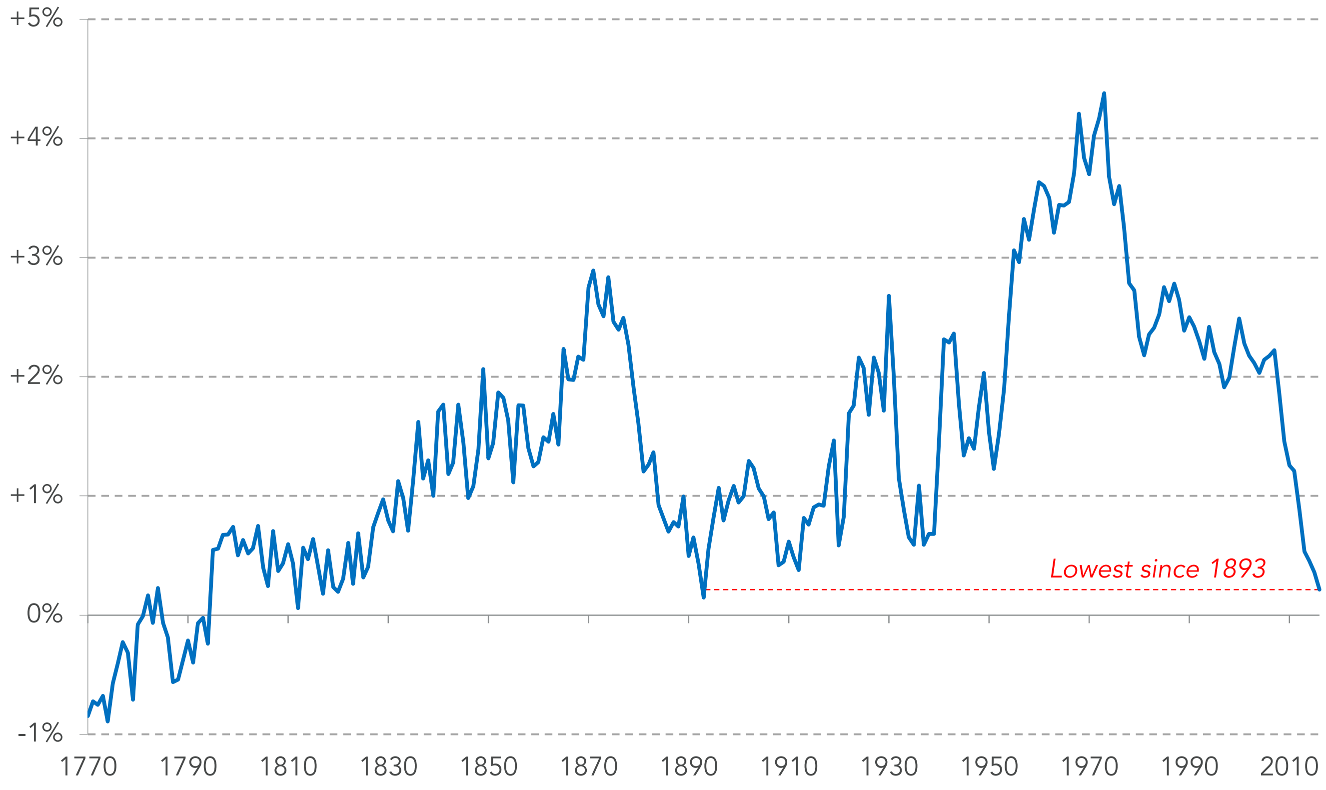


Sources: ONS, *Series LZVB*

The persistence of this productivity stagnation is such that output per hour was no higher in the first quarter of 2017 than it was immediately before the start of the 2008 recession. In the absence of the post-crisis slowdown, UK productivity might instead have been some 21 per cent higher. As yet, there is no sign of productivity returning to its pre-crisis trend rate of growth, with output per hour *falling* by 0.6 per cent between Q4 2016 and Q1 2017. Indeed, so poor has been the productivity performance over recent years that the past decade stands out as the worst for growth since the decade ending in 1893 – as Figure 11 shows.

Figure 11: Productivity growth over the last decade is the worst for 120 years

Year-on-year growth in output per hour worked (ten-year rolling average)



Sources: Bank of England, *Three Centuries of Data: v3;* ONS, series LZVB

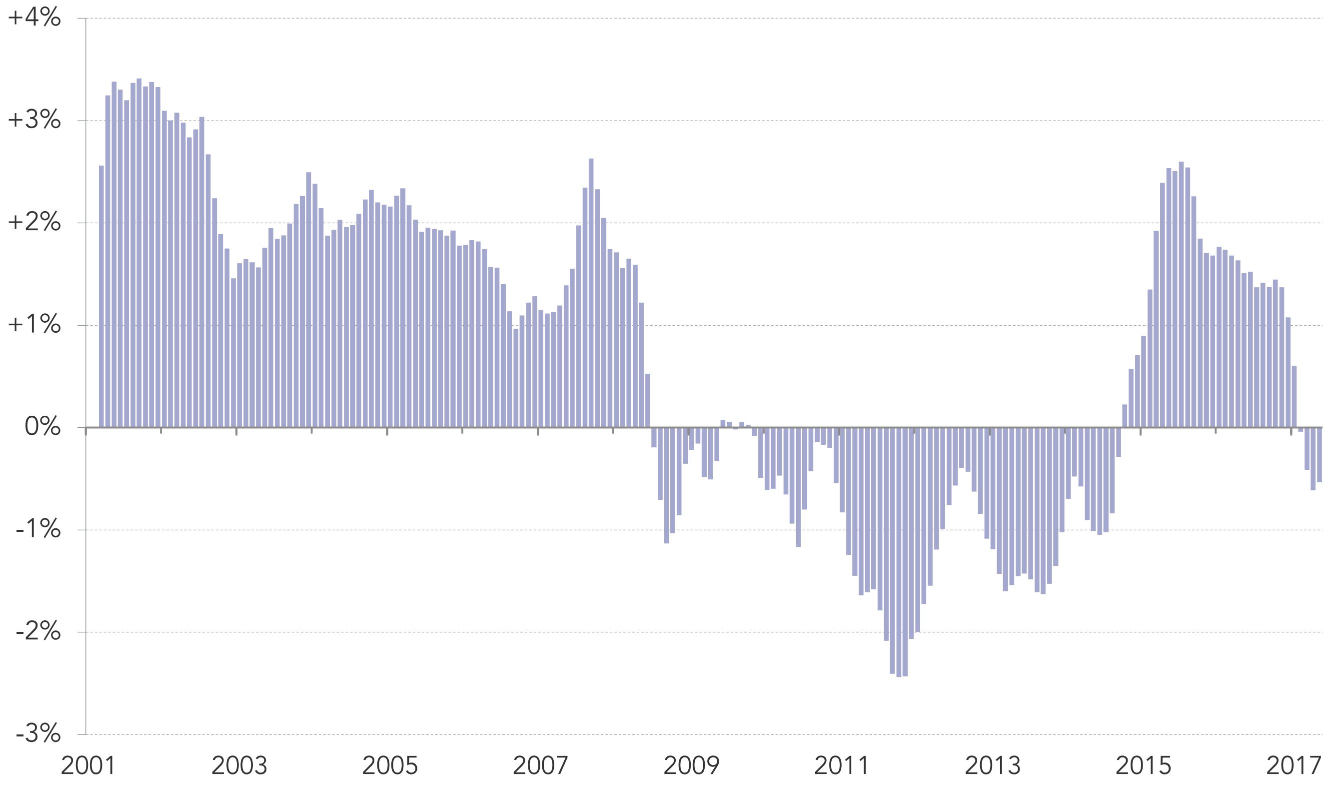
The pay squeeze has returned, with only the lowest earners protected

Productivity stagnation matters because over the long run it is only by increasing the output of workers that pay growth (and broader living standards improvements) can be sustained. It is no surprise therefore that the post-crisis flat-lining of productivity growth has coincided with extremely poor pay performance.

As Figure 12 shows, employees endured a six-year squeeze on their real-terms earnings between 2008 and 2014. Falling inflation supported a period of pay recovery in 2015, but growth slowed during 2016 and – with inflation rising as discussed above – the pay squeeze returned right at the end of 2016-17. As a result, average weekly earnings are no higher today than they were in 2005. Average pay is still some £16 a week below the pre-crisis peak, and is unlikely to return to that level until part-way through the next decade.

Figure 12: The earnings squeeze has returned in 2017

Growth in real-terms regular pay (CPIH-adjusted)

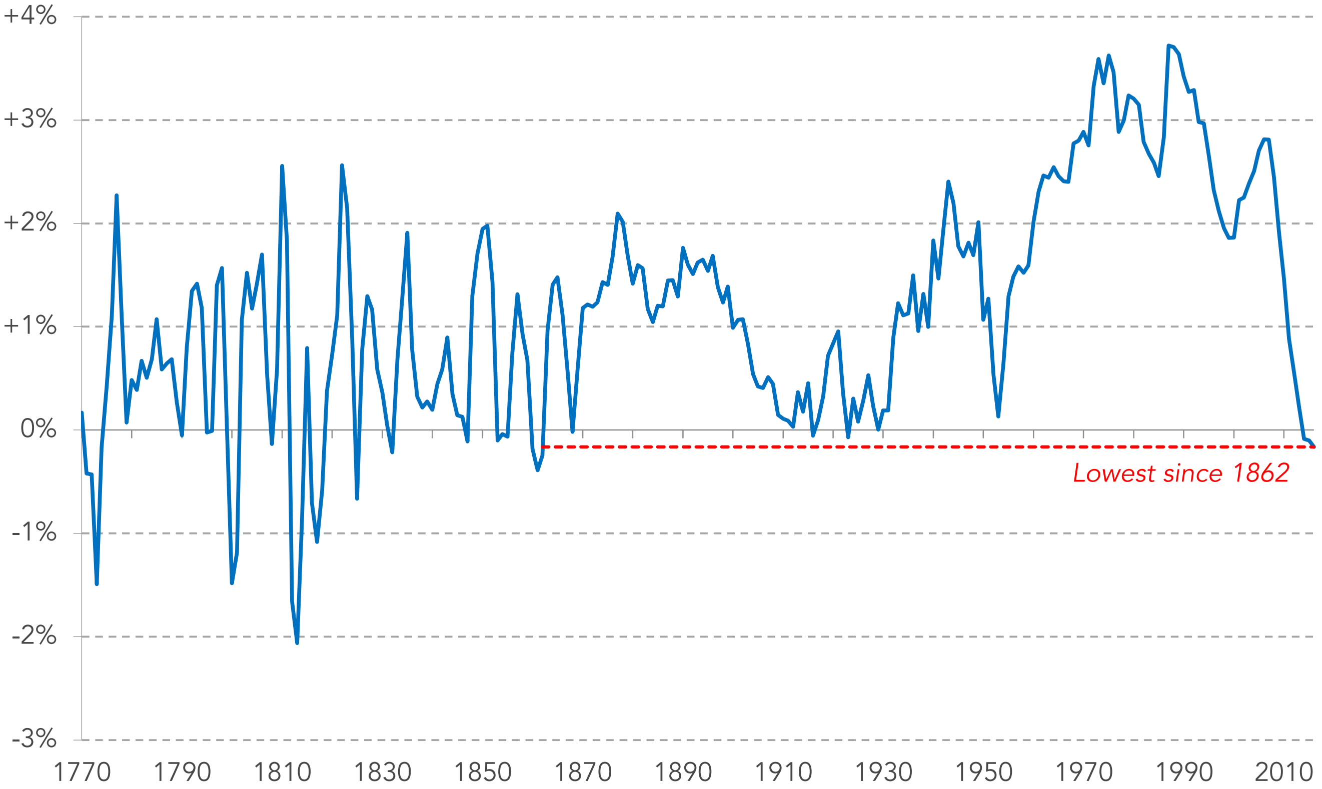


Source: ONS, *Labour Market Statistics*

As with the picture on productivity, the duration of the poor performance on pay is such that the last decade stands out when viewed over the longer term. Figure 13 shows that average earnings growth over the course of a decade hasn't been as low as it is today (-0.2 per cent on this measure) since the 1860s.

Figure 13: Earnings growth over the last decade is the worst for 150 years

Year-on-year growth in real-terms (CPI and predecessors-adjusted) average earnings (ten-year rolling average): GB

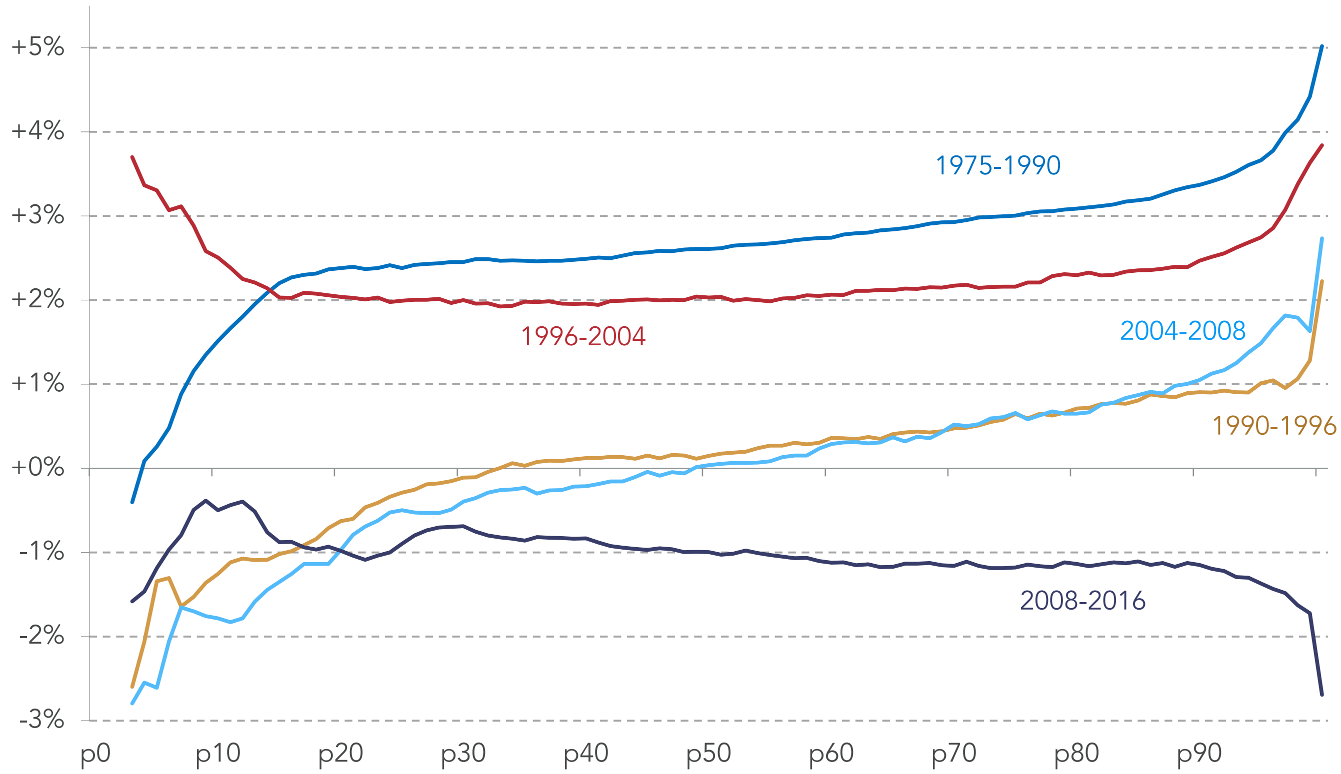


Sources: Bank of England, *Three Centuries of Data: v3*

While the overall picture on pay has remained undoubtedly gloomy over the past 12 months, it is worth noting that the average masks important differences in experience across different groups of employees. Looking at the post-crisis period as a whole, Figure 14 suggests that the squeeze on weekly pay has been relatively evenly felt across the earnings distribution, with the very highest earners faring a little worse.

Figure 14: The post-crisis squeeze on wages has been relatively evenly felt

Average year-on-year growth in real-terms weekly pay (CPIH-adjusted)



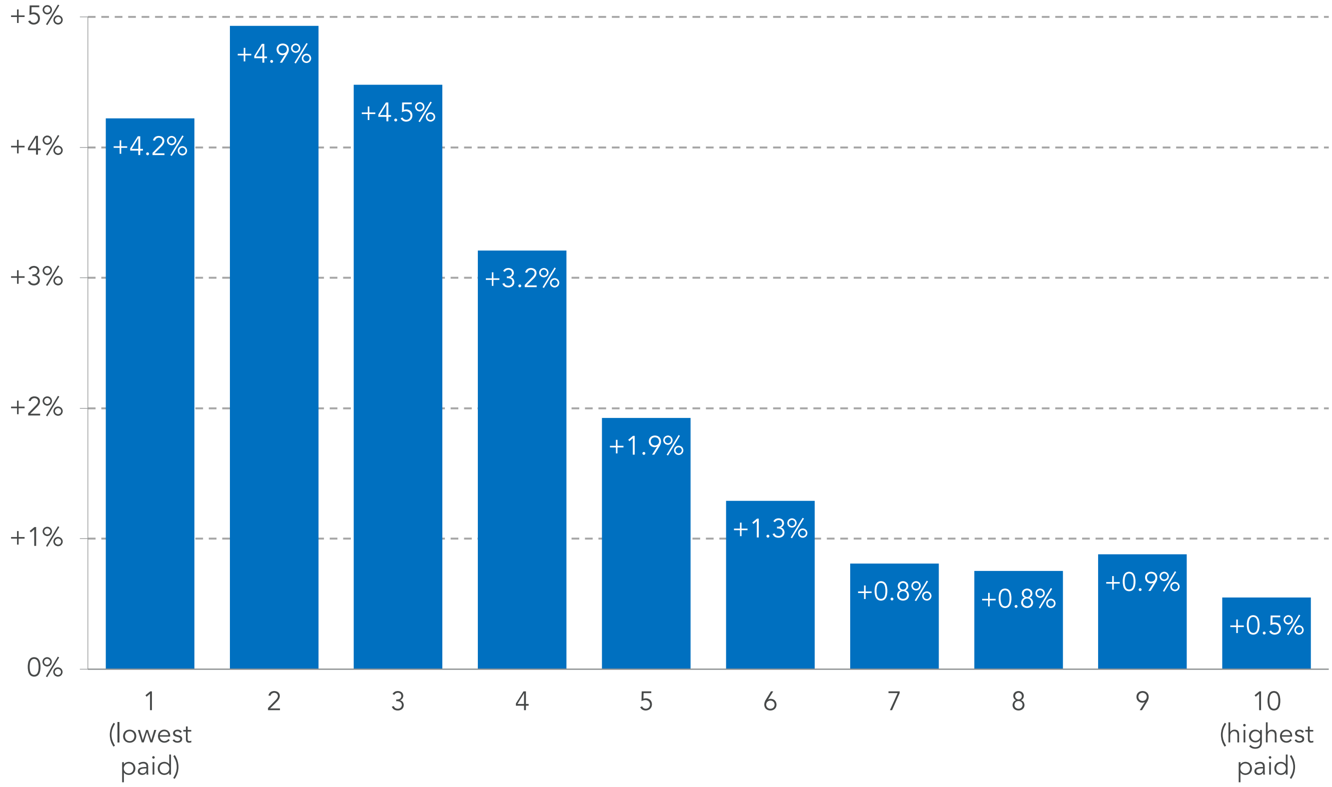
Sources: RF analysis of ONS, *Annual Survey of Hours and Earnings* & *New Earnings Survey Panel Dataset*

Three other things stand out from Figure 14. First, the extent to which the overall level of pay growth has fallen short of past periods, with a very stark contrast between strong and evenly shared pay growth in the late-1990s and early-2000s and the generalised squeeze since 2008. Secondly, the falling pay of recent years followed a period of marked slowdown in earnings growth that arrived even *before* the financial crisis hit. Indeed, during these pre-crisis years, weekly earnings fell in real-terms across most of the bottom half of the distribution. Thirdly, while pay fell at the very bottom of the earnings distribution in the post-crisis period, this outcome was actually somewhat *better* than had been experienced both in the pre-crisis period and in the early-1990s (though it should be remembered that weekly pay can be affected by changes in working hours as well as by changes in pay rates).

Focusing on the most recent period, pay growth has performed significantly better at the bottom end of the distribution. The introduction of the National Living Wage in April 2016 provided a very significant boost to the pay of millions of the lowest earners, as highlighted by Figure 15. Relative to the wage floor that had been in place in April 2015, the initial National Living Wage of £7.20 represented an increase of 70p, or 10.8 per cent in nominal terms.

Figure 15: Annual growth in weekly pay was heavily skewed towards lower earners in April 2016

Average year-on-year growth in real-terms weekly pay by weekly earnings decile (CPIH-adjusted)



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

Figure 15 also suggests that the raising of the wage floor for those aged 25 and over via the introduction of the National Living Wage had a spillover effect on pay for those a little higher in the weekly earnings distribution,[9] with wages rising by more than 3 per cent in real-terms across each of the four lowest earning deciles.

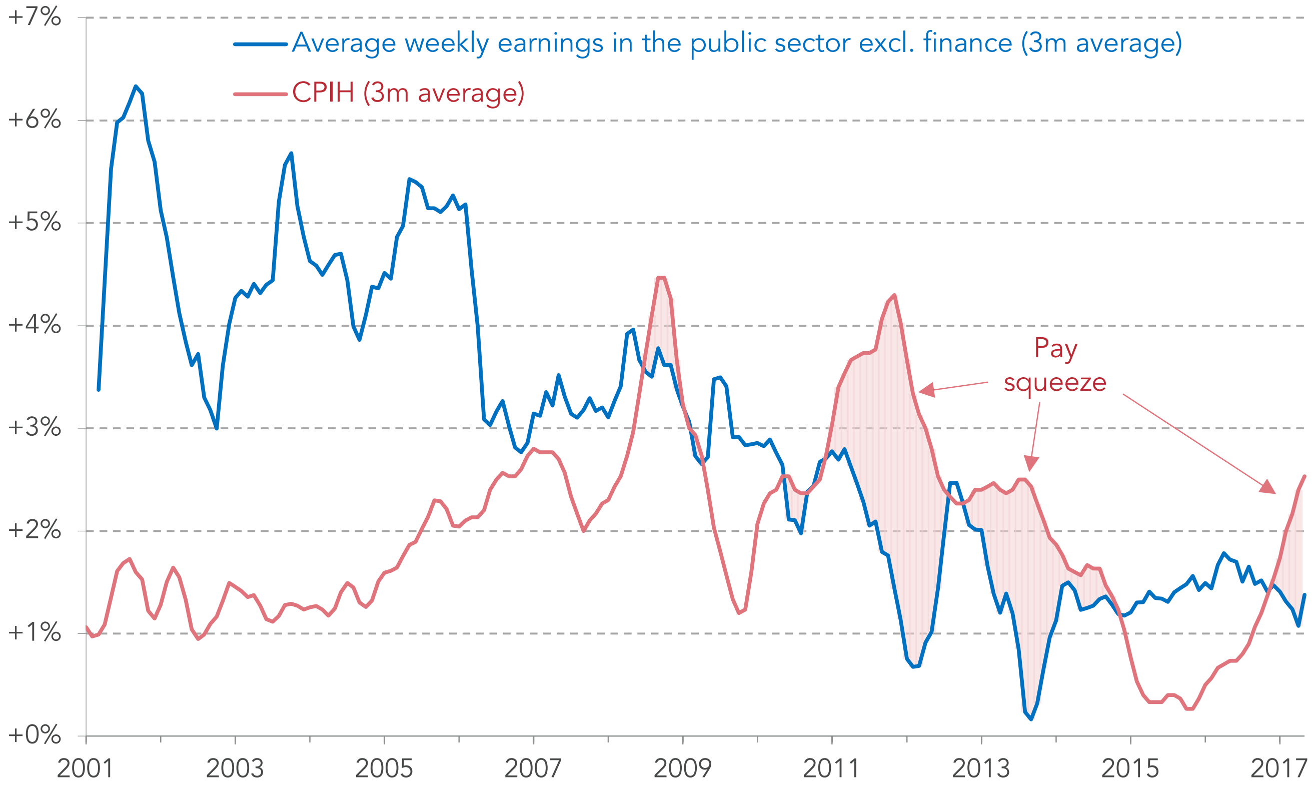
While this data relates to April 2016, we can make use of more timely ONS data to understand how wage growth has differed across 2016-17 and so produce a more accurate set of earnings inputs for the nowcast presented in the following section. Alongside variation across the earnings distribution, this exercise throws up important differences between the public and private sectors.

As part of the government's approach to fiscal consolidation, public sector pay was frozen for all but the lowest paid in 2011-12 and 2012-13 and annual growth in the total paybill was then capped at 1 per cent in each subsequent year. As a result, pay has been falling in the public sector in real terms for much of the post-crisis period. And the pay squeeze that has returned in recent months across employees as a whole arrived earlier and is being more acutely felt among public sector employees. As Figure 16 shows, nominal public sector pay has failed to keep pace with CPIH inflation in each of the last six months.

[9] Repeating this analysis for the hourly pay distribution produces an apparently more limited amount of spillover from the National Living Wage. See L Gardiner, "Five things we learned from today's earnings figures", Resolution Foundation, October 2016.

Figure 16: Average earnings in the public sector have been squeezed across much of the post-crisis era

Year-on-year change in consumer inflation and average nominal public sector earnings



Sources: ONS, *Labour Market Statistics*

As well as these differences in pay growth among different groups of employees, recent years have also played out quite differently for the growing number of self-employed workers in the UK. As noted above, self-employment has accounted for more than two-fifths of the jobs added to the UK economy since 2008. As such, some have questioned the extent to which this surge represented a 'second-best' option for some workers unable to find suitable employee jobs.

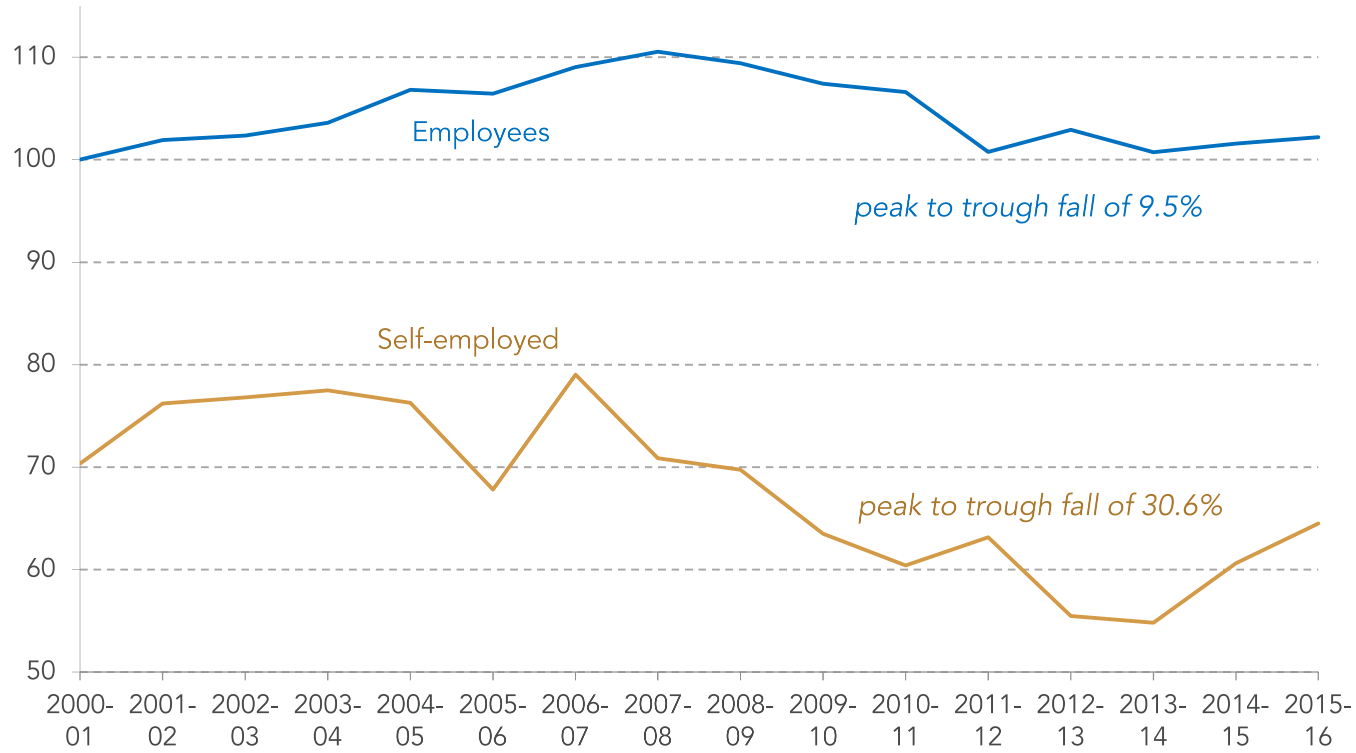
Survey responses indicate that this has *not* been the case for the majority working in this way,[10] but it remains the case that the returns to self-employment are typically lower than those associated with being an employee – meaning the trend towards self-employment has important consequences for household living standards. Figure 17 compares levels and changes in median weekly earnings[11] for employees and the self-employed in the period from 2000-01. It shows both that typical self-employed returns are considerably lower than among employees (in the final year shown median self-employed earnings equated to less than two-thirds of median employee earnings) and that self-employed earnings fell further following the financial crisis.

[10] Asked in 2014, 73 per cent of people who had become self-employed since the recession said they did so wholly or partly due to their personal preference and not solely due to a lack of better work alternatives. C D'Arcy & L Gardiner, *Just the job – or a working compromise? The changing nature of self-employment in the UK*, Resolution Foundation, May 2014

[11] The concept of self-employed earnings – the profits of individuals or the businesses they own – is of course qualitatively different to employee pay. Self-employed earnings are also harder to capture, and there is concern that even the limited sources we do have are subject to a significant decree of measurement error. However, both self-employed and employee earnings equally represent the rewards from work and therefore merit comparison.

Figure 17: Self-employed earnings are both lower than employee earnings and have been more adversely affected post-crisis

Indices of real-terms median weekly earnings (CPIH-adjusted): 2000-01 employee median = 100



Sources: RF analysis of DWP, *Family Resources Survey*

In part, the sharper decline in self-employed earnings after 2007 is likely to be associated with a steady reduction in the average hours worked by members of the group. As hours worked have levelled off in recent years, so the decline in median earnings has slowed.[12] Indeed, self-employed earnings picked-up strongly in both 2014-15 and 2015-16, with average real-terms growth of 9 per cent a year over these two years. For the purposes of our nowcast, we assume that self-employed earnings in 2016-17 moved in line with average weekly earnings among private sector employees, with an adjustment for outturn hours growth among the self-employed.

Rising inflation has meant that the benefits squeeze has also been harder-felt over the course of 2016-17

In the labour market then, rising inflation has acted as a headwind for living standards over the course of 2016-17, but one that has been partially offset by further employment gains and by sizeable increases in the wage floor. In relation to welfare payments, above-target inflation has had a much more straightforwardly negative effect on family finances.

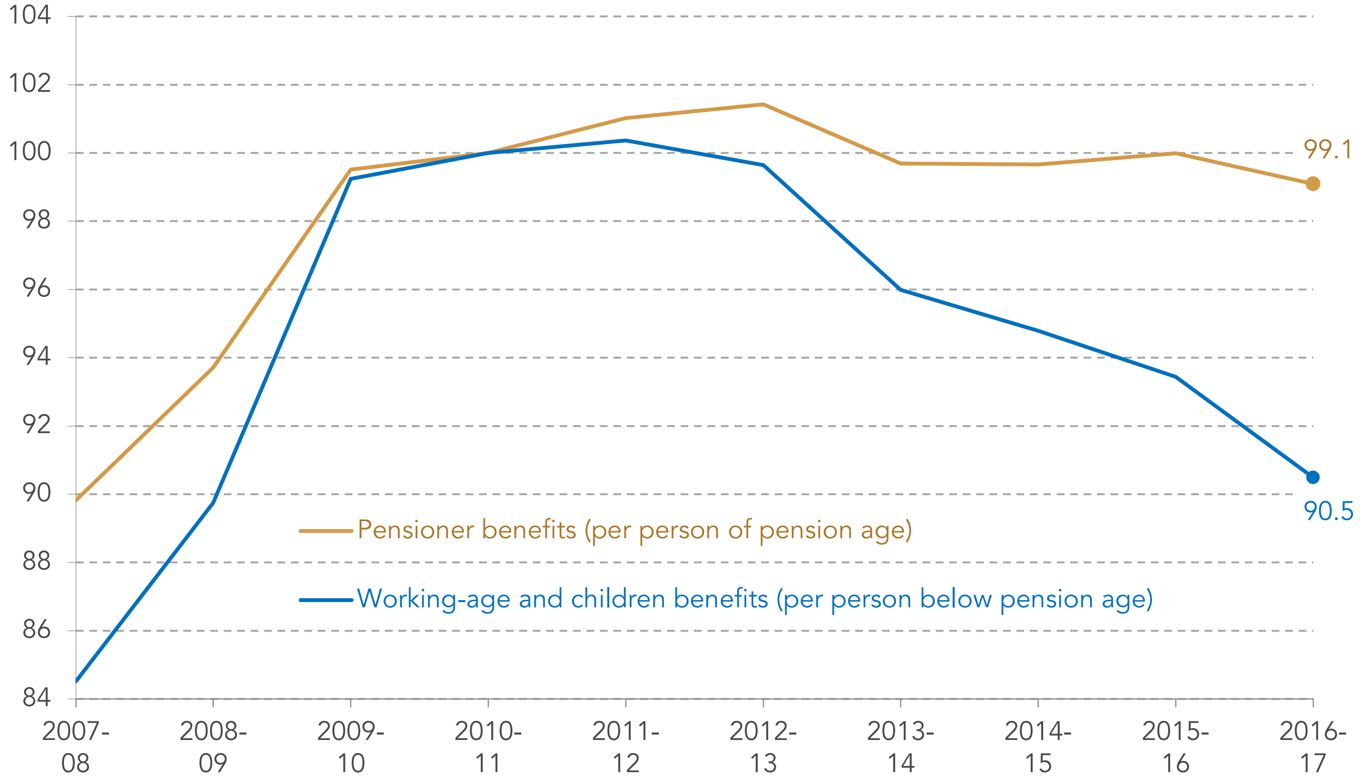
As with the public sector pay cap, a range of measures have been brought in over recent years with a view to lowering the welfare budget and so contributing to overall fiscal consolidation. The 2015 Summer Budget set out welfare cuts summing to £14 billion by 2021-22, concentrated on working-age families. Many cuts – including a two-child limit for new Universal Credit claimants and cuts in work allowances provided under the newly-introduced welfare system – are yet to fully bite. Indeed, heading into 2017-18, roughly £9 billion of cuts directly affecting incomes were still to be delivered.

[12] A Corlett, *The RF Earnings Outlook Q2 2016*, Resolution Foundation, October 2016

But the impact to date of welfare cuts on household incomes is still clearly visible. Figure 18 sets out spending per person, split between pensioner benefits and those accruing to working-age families. The distinction is clear. Pensioner benefits have been protected since the start of the fiscal consolidation in 2010, with overall payments per person therefore remaining broadly flat. In contrast, welfare spend per working-age adult and child is nearly 10 per cent down on 2010-11. Looking ahead, this spend is set to fall further still, while spending per pensioner is set to increase modestly over the coming years.

Figure 18: Welfare spending per person has fallen sharply among non-pensioners since the start of fiscal consolidation

Indices of real-terms welfare spending per person (GDP deflator-adjusted: 2010-11 = 100



Sources: DWP, *Welfare Trends*

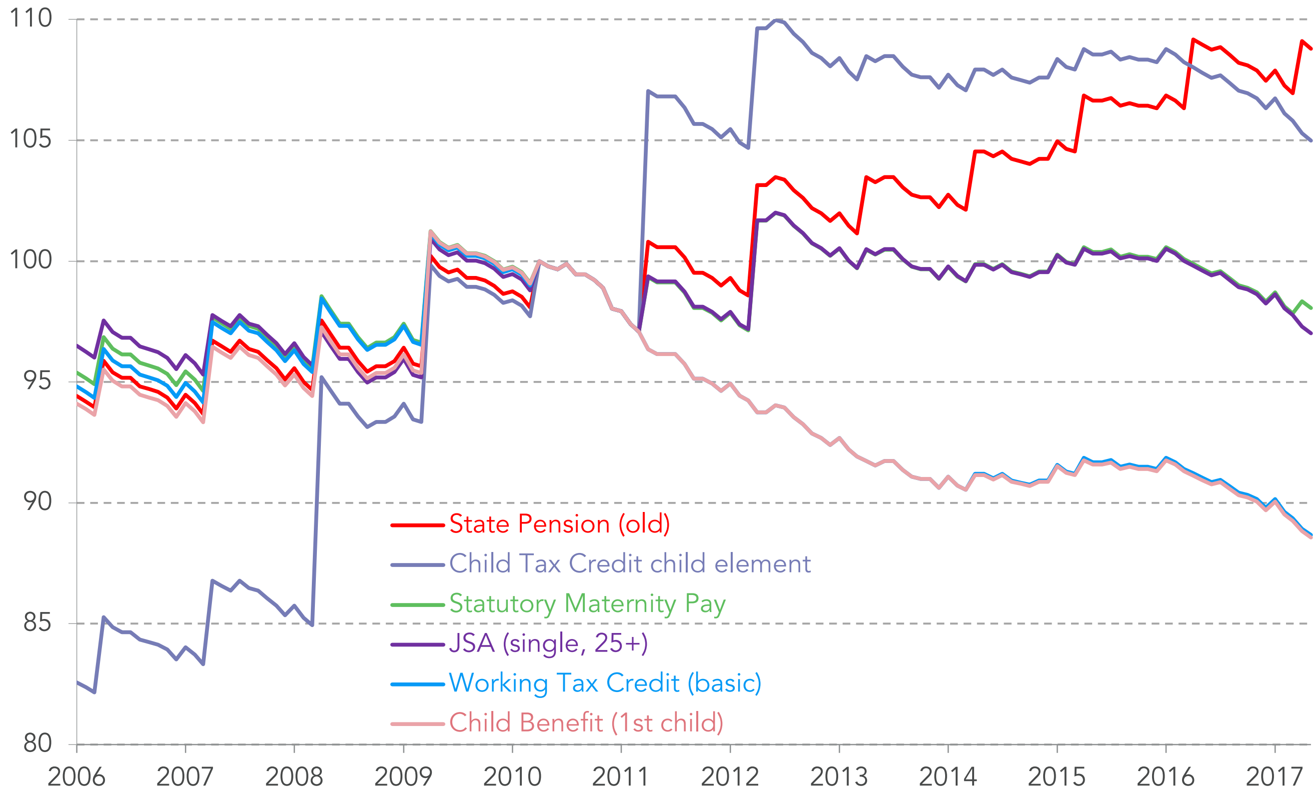
In part, the reduction in working-age welfare spend reflects cyclical factors: as employment has increased, so working-age benefit spending is likely to fall. But it is also the product of discretionary cuts in generosity. The four-year freeze on working-age benefit levels (operating between 2016-17 and 2019-20) in particular is starting to bite harder now that inflation has picked up.

The April 2016 freeze had little effect relative to the counterfactual uprating policy because the reference inflation rate was already zero. But from the perspective of households, even the modest increase in inflation over the first half of 2016-17 eroded the value of benefits in receipt. That effect has been amplified over the course of 2017, with the April freeze in particular acting to lower incomes relative to the counterfactual approach.

Figure 19 sets out trends in the real-term values of selected benefits before and after the start of the government's fiscal consolidation. Relative to April 2010, the old state pension is now 8.8 per cent more, and the child element of Child Tax Credit remains 5 per cent higher (despite falling from 2016). In contrast, the value of Statutory Maternity Pay is 1.9 per cent down and JSA has fallen by 3 per cent. The values of both Child Benefit (the first child payment) and the basic element of Working Tax Credits are down by more than 11 per cent over the period.

Figure 19: The welfare freeze has pushed down on the real value of working-age benefits since 2016

Indices of real-terms values of selected benefit payments (CPIH-adjusted): Apr-2010 = 100



The 'mini boom' in incomes appears to have ended in 2016-17, with the living standards outlook deteriorating significantly towards the end of the period

Bringing all these economic trends together, it is clear that the living standards backdrop has shifted somewhat over the past 12 months. While employment has continued to rise – with some signs of improvements in job *quality* too – the gains are inevitably less steep than those achieved during the earlier phase of economic recovery.

Earnings also continued to rise over much of 2016-17, but the pace of improvement slowed well below what might be expected in more 'normal' times. And the return of the pay squeeze towards the end of the period will have implications for both the *actual* and *perceived* sense of living standards improvement among UK households. An acceleration of cuts in working-age benefits over the year is likely to have pushed against the progressive nature of further employment gains, raising the prospect of a rise in income inequality alongside an overall slowdown in income growth.

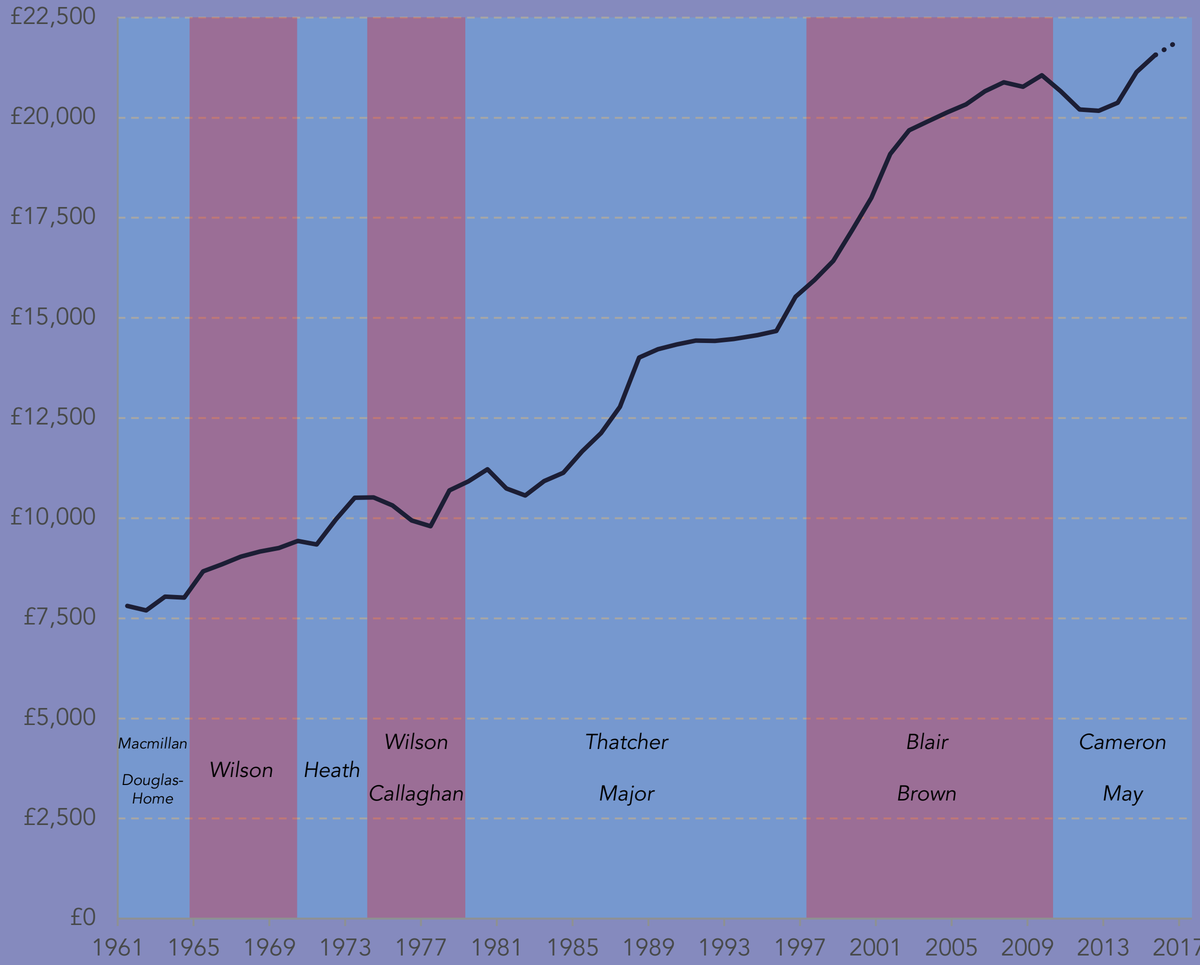
Elevated inflation has played a key role in changing the living standards outlook over recent months, with the headwind becoming especially forceful since the turn of the year. This will have only limited impact on any full-year assessment of income growth in 2016-17, but it is set to continue to into 2017-18 – something we'll return to in our living standards outlook in the winter.

For now, we focus on developments over the recent past. In the next section we make use of both recently-released survey data for 2015-16 and more timely economic metrics running through 2016-17, in order to build a nowcast of income growth that can give us a sense of what is happening to living standards across society.

Section 3
The 2016-17 nowcast: household incomes and housing costs

Real household incomes by Prime Minister

Typical real equivalised disposable income after housing costs



Source: IFS with Resolution Foundation nowcast

Notes: GB

Section 3

The 2016-17 nowcast: household incomes and housing costs

As we explored in the previous section, 2016-17 was a mixed year for the various components of living standards. Employment continued to grow, but the return of inflation provoked both a reappearance of the earnings squeeze and an amplification of ongoing cuts in working-age welfare. We won't have final figures on what all this has meant for overall household income growth over the year for some time but, ahead of the availability of any detailed survey data, we set out our best estimate in this section by means of a 'nowcast'.

Our approach implies that the 'mini-boom' in incomes that prevailed in 2014-15 and 2015-16 did indeed come to an end in 2016-17. Median income growth slowed to just 0.7 per cent: progress, but well below historical averages. And even this modest level of estimated growth may prove optimistic. National Accounts data for household income point to an overall reduction in incomes over the year, with three successive quarters of declining incomes.

The picture improves a little when we switch to our preferred living standards measure of incomes after housing costs. While housing has acted as an increasingly important drag on living standards improvements over recent decades, falling mortgage costs in 2016-17 provided some respite for many of those owning a home. However, this focus on housing also exposes a growing divide between the living standards experiences of home owners and renters.

Incomes were higher in 2016-17 than the year before, but growth slowed

"It's hard to make predictions", goes the famous quote, "especially about the future."[13] In this report we limit ourselves to making predictions about the past. More specifically, we undertake a 'nowcast' for incomes in the financial year 2016-17. To do so, we roll forward outturn household survey data (from the DWP's *Households Below Average Income* (HBAI)) for 2015-16 by plugging in known changes in the economy, demographics and the tax and benefit system. For more information on the assumptions underpinning the nowcast, see the Annex.

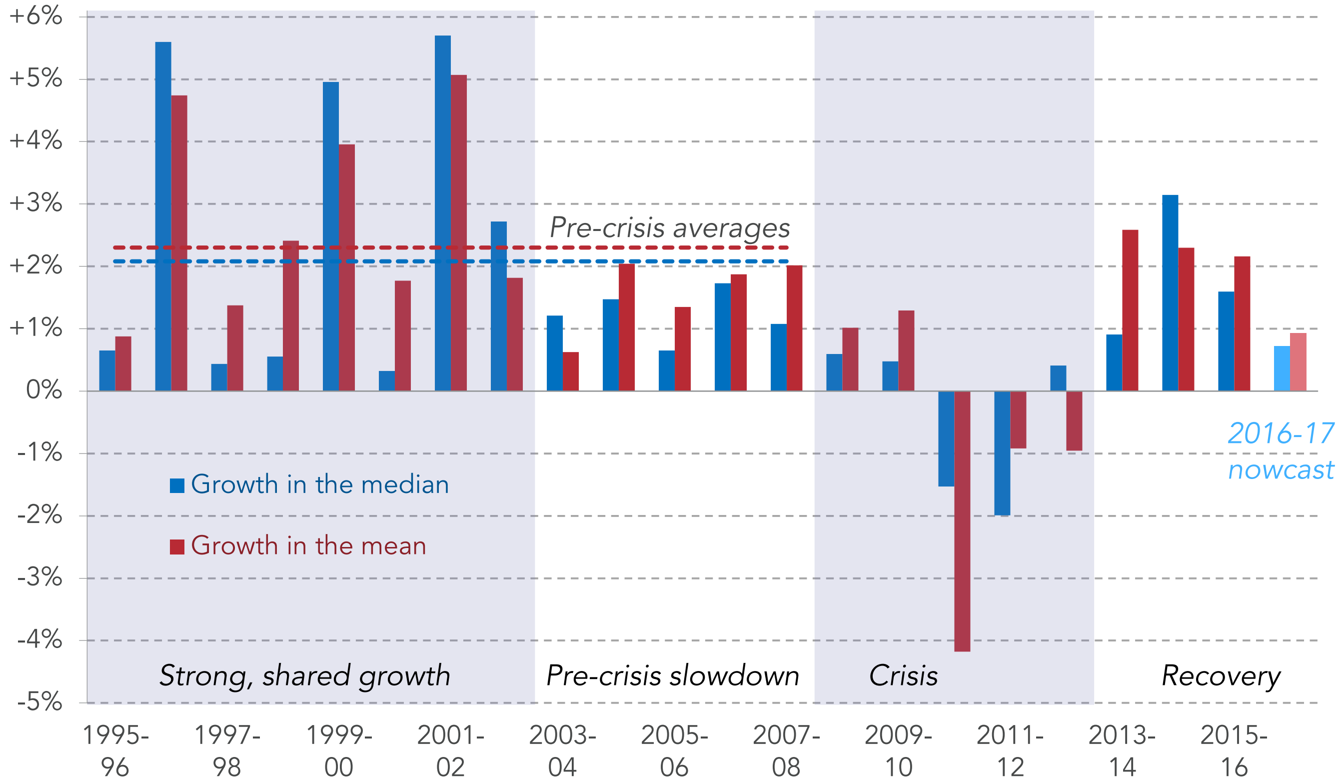
In our last note on living standards, we used outturn HBAI data for 2014-15 and a nowcast for 2015-16 to identify a 'mini-boom' for incomes.[14] With the outturn HBAI data now in for 2015-16, that period is clearly visible in Figure 20. It sets out growth in median and mean household income[15] in each year from 1995-96, and splits the years since then into four distinct time periods for income growth. First, from the mid-1990s until 2002-03 – a period in which income growth was strong, and widely shared. Second, from 2002-03 to 2007-08, the five years during which income growth slowed in the run up to the crisis. Third, the crisis itself from 2007-08 to 2012-13 in which income growth shrunk further and then fell into reverse. And finally, the recovery phase from 2012-13 until this most recent year. The performances in the early part of this recovery – while far from spectacular – are as good as anything recorded over the previous decade.

[13] Several variations of this quote exist. The ultimate source is unclear but may be of Danish origin.

[14] A Corlett & S Clarke, *Living Standards 2017: The past, present and possible future of UK incomes*, Resolution Foundation, February 2017

Figure 20: Income growth has slowed in 2016-17

Year-on-year growth in real-terms mean and median equivalised household disposable income (CPI-BHC adjusted)



Source: RF analysis of *Households Below Average Income*; RF nowcast (see Annex for more detail).

We argued in our previous outlook that the strength of this recovery would prove short-lived. And the trends in pay, inflation and benefits outlined in Section 2 certainly add to the sense of a change in the winds in 2016-17. Our new nowcast appears to confirm this, with median income growth more than halving from 1.6 per cent in 2015-16 to just 0.7 per cent in 2016-17 – taking typical income from roughly £25,300 to around £25,500. Mean income growth also appears to have fallen sharply, dropping from 2.2 per cent in 2015-16 to 0.9 per cent in 2016-17.

Of course, any income growth represents progress, and both median and mean incomes have reached new highs as a result. But this growth is low by historical standards – no better than that recorded in the first two years following the start of the financial crisis – and appears to herald an end of the 'mini-boom' long before any restoration of the 'lost' income growth associated with the prolonged post-crisis downturn.

[15] Throughout this report we present income on an 'equivalised' basis. That is, we adjust household incomes to account for the size of the household (acknowledging that a given level of income generates very different standards of living in a four person household than it does in a single person household) using a standardised approach. Mean and median incomes are then calculated by weighting the population at the individual level. That is, the median income relates to the equivalised household income recorded by the individual who sits precisely half way up the individually-weighted income distribution. When equivalised incomes are presented in cash terms, they represent the income that a couple without children would need in order to achieve an equivalent level of living standards as the particular family depicted. For example, a couple with two children recorded a disposable income of £25,000 would be said to have an equivalised income of £17,860 because that's the level of income a couple without children would need to secure roughly the same standard of living.

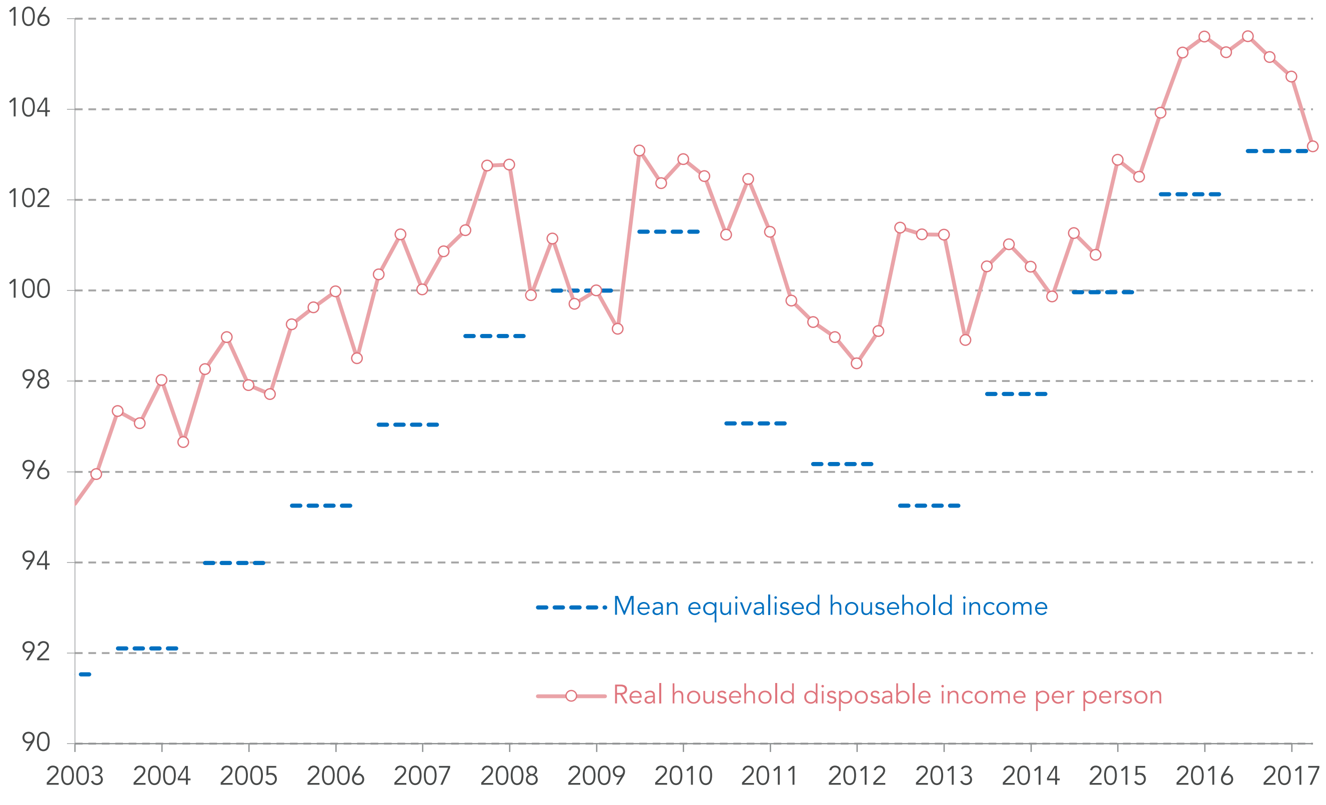
National Accounts data suggests incomes may instead have fallen over the past year

As we noted in Section 2, economic conditions altered rapidly over the course of 2016-17. Inflation changed course particularly swiftly, with annual CPIH inflation standing at 0.7 per cent at the start of the financial year and 2.3 per cent by its end. Averaging across the year as a whole – with average inflation of 1.1 per cent – may therefore mask the extent to which living standards shifted over the course of the past 12 months.

One check on movement over the year that we can undertake involves looking at National Accounts data on per capita household income. The real household disposable income (RHDI) per person measure that is produced as part of the quarterly National Accounts does not provide the same level of detail as the HBAI survey data used elsewhere in this report and is captured in a very different way. And RHDI need not precisely match the trends identified in HBAI, but the general direction of travel tends to provide a good indication of what is happening.

Figure 21: Quarterly RHDI figures show a marked recent decline in real income

Indices of real-terms income: 2008-09 = 100



Note: Equivalised household income is adjusted using the CPI-BHC deflator; RHDI per person is presented as a chained volume measure. Prior to 2008 the RHDI measure includes non-profit institutions serving households (NPISH); thereafter it covers just households.

Sources: ONS, National Accounts; DWP, *Households Below Average Income*; RF nowcast (see Annex for more details).

Figure 21 compares recent movements in quarterly RHDI per person with mean equivalised household incomes captured in the HBAI and in our 2016-17 nowcast. In contrast to the 0.9 per cent growth in mean equivalised income produced in our nowcast, the RHDI per person measure suggests that average incomes *fell* by 0.3 per cent between 2015-16 and 2016-17. And incomes have been falling across the last three quarters on this measure, reflecting the extent to which living standards appear to have deteriorated over recent months. An alternative measure of RHDI – designed to reflect people's cash circumstances more precisely – suggests that average incomes fell by 0.8 per cent.[16]

Accounting for easing housing costs improves the aggregate living standards picture in 2016-17

To date, our analysis has focused on incomes adjusted for generalised inflation. As we outlined in Section 2 however, the HBAI survey data affords us the opportunity to directly remove housing costs at a household level in order to better reflect the residual spending power –and therefore living standards – facing different families. Because housing costs represent such a major part of many households' budgets and because these costs can vary significantly across areas and across different groups, this 'after housing costs' (AHC) measure of income can provide a better proxy for living standards than the usual 'before housing costs' (BHC) approach.[17]

Housing costs tended to rise more rapidly than incomes over much of the 2000s, acting as an important drag on living standards. This came about both because individuals' housing costs rose (reflecting sharp increases in house prices) and because the composition of households shifted, with an increasing number living in private rented accommodation in which housing cost to income ratios are typically highest.[18]

Given the slowdown in BHC household income growth described above in 2016-17 then, we might expect that switching to AHC income would generate a still gloomier picture. Yet, while overall increases in inflation represented a significant headwind to living standards improvements in 2016-17, housing costs actually pushed in the opposite direction in our nowcast.

That's reflected in Figure 22 which presents an AHC version of the mean and median income growth trends depicted in Figure 20. It shows that our nowcast estimates a rise in typical AHC income of 1.3 per cent in 2016-17. This is again a significant slowdown relative to the previous year's level (2.3 per cent), but it is nonetheless somewhat higher than the figure recorded in relation to BHC income.

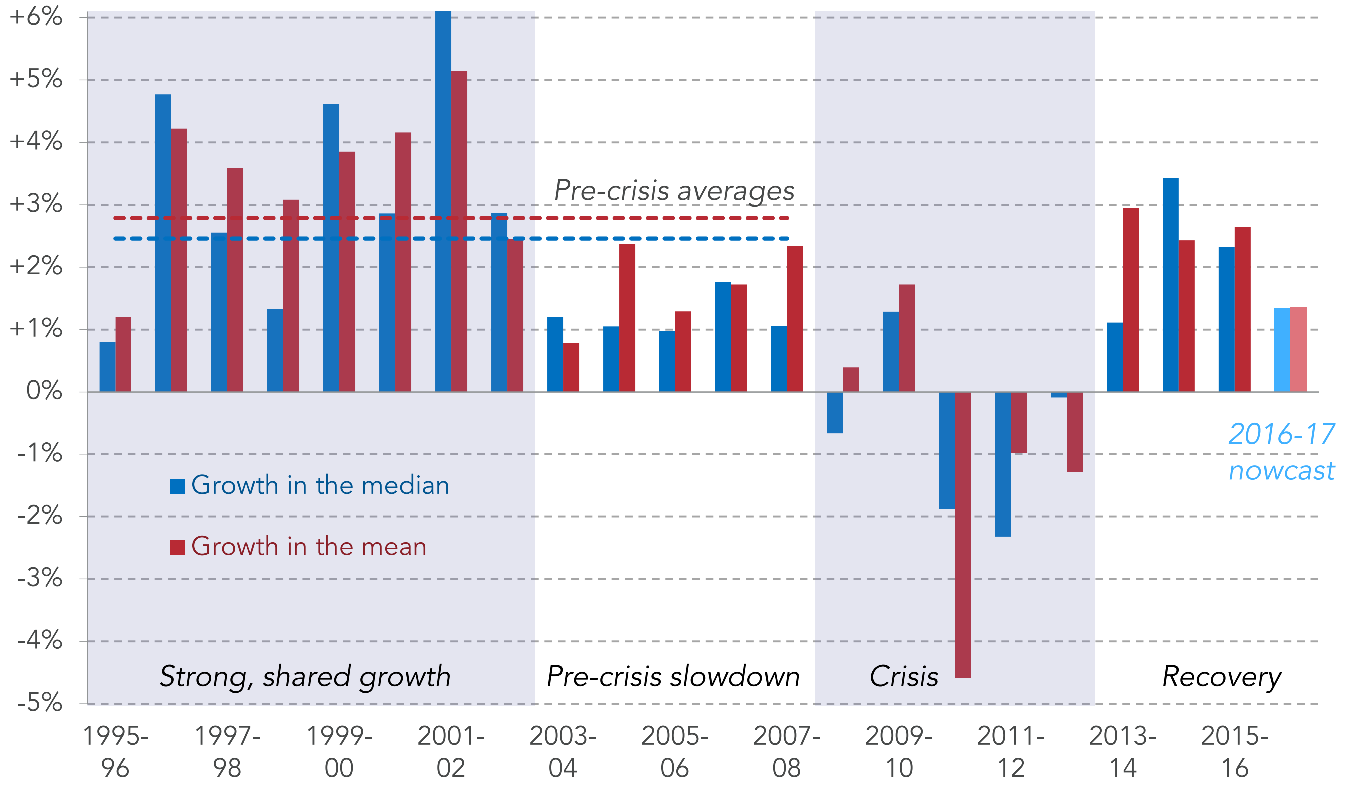
[16] ONS, *Alternative measures of UK real households disposable income and the saving ratio: Jan to Mar 2017*, July 2017

[17] As an illustration, if you lived in East Anglia but rental costs fell in Northern Ireland, this price fall would boost your 'real' income. This is true in the sense that your opportunity to move and live in Northern Ireland had increased, but in terms of people's real lives this is not especially more meaningful than if rental costs in Germany had fallen. For them, their local – or indeed individual – housing costs are far more important than the national average. There is no 'right' answer here, but accounting for housing costs at an individual level, rather than within the price deflator, therefore has some advantages when studying changing living standards in different places and for different groups.

[18] See A Corlett & L Judge, *The Housing Headwind: The impact of rising housing costs on UK living standards*, Resolution Foundation, June 2016 for more detail on variations in housing cost to income ratios over time and across the country.

Figure 22: Incomes after housing costs have risen in 2016-17, though slower than last year

Year-on-year growth in real-terms mean and median equivalised household disposable income after housing costs (CPI-AHC adjusted)

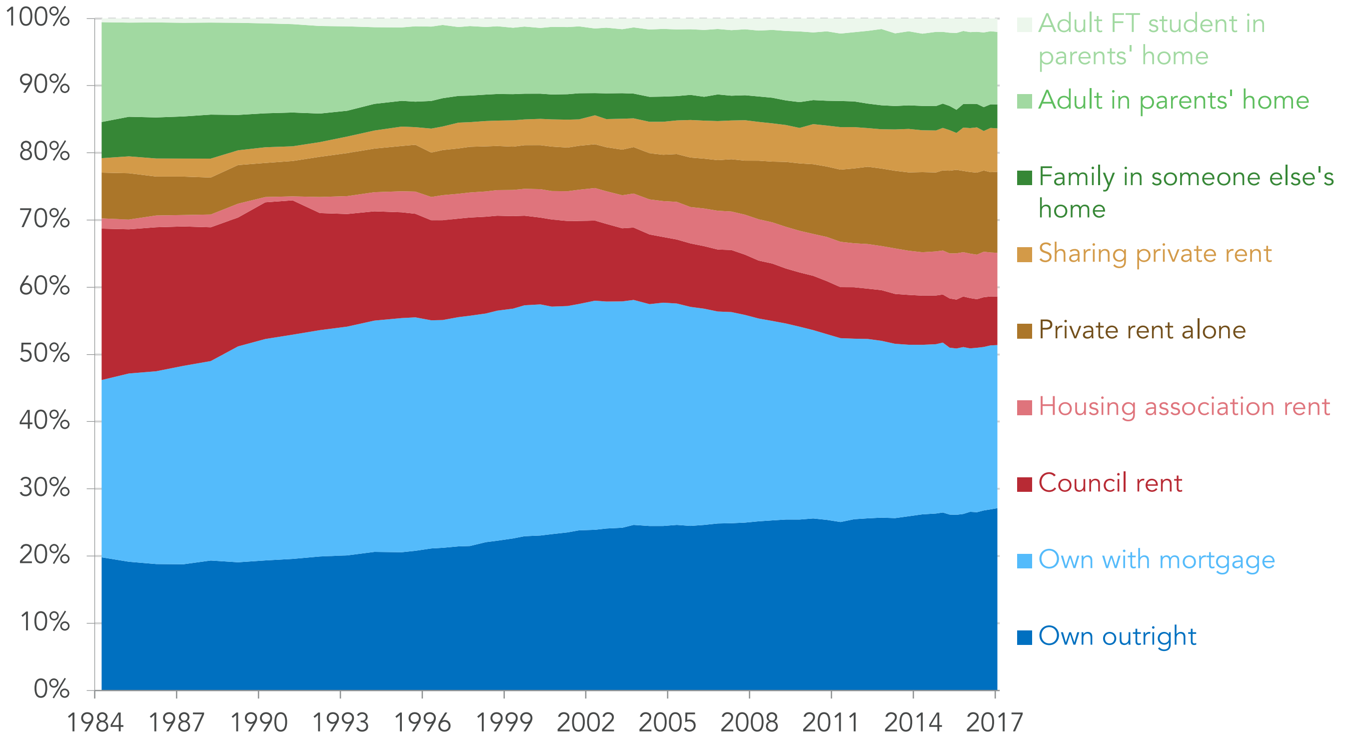


Source: RF analysis of *Households Below Average Income*; RF nowcast (see Annex for more detail).

Two factors appear to have been key to the boost provided by housing costs over the past 12 months. First, the compositional shift from home ownership to private renting looks to have paused. Indeed, as Figure 23 shows, the proportion of family units owning their own home actually *increased* slightly in 2016-17, rising from 51.0 per cent in 2015-16 to 51.2 per cent. Home ownership has therefore been relatively flat over the past few years – marking a halt in the sustained fall observed over the 2000s.

Figure 23: Home ownership has not been in decline recently but remains considerably below its peak

Proportion of family units by housing tenure

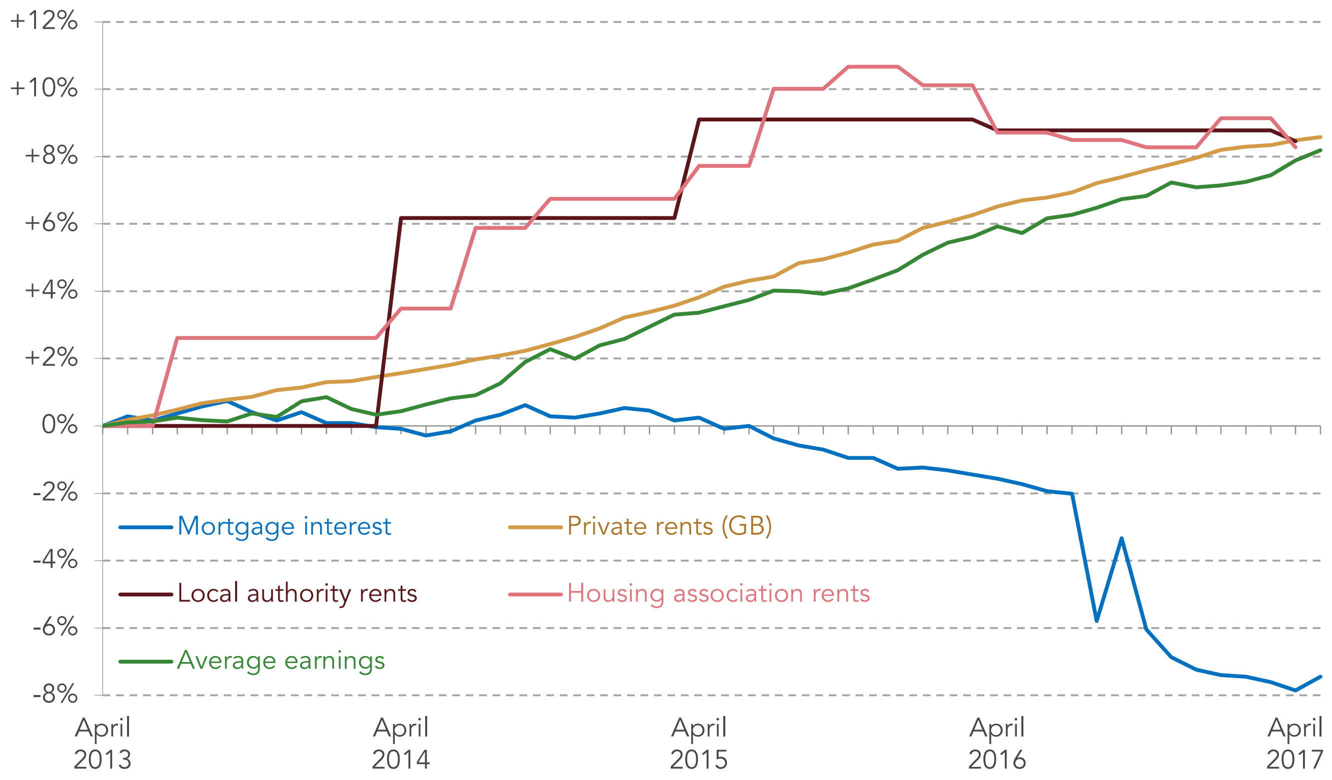


Source: RF analysis of *Labour Force Survey*

The second factor helping to support AHC incomes in 2016-17 was a further decline in mortgage interest rates that directly lowered mortgage repayments among mortgagor households. Average rates fell both as lenders narrowed their margins with the Bank of England base rate and as the Bank itself cut that rate to 0.25 per cent following the EU referendum. According to ONS figures, the average mortgage interest payment in 2016-17 – i.e. excluding capital repayments – was over four per cent lower than in 2015-16. The decline over the past four years – and the contrast with nominal average earnings – can be seen in Figure 24.

Figure 24: Mortgage costs have declined significantly

Cumulative change in mean costs (and earnings) since April 2013



Source: RF analysis of ONS, various

Of course, lower mortgage interest payments are not the same as lower house *prices*: indeed, cheaper credit will have been one of the factors helping to support house price growth in 2016-17. House prices across the UK have risen by 24 per cent over the past four years, far outpacing earnings growth. Because purchasing a home can be viewed as a form of saving, the income measures in this report take no account of the purchase costs associated with buying (such as deposits) or the ongoing capital repayments. Nonetheless, changes in house prices still matter for living standards – not least in terms of how they might affect future levels of home ownership and therefore access to lower ongoing housing costs.

Figure 24 also details recent movements in private and social rents. It shows that average private rents have risen steadily since April 2013, broadly tracking earnings as economic theory would suggest.[19] As will be explored in a later section though, this national average hides a geographic split – with rents rising more rapidly in the South of England and in the Midlands.

For analysing short-term living standards, just as important as the level of private rents is the question of who pays for them. And here too there has been significant change. A large number of private renters receive Housing Benefit, but this is increasingly unlikely to cover their full rent. This is both because Local Housing Allowances have been decoupled from local housing costs and because they have in any case been frozen for the next few years. The result is that for most low income private renters, any rent increase now comes entirely out of their own pockets.[20] While

[19] Theory states that rents are determined by a combination of earnings growth (i.e. what can be afforded) and shifts in demand and supply. House prices are in turn determined by a combination of rent levels, borrowing costs and expectations for future price movements.

[20] A Hood & T Waters, *Living Standards, Poverty and Inequality in the UK: 2016–17 to 2021–22*, IFS, March 2017

there are some positive incentive arguments for this approach, the immediate negative impact on household incomes is clear – as explored below.

In the social rented sector, Housing Benefit is more likely to still cover rents entirely. As such, trends in rents have less of a direct impact on incomes within this group. With this in mind, the government's decision to lower social rents by one per cent each year for four years starting in 2016-17 – visible in Figure 24 – primarily represents a cost pressure for social landlords rather than an income boost for tenants. Nevertheless, it will support the incomes of those social renters not in receipt of Housing Benefit.

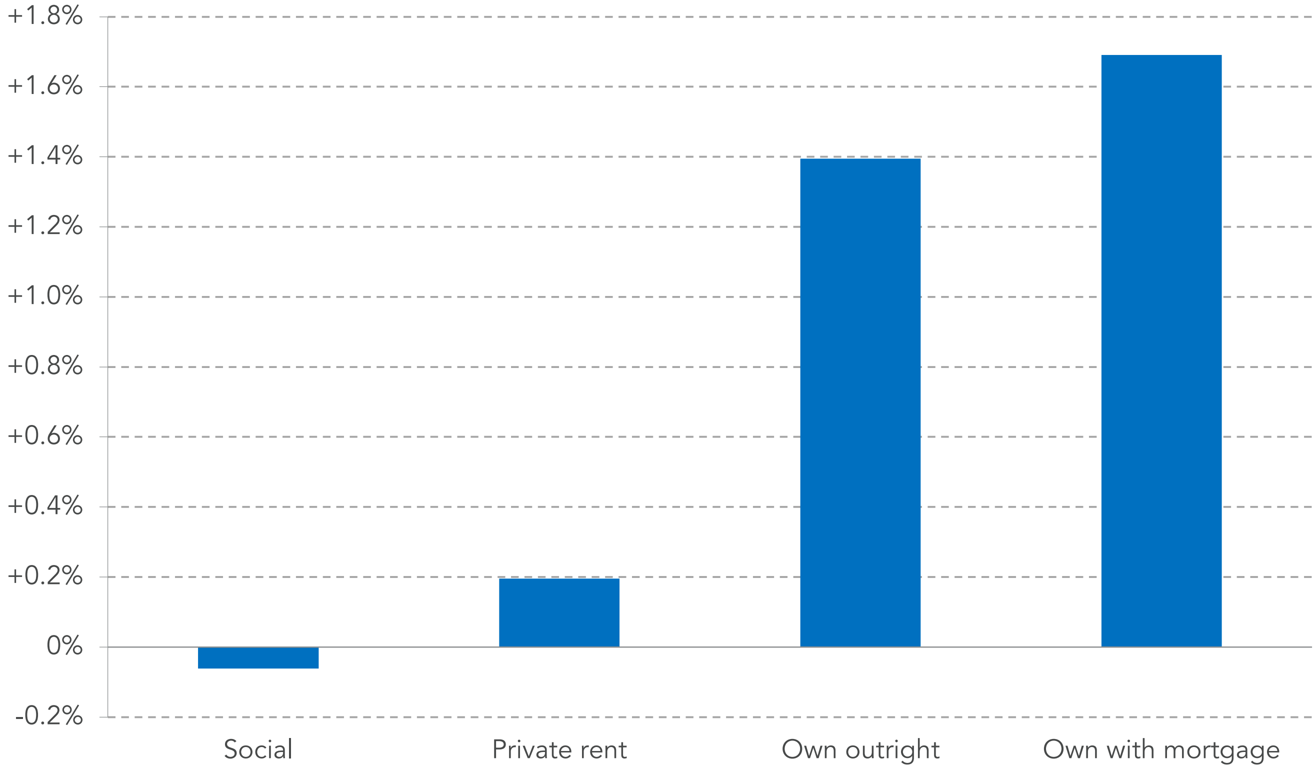
The differing direction of housing costs across tenures in 2016-17 means mortgagors' incomes have fared better than renters'

Of course, these very different trends in costs across tenures mean that the overall living standards boost associated with housing over the past year is likely to mask quite different experiences across groups. To provide some indication of these differences, we can consider how income growth varied in our 2016-17 nowcast across broad tenure categories.

Figure 25 implies that mortgagors experienced the strongest AHC income growth, with median incomes in the group rising by 1.7 per cent relative to 2015-16. Outright owners also fared relatively well, recording growth of 1.4 per cent. In contrast, median AHC income growth among private renters was just 0.2 per cent and incomes actually *dropped* among social renters (by 0.1 per cent).

Figure 25: Accounting for housing costs, typical incomes likely rose fastest for mortgagors in 2016-17

Growth in real median equivalised after housing costs income (CPI-AHC adjusted)



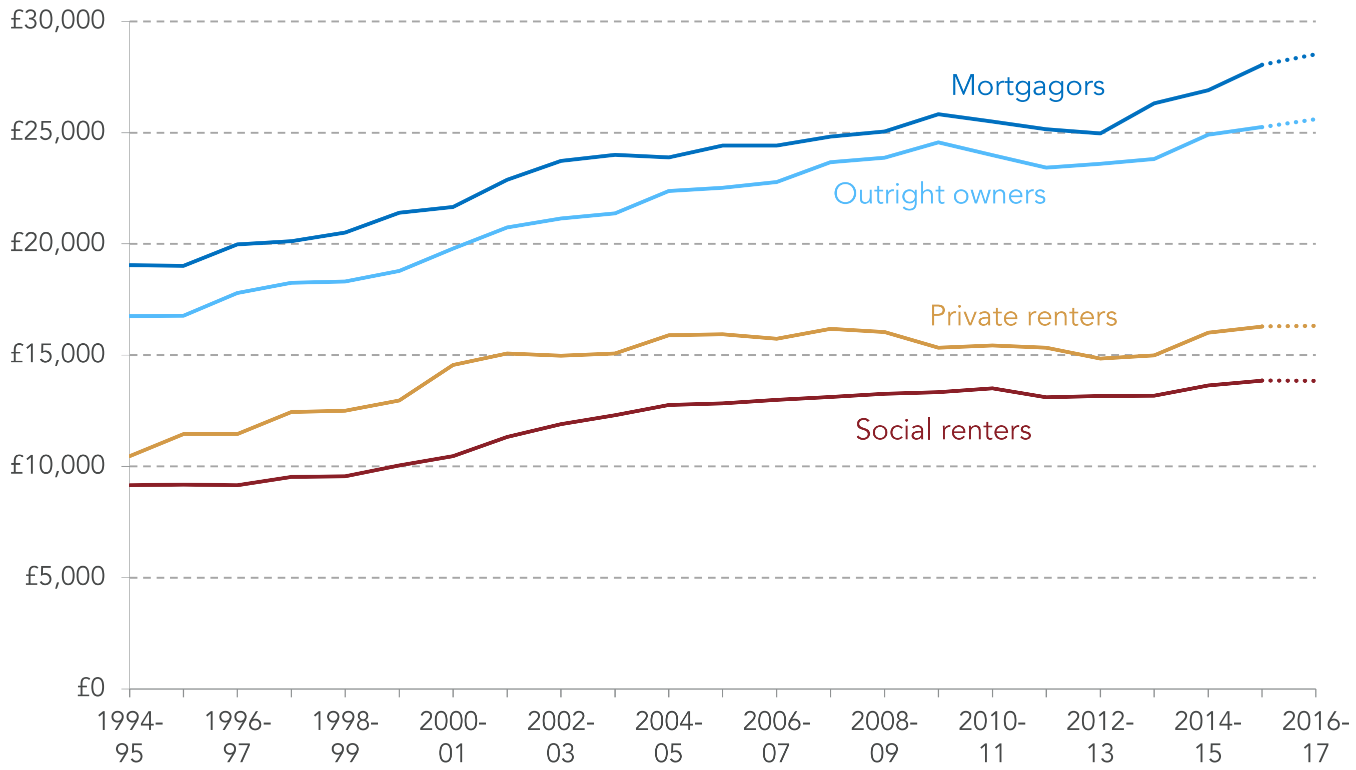
Source: RF nowcast (see Annex for full details).

These differences are certainly not solely driven by housing costs – with differing levels of benefit receipt one of many other key factors – but differing fortunes in this respect, as shown earlier, are one important divergence.

This would continue a trend of particularly rapid income growth for mortgagors – shown in Figure 26 – although in part this relates to the changing make-up of the mortgagor population as outright ownership rises. The typical mortgagor AHC income is now twice that of the typical social renter, and over the past decade this income has grown by 17 per cent compared to just 4 per cent growth for the typical private renter. Even more than was the case before the financial crisis, the living standards split between those who own their own home and those who do not has become a key divide.

Figure 26: The typical mortgagor income has risen particularly rapidly

Median equivalised disposable household income after housing costs (2016-17 prices, CPI-AHC adjusted)



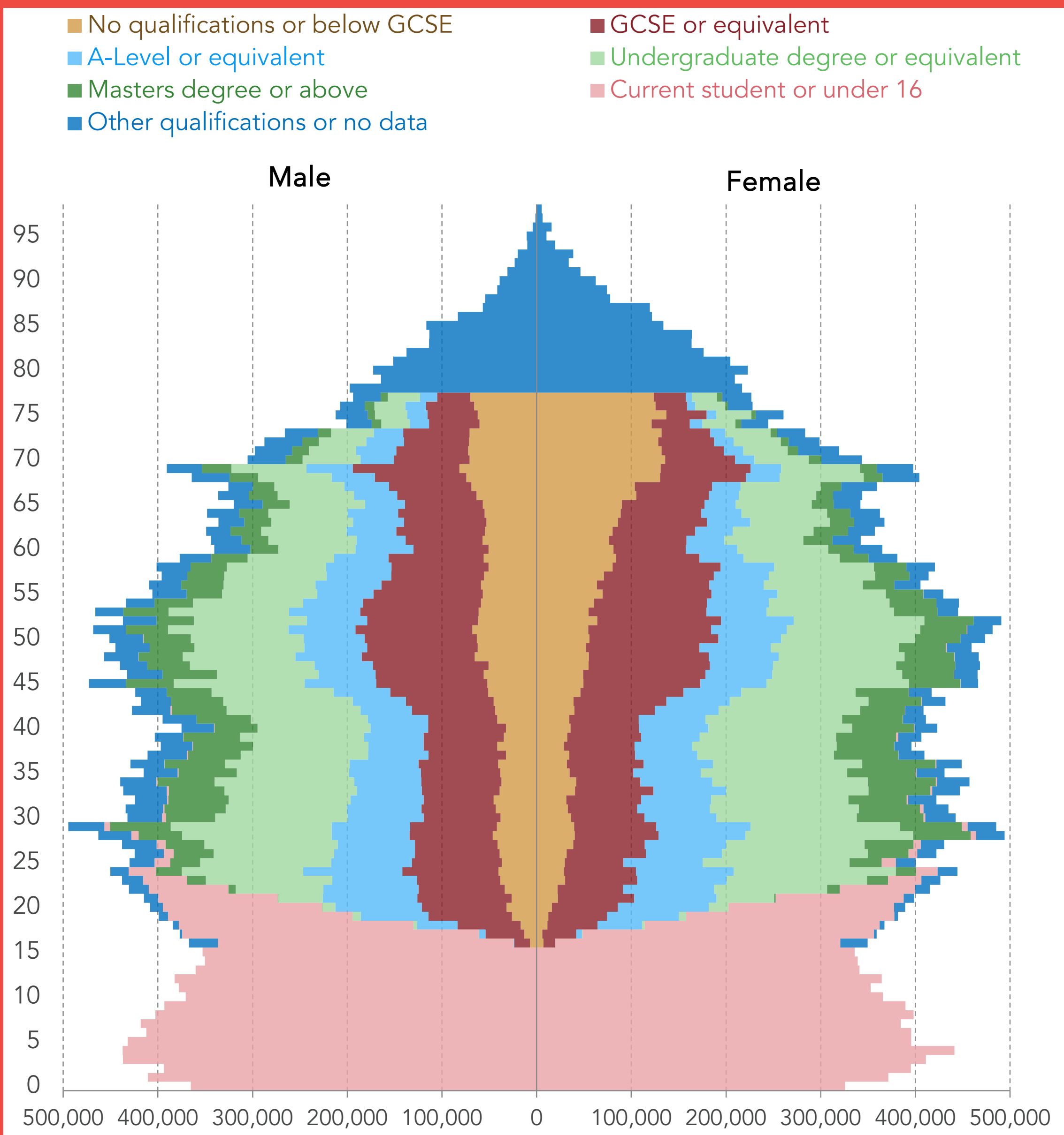
Source: RF analysis of *Households Below Average Income;* RF nowcast (see Annex for more detail).

Notes: 2016-17 nowcast shown as dotted lines.

Overall, it is clear that household income growth slowed markedly in 2016-17 – whether measured before or after accounting for housing costs. But, as the tenure split above has suggested, trends are likely to have differed somewhat across different parts of society. How then has income growth varied across age groups, income groups and regions – both in 2016-17 and over the past few decades more generally? Such breakdowns are the focus of the rest of this report.

Section 4
Generation gap: income growth across the age profile

The age, gender and education make-up of the UK in 2016



Source: Resolution Foundation analysis of the *Labour Force Survey*

Section 4

Generation gap: income growth across the age profile

Previous sections have set out the many, complex drivers of household income growth in the UK. We have shown how movements in employment, wages, inflation, housing costs and government policy have all shaped income growth. Each of these drivers is relevant in different ways across the age distribution. For example, younger households, and certainly those with children, are more likely to be affected by changes to working-age benefits; whereas the state pension matters for those aged 65 and over. Similarly, older people are more likely to be home owners than younger ones, meaning that variation in the different components of housing costs will have a different effect on different age groups.

This section builds on the household income nowcast that we have undertaken for 2016-17 in order to add the story of the recent past to the now quite well-known finding that over recent years younger people have, on average, fared less well on living standards than their older counterparts. Typical household incomes for pensioners are now, after two decades of relatively strong growth, higher than those of the rest of the population. Our nowcast produces fairly similar growth rates across the age profile in the most recent period, meaning that this overall picture remains broadly unchanged.

More strikingly, and reflecting continued poor performance in the latest period, we find that the typical incomes of single adults and those aged 25 to 34 are lower today than in the early-2000s. Typical incomes among those aged 25 to 34 fell further than any other age group in the aftermath of the financial crisis, and they have recorded the weakest subsequent recovery.

Pensioner incomes have grown significantly faster than working-age incomes since 2002

Intergenerational fairness moved to the top of the political agenda during the 2017 general election. Although a discussion of the £14 billion of working-age welfare cuts[21] currently being rolled out was largely missing from the campaign, policies designed to tackle the challenges facing specific age groups across society were prominent. These included Labour's pledge to abolish tuition fees and the Conservatives' social care, winter fuel and state pension uprating policies.

It's no surprise then that age also mattered in terms of the election result: in fact, it appeared to become *the* political cleavage in 2017. This was evident both in relation to an apparent narrowing of the wide gaps in turnout by age that had opened up since the early 1990s,[22] and in the party preferences of different age groups. For example, over 60 per cent of the under-30s voted Labour while around 20 per cent voted Conservative. Meanwhile, 70 per cent of those aged over 70 voted Conservative and just 20 per cent voted Labour.[23]

[21] M Whittaker, *Ending austerity? The priorities, price tags and practicalities for a government changing course on spending cuts*, Resolution Foundation, July 2017

[22] See T Bell, "The millennials and politics: are they getting into the swing of it?", *Resolution Foundation blog*, 9 June 2017 for details.

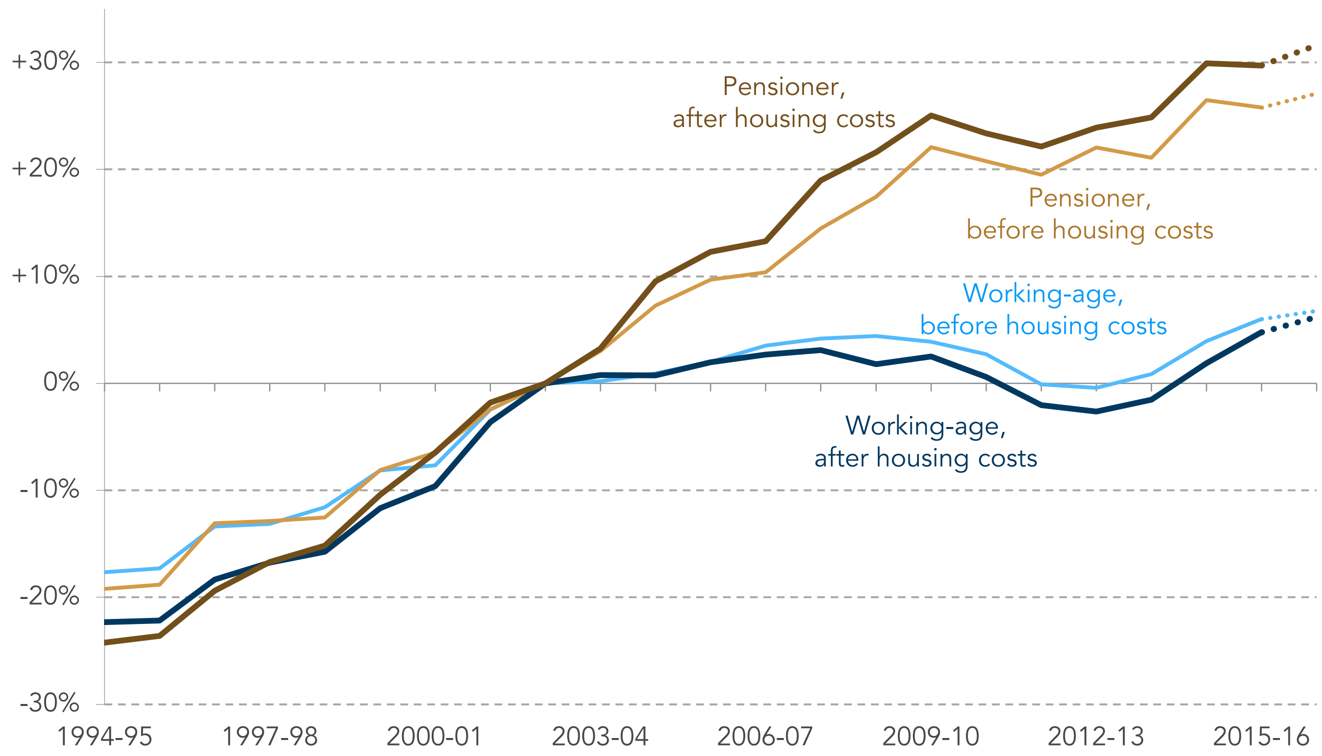
[23] C Curtis, *How Britain voted at the 2017 general election*, YouGov, 13 June 2017

Short-term political factors mattered, but it's probable that underlying the new political divide is the emergence of a growing economic one. Income growth has diverged significantly between the age groups of the UK population since the turn of the century.

As Figure 27 shows, people of working-age and their children (i.e. the non-pensioner population)[24] have recently endured a lost-decade of income growth; typical income after housing costs (AHC) for those of working-age was 3 per cent lower in 2012-13 than it was in 2002-03. Over the same time period, typical pensioner AHC incomes increased by 24 per cent. It is only in the last four years that those of working-age have enjoyed any sustained (but still modest by historical standards) income growth. Over the course of the recovery, from 2012-13 to 2016-17, typical working-age household AHC income increased by a total of 9 per cent, compared to an increase of 6 per cent for pensioners.

Figure 27: Income growth for pensioners has outperformed that of the rest of the population

Cumulative change in real median equivalised household disposable income, relative to 2002-03



Notes: Incomes are deflated using CPI-BHC or CPI-AHC. 2016-17 nowcast shown as dotted lines.

Source: RF analysis of DWP, Households *Below Average Income*; RF nowcast (see Annex for more details).

The differing performance of the two groups is less marked when measured using before housing costs (BHC) income. On this measure, post-2002-03 pensioner incomes grew four times faster than working-age ones; whereas the ratio was five times when using AHC income. This stems from significantly higher levels of outright ownership rates among older households, which mean that pensioner incomes have been much less affected by rising house prices and by rising rents.

[24] In keeping with the DWP's *Households Below Average Income* methodology, we define the pensioner population as those individuals living in family units where at least one person is above state pension age.

There are also compositional effects at play: home ownership has risen among the pensioner group over this period, while the working-age group has recorded an increase in private renting – which is typically more expensive than having a mortgage.

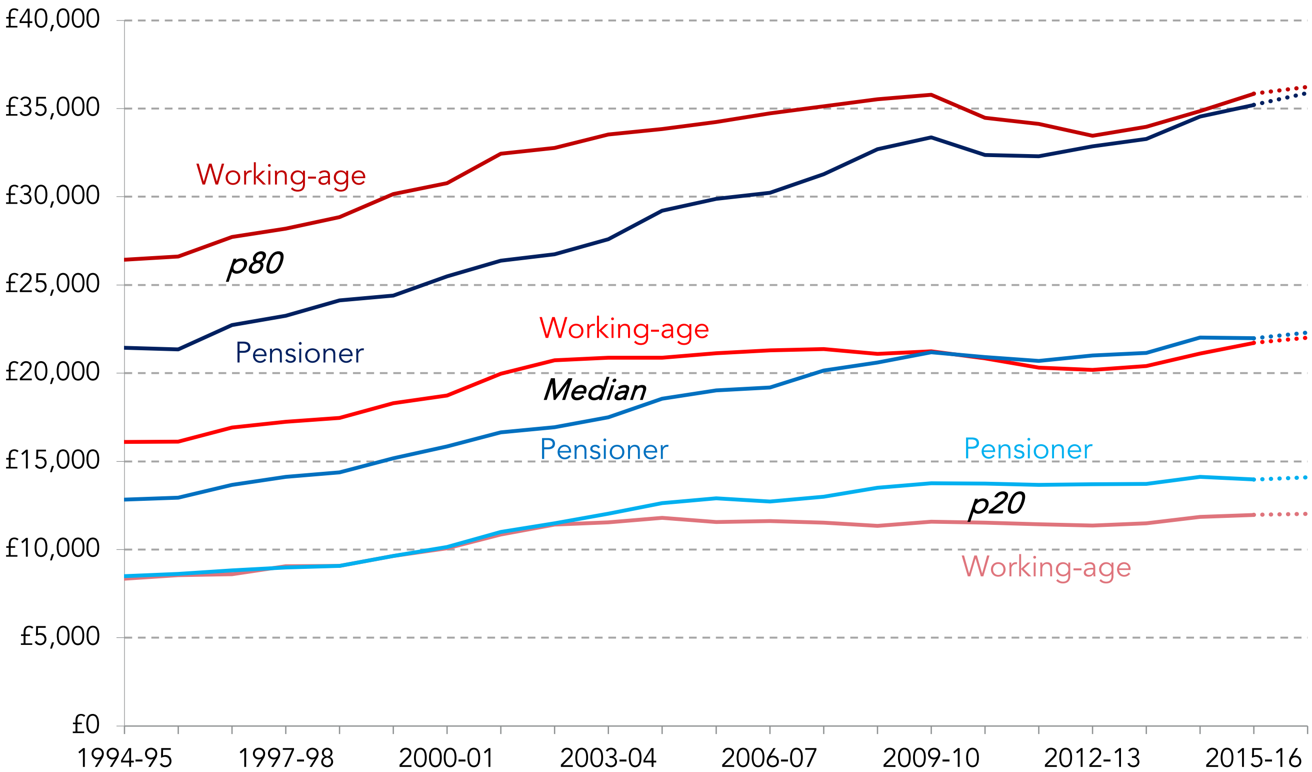
On either measure, typical pensioner incomes have increased substantially since the mid-1990s. It is worth emphasising that this is a cause for celebration. At the turn of the century pensioner incomes were too low and pensioner poverty was too high. What should concern us is not so much the gap between pensioner and working-age households, but that it has emerged because of the stark underperformance – indeed near stagnation – of working-age incomes.

Pensioners now typically have higher incomes than non-pensioners

The result of this decade-and-a-half of strong income growth for pensioners and weaker income growth for the rest of the population is that in 2011-12 typical pensioner AHC income surpassed that of the typical non-pensioner for the first time. Figure 28 shows how this situation has persisted since then, despite relatively strong growth over the past few years for those of working-age. The difference in typical income is small: our nowcast for 2016-17 suggests that typical pensioner AHC incomes stand at £22,300, compared to £22,000 for those of working-age. And it is worth noting that pensioner income growth has noticeably slowed in recent years. Box 1 discusses the extent to which this most recent experience might reflect stalling progress for pensioners.

Figure 28: Pensioner incomes have overtaken those of non-pensioners – at least at low and middle incomes

Real-terms equivalised household disposable income after housing costs (2016-17 prices, CPI-AHC adjusted)



Notes: 2016-17 nowcast shown as dotted lines.

Source: RF analysis of DWP, *Households Below Average Income*; RF nowcast (see Annex for more details).

Box 1: Is pensioner income progress stalling?

Despite the very impressive gains of recent decades, there are emerging signs of a potential stalling of progress on pensioner income growth. As can be observed above, the 2015-16 outturn HBAI data shows weak (or negative) real income growth for pensioners. In addition the employment rate of the 65+ population has flattened off for both men and women,[1] ending a previous trend of rapid increases. There are, however, several reasons for caution in interpreting these trends.

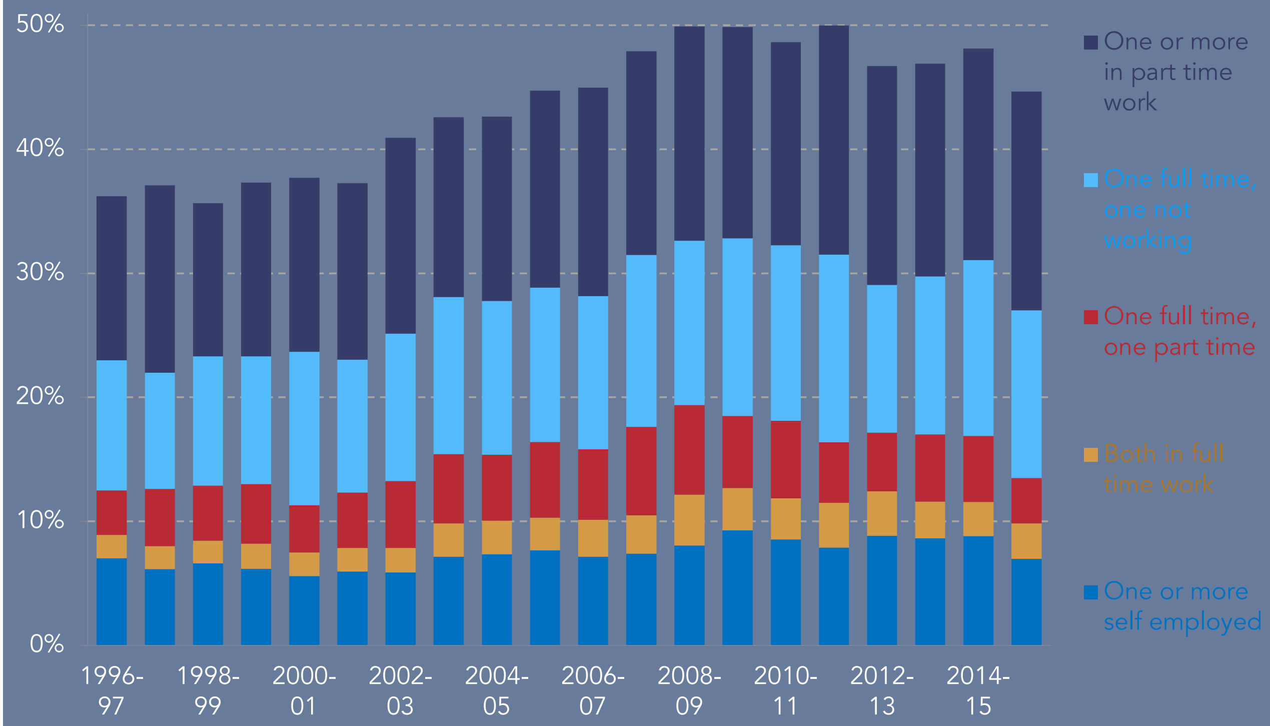
First, very little can be read into a single year's household income data for pensioners, given the degree of statistical uncertainty. Particularly strong growth in the 2014-15 data (4.1 per cent for the typical pensioner) may have led to reversion to the mean in the 2015-16 data (a 0.1 per cent fall).

Second, the age make-up of the 65+ age group may be changing more rapidly than usual. The large spike in births in 1947 means that in 2007 there was a spike in the number of 60 year olds; in 2012 a spike in 65 year olds; and in 2017 a spike in 70 year olds. As this cohort moves from work into early retirement and then later retirement, the change in age make-up may be large enough to affect statistics for older age groups as a whole.

Finally, the increases in the female state pension age from 60 at the start of 2010 to 64 in mid-2017 have had a significant impact on the make-up of the 'pensioner' population. The definition used in this report, following that used by DWP, is that anyone in a family containing anyone of state pension age or above falls within the pensioner population. As this is not synonymous with 'retired', we have described in a previous report how employment has been an important part of the pensioner income story.[2] Previously the population of pensioner families included any households containing a woman aged 60 or above, many of whom were still in work. With the raising of the state pension age, the average age of people in pensioner couples has risen too. Since this process began, the proportion of pensioner families with someone in work has been falling – especially pensioner couples with both partners age 70 or younger, as shown in Figure 29. This removal of some younger, working households from the 'pensioner' population has an effect on typical incomes, and should be borne in mind when discussing recent – and future – pensioner and non-pensioner income trends

Figure 29: **Increases in the female state pension age may have reduced the number of working 'pensioner' couples**

Family employment statuses of pensioner couples where both are age 70 or under



Source: RF analysis of DWP, *Households Below Average Income*

[1] ONS, Labour Market Statistics, Table A05

[2] A Corlett, As time goes by: shifting incomes and inequality between and within generations, Resolution Foundation, February 2017

Looking beyond the median, Figure 28 also shows experiences at different points in the income distribution. It shows that at the 20th percentile (the point in the distribution at which an individual has higher income than just 20 per cent of the population) lower income working-age households have fallen behind relative to lower income pensioners. Until 2002-03 the incomes of these two groups moved in step, but since then a persistent gap has opened up. In contrast, higher income (80th percentile) working-age households are still better off than their higher income pensioner household peers.

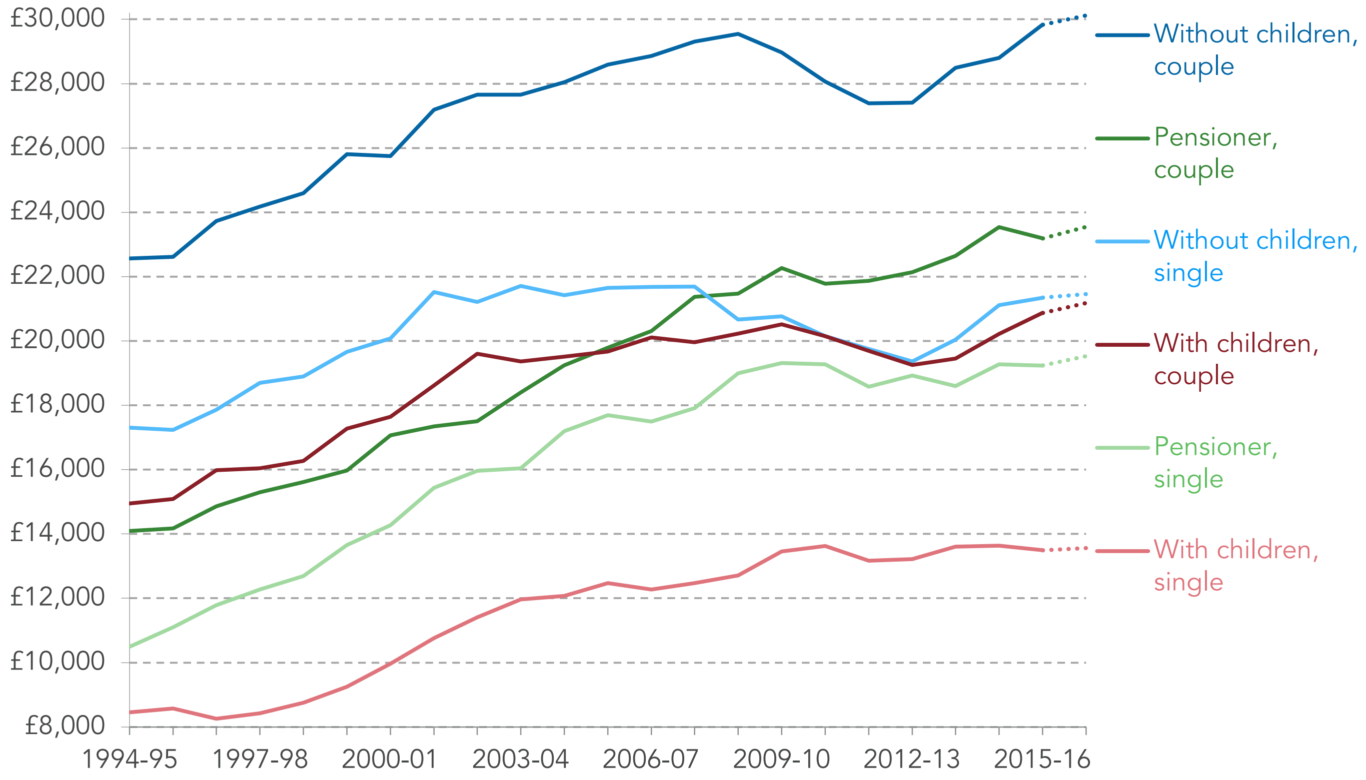
Stepping back from the past couple of decades, the changing living standards fortunes of pensioners and non-pensioners appear to reflect a longer-term trend. As previous Resolution Foundation work has shown, in 1961 almost half of all pensioners were in the bottom fifth of the income distribution (after housing costs) whereas it is now the case that the majority are in the top half of the income distribution.[25]

A comparison of income growth between these two broad age groups may, however, miss granular trends for sub-sections of the working-age population – so it is these that we now focus on.

Households with children, and younger working-age households have the lowest incomes

Figure 30: Family type is an important determinant of living standards and of recent income growth

Real-terms median equivalised household disposable income after housing costs (2016-17 prices, CPI-AHC adjusted)



Notes: 2016-17 nowcast shown as dotted lines.

Source: RF analysis of DWP, *Households Below Average Income*; RF nowcast (see Annex for more details).

[25] A Corlett, As time goes by: shifting incomes and inequality between and within generations, Resolution Foundation, February 2017

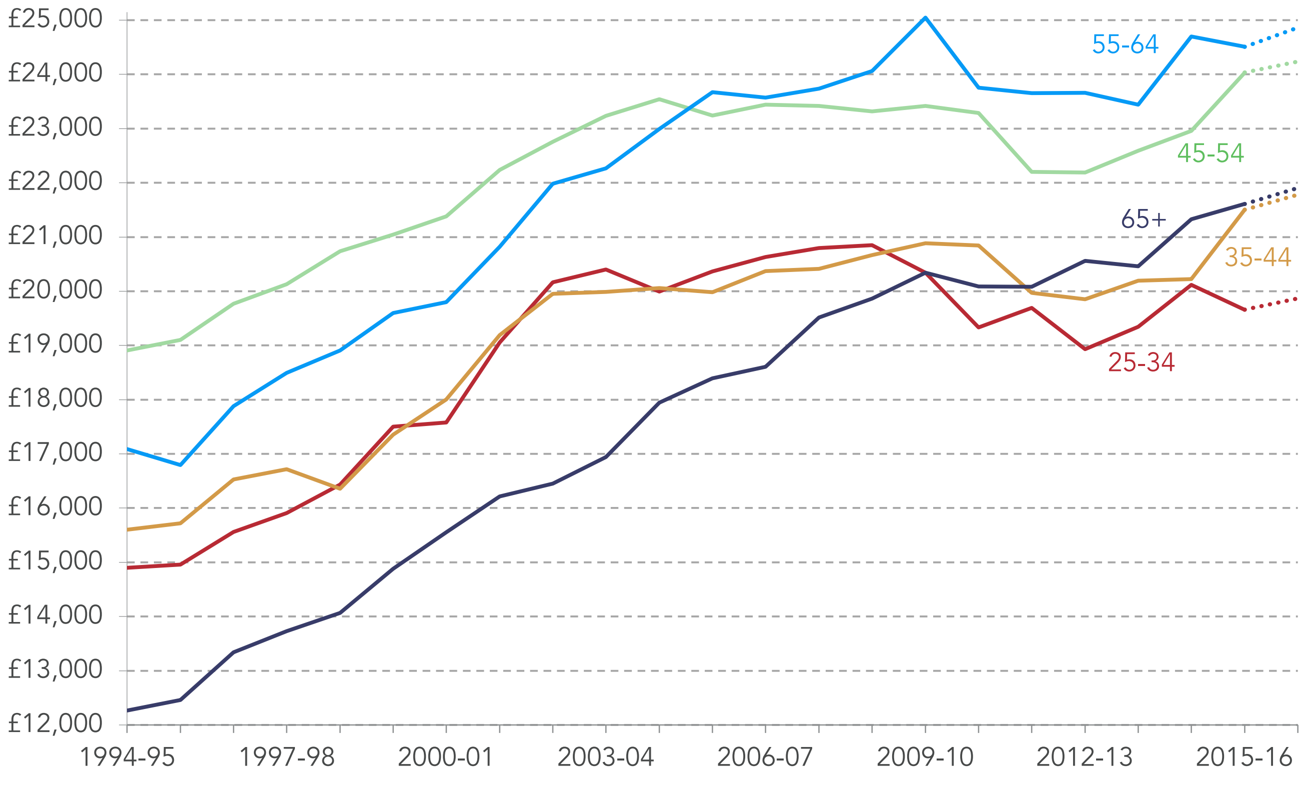
Single parent families have the lowest typical AHC income (£13,600 in our 2016-17 nowcast) and couples without children have the highest typical income (£30,100). As shown in Figure 30, between these two extremes the annual incomes of other family types are all clustered around £20,000-£25,000.

While non-definitive, our 2016-17 nowcast suggests that median incomes among single parent families have grown very weakly over the past year. This follows a number of years of stagnation for this group and means that the typical equivalised income in single parent families has only increased by 1 per cent since 2009-10. This stagnation has coincided with large increases in employment rates for single parents in recent years[26] – something which on its own would have acted to boost incomes – but also real-terms falls in the value of a number of benefits for working-age families which single parents in particular tend to be supported by. It seems that this latter effect has cancelled out the former.

As well as single parents, single individuals of working-age without children have fared relatively badly of late. This group was the most affected by the slowdown in income growth in the mid-2000s and – despite some improvement in recent years – typical income among single adults remains lower today than it was in 2001-02.

Figure 31: The typical household incomes of young adults are below where they were in 2002-03

Real-terms median equivalised household disposable income after housing costs (2016-17 prices, CPI-AHC adjusted)



Notes: 2016-17 nowcast shown as dotted lines.

Source: RF analysis of DWP, *Households Below Average Income*; RF nowcast (see Annex for more details).

[26] L Gardiner & P Gregg, *The road to full employment: What the journey looks like and how to make progress*, Resolution Foundation, March 2016

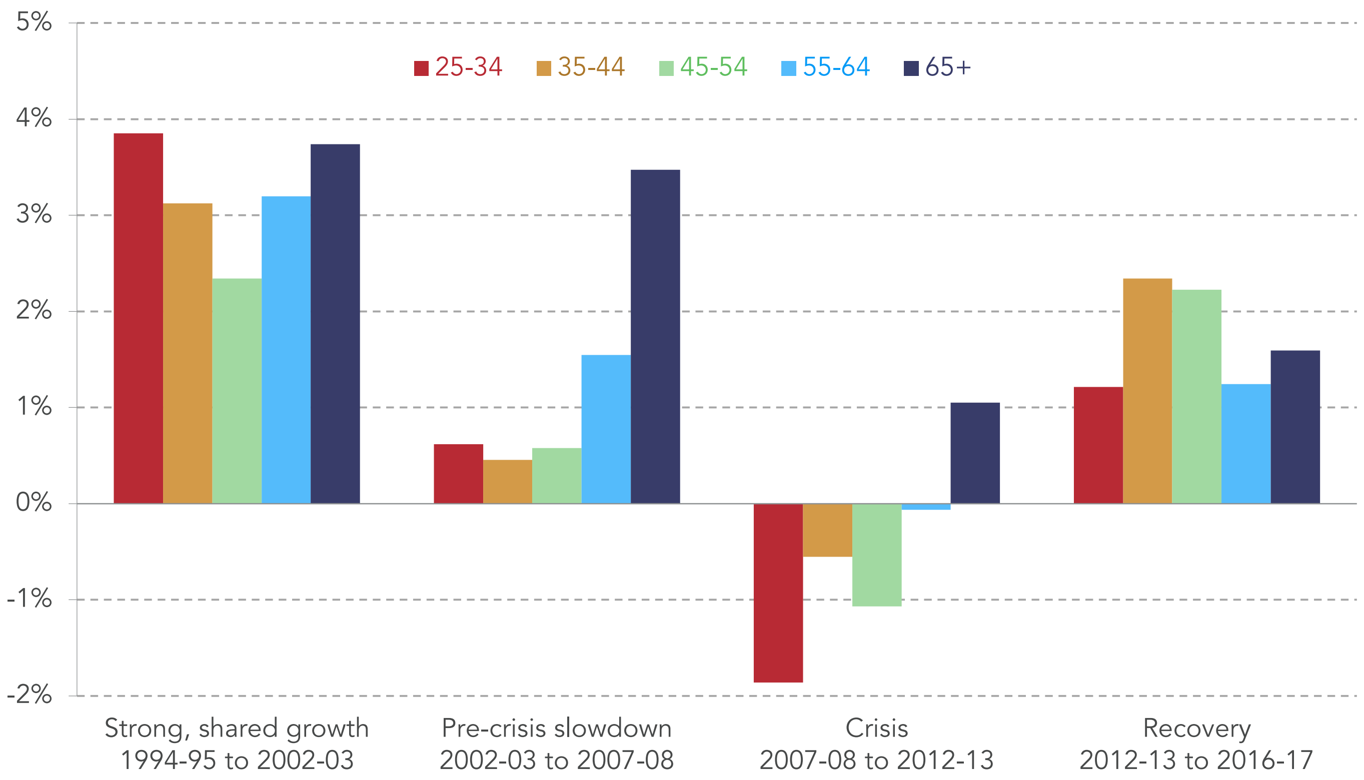
A similar story is evident for younger groups more generally. Ignoring family type, but instead looking at the age of the "household reference person" in each family, Figure 31 shows that typical household incomes for 25 to 34 year-olds have performed especially poorly post-crisis. Year-to-year changes are somewhat volatile but, notwithstanding a modest rise for this age group over the course of 2016-17 in our nowcast, the typical 25 to 34 year-old appears no better off today than in 2002-03. In comparison, typical incomes for all other age groups are now above, or very near, their pre-recession peaks.

These post-crisis trends are likely to be associated with the fact that younger workers experienced the biggest pay squeeze of any age group in recent years. Between 2009 and 2014 the typical pay of someone aged 22 to 29 fell by almost 14 per cent, significantly more than the fall experienced by older age groups.[27] These trends are compounded by the fact that growth in typical AHC income among younger groups struggled even *before* the crisis took hold. A large factor in this pre-crisis slowdown was the impact of rising housing costs and declining home ownership.

In comparison, Figure 31 also shows how substantial the income gains for those aged 65 and above have been over the past two decades – albeit from a low base. In the mid-1990s, the typical income for this group was £2,600 lower than for those aged 25-34. It is now £2,000 higher.

Figure 32: Income growth in recent time periods has varied considerably depending on age

Average real-terms annual growth in median equivalised disposable household income after housing costs (CPI-AHC adjusted)



Source: RF analysis of DWP, *Households Below Average Income*; RF nowcast (see Annex for more details).

This reversal of fortunes is made clearer still if we split income growth into four time periods (as first introduced in Section 3). Since the mid-1990s, the UK has experienced eight years of

[27] L Gardiner, "Five things we learned from today's earnings figures", *Resolution Foundation blog*, 26 October 2016

strong income growth (1994-95 to 2002-03), followed by a five year slowdown in incomes for working-age households (2002-03 to 2007-08), an unprecedented five year squeeze on incomes (2007-08 to 2012-13) and four years of tepid – and now quite fragile – recovery (2012-13 to 2016-17) in household incomes. The average annual growth in typical household incomes in each age band in each of these four periods is shown in Figure 32.

The strong income growth of the late-1990s and early-2000s was broadly shared across all age groups. But from 2002-03, older families enjoyed continued strong income growth (averaging 3.5 per cent a year) even as increases in incomes for most other age groups virtually ground to a halt. For example, although it was little noticed at the time, we now know that income growth collapsed for 25 to 34 year olds between 2002-03 and 2007-08; falling from almost 4 per cent a year pre-2002-03 to 0.6 per cent in the years immediately preceding the crisis.

Following this slowdown, typical incomes in the 25 to 34 age band shrunk by an average of 2 per cent a year during the big squeeze (the largest fall of any age group) and have only grown by an average of 1.2 per cent a year during the recent recovery (the smallest increase of any age group).

Of course, this picture isn't necessarily reflective of individual experience. Someone aged 30 in 2000 (who would be found in the red bar on the far left of Figure 32) will now be aged 47 (and in the light blue bar on the right-hand side of Figure 32). But, it does show that the UK economy has been consistently failing to deliver rising incomes for younger households for a prolonged period of time.

This matters. It reflects the fact that young people have been more likely to miss out on the large pay rises usually associated with progression in employment early on in careers.[28] It means that they will have found it more difficult to accumulate wealth, particularly housing wealth. And it – clearly – has important implications for the political sphere. The Resolution Foundation's Inter-generational Commission is now part-way through an in-depth investigation into the drivers and consequences of the diverging experiences of different generations (see the Commission's website for more detail).[29]

But it is not just the experiences of different age groups that have diverged. Varying changes in living standards between those in higher and lower incomes, regardless of age, are just as significant; it is to these that Section 5 will now turn.

[28] L Gardiner & P Gregg, *Study, work, progress, repeat?: How and why pay and progression outcomes have differed across cohorts*, Resolution Foundation, February 2017

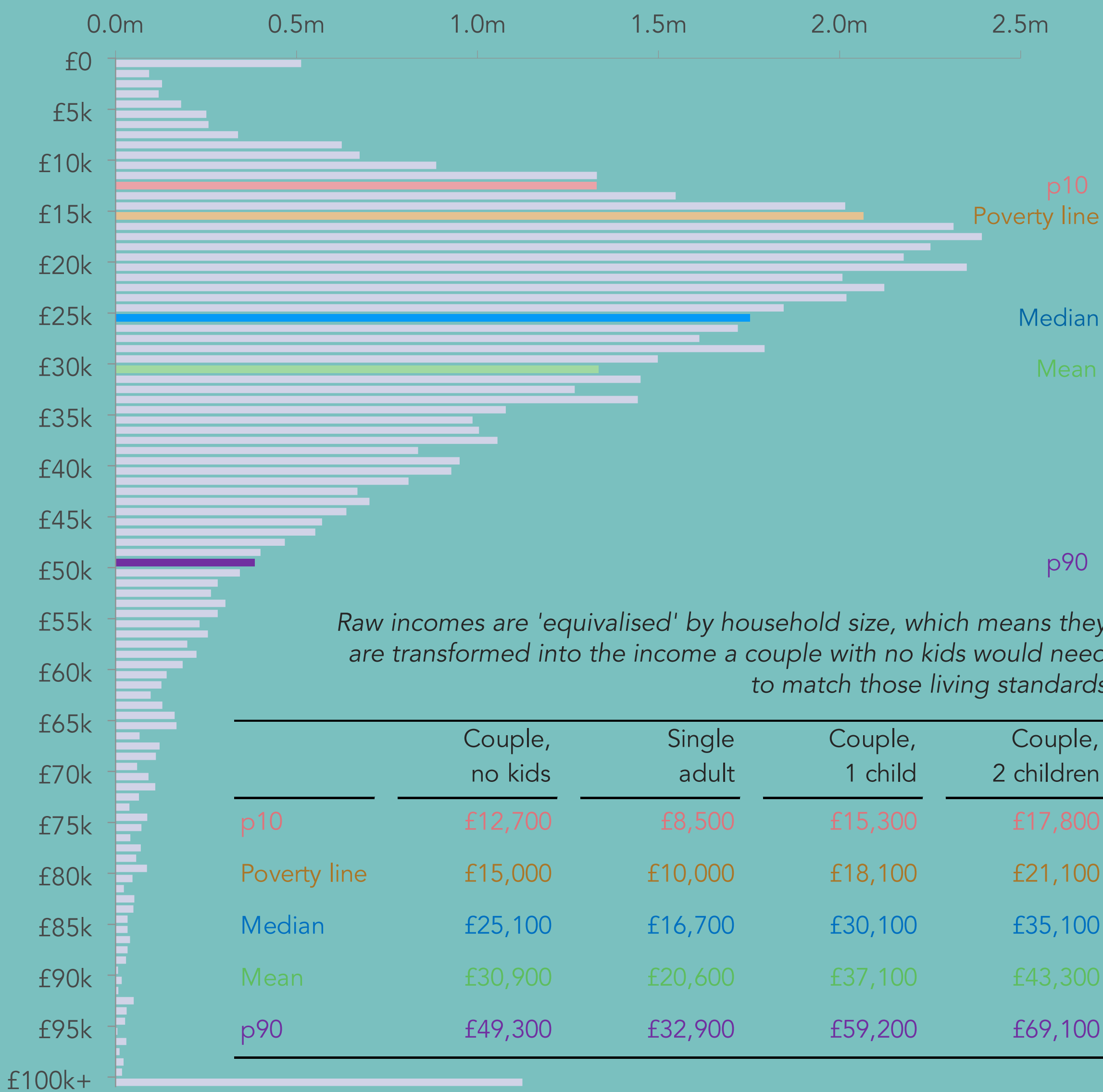
[29] http://www.intergencommission.org/

Section 5

Fair shares: the distribution of income and growth

The income distribution in 2015-16

Population by equivalised household disposable income, before housing costs



Raw incomes are 'equivalised' by household size, which means they are transformed into the income a couple with no kids would need to match those living standards

	Couple, no kids	Single adult	Couple, 1 child	Couple, 2 children
p10	£12,700	£8,500	£15,300	£17,800
Poverty line	£15,000	£10,000	£18,100	£21,100
Median	£25,100	£16,700	£30,100	£35,100
Mean	£30,900	£20,600	£37,100	£43,300
p90	£49,300	£32,900	£59,200	£69,100

Notes: 10% of the population have incomes below 'p10' and 10% have incomes above 'p90'

Source: Resolution Foundation analysis of *Households Below Average Income*

Section 5

Fair shares: the distribution of income and growth

Having shown in the previous section that income growth has slowed in 2016-17, we now show using our nowcast that this has occurred across a broad swathe of the income distribution. At the bottom of the non-pensioner income distribution growth has been especially weak – despite the positive trends in employment and the progressivity of pay growth explored earlier.

One implication is that the UK has likely failed in 2016-17 to meet an international Sustainable Development Goal for income growth of the bottom 40 per cent to be above average. More broadly, inequality is more likely than not to have risen slightly in 2016-17.

Exploring the outturn (2015-16) data in more detail, this section also sets out how the share of disposable income going to the richest one per cent has increased, returning to near-record levels, despite changes in the tax system. The importance of the top one per cent over a longer time period is also revealed in terms of its impact on overall measures of inequality – and we set out how this has played a role (among other factors) in disagreements about recent UK inequality trends. Section 6 then focuses in on the low to middle income working group who have struggled financially for some time.

The slowdown in income growth experienced in 2016-17 has been especially marked towards the bottom of the income distribution

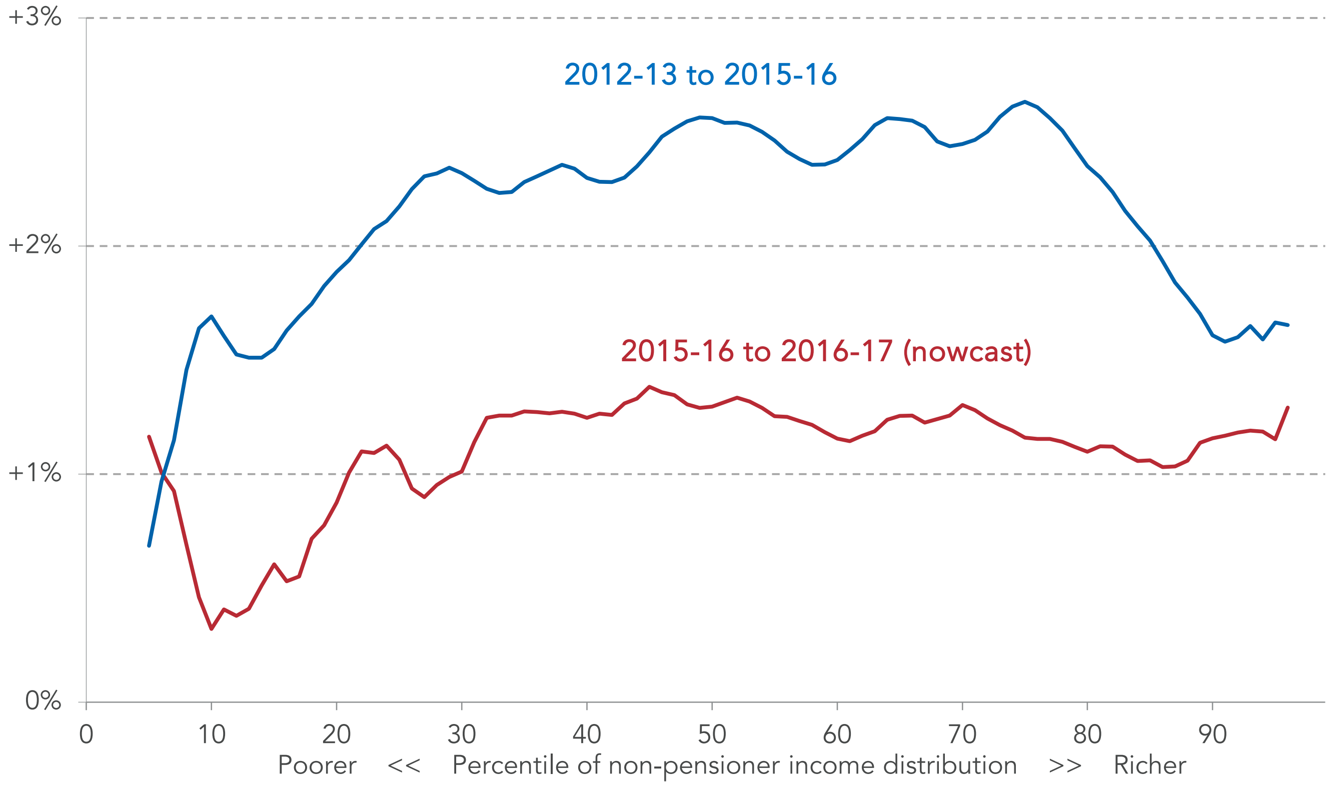
In Section 3 we set out growth in median and mean household incomes over recent years, identifying an apparent slowdown in this growth over the last 12 months. Taken together, these two points can tell us something about the extent to which growth is shared across households. But they still leave much unsaid, with no detail on what is happening towards the bottom and top of the income distribution for instance.

Figure 33 rectifies this, by setting out real income growth rates across the non-pensioner household income distribution.[30] We compare the early recovery period (from 2012-13 to 2015-16) with developments in 2016-17, and two things stand out. First, growth over the last year was slower at nearly all points of the income distribution than was the case over the previous three years. Secondly, the *shape* of growth appears to have changed in 2016-17. Whereas income growth was strongest across the middle of the distribution between 2012-13 and 2015-16, growth last year was relatively even across the top two-thirds of the income distribution and markedly weaker for those on low to middle incomes.

[30] Here we exclude pensioners and those with the top incomes: two groups where labour market data and the tax and benefit system are insufficient for nowcasting incomes. We also remove the very lowest incomes from Figure 33 due to volatility in annual growth rates.

Figure 33: Income growth slowed in 2016-17, with low income non-pensioners experiencing the weakest gains

Average annual real-terms growth in after housing costs income (CPI-AHC adjusted)



Notes: Results are smoothed and the extremes of the distribution are removed.

Source: RF analysis of *Households Below Average Income* and RF nowcast (see Annex for more details).

As ever, it should be stressed that these 2016-17 figures are a 'nowcast' rather than outturn data (see the Annex for more details). And, even in periods where outturn data is available, the nature of survey data means that it is the overall pattern that should be the focus of attention rather than minor peaks and troughs. Nonetheless, the pattern of slower income growth at the bottom of the distribution is clear, with implications for headline inequality metrics. Indeed, one by-product of the given pattern is that the UK may have failed to meet a new international commitment on inequality, as Box 2 explores.

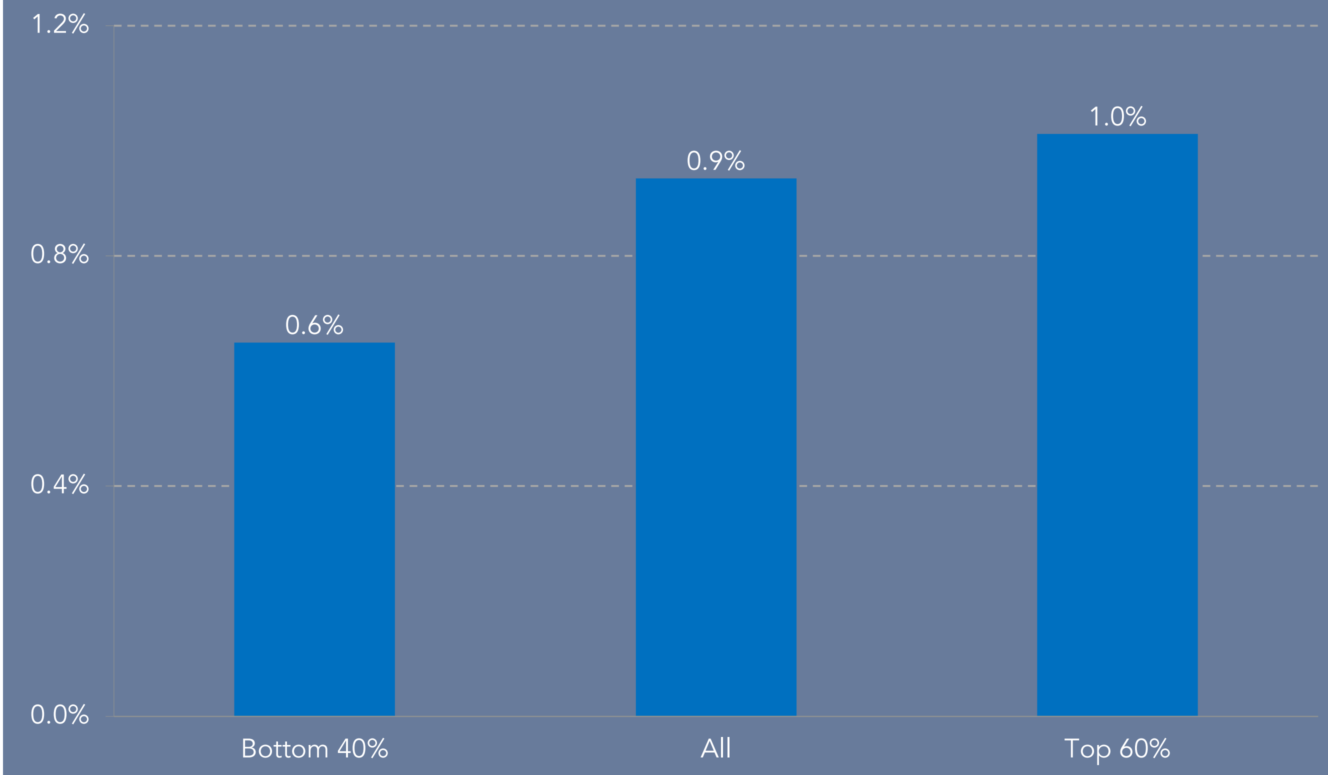
Box 2: The Sustainable Development Goals

In September 2015, the UK committed itself to implementing the 2030 Sustainable Development Goals at home as well as overseas.[1] Goal 10 is to "reduce inequality within and among countries", and this includes a specific goal (target 10.1) to "progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average."

Our nowcast suggests that the UK has failed to meet this aim in 2016-17, the first year in which the new goals apply, with incomes for the bottom 40 per cent growing more slowly than those of the top 60 per cent (Figure 34).

Figure 34: **The UK has likely failed to meet its Sustainable Development Goal on inequality in 2016-17**

Growth in mean real equivalised disposable incomes, 2015-16 to 2016-17



Source: RF nowcast (see Annex for more details).

Our previous forecasts for the period up to 2020-21 suggest that the goal will – on current policy – continue to be missed for years to come as benefit cuts weigh heavily on the incomes of poorer households.[2] This comes despite the Prime Minister's intention for the UK to be "at the forefront of delivering [the SDGs]".[3]

[1] House of Commons Environmental Audit Committee, *Sustainable Development Goals in the UK*, March 2017

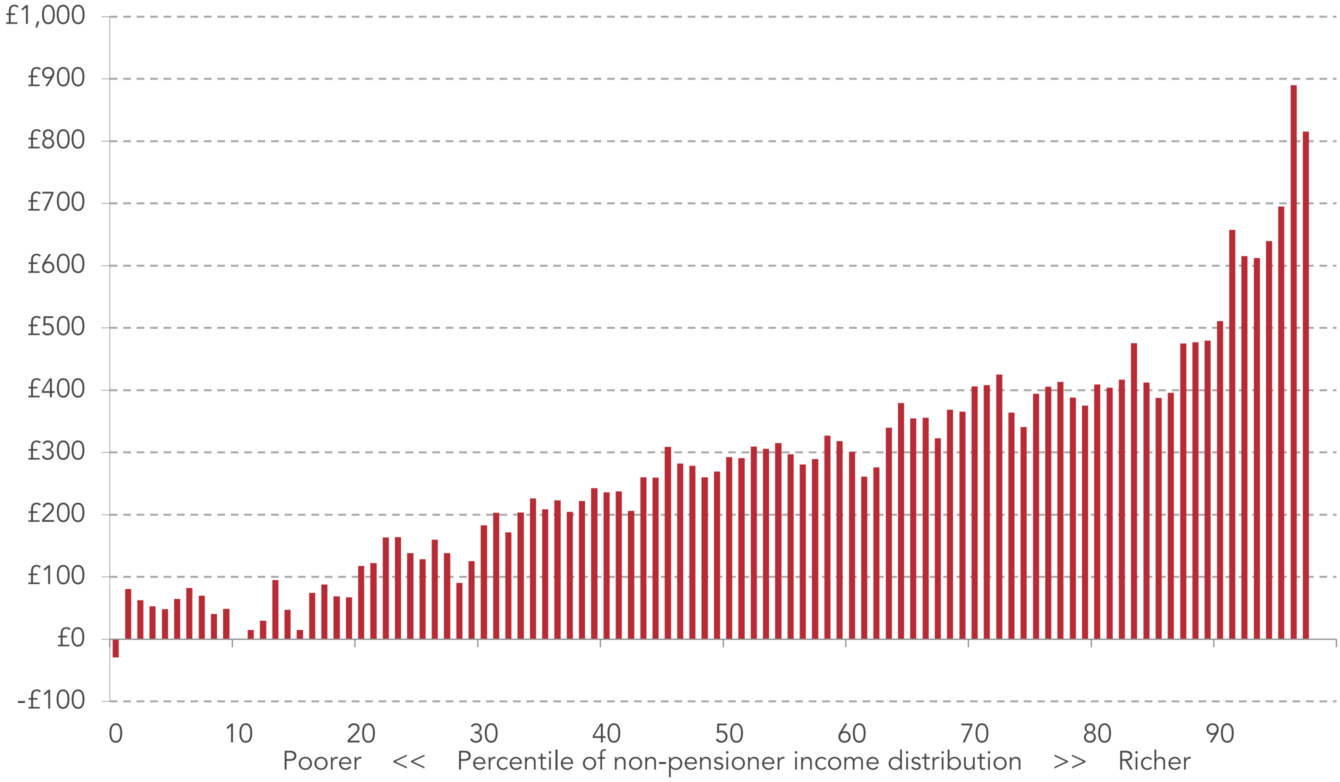
[2] A Corlett & S Clarke, *Living Standards 2017: The past, present and possible future of UK incomes*, Resolution Foundation, February 2017

[3] Letter from the Prime Minister to 84 companies, February 2017

Figure 33 showed how incomes have grown in relative (proportional) terms, with a one per cent income increase for someone in a low income family assumed to be in one sense equivalent to a one per cent income increase for those with higher incomes. But it is also illuminating to consider absolute income growth, as Figure 35 does. Using this approach, the low growth at bottom of the distribution is even clearer. Incomes look to have grown relatively little in 2016-17 across the bottom third of non-pensioner households, whereas median income increased by around £300 and gains near the top of the distribution (but still excluding the very top) averaged somewhere between £600 and £900.

Figure 35: In absolute terms, the biggest gains in our 2016-17 nowcast go to those with higher incomes

Average annual real-terms growth in after housing costs income (CPI-AHC adjusted)



Notes: The top of the income distribution is removed from this analysis.

Source: RF nowcast (see Annex for more details).

The somewhat regressive pattern of growth in the two charts above – in relative as well as absolute terms – comes in spite of two positive tailwinds for lower income working-age households; both set out in Section 2. First, increases in employment and reductions in household worklessness are assumed to have had a progressive impact on incomes (in line with recent experience of employment growth). And second, the introduction and development of the National Living Wage (and prior National Minimum Wage increases) has meant that wage growth has been very progressive.

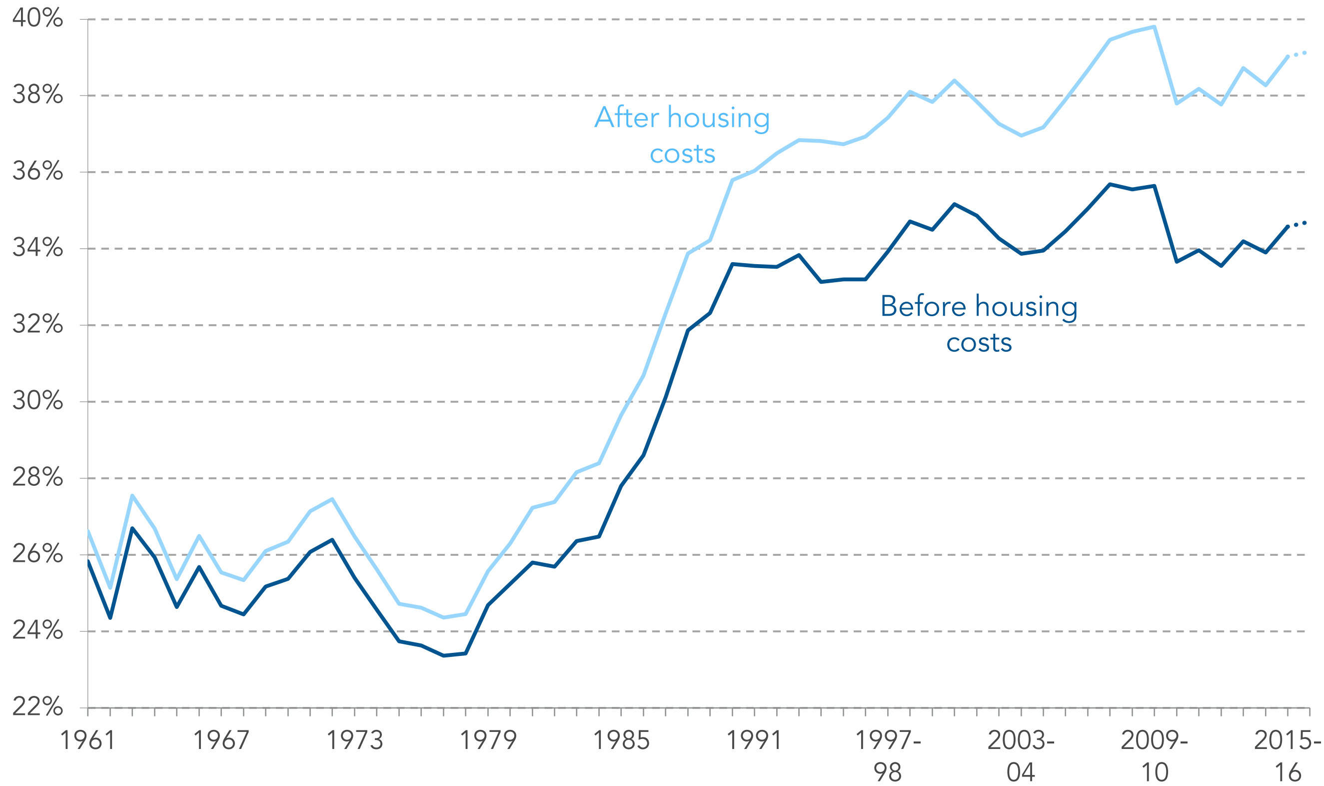
That growth has nonetheless been weaker for those towards the bottom of the income distribution reflects two things. First, low pay is not the same as low income; meaning increases in the wage floor do not necessarily map directly to gains for lower income households. Secondly – and perhaps more importantly – public policy on taxes and benefits has weighed heavily on those at the bottom of the distribution, with the working-age benefit cuts we detailed in Section 2 being concentrated among low to middle income families.

Having fallen immediately after the financial crisis, income inequality appears to be rising slightly

What does this shape of income growth mean for inequality in 2016-17? Figure 36 sets out the Gini measure of inequality since 1961 (where 100 per cent means complete inequality and 0 per cent means perfect equality).[31] Before accounting for housing costs, inequality has been broadly flat since the remarkable increases of the 1980s. However, the outturn data for 2015-16 did produce a small increase, lifting inequality to its highest level since 2009-10. The results of our nowcast imply a further small increase in 2016-17.

Figure 36: Inequality has been rising since 2010-11

Gini inequality measures for equivalised disposable income



Source: DWP and IFS, *Households Below Average Income*; RF nowcast (see Annex for more details).

Once housing costs are accounted for (in part to recognise the difference that home ownership makes to disposable income), we observe a steadier upward trend in inequality over the past 25 years. As with the before housing cost measure, the Gini fell sharply immediately following the financial crisis, but the measure has been tracking upwards again since then. Our nowcast suggests that inequality after housing costs was higher in 2016-17 than in all the years since 1961 except for the period from 2007-08 to 2009-10.

[31] In this analysis we switch back to looking at the entire UK population, bringing pensioner households back into the sample.

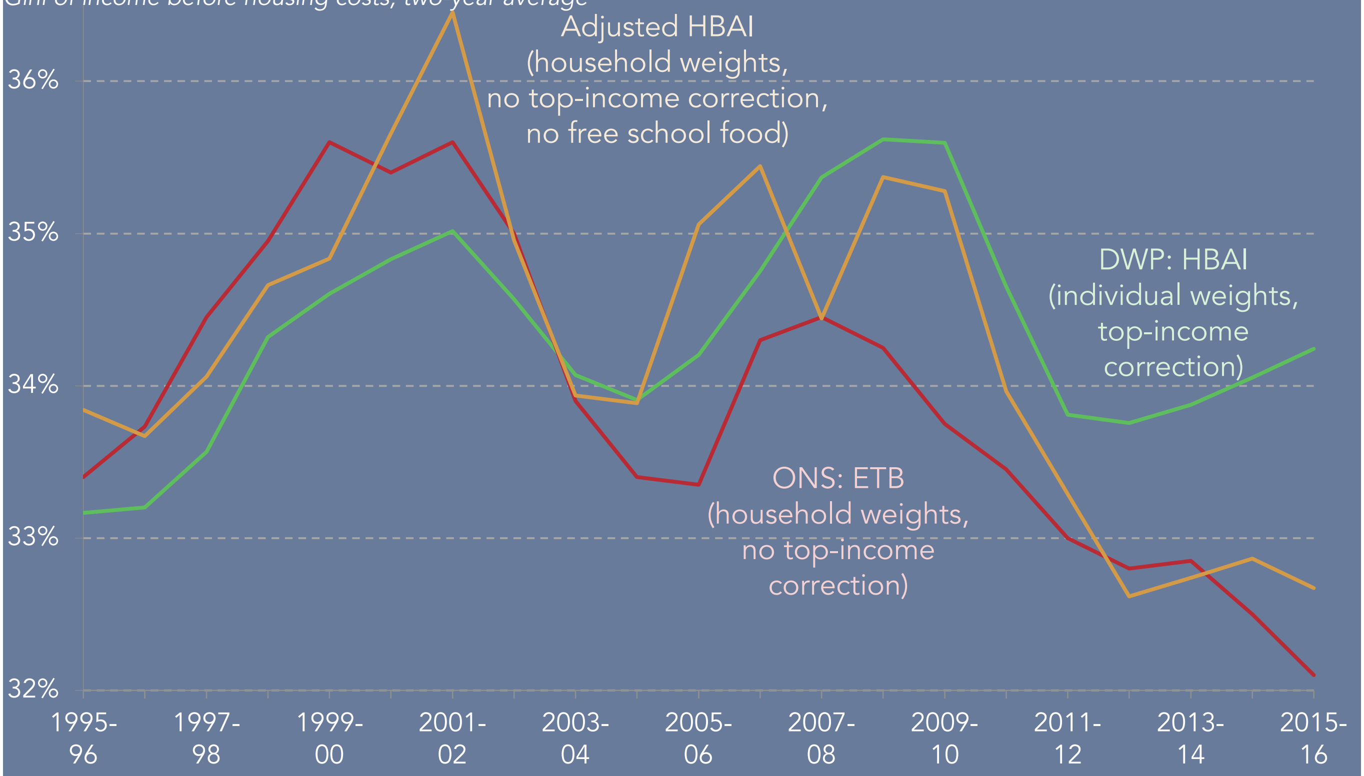
The picture set out in Figure 18 contrasts to some extent with alternative ONS household income data, which put inequality in 2015-16 at levels last recorded in 1986. The reasons for this apparent disagreement – and why the data presented above should be considered a better source – are explored in Box 3. Central to this is recognising the importance of the top one per cent.

Box 3: Alternative data on inequality

This report primarily uses income data from the DWP's *Households Below Average Income* (HBAI) dataset, which focuses on capturing poverty and trends in inequality. The ONS produces separate data, based on a different survey, in its *Effects of Taxes and Benefits on Household Incomes* (ETB) release. According to this data, disposable (before housing costs) income inequality in 2015-16 was lower than at any time since 1986, following repeated falls since 1990.

Figure 37: **HBAI and ETB have disagreed about inequality trends, but can be reconciled: UK**

Gini of income before housing costs, two-year average



Source: ONS, Effect *of Taxes and Benefits on Household Incomes;* RF analysis of DWP, *Households Below Average Income*

Both outputs are classed as National Statistics, but the HBAI is the preferred measure for measuring living standards. One advantage of the HBAI is that it has a sample size of around 19,000 households compared to around 5,000 in the ETB. HBAI also allows analysis to be done before or after housing costs, whereas ETB takes no account of housing. But two further differences are particularly important in explaining their differing inequality results.

First, HBAI is created not just from a household survey but is supplemented using HMRC administrative data on the numbers and incomes of the "very rich" (the *Survey of Personal Incomes*). This is done to give more accurate results for richer households, and reduce statistical volatility among this small but important group (though even this adjustment is in turn believed to underestimate top incomes).[1] ETB is not supplemented in this way.

Second, both ETB and HBAI calculate incomes on a household level, on an assumption that resources are shared within households, with incomes 'equivalised' to reflect the number of people. However, when subsequently calculating inequality or average incomes, the two differ in how much weight they give to households of different sizes. ETB essentially calculates inequality *between households*, taking no account of how many people live in each household. HBAI calculates inequality *between individuals*.

To give a very simple example, imagine the population consisted of only five people in three households: a low income household made up of three people, a middle income household with one person, and a high income household with one person. Should the 'median income' then be the income of the middle – i.e. second – household? Or that of the middle – i.e. third – person, who would be one of those in the low income household? And if the low income household instead contained only one person, or instead 10 people, should that change our measured level of inequality or not? Both are defensible, but the academic literature favours individual weighting "as it does not assume that people living in larger households are less important than people living in smaller households, when assessing the income distribution".[2]

Figure 37 shows the divergent inequality trends of ETB and HBAI. It also shows how the two can be reconciled if we take the – unwelcome but illustrative – steps of removing the HBAI's top income accuracy adjustments and switching to household weights. The implication is that it is these important methodological differences that primarily explain the different inequality outcomes and mean that the HBAI should be the preferred measure.

In the interests of avoiding public confusion, it is to be hoped that these two surveys can be brought into closer alignment. This could mean ETB making use of administrative data to improve its coverage of top incomes (helped by the recent *Digital Economy Act*), and by a new consideration of weights and other methodological differences between the surveys.

[1] R Burkhauser, N Hérault, S Jenkins and R Wilkins, *What Has Been Happening to UK Income Inequality since the Mid-1990s? Answers from Reconciled and Combined Household Survey and Tax Return Data*, Institute for the Study of Labor (IZA), February 2016

[2] D. Papadimitriou (editor), *The Distributional Effects of Government Spending and Taxation*, May 2006

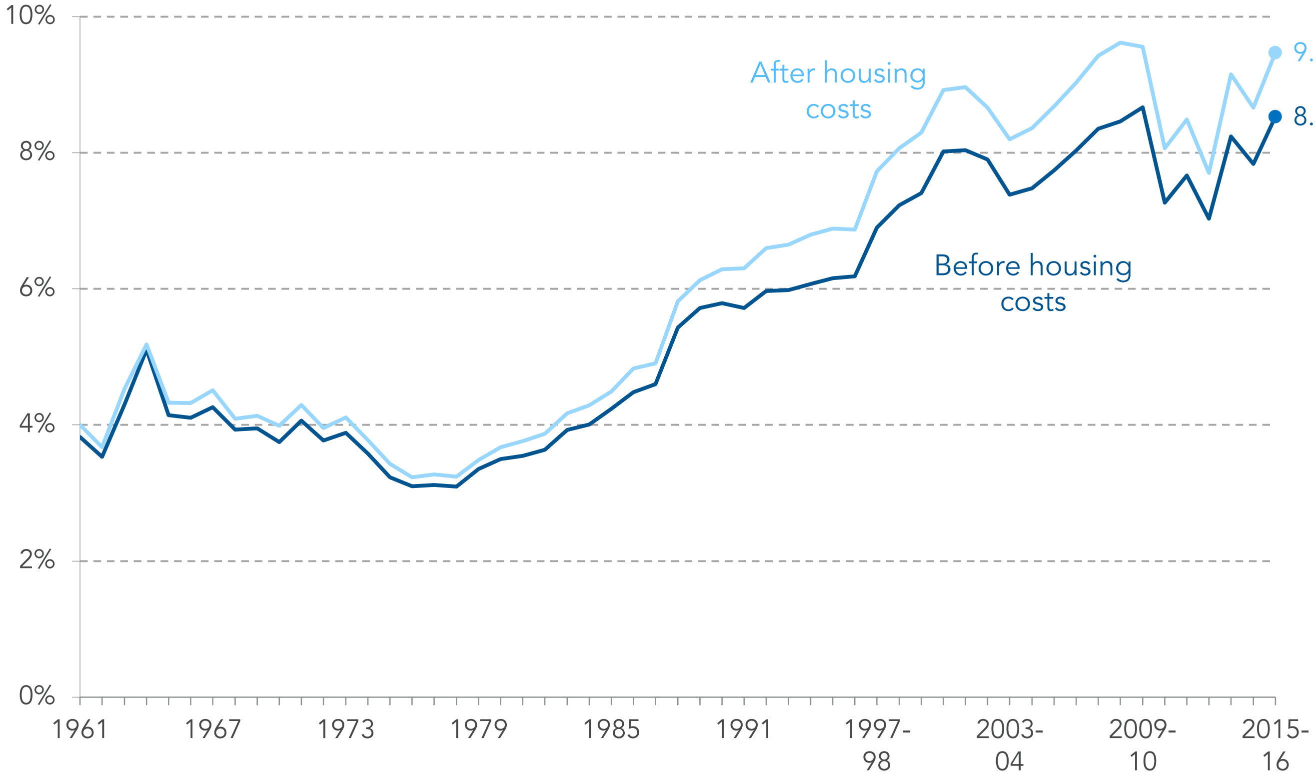
The top one per cent's share of income is at a near-record high

Although weak growth at the bottom of the distribution remains a pressing concern, an important part of the inequality picture over the longer term has centred around trends in income growth at the very top of the distribution. Figure 38 sets out the share of disposable income flowing to the top one per cent of the population[32] on both a before housing cost and after housing cost basis. It highlights the volatility of incomes in this part of the distribution around the economic cycle: the share accounted for by the top one per cent fell significantly between 2009-10 and 2010-11, but has since been rebounding. It should be noted that some of the post-crisis volatility – and indeed some of the overall Gini fluctuation seen above – also reflects the shifting of income between years in reaction to the 2010-11 introduction of the additional (50p) rate of income tax and its subsequent lowering.

[32] Again this analysis covers the full population, including pensioner households.

Figure 38: The top one per cent of the population's share of disposable income is at a near-record high

Share of equivalised household disposable income flowing to the top one per cent of individuals



Notes: Figures for 1992 and 1993 are interpolated

Source: RF analysis of *Households Below Average Income*

The 2015-16[33] share of (before housing costs) income held by the top one per cent was – at 8.5 per cent – higher than in every year since 1961 except for 2009-10.[34] As with 2009-10, the income share of the top one per cent was elevated in 2015-16 due to tax planning, this time around changes to dividend taxation encouraging income to be brought forward into that year. As a result you might expect the top one per cent's income share to fall again in future years.

As discussed in Box 3, the importance of the top one per cent to inequality figures is a large part of why different surveys disagree about inequality trends – though there is also reason to think that even the most comprehensive of these currently underestimates the size and rise of top incomes.[35] To further demonstrate this, Figure 39 supplements the recent pattern of inequality (seen in Figure 35) with the Gini metric for the bottom 99 per cent of the population only. Excluding the top one per cent (and looking before housing costs), inequality has been less volatile and has fallen slightly over the past two decades rather than rising slightly. That is, all of the small increase in inequality since the mid-1990s is the result of faster growth for the top one per cent.

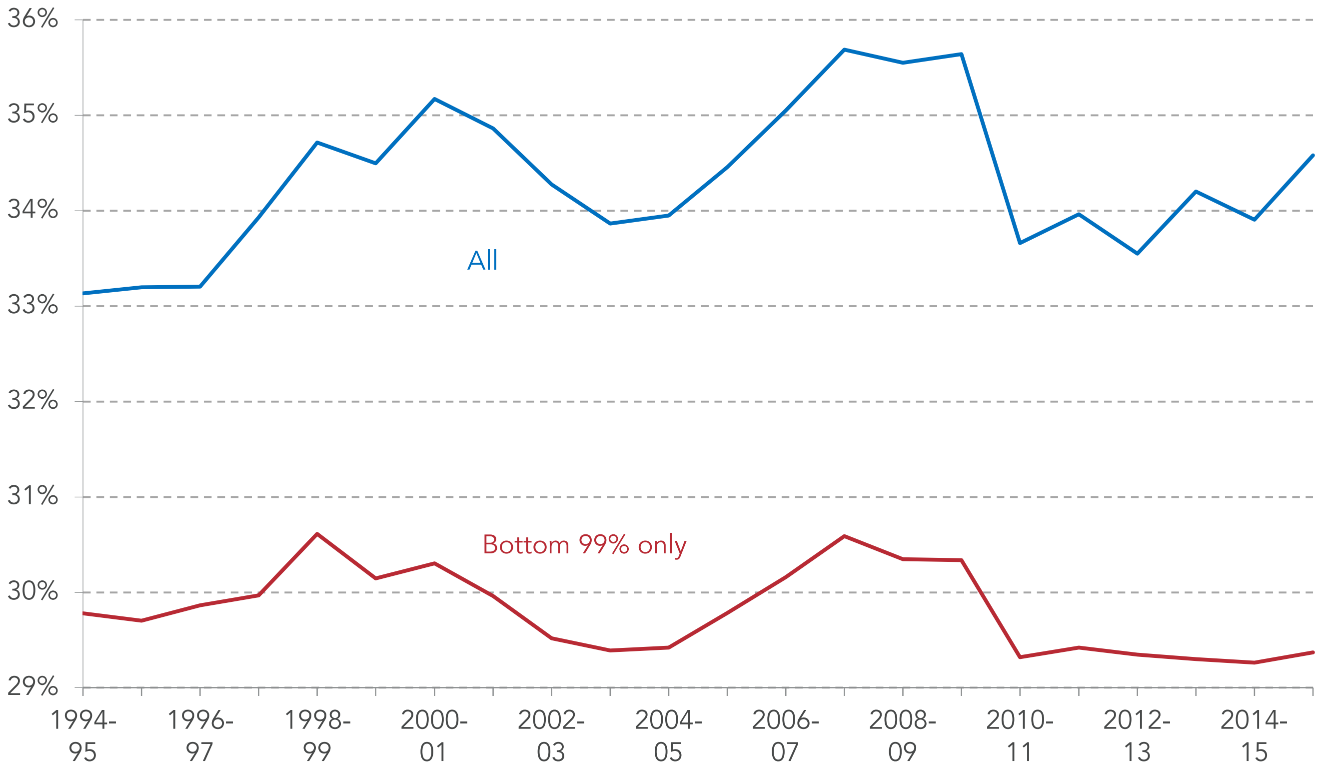
[33] We do not present any figures for the share of income held by the top one per cent in 2016-17 because our nowcast cannot produce sufficiently robust results for this unusual group.

[34] Separate data available at The Chartbook of Economic Inequality website might suggest that the top one per cent share trended downwards for many decades prior to 1961.

[35] R Burkhauser, N Hérault, S Jenkins and R Wilkins, *What Has Been Happening to UK Income Inequality since the Mid-1990s? Answers from Reconciled and Combined Household Survey and Tax Return Data*, Institute for the Study of Labor (IZA), February 2016

Figure 39: Inequality excluding the top one per cent has fallen slightly over the past two decades

Gini measure of inequality in equivalised disposable income, before housing costs



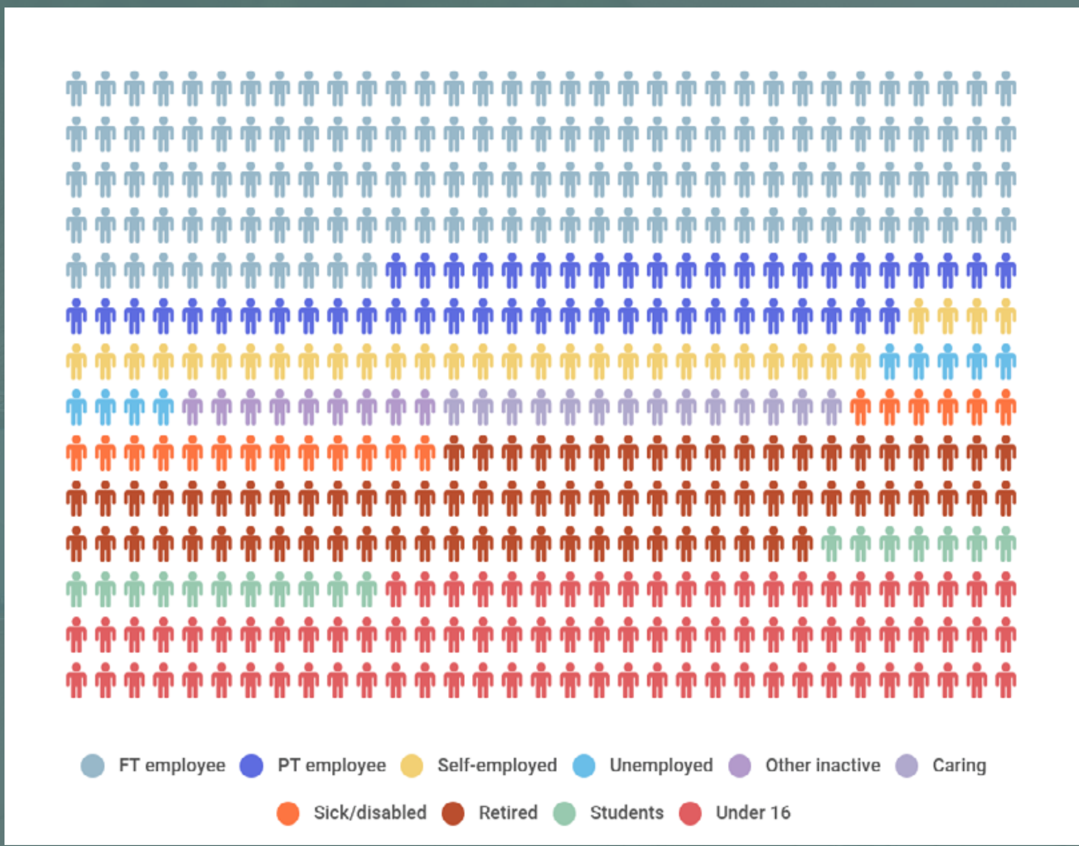
Source: DWP, *Households Below Average Income*; RF nowcast (see Annex for more details).

This is not to say that the post-1980s inequality story is entirely about the top one per cent – not least because inequality among the bottom 99 per cent after housing costs *has* risen slightly. The economic performance for those on low to middle incomes has been remarkably weak over the past 15 years, and as set out above has slowed again. The next section focuses on those large number of in-work singles and couples on low to middle incomes.

Section 6

Still squeezed: life on a low to middle income in 2015-16

The UK population in 2017 Q1 by employment status



Source: Resolution Foundation analysis of the *Labour Force Survey*

Section 6

Still squeezed: life on a low to middle income in 2015-16

In the last section we looked at how incomes have evolved in recent years across the distribution. Before moving on to consider differences by place in Section 7, we pause here to take a more detailed look at one specific part of the distribution: namely those families on low to middle incomes who form the core of the Resolution Foundation's work. We make extensive use of the outturn 2015-16 HBAI data in order to undertake a deep-dive into the lives and experiences of this group.

From a conceptual perspective, we have always defined this group as including those who are squeezed by the workings of the modern UK economy: they are in work but their earnings are relatively low. They may be in receipt of benefits but they are not reliant on state support.

Looking over the past two decades, we find that low to middle income living standards have stagnated since the early 2000s; income has remained flat and poverty has risen. This is despite the fact that the majority of low to middle income families contain at least one person in full-time work. Driving this are a number of factors discussed in previous sections of this report, including the squeeze on real wages since the financial crisis, rising housing costs and a reduction in state support.

Low to middle income families have equivalised incomes of £26,000 or less and are in work

While our conceptual definition of 'low to middle' has no hard and fast borders, for the purposes of analysis we are required to set up some statistical boundaries. In doing so, we apply three filters. First, we focus just on working-age families (reflecting the fact that lower income pensioner households face different challenges and options for support). Secondly, we drill down to the bottom half of the working-age income distribution, setting median equivalised net household BHC income as an upper boundary. In 2015-16 this equated to £26,000. Finally, we categorise the low to middle income group as only containing those in which at least one person is in work.

Families in which no one is in work are defined as being in the 'non-working (working-age)' group, while those in the top half of the distribution are categorised as 'higher income'. We can also separately identify pensioner families. More detail on our approach to identifying this group – including information on some small changes we have made to the definition for this and subsequent analyses – is provided in Box 4.

Box 4: Defining low to middle income families

Prior to the latest version of our living standards audit, we defined the low to middle income group on the basis of both their household income and their means-tested benefit receipt. Our updated definition is designed to deal with changes in the benefit system – most importantly the gradual introduction of Universal Credit – which are blurring the boundary between different forms of welfare payments.

We now define the low to middle income group using just their household income and whether or not any members of the family are in work. To define low to middle income families (i.e. a single person or couple and any dependent children) we first exclude all families that include a pensioner. Pensioner families face a very different set of challenges and policy needs. In particular the availability of the state pension and often the presence of private pension savings mean that it would be inappropriate to compare them with working-age families with the same income.

We then estimate the median equivalised household income, before housing costs, of the non-pensioner population. All those above this point are labelled as 'higher income' and those below it fall into the low to middle income group.

For those in the bottom half of the income distribution we then exclude all families in which no one is in work.[1] These are placed in our 'non-working' category. Many of these families have specific needs or face challenges that make it difficult for them to work and as a result their fortunes are often tied to the generosity of the benefits system.

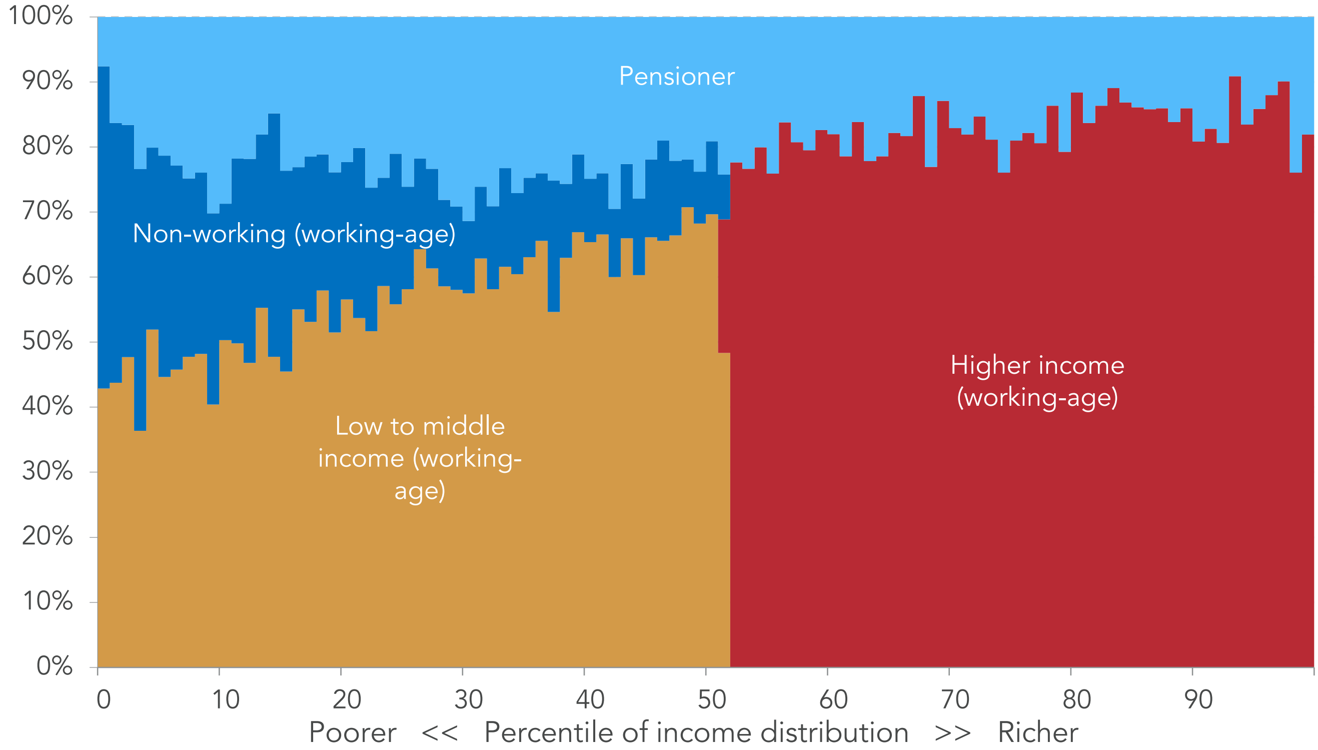
Although our approach tries to exhaustively categorise families, it should be noted that it of course glosses over many of the realities of family living. One important factor will be that some family units share households and so resources are likely to be pooled across different groups in our categorisation in some instances, for example in the case of an unemployed young adult living with their parents. In addition, it is important to recognise that people will of course fall into several if not all of these four groups in our categorisation at different points in their lives.

[1] This means that there are families in which no one is in work in the 'higher income' category.

Low to middle income families form a sizeable minority of the UK population. Figure 40 shows how the group fits into the income distribution. The majority (56 per cent) of families with typical or below-typical incomes are classified as low to middle income because they are in work and of working-age. There are proportionally more non-working households near the bottom of the income distribution (this group forms 34 per cent of the families in the bottom decile) whereas members of non-working families form only 12 per cent of the fifth decile.

Figure 40: Where our family groups fall within the 2015-16 income distribution

Share of the population across the equivalised household disposable income distribution (before housing costs)



Notes: The low to middle income and higher income groups are not split exactly at the 50th percentile because we use household income excluding pensioner households.

Source: RF analysis of DWP, *Households Below Average Income*

Pensioner households are relatively evenly spread across the BHC income distribution although, as explored in Section 4, there are fewer pensioner families in the bottom half of the distribution than there were previously.

The low to middle income population has grown over time, reflecting positive shifts rather than a worsening of family living standards. Two decades ago this group accounted for 25 per cent of the population, whereas by 2015-16 the figure was 29 per cent. The non-working share of the population fell over the same period from 15 per cent to 10 per cent of the population, so this expansion in the number of low to middle families is the result of significant falls in the numbers of families in which no one works. This in turn is the result of a number of factors (which we have outlined elsewhere), but successful policy making has played an important part.[36]

In some respects this group has received greater attention recently. On becoming Prime Minister, Theresa May said that her government would focus its attention on working families with relatively low earnings – those who are 'just managing'.[37] Similarly, there has been a growing recognition over recent years that the number of families in poverty and in work is now greater than the number out of work.[38] Increasingly, the challenge in 21st century Britain is not only how to help people into work, but how to ensure that the combination of earnings and relevant state

[36] P Gregg & D Finch, *Employing new tactics: the changing distribution of work across British households*, Resolution Foundation, January 2016

[37] Prime Minister's Office, *Statement from the new Prime Minister Theresa May*, 13 July 2016

[38] Adam Tinson et al., *Monitoring poverty and social exclusion 2016 (MPSE)*, Joseph Rowntree Foundation, December 2016

support provides a level of income above the poverty line. Low to middle income families are at the centre of that challenge.

Nearly half of all children now live in low to middle income families

Although low to middle income families account for a minority of the population by definition, 49 per cent of all children and 57 per cent of children in working families lived in low to middle income families in 2015-16. This is up from 41 per cent two decades ago, reflecting the falling number of children living in workless households.

Looking at specific types of families, it is apparent that families with children are disproportionately represented among low to middle income families (Table 2). The low to middle income group makes up 31 per cent of all working-age families, but accounts for 46 per cent of couples with children and 48 per cent of single people with children. Single parents with children were much more likely to be in the non-working category two decades ago but are now more likely to be in work and on low to middle incomes. Unsurprisingly perhaps given the extra costs involved with raising children (reflected in the fact that equivalisation takes these additional costs into account), families without children are disproportionately represented in the higher income category.

Table 2: Families with children tend to be on low to middle incomes: 2015-16

	Non-pensioner			
	Non-working	Low to middle income	Higher income	Pensioner
Total population	*6,700,000*	*18,750,000*	*25,450,000*	*13,010,000*
Adults	4,920,000	12,080,000	20,420,000	12,940,000
Children	1,780,000	6,670,000	5,030,000	70,000
Total number of families	*4,250,000*	*7,980,000*	*13,220,000*	*8,750,000*
Couple with children	280,000	2,740,000	2,880,000	
Single with children	670,000	950,000	360,000	
Couple without children	380,000	1,370,000	4,310,000	
Single male without children	1,740,000	1,670,000	3,370,000	
Single female without chidlren	1,180,000	1,250,000	2,300,000	
Pensioner couple				4,200,000
Single male pensioner				1,360,000
Single female pensioner				3,190,000

Note: The four groups here are hierarchical, with all pensioners in the pensioner category regardless of income and the richer 50 per cent of the remaining population all in the higher income category regardless of work status.

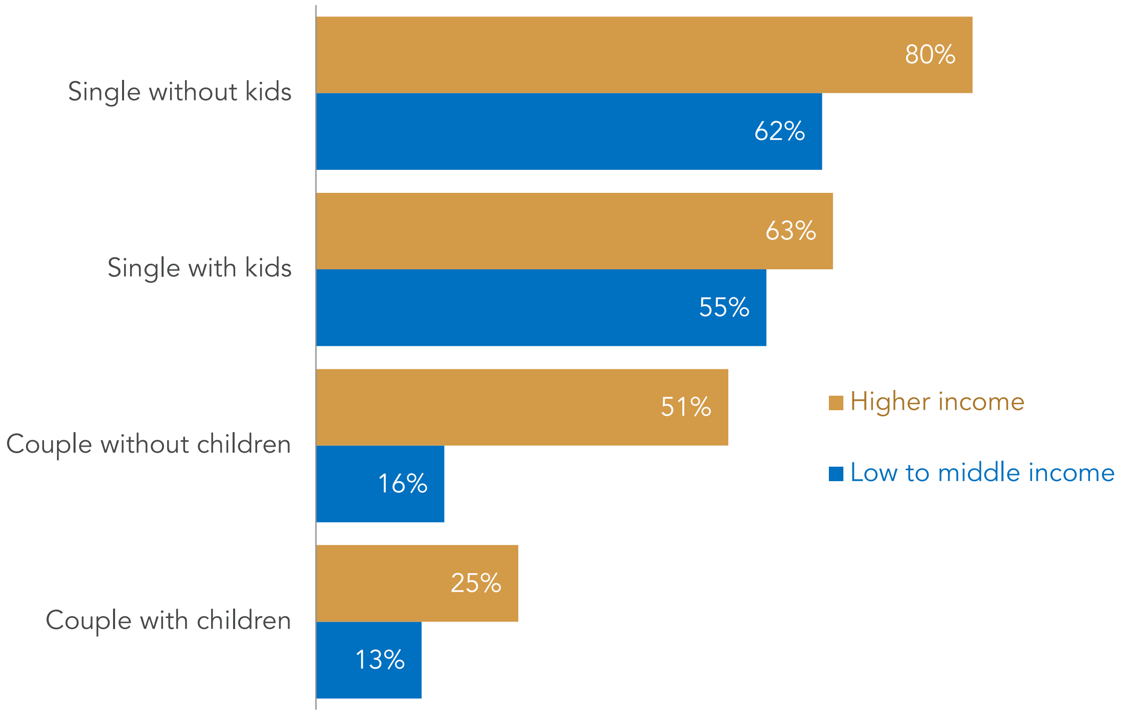
Source: RF analysis of DWP, *Households Below Average Income*

Low to middle income families are less likely to be in full-time work than higher income families

The swelling of the ranks of low to middle income families, a product of a fall in the number of families in which no one works, is something to be welcomed. Beyond this wider spread of the quantity of work across families, understanding the nature of that work is illuminating. Importantly, low to middle income families are much less likely than their higher income counterparts to be in full-time work. This is true for every type of family, as Figure 41 shows. For example, 80 per cent of higher income singles without children were in full-time work in 2015-16, whereas only 62 per cent of low to middle income singles were.[38]

Figure 41: Low to middle income families are less likely to be in full-time work: 2015-16

Share of each family type in which all adults are in full-time work



Source: RF analysis of DWP, *Households Below Average Income*

The different incidence of full-time working is particularly stark for couples. Whereas over half of all higher income couples without children had both adults in full-time work in 2015-16, this figure was just 16 per cent for low to middle income couples. Even in families with children, a quarter of higher income couples contained two adults working full time, compared to 13 per cent for low to middle income couples.

Similar proportions of higher and low to middle income families have one person in full-time work and the other in part-time work (around one third for each). However, a far greater share of low to middle income families contain no one in full-time work, in contrast to almost zero higher income families in which no one is in full-time work. In addition, a larger proportion of higher income couples contain two earners: 70 per cent of higher income couples are dual-earning couples, whereas only 35 per cent of low to middle income couples are.

This split emphasises the need to help second earners in low to middle income families into work and to help them progress, both of which will help boost incomes. Of course, it is perhaps to be expected that full-time working and (in the case of couples) dual-earning families will have higher incomes, pushing them up the income distribution and into the higher income group. Nevertheless it is important to understand what drives a family's position in our categorisation.

[39] Given that our low to middle income definition excludes families with no non-working adults, for single low to middle income families this measure essentially reflects the prevalence of part-time working among these adults.

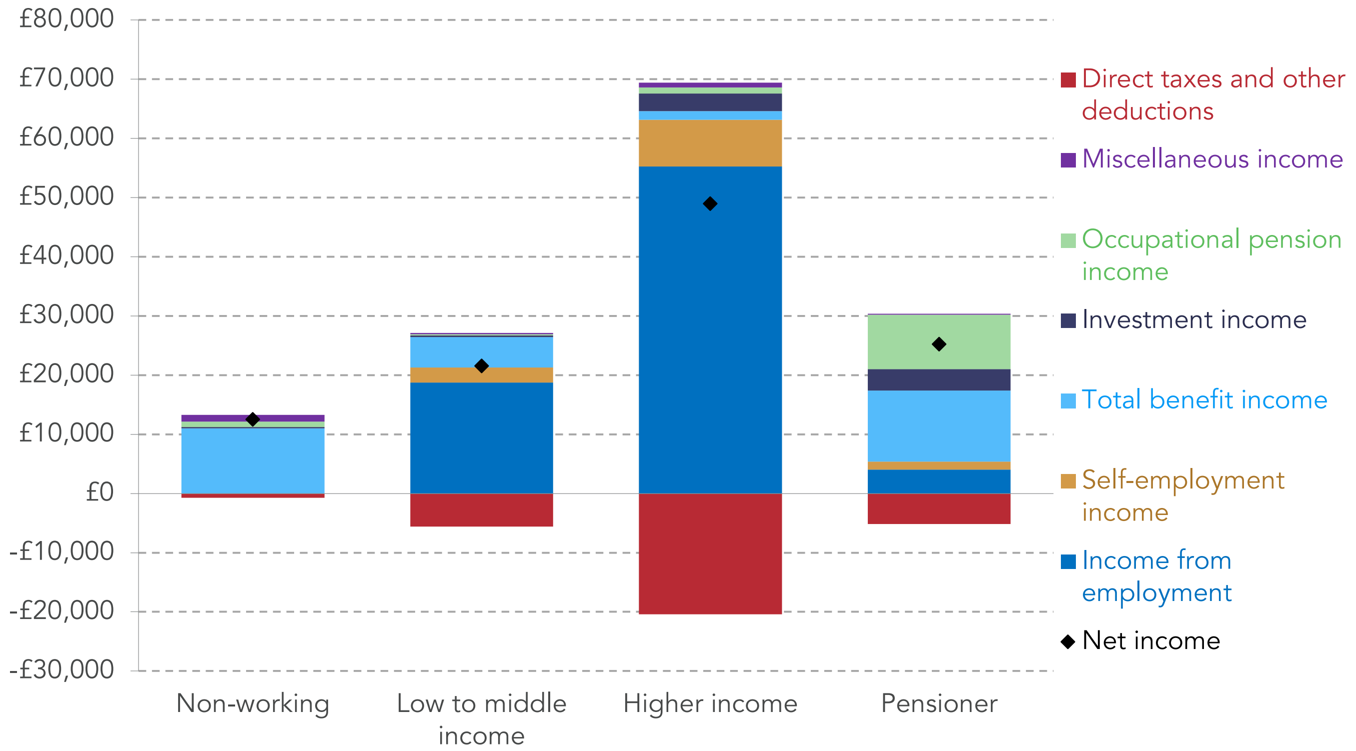
Low to middle income families derive most of their income from employment

Perhaps unsurprisingly given our approach to identifying them, and the fact that the majority (74 per cent) of low to middle income families have at least one person in full-time work, most of their income comes from employment. In 2015-16, 69 per cent of the gross income of low to middle income families came from employment and 19 per cent came from benefits. These amounts have remained relatively stable over time, although two decades ago low to middle income families did receive less benefit income – just 12 per cent of their gross income. As a result, employment income contributed an even greater share.

Figure 42 shows that members of the group are on average net contributors to the exchequer, with the latest available data showing that the average low to middle income family contributed over £5,500 in direct taxes and received around £5,100 in benefit income in 2015-16. We do not look here at indirect taxes paid, nor benefits-in-kind received.

Figure 42: Low to middle income families are net contributors to the exchequer: 2015-16

Sources of annual average family disposable income



Source: RF analysis of DWP, *Family Resources Survey*

For low to middle income families with children, the picture is a little different. They contributed, on average, £5,800 to the exchequer in direct taxes and received £6,900 in benefits in 2015-16. Partly this is because many low to middle income households with children benefit from tax credits.

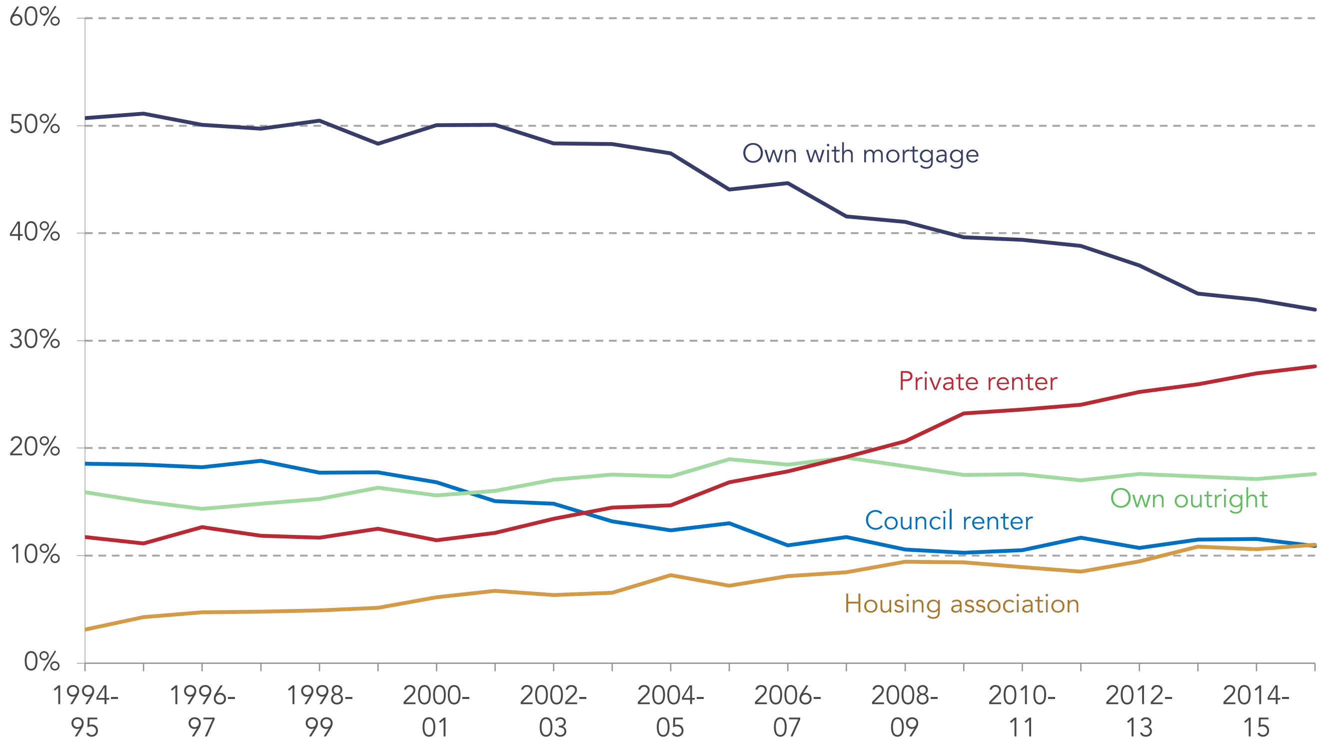
Tax credits have formed a larger proportion of household income for this group since their introduction in 2000, both because they were made more generous in the early-2000s and because they helped cushion the blow of falling incomes during the recession. As a result of both these forces, tax credits accounted for, on average, 4 per cent of gross income for low to middle income families in 2000 but now account for around 10 per cent. This points to the important role that such policies play in supporting the living standards of families with children.

Increasingly, low to middle income households live in the private rented sector

One of the reasons why more low to middle income families are in receipt of Housing Benefit is because a higher proportion now live in the private rented sector. Figure 43 shows that almost the same proportion of low to middle income households now rent privately (28 per cent) as are mortgagors (33 per cent). This is a big change compared to the position two decades ago, when only 11 per cent of low to middle income households rented privately. These shifts have had a big impact

Figure 43: Increasingly, low to middle income families rent in the private sector

Housing tenure of low to middle income households



Notes: Northern Ireland is excluded before 2002.

Source: RF analysis of DWP, *Households Below Average Income*

on living standards. The trend over the past two decades is for low to middle income households to be considerably less likely to own their own home and more likely to live in private rented accommodation, with an associated increase in the proportion of their income allocated to housing costs.[40]

[40] S Clarke, A Corlett & L Judge, *The housing headwind: The impact of rising housing costs on UK living standards*, Resolution Foundation, June 2016

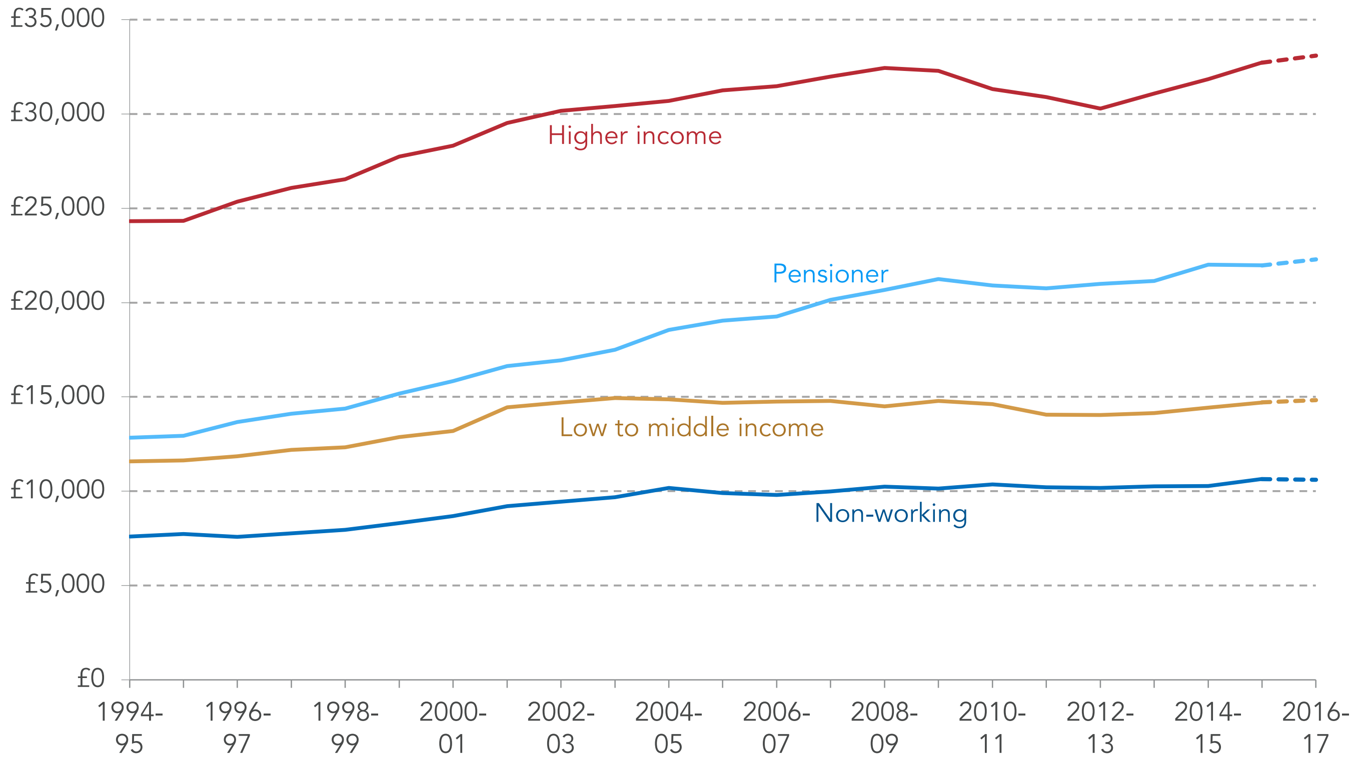
Incomes for low to middle income households are no higher than they were in 2003

In Section 5, we discussed how weak income growth appeared to be for people in the bottom half of the income distribution in our 2016-17 nowcast. This outcome is of course reflected in the experience of low to middle income families. Median AHC household income grew by 1 per cent among low to middle income households between 2015-16 and 2016-17, compared with growth of 1.4 per cent for higher income households.

Putting these figures into a longer-term perspective illustrates just how much the low to middle income group appears to have fallen behind the higher income group over the past two decades. Figure 44 shows that members of low to middle income families have higher median household incomes than they did in 1994-95, but that all of the growth occurred in the years before 2003.

Figure 44: Low to middle income households are the only group for whom incomes have not recovered to their pre-crisis peak

Typical (median) annual household income (after housing costs)



Notes: 2016-17 nowcast shown as dotted lines. Northern Ireland is absent from the raw data before 2002, so earlier figures have been adjusted to take into account the difference in the median.

Source: RF analysis of DWP, *Households Below Average Incomes*; RF nowcast (see Annex for more details).

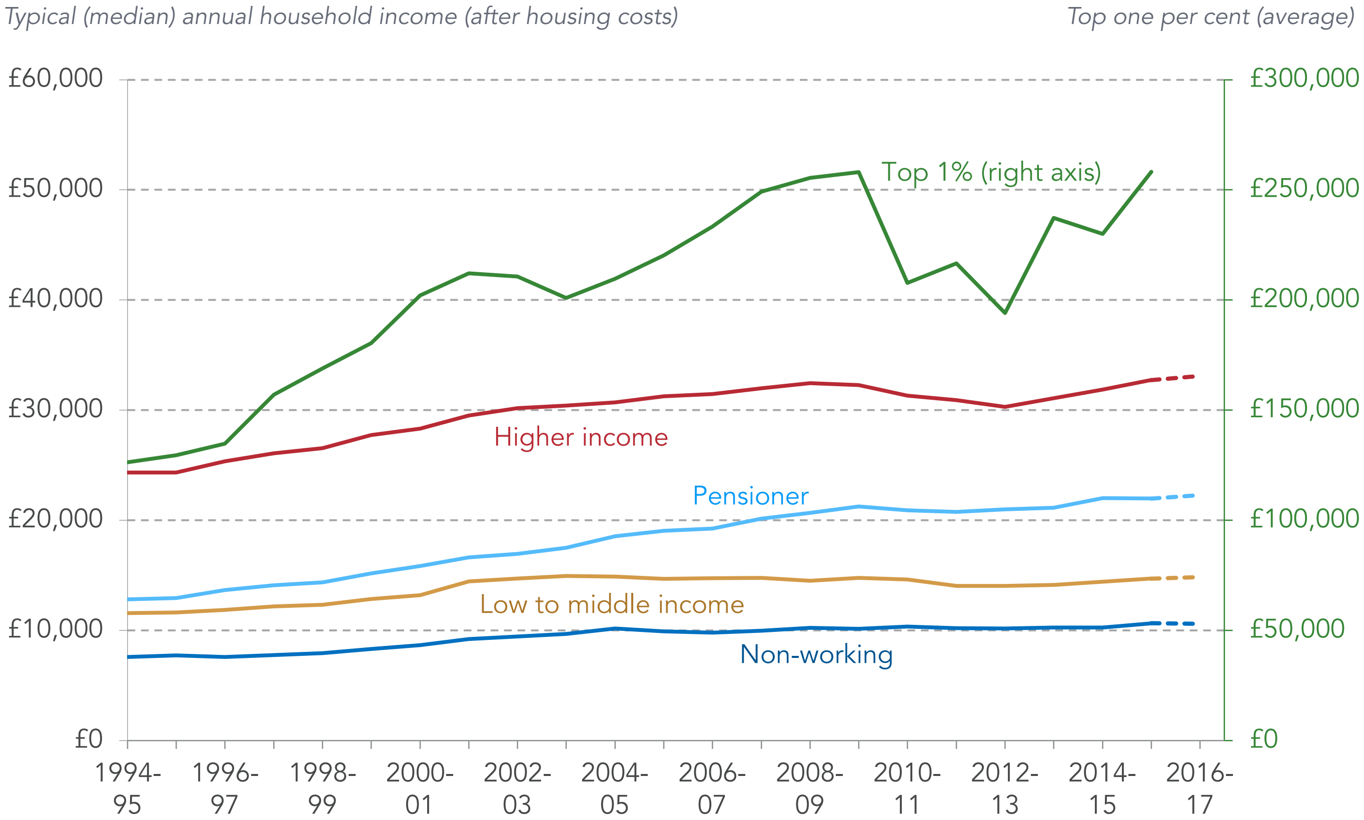
Typical household incomes grew by 29 per cent between 1994-95 and 2003-04, but have since stagnated. As a result average low to middle income in 2016-17 was no higher than in 2003-04.

Household incomes for non-working households also stagnated between 2004-05 and 2014-15, although median income in this group has grown more recently and is now 2.4 per cent above its pre-crisis peak.

In contrast, median household incomes continued to grow strongly between 2003-04 and 2007-08 for people on higher incomes, pensioners and particularly the top 1 per cent of households in the income distribution (added in Figure 45).

In exploring why low to middle income households have fared so badly in this period we can distinguish between economic or market-based factors and the role played by the state.

Figure 45: Top one per cent incomes grew significantly before the crisis and are now back to pre-crisis highs



Notes: 2016-17 nowcast shown as dotted lines. Northern Ireland is absent from the raw data before 2002, so earlier figures have been adjusted to take into account the difference in the median.

Source: RF analysis of DWP, *Households Below Average Incomes;* RF nowcast (see Annex for more details).

In relation to recent economic trends, several groups have been affected by the financial crisis. For example, post-crisis incomes in the higher income group fell 7.1 per cent peak to trough and low to middle income households experienced a similar fall of 6.4 per cent. Due to their incomes being closely linked to their financial wealth and asset prices (as well as the tax reasons explored in Section 5) the top 1 per cent recorded a fall of around 30 per cent during the crisis, albeit from a very high base (approximately £250,000). In contrast, the pensioner and non-working household groups recorded little change in median household income as a (direct) result of the financial crisis. This is because these households receive the vast majority of their income from the state, or from private saving in the case of some – particularly higher income – pensioner households.

Unlike higher income families and the top 1 per cent, people in low to middle income families experienced a slowdown in income growth well *before* the financial crisis. This reflects a slowdown in median earnings and incomes in the run-up to the crisis and also the impact of rising housing costs that especially affected the group. When measuring income on a BHC basis, median household income for low to middle income families *is* above its 2003 level (albeit only 3 per cent above). That this is not the case on our preferred AHC measure reflects the fact that housing costs have risen faster than household incomes over this period.

In terms of non-market factors, all households have been affected by changes to the tax and benefit system since 2010, but the changes have tended to have a negative effect on non-working and low to middle income households. Tax cuts have benefitted richer households to a greater extent, while cuts to working-age benefits have obviously affected lower-income households more.[41] Pensioner families have benefitted from the fact that their benefits have tended to be protected and higher income families receive relatively little benefit income (see Figure 42).

Overall, the picture is one of low to middle income households being hit by a triple whammy of sluggish (before the financial crisis) and falling real earnings growth, rising housing costs and reductions in state support.

The fall in income has coincided with a rise in poverty for low to middle income households

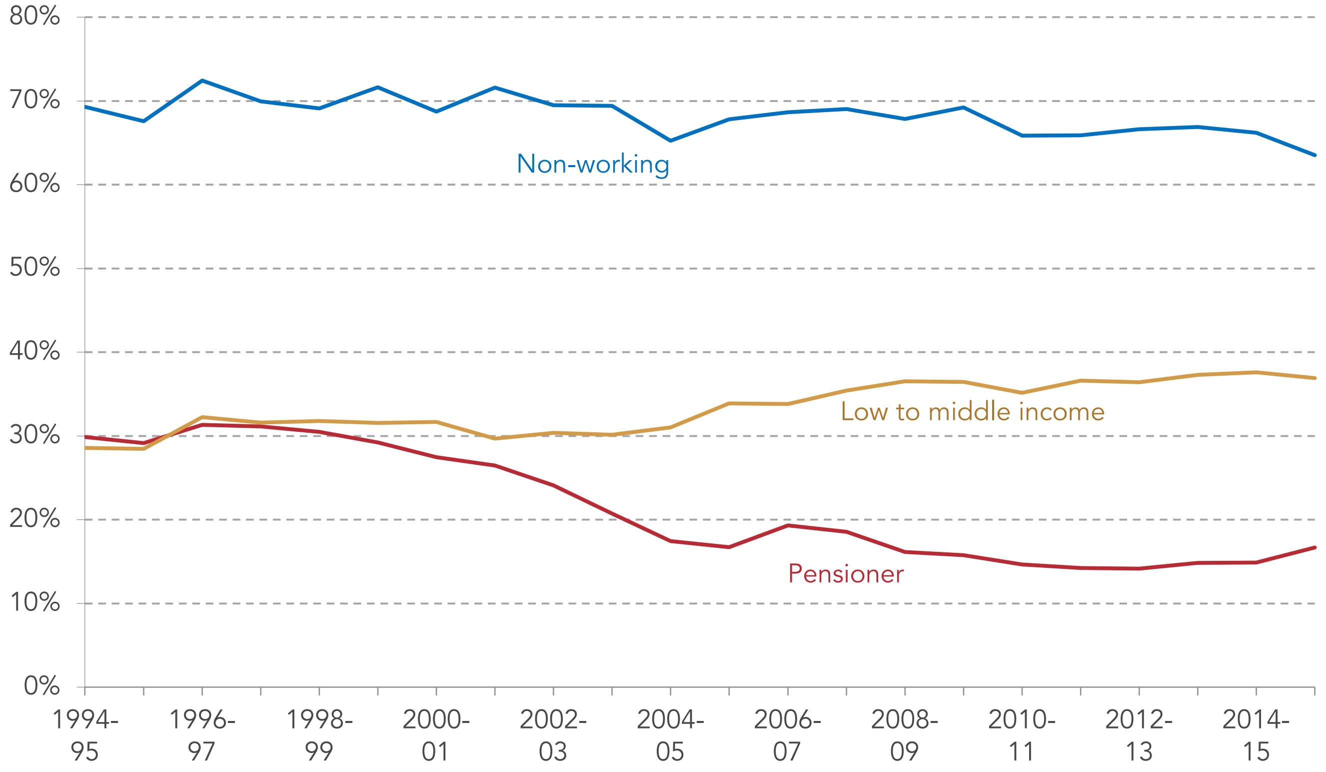
Perhaps unsurprisingly given what we know was happening to household income from the early 2000s, the share of low to middle income people living in poverty (defined as below 60 per cent of median income) began to rise in 2004.

Figure 46 shows that between 2003-04 and 2015-16 the share of low to middle income people in poverty – after taking into account housing costs – rose by 7 per cent. Although not shown here, we can also look at how many people have below 60 per cent of median income before taking housing costs into account; on this measure the rise in poverty for low to middle income people is lower (3 per cent), but still significant. The difference between the two measures further emphasizes the important drag on household incomes caused by housing over the period.

[41] M Whittaker, *Budget 2016 response*, Resolution Foundation, April 2016

Figure 46: The share of low to middle income people in poverty has increased significantly since 2004

Proportion of population in poverty after housing costs (<60 per cent of median income)



Source: RF analysis of DWP, *Households Below Average Incomes*

Low to middle income households have very limited savings to fall back on

With such poor income growth over the past decade low to middle income families find it very difficult to save money. Looking again at the 2015-16 outturn HBAI data, we find that around 40 per cent of low to middle income families say that they'd like to save £10 or more per month but cannot afford to do so. Unsurprisingly then, the savings of this group are relatively low. Using related data,[42] we can see that roughly two-thirds (64 per cent) of low to middle income families reported having less than £1,500 in savings in late-2016. The implication is that they would struggle to deal with any significant unexpected cost or loss of earnings.

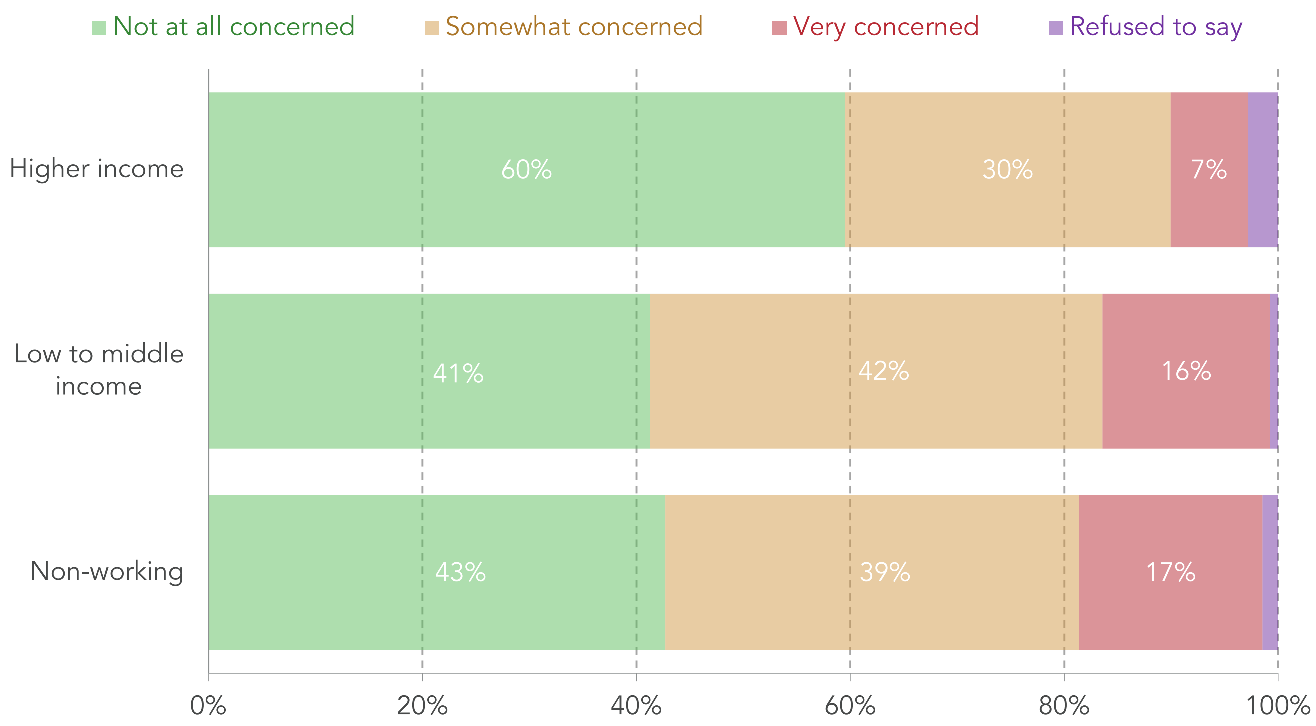
On this basis, it is no surprise that many low to middle income families turn to borrowing as a means of supporting or smoothing expenditure. On average, low to middle income families spend one fifth of their pre-tax monthly income servicing unsecured debt.[43] And this appears to weigh heavily. Figure 47 shows that nearly two-thirds of adults in low to middle income families said they were concerned about their current level of total debt at the end of 2016. This compares to 56 per cent of non-working families and 37 per cent of higher income families.

[42] RF analysis of DWP, *Family Resources Survey*

[43] RF analysis of Bank of England, *NMG Survey*. In the NMG survey due to a lack of data we categorise low to middle income households using equivalised pre-tax (rather than net) income. We also place all households headed by someone over 65 into the pensioner category.

Figure 47: Nearly two-thirds of low to middle income families are concerned about their debts: 2016

Share of families concerned about their current level of debt



Source: RF analysis of Bank of England, *NMG survey*

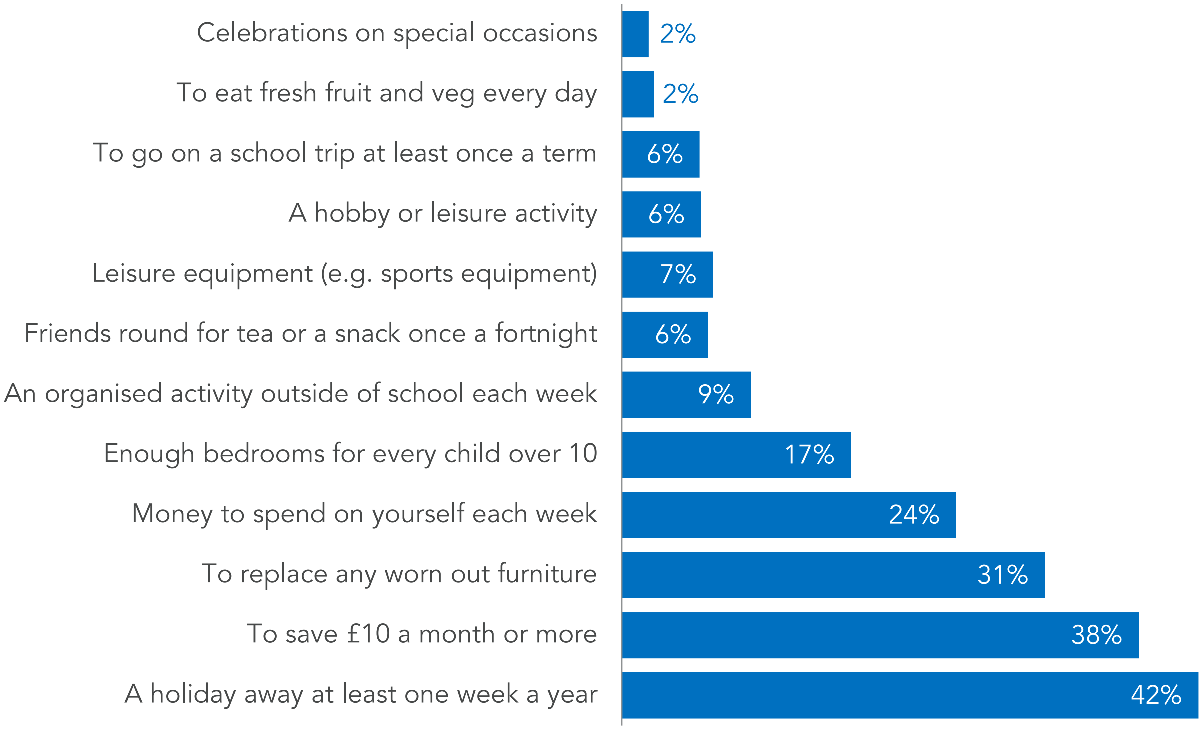
While much of our analysis in this and other sections focuses on incomes, short-term living standards are driven by the extent to which these income changes feed through to what families consume from month to month. We therefore briefly touch on the consumption experiences of low to middle income families here.

At least initially, the stagnation of typical household incomes in the group from 2003-04 meant that fewer families could afford to spend money on relatively essential things such as activities and school trips for their children, and on household maintenance. Over time, the share of people in low to middle income families reporting that they couldn't afford such things rose steadily; in 2004-05, 30 per cent said that they couldn't afford to replace worn out furniture; a figure that had risen to 39 per cent by 2013-14. With the return of (albeit relatively weak) household income growth in 2014-15 the share of people reporting that they couldn't afford such things fell back.

Figure 48 presents the figures derived from the latest 2015-16 HBAI survey. It shows that one third of members of low to middle income households said they couldn't afford to replace worn out furniture, while 42 per cent couldn't afford an annual holiday.

Figure 48: Four in ten low to middle income households cannot afford an annual holiday: 2015-16

Proportion of low to middle income families that would like, but cannot afford...



Notes: Questions 1 to 8 and question 12 are only asked in households with children in.

Source: RF analysis of DWP, *Family Resources Survey*

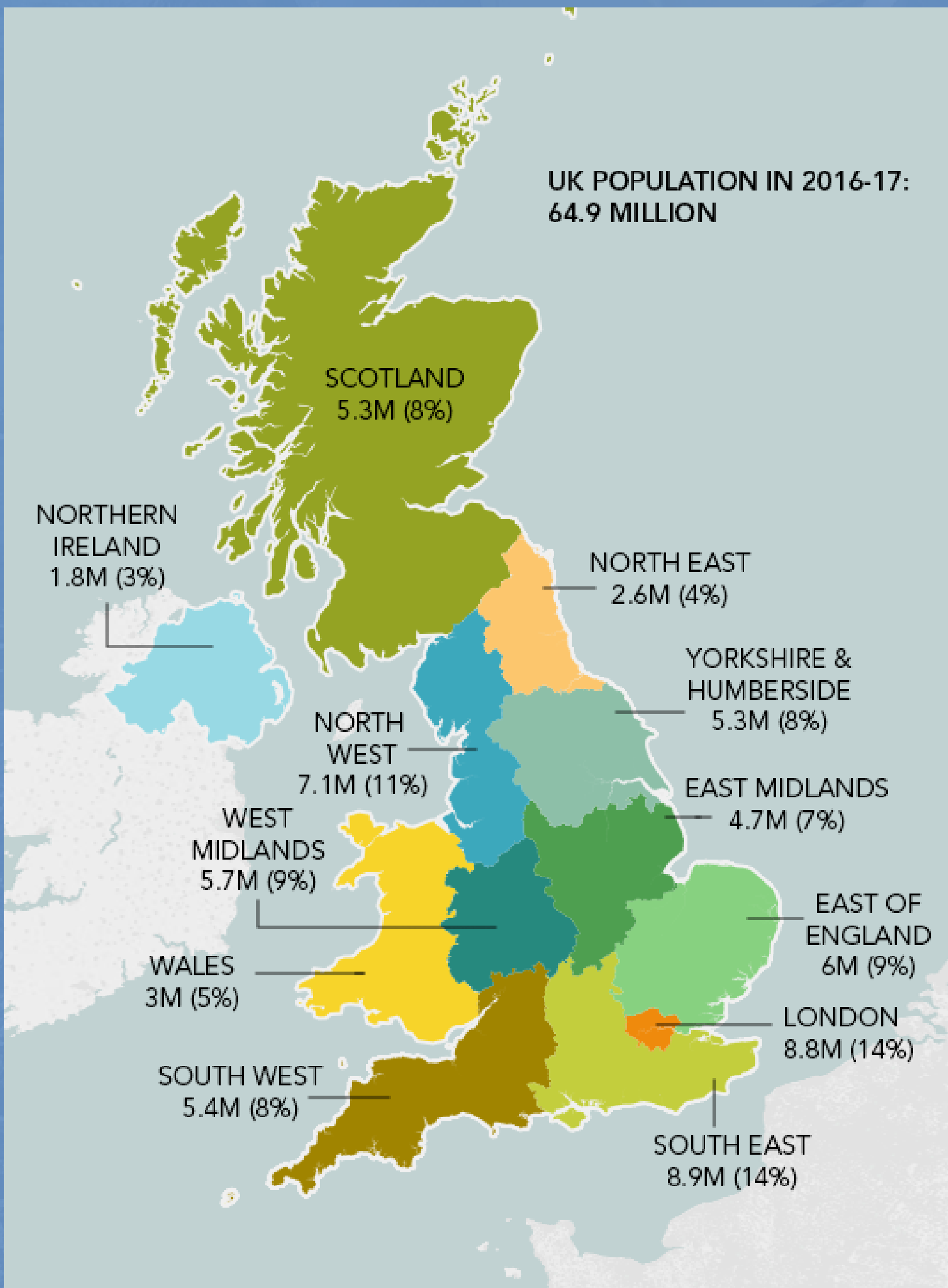
With a poor outlook for household income growth over the next few years – particularly for those in the bottom half of the income distribution – it is possible that increasing numbers of low to middle income families will find themselves unable to afford many of the things outlined above.[44]

Of course the experiences of low to middle income households will vary, and although our categorisation provides a useful concept via which to understand a group that has been particularly affected by the squeeze on living standards since the early 2000s, it is important to look in more detail where possible. To this end, the next section looks at how household experiences have differed across the UK.

[44] A Corlett & S Clarke, *Living Standards 2017: The past, present and possible future of UK incomes*, Resolution Foundation, February 2017

Section 7
One nation: income trends across the UK

The UK population in 2016-17 by region



Source: Resolution Foundation analysis of the *Labour Force Survey*

Notes: Based on region of residence. Percentages are shares of the total UK population.

Section 7

One nation: income trends across the UK

Just as we have observed big differences in near- and long-term living standards experiences across the age profile, across family types and across the income distribution in previous sections, so too we find sizable disparities across different parts of the UK. The gap between poorer and richer nations and regions of the country hasn't necessarily grown over the past 20 years, but nor has it narrowed in any significant way. According to our 2016-17 nowcast, typical household disposable income in the best-performing part (South East) of the country is some £5,000 higher than in the worst-performing one (Wales).

With a renewed focus on the UK's regional differences and a new 'modern industrial strategy' at the forefront of the current government's approach to reforming the economy, it's important to note that the differences in living standards across the different parts of the UK are large and persistent. And of course, differences within regions can be just as stark as those between them. Closing the gap between areas will therefore involve engagement with sub-regional centres too – something to which this section also draws attention.

Living standards vary hugely across the UK, with little sign of any narrowing of the performance gap in recent decades

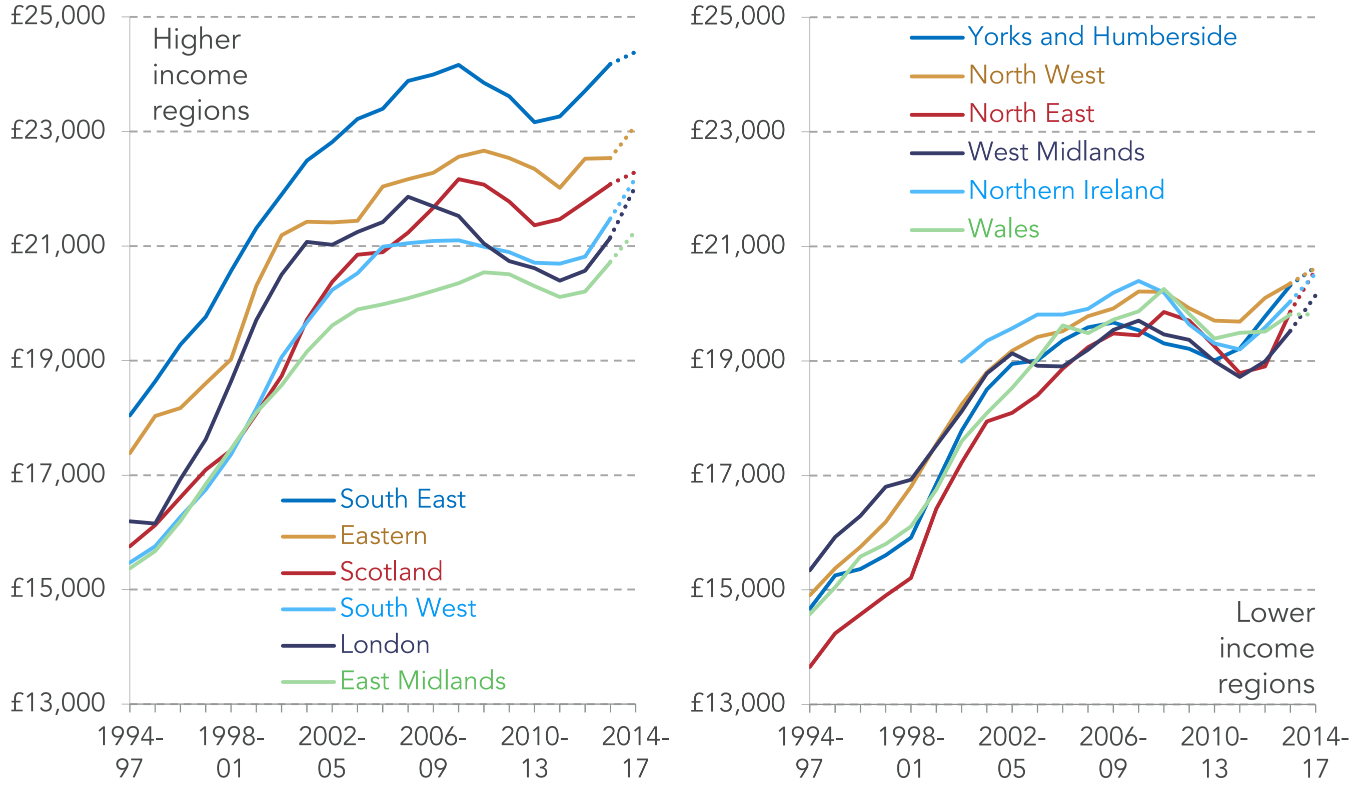
Where you live matters, from the job opportunities available within commuting distance, to the cost of buying a house and the mix of people who will share the public spaces that you inhabit. It also matters for your living standards. Geographical income inequality in the UK stands out internationally[45] and, over the past 20 years, these large differences in living standards between the UK's regions have persisted.

Figure 49 shows after housing costs (AHC) income levels in each of the 12 nations and regions of the UK since the mid-1990s, with the six highest income areas at the end of the time period on the left-hand side and the six lowest income ones on the right-hand side. The data presented here is averaged over three years.

[45] S Clarke & N Lee, A rising tide lifts all boats? Advanced industries and their impact upon living standards, Resolution Foundation, July 2017, Figure 4

Figure 49: Trends in after housing costs income by region

Real-terms median equivalised household disposable income growth after housing costs (2016-17 prices, CPI-AHC adjusted)



Notes: 2016-17 nowcast shown as dotted lines.

Source: RF analysis of DWP, *Households Below Average Income*; RF nowcast (see Annex for more details).

In 1994-97, the South East had the highest typical AHC income (£18,000 in today's prices) while the North East had the lowest (£13,700). Fast forward 20 years, and the South East is still in pole position, with median AHC income now standing at £24,400. The North East has climbed off the bottom of the pile (though it was there as recently as 2012-15) and has been replaced by Wales (where typical AHC income stands at £19,800). Over the long run then, the gap between the top and bottom parts of the UK has altered little: a lead of 24 per cent in the mid-1990s has shifted to 23 per cent in the latest three year period.

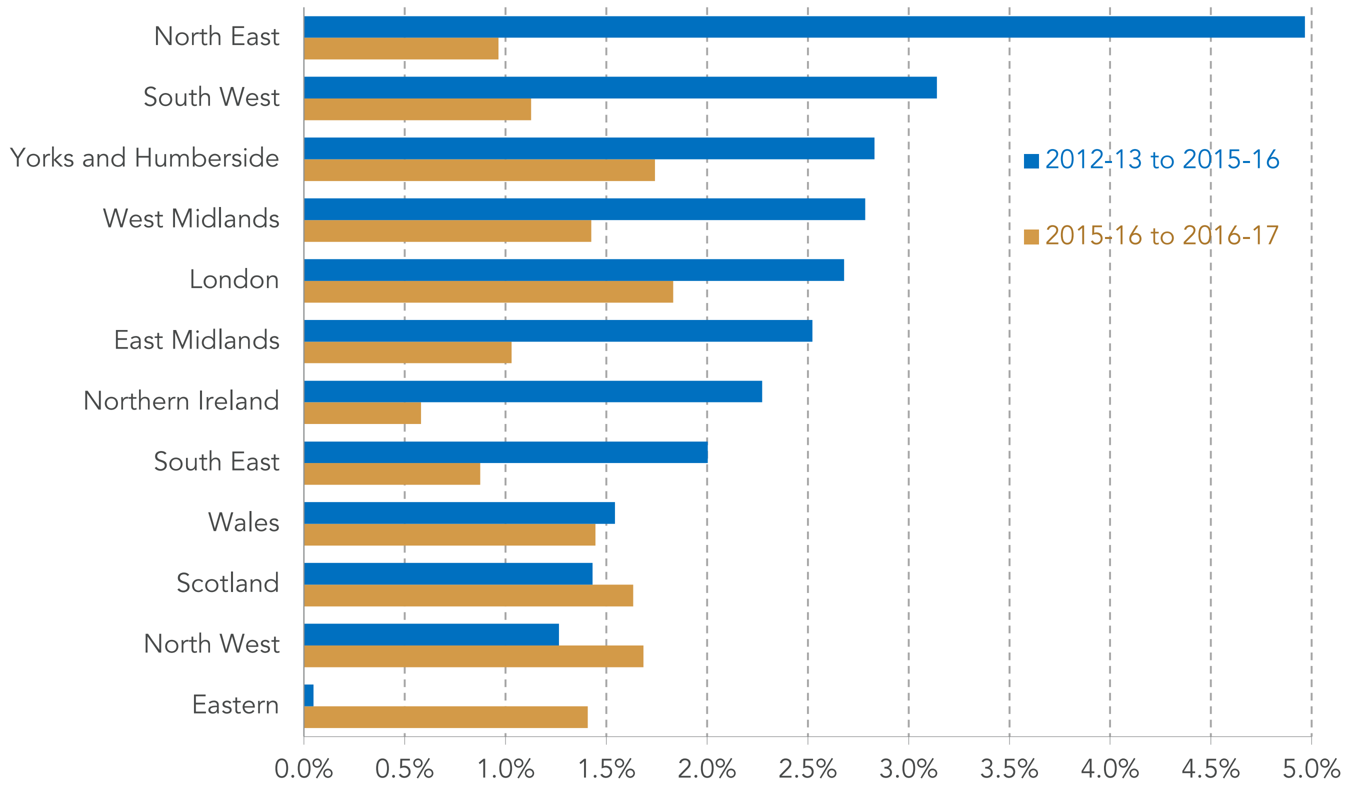
Part of this disparity is, of course, a result of different people living in different places – young people with degrees gravitate towards London and the South East for example. But the fact that the gap has remained stubbornly high throughout slowdown, crisis and recovery is nonetheless a cause for concern.

Income is growing across the UK, but the recovery has slowed this year in the majority of the UK's nations and regions

As covered in Section 3, our nowcast estimate suggests that the post-crisis recovery in household incomes that started in 2012-13 looks to have slowed markedly over the course of 2016-17. Looking at how this has played out across the country, Figure 50 shows that AHC incomes increased in every part of the UK last year, but at a much reduced pace relative to the earlier recovery period in most instances. For example, growth in median AHC income fell from an average of 3 per cent a year in the South West in the three years from 2012-13 to just 1 per cent last year.

Figure 50: Income growth during the recovery

Real-terms average annual growth in median equivalised household disposable income after housing costs (CPI-AHC adjusted)



Notes: Growth between 2015-16 and 2016-17 based on the RF nowcast.

Source: RF analysis of DWP, *Households Below Average Income*; RF nowcast (see Annex for more details).

Although our nowcast is not definitive, it does suggest that some areas bucked this trend, with Wales, Scotland, the North West and the East of England recording comparable or stronger growth in 2016-17 than in the previous three years. But these parts of the UK are characterised by having recorded lower than average growth over the early part of the recovery, implying more room for catch-up in the latest data.

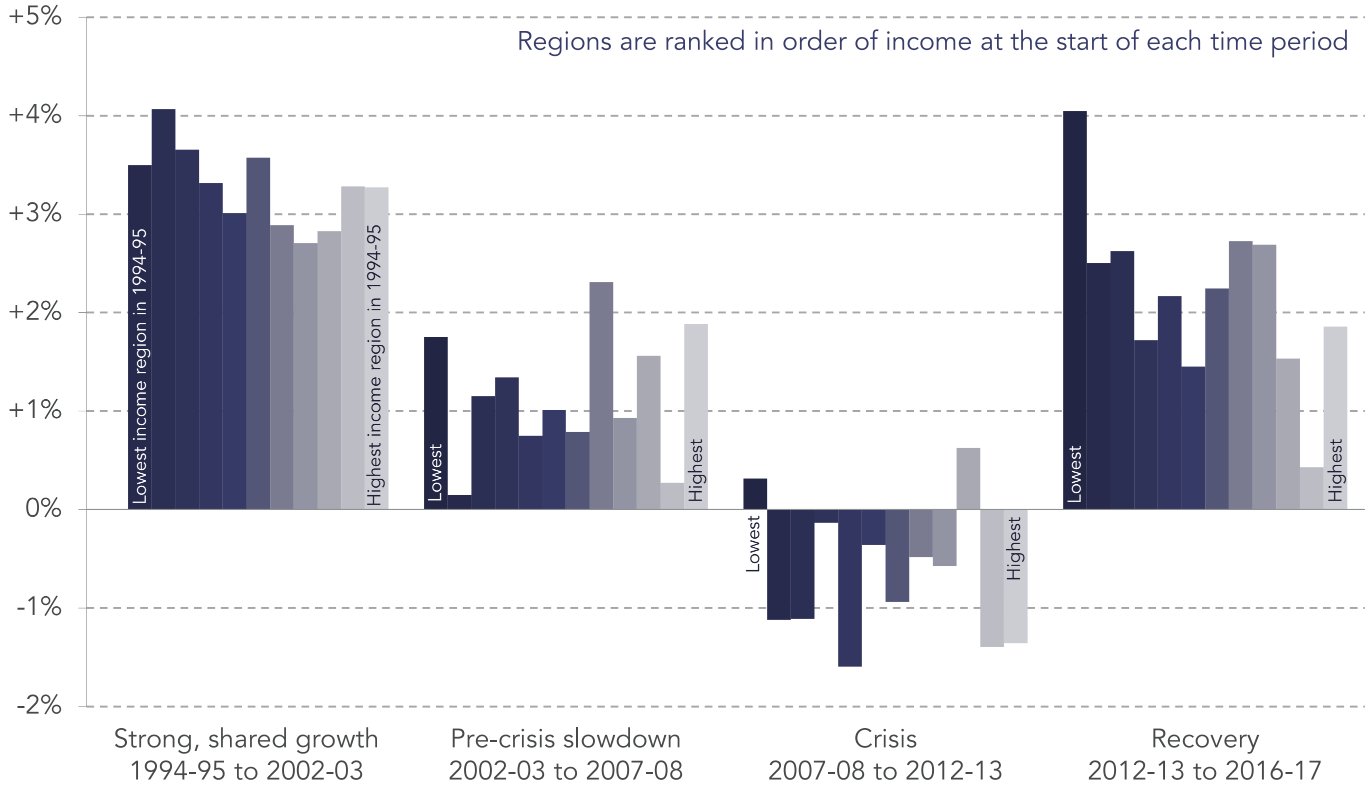
Encouragingly, some lower income regions have performed relatively well recently

Figure 50 also suggests that – despite our earlier finding that regional disparities have remained largely unchanged over the longer-term – lower income parts of the country appear to have fared better in general during the post-crisis recovery than higher income areas have. We have already shown how the employment gains over recent years have been concentrated among lower income households, and how this has acted to boost living standards in the bottom half of the income distribution over recent years. It seems, to some extent, that this welcome trend has fed through to changes at the regional level.

Figure 51 splits median AHC income growth across the 12 nations and regions of the UK into the four time periods first introduced in Section 3. It shows how the period of strong, shared growth was slightly more advantageous for lower income regions than those with higher incomes, with both the pre-crisis slowdown and the crisis itself having a mixed impact on incomes across the UK's nations and regions. But income growth in the recovery period has again been somewhat skewed towards lower income parts of the country.

Figure 51: Household income growth by region

Real-terms average annual growth in median equivalised household disposable income after housing costs (CPI-AHC adjusted)

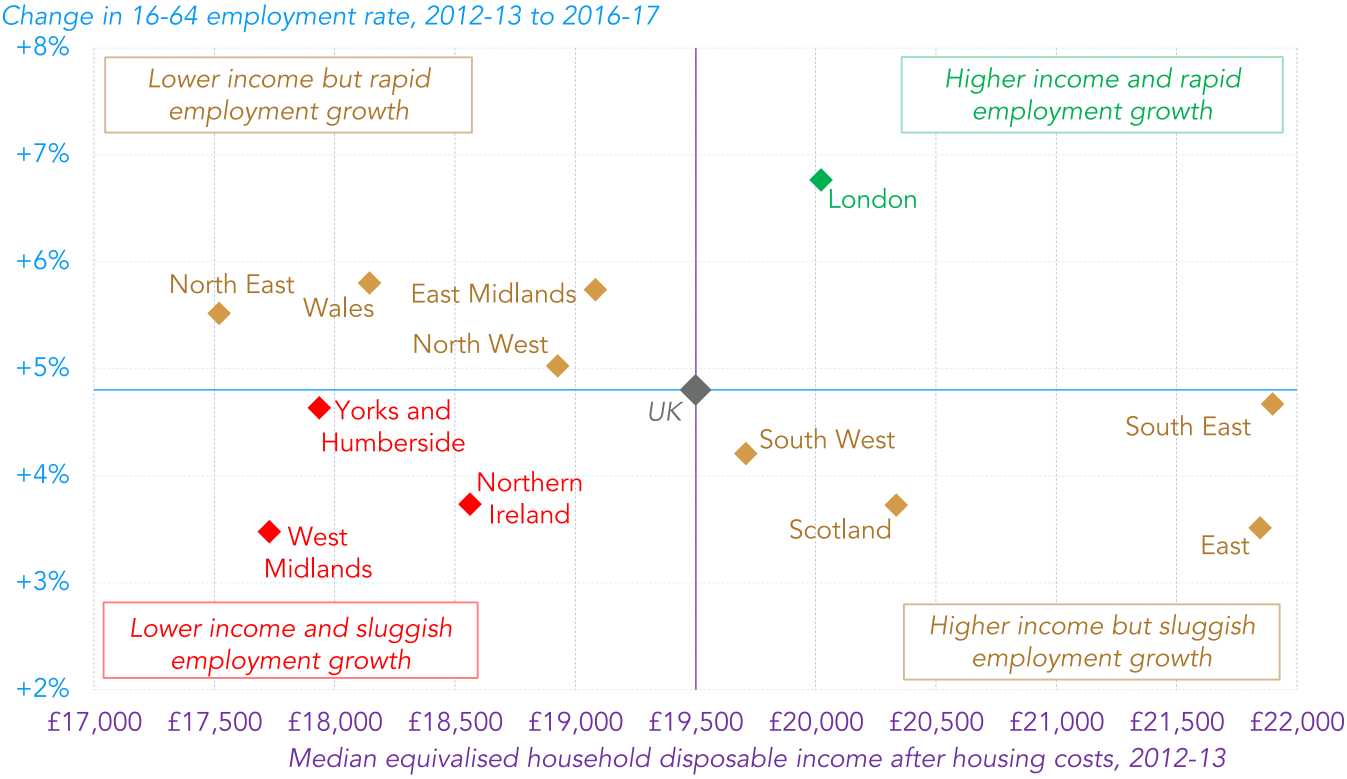


Source: RF analysis of DWP, *Households Below Average Income;* RF nowcast (see Annex for more details).

In particular, the North East (which was the lowest income region in 2012-13) has experienced a very strong recovery. Indeed, the area is the only part of the country to have enjoyed higher income growth since 2012-13 than in the period of strong, shared growth around the turn of the century.

This strong recent performance in the North East is reflective of a relatively strong performance on employment, as shown in Figure 52. In fact, four of the five regions with faster-than-average increases in employment rates since 2012-13 also had lower than average incomes in 2012-13. To some extent, the progressivity of post-crisis employment gains that we highlighted in Section 2 is reflected in the regional experience.

Figure 52: Variation in increases in regional employment rates over the past four years



Source: RF analysis of DWP, *Households Below Average Income*; ONS, Labour Force Survey.

For significant rebalancing to take place across the country, the pattern of diamonds in Figure 52 would need to fall diagonally from top-left to bottom-right. In this context, the fact that three of five lowest income regions – the West Midlands, Yorkshire and Humberside and Northern Ireland – have experienced sluggish employment growth over the phase of income recovery is far from encouraging.

Regionally progressive employment gains, however, are just one route to rebalancing incomes across the UK. As well as the impact of continued cuts to working-age welfare, the amount people are paid for the work they do will also matter. Median hourly wages[46] are still below their pre-crisis peak in all parts of the UK, but some regions have experienced stronger recoveries in earnings than others.[47] Looking over the past four years, the North East again outperforms other areas – earnings here are now just 1 per cent below their pre-crisis peak. In contrast, typical weekly earnings are still 11 per cent lower in London than they were in 2009.

Variation in housing costs across the country are especially important to geographical living standards comparisons

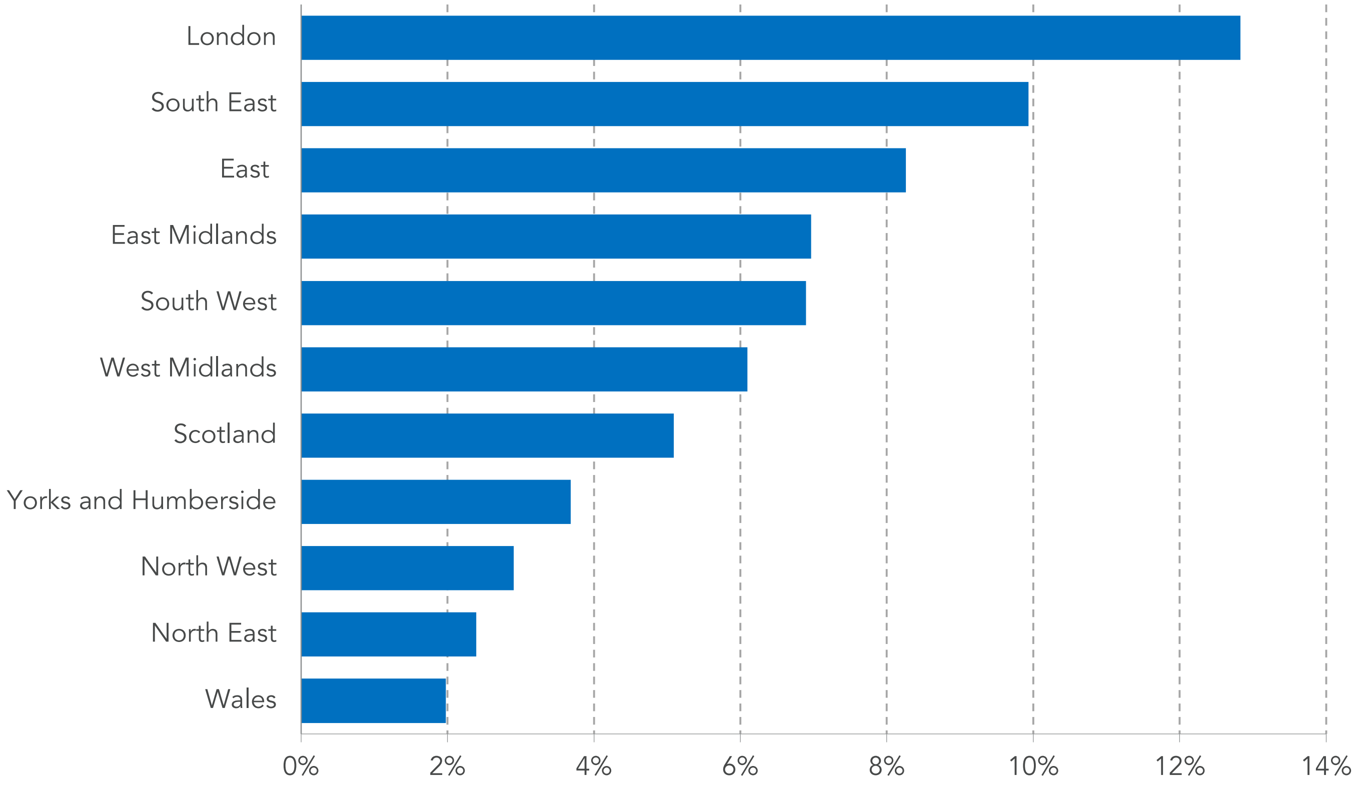
Just as labour market trends can drive significant regional income changes, the impact of housing costs on living standards across the UK's nations and regions is also substantial. As Section 3 has already demonstrated, private rents have increased significantly faster than mortgage interest costs in recent years. However, these increases have taken place in a far from uniform fashion across the UK's regions and nations, as Figure 53 makes clear.

[46] Wage figures used here are calculated on a workplace, rather than place of residence, basis. But the large size of the high-level geographies referred to means that the impact of the choice of measure will be small.

[47] S Clarke, *The RF Earnings Outlook Q1 2017*, Resolution Foundation, July 2017

Figure 53: Private rents are growing faster towards the south of the country: GB

Increase in private rents, 2012-13 to 2016-17



Notes: Private rental data for Northern Ireland not available in a consistent form to that presented here.

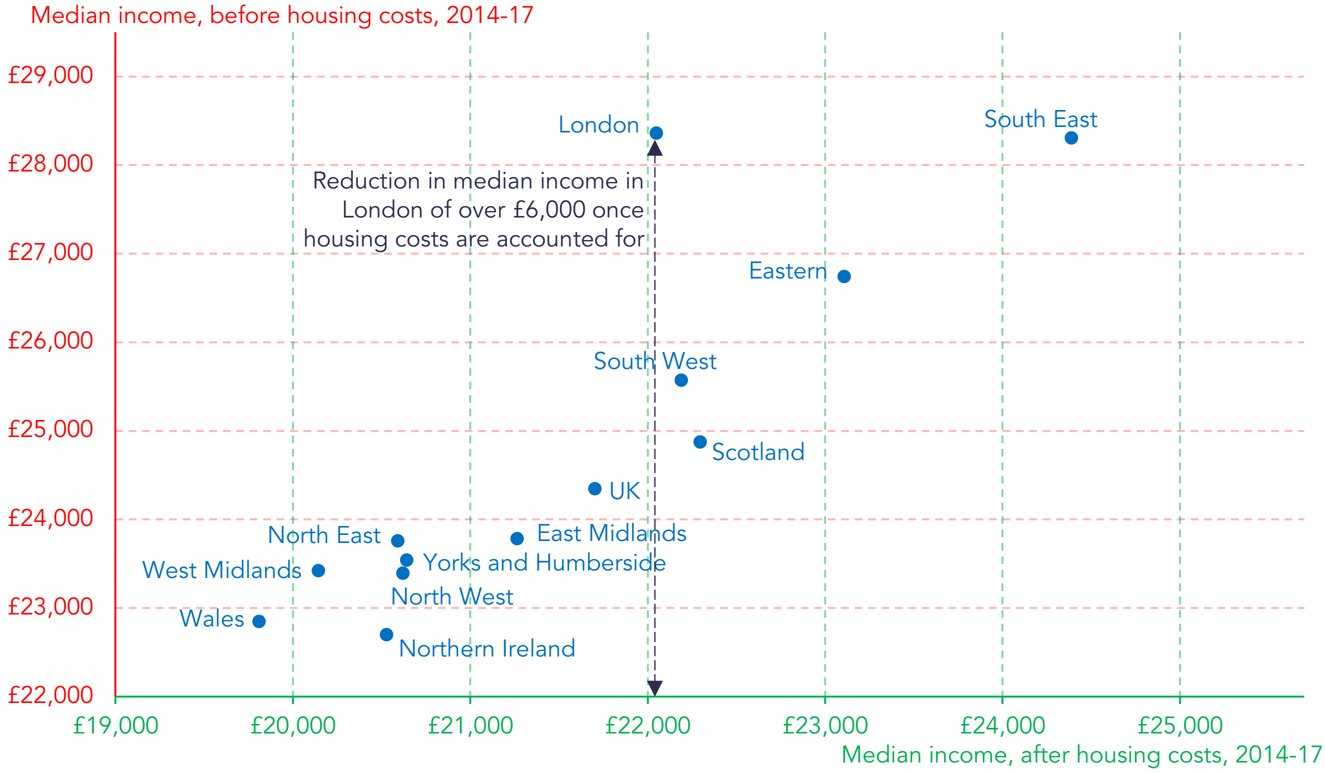
Source: RF analysis of ONS, *Index of Private Housing Rental Prices.*

In general, over the past five years private rents have been increasing faster in regions nearer London and towards the South of England. The distinction was most marked earlier in this period, with London experiencing rent rises between 2011-12 and 2012-13 that were almost 10 times as fast as those in Wales and the North East. More recently, the pace of increase in private rents in London has declined to 2.6 per cent in 2016-17 at the same time as it has picked up across many other parts of the county.

Regional variations in rents and other housing costs mean that the distinction between BHC and AHC income is especially important when comparing living standards across regions and nations. With this in mind, Figure 54 compares typical household income before and after housing costs in each area.

Figure 54: Difference between regional incomes before and after housing costs: 2014-17

Median equivalised household disposable income before and after housing costs (2016-17 prices, adjusted using CPI-based deflators)



Notes: Income is deflated by the relevant before housing costs or after housing costs CPI deflator.

Source: RF analysis of DWP, *Households Below Average Income*; RF nowcast (see Annex for more details).

The stand-out finding relates to London. The capital records the highest BHC level of median income, but drops to fifth in the rankings and only just above the UK average when measured on an AHC basis. This reflects the fact that home ownership and renting are both relatively more expensive in London than elsewhere in the county.

Movements in other areas are less dramatic, but it is notable that AHC incomes in the North East, Yorks and Humberside, the North West and Northern Ireland appear almost identical, despite a spread of £1,100 across the four regions on a BHC basis.

The picture at the sub-regional level is more nuanced

Although household income data is not available for any smaller geography than the 12 areas mentioned so far in this section, it is possible to look at other measures at a sub-regional level. These show that there is, in some respects, as much variation within regions as between them.

For example, as Table 3 shows, there is a gap of over 10 percentage points between the employment rate in the West Midlands metropolitan county (including the more densely populated parts of the region such as Birmingham, Coventry and Wolverhampton) and the rest of the region. Previous Resolution Foundation research has looked more closely at the issue of low employment in this city region.[48]

[48] C D'Arcy, *Midlands engine trouble: The challenges facing the West Midlands Combined Authority*, Resolution Foundation, December 2016

There are also large differences in earnings between different parts of London, with median employee earnings £80 per week higher (£4,200 on an annual basis) in Inner London than in Outer London. Similar disparities are evident in the East of England, for example typical earnings in East Anglia (Cambridgeshire, Norfolk and Suffolk) are £60 per week lower (£3,100 on an annual basis) than in the rest of the region.

Table 3: Selected sub-regional statistics, 2016-17

	Employment rate	Unemployment rate	Median weekly employee earnings
North East			
Tyne & Wear	71.0%	7.2%	£360
Rest of North East	71.0%	6.2%	£358
North West			
Greater Manchester	72.0%	5.8%	£369
Merseyside	69.7%	4.9%	£369
Northern North West	77.0%	3.5%	£375
Rest of North West	75.3%	4.1%	£385
Yorkshire and Humberside			
West Yorkshire	72.7%	5.4%	£369
South Yorkshire	70.4%	6.8%	£358
Rest of Yorks & Humberside	75.9%	4.2%	£369
East Midlands			
East Midlands	75.5%	4.4%	£375
West Midlands			
West Midlands (met county)	67.0%	7.6%	£377
Rest of West Midlands	77.5%	4.1%	£400
East			
East Anglia	77.8%	3.8%	£392
Rest of East of England	77.0%	4.1%	£452
London			
Inner London	72.4%	6.1%	£562
Outer London	74.2%	5.5%	£481
South East			
South East	78.3%	3.5%	£442
South West			
South West	77.8%	3.7%	£370
Wales			
Wales	72.9%	4.5%	£369
Scotland			
Strathclyde	72.6%	5.2%	£404
Rest of Scotland	74.8%	4.4%	£415
Northern Ireland			
Northern Ireland	69.3%	5.6%	£369
UK	*74.6%*	*4.8%*	*£404*

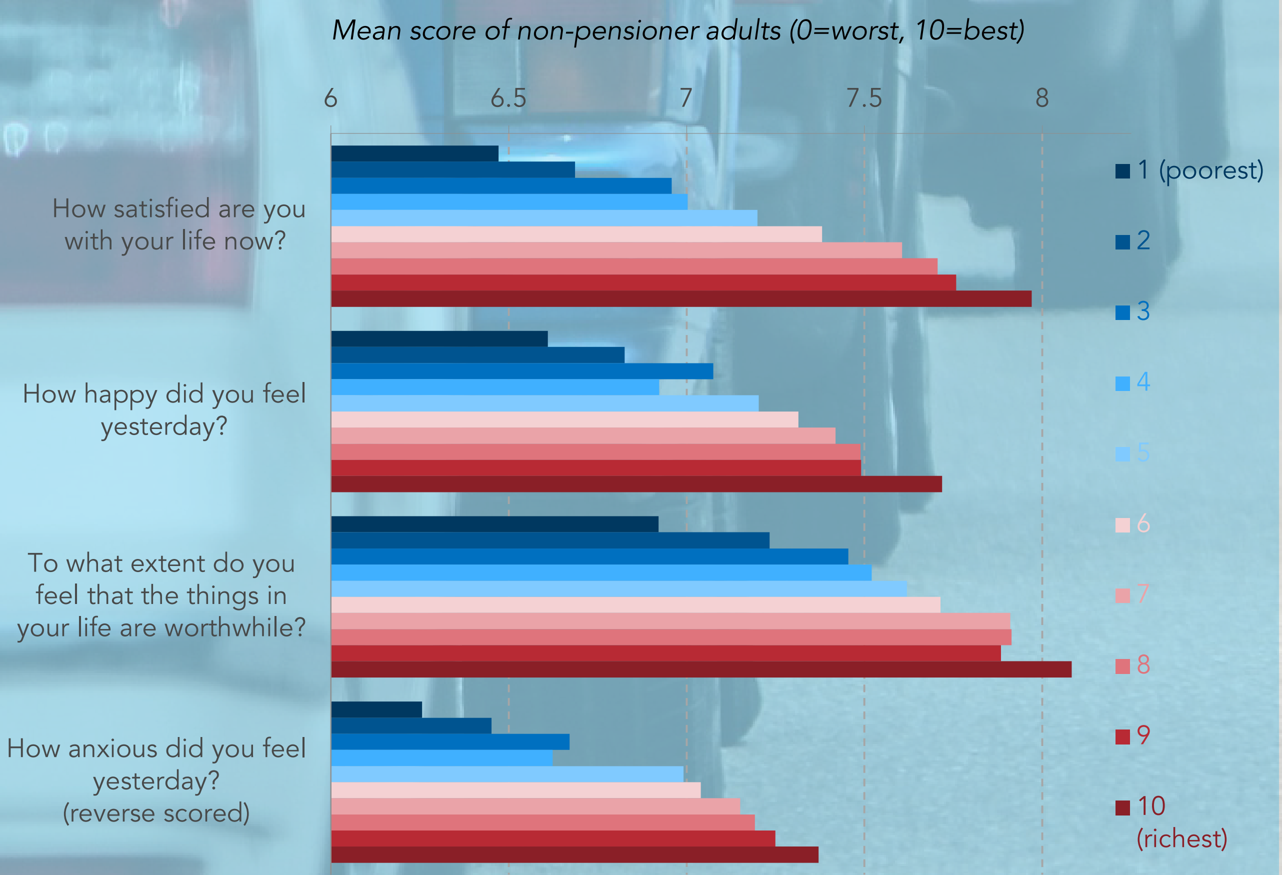
Source: ONS, *Labour Force Survey*

Overall, Table 3 – and this section as a whole – demonstrates how much variation there is within the UK. For a relatively small country, there is a lot that sets the different places within it apart from a living standards perspective. These range across factors including high housing costs in the south of England; weak employment performance in Northern Ireland; and wide disparities both within cities and between the urban and rural parts of certain regions.

Although it is welcome that living standards are growing across the country, there is still a lot of progress to be made in terms of ensuring that the gains from growth are evenly distributed across different parts of the UK.

Section 8
Conclusion

The relationship between incomes and well-being in 2015-16



Source: Resolution Foundation analysis of *Family Resources Survey*

Notes: Income deciles use equivalised disposable household income, after housing costs

Section 8

Conclusion

The vote to leave the European Union was only a year ago, and the moment of Brexit itself is of course still some time away, so it is too soon to judge any long-term impact on living standards. However, it is clear that rising inflation – driven in no small part by a large fall in the value of Sterling following the vote – has cut into the real value of people's earnings and benefits over the course of that year. Other factors have pushed and pulled on living standards, but we have seen a clear strengthening of the economic headwinds over the course of 2016-17. The recent reappearance of the pay squeeze has been the most noticeable manifestation yet, but there are signs too that overall incomes have been falling in recent months.

Scratching beneath the headline of slowing growth, our analysis suggests that lower income households have been particularly affected. Income inequality appears to be rising once more, with low and middle income families seeing particularly weak income growth.

If the backward-look brings some challenging sights into view, a glance to the future raises gloomier prospects still. We'll present an update of our living standards forecast for the rest of this decade and beyond in the winter, taking account of new economic forecasts and any changes in government policy. But our previous projections have pointed to falling incomes for lower income working-age families, weak growth overall and sharply rising inequality.

This outcome is far from inevitable however, with scope for policy to improve the outlook. The significant and progressive gains that the UK has experienced from employment growth over recent years could potentially continue given the right support and an increasing focus on the quality of jobs.[49] Good and ambitious housing policy could also help ensure housing costs and home ownership trends are more of a headwind than a tailwind for living standards. More generally, the government must ensure a strong economy overall, with a careful Brexit policy and productivity growth across the country and across sectors: easier said than done, of course.

But alongside the long-term task of supporting growth – right across the country – other choices around distributional and fiscal trade-offs remain key. While recognising the backdrop of still-elevated public debt, working-age welfare cuts currently look set to compound a living standards squeeze – and in many cases further delay recovery from the last crisis – and reconsidering these should be a high priority across the political spectrum.

We hope this report has helped set out some fundamentals and persistent trends – both good and bad – in the state of UK living standards, and a challenge for the nascent parliament and Brexit process to help those many parts of the population who might justly feel left behind.

[49] See S Clarke et al., *Work in Brexit Britain: reshaping the nation's labour market*, Resolution Foundation, July 2017

Annex

Annex

‘Nowcasting’ household incomes in 2016-17

Data on household incomes has thankfully become timelier in recent years, with survey data from the ONS and DWP now released within 12 months of the end of the financial year. Nonetheless, this still means detailed knowledge of UK living standards could be up to 23 months behind the times. This compares unfavourably to statistics on earnings, employment, prices and more, where data can come with a lag of as little as one month.

The relative timeliness of other statistics, however, offers us the ability to piece together what has happened to household incomes based on those separate components of living standards. Not least, the quarterly Labour Force Survey – while not containing a household income measure – contains a wealth of data that can be used to guess what will happen in the less timely household income surveys.

This report therefore analyses household incomes using outturn survey data – especially the *Family Resources Survey / Households Below Average Income* series (available via the UK Data Archive to registered users) – but, where possible, adds our own ‘nowcast’ for 2016-17, less than four months after that year ended.

Table 4 shows the various assumptions and sources we use to create this nowcast of 2016-17. These can be grouped into three stages, all using the starting point of the 2015-16 *Family Resources Survey*.

- First, regarding incomes, we uprate earnings and other private sources of income using known wage growth among other factors. We also use the IPPR tax-benefit model to incorporate 2016-17's tax and benefit system.
- Second, regarding costs, we use deflators provided by the ONS for real-terms adjustments (these are special variants of CPI designed for household income statistics) as well as specific data on housing costs in 2016-17.
- Third, we ‘reweight’ the population to account for known changes in employment, demographics and more.[50]

There are some trends that we do not attempt to model, including the impact of increased pension contributions – especially through auto-enrolment – on disposable incomes. And there are some specific changes in 2016-17 which we do not capture. These include the abolition of contracting out on National Insurance liabilities; the abolition of the family element of housing benefit for new claimants; reductions in the benefit cap from November 2016; and the limited roll-out so far of Universal Credit.

It should be noted that our approach is also limited by the strength and detail of its inputs. For example, we uprate all mortgage costs by the same growth figure – whereas in reality this change in costs between 2015-16 and 2016-17 will have varied by region and cohort. In some cases, our inputs can only be based on previous trends or related proxies rather than a specific source of 2016-17 data. Finally, while actual survey data will eventually become available, one extra reason for potential disagreement between nowcasts and outturn data is the year-to-year noise inherent in those surveys. Those caveats aside, however, nowcasting can provide us with insights into broad trends in income and inequalities well ahead of survey data becoming available.

[50] J Browne, *Reweight2: Stata module to reweight survey data to user-defined control totals*, IFS, July 2012

Table 4: The assumptions and sources underlying our 2016-17 nowcast

	Data used for 2015-16 → 2016-17 nowcast	Values for year-on-year growth
Income growth		
Employee earnings	Labour Force Survey 2016-17 scaled to match AWE, with public / private split and 5 quintiles within these	Private 2.5% and public 1.5%
Self-employed	AWE private sector employee earnings growth, adjusted using LFS self-employed hours growth	3.5%
Private pensions	Family Resources Survey 2011-12 to 2015-16 average growth	3.6%
Other investment	In line with AWE private sector employee earnings growth	2.5%
National tax	Outturn system	e.g. Personal allowance £10,600 -> £11,000
National benefits	Outturn system	e.g. Child benefit frozen
Council tax / rates	Regional averages estimated from official data	From 0% (Scotland) to 3.7% (SW & NE)
UC roll-out	Not modelled	-
Family element cut roll-out	Not modelled	-
Two child policy roll-out	n/a	-
Auto-enrolment roll-out	Not modelled	-
Student loan roll-out	Not modelled	-
Cost increases		
CPI inc. housing costs	ONS ad hoc release	1.0%
CPI ex. housing costs	ONS ad hoc release	1.1%
Mortgage interest	ONS mortgage interest payments inflation (code:DOBQ) applied to all mortgagors	-4.2%
Private rents	ONS by region & Northern Ireland Private Rental Index	From 0.1% (Scotland) to 3.4% (SE)
Social rents	ONS CPI actual rents components, with local authority / registered social landlord split	-0.3% (Council) & -0.9% (RSL)
Eligible rents	We assume all private renters are now above the (frozen) LHA caps so pay for any new rent increases	Frozen for the private sector. As above for social rents
Service charges, ground rent etc.	ONS regional private rent growth - historically a good proxy	From 0.1% (Scotland) to 3.4% (SE)
Structural insurance	ONS house contents insurance (code:D7F2) - historically a good proxy	0.4%
Water and sewerage	ONS water supply and misc. services (code:D7CG)	1.4%
Reweighting		
Adult unemployment, non-participation, self-employment and public/private employees	Labour Force Survey 2016-17	e.g. Self-employed rose 3% as share of adults
Regional population with adult worker / non-worker split	Labour Force Survey 2016-17	e.g. Workers in the North East rose 1% as share of adults
Population by gender and age (5-year bands)	Labour Force Survey 2016-17	e.g. Men age 70-74 rose 5% as share of adults
Household employment status, single/couple status and number of kids	Labour Force Survey 2016-17	e.g. Non-working single parents fell 15% as share of adults
State Pension Age	Small change in female state pension age not modelled	-
Numbers with private pension / state pension entitlements	Not modelled	-
Housing tenure change	Labour Force Survey 2016-17	e.g. Outright ownership rose 2% as share of adults

Resolution Foundation

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- *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.*

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