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Resolution Foundation

REPORT

Living Standards 2017

*The past, present and possible future
of UK incomes*

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RF

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All errors of course remain the authors' own.

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Executive Summary

This is the Resolution Foundation's eighth annual state of the nation report on UK living standards. It comes at a time when the recovery from the last downturn is still incomplete for some, yet the threat of a new squeeze on living standards looms large. Following a year of significant change that reinforced the crucial role of living standards in shaping politics on both sides of the Atlantic, this report provides a chance to both look back and assess income growth during the Cameron premiership, and look ahead at the prospects for the 'just about managing' families whom Theresa May hopes to help. And with the formal process of leaving the European Union expected to begin soon and to last right through the remainder of this Parliament, this report assesses the factors likely to affect households over that time period, ranging from the relatively certain – such as faster price rises and the roll-out of welfare cuts – to the highly uncertain outlook for wages, employment and housing costs.

The current state of living standards: a mini-boom draws to a close

The financial crisis led to a deep hit to the economy and living standards, and likely a permanent loss of income relative to the pre-crisis trend. Perhaps it also helped stir political dissatisfaction. However, **household income growth has been strong in the past few years, driven by large falls in inflation and large increases in employment.** In 2014-15, we know that median real household disposable income – the best measure of living standards and the focus of this report – grew by 3.4 per cent: the fastest increase since the early 2000s.

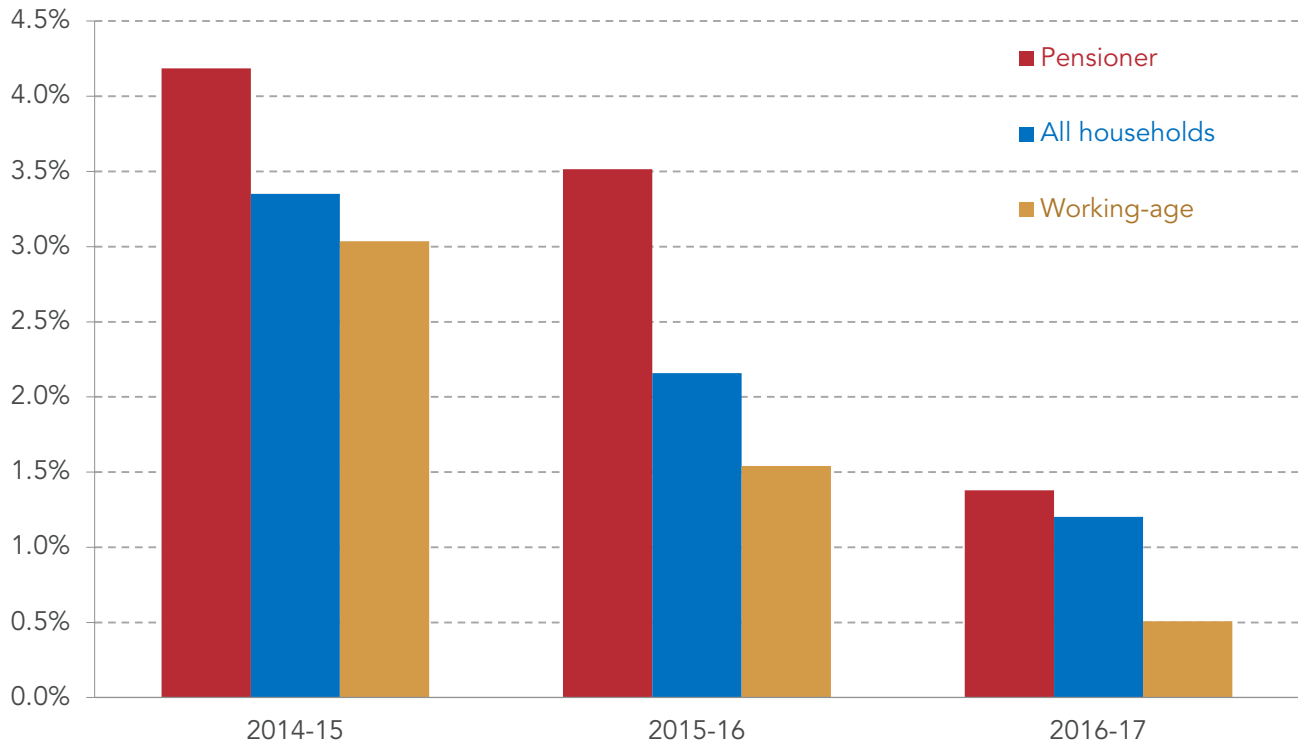
Given recent data about earnings, employment, housing, taxes and benefits, **we are also able to 'nowcast' income growth in 2015-16. Strong growth appears to have continued, implying a two year living standards mini-boom that was well shared and benefited the low and middle income households the Resolution Foundation focuses on.**^[1] Inflation was around zero, supporting strong – and progressive – real earnings growth and muting the effects of benefits cuts. Employment grew rapidly too, particularly

[1] Further details on the experience of low and middle income households, or the 'just managing families' as the government prefers to refer to them, is set out in Annex 1, building on D Finch, *Hanging on: the stresses and strains of Britain's 'just managing' families*, Resolution Foundation, September 2016

benefiting poorer households. We estimate that typical income was 2.2 per cent higher than the year before.

However, this growth was very dependent on falling oil prices and rising employment rather than improvements in productivity. **Part way through 2016-17, there are good reasons to think that this mini-boom has already drawn to an end.** While inflation could not have been expected to remain near zero indefinitely, the large fall in the value of Sterling following the EU referendum has triggered faster increases in inflation than had previously been expected. The headline CPI rate reached 1.6 per cent in December 2016 and is expected to average over 1 per cent for the financial year as a whole, up from just 0.1 per cent the previous year. Yet earnings and working-age benefits growth have not risen in such a way, and employment now appears to have plateaued, albeit at record highs.

Using a mixture of outturn data and Office for Budget Responsibility (OBR) projections, **we estimate that income growth has slowed substantially in 2016-17, with typical income 1.2 per cent higher than the year before.** For working-age households we project growth to have more than halved to only 0.5 per cent, though falling costs for mortgagors may ameliorate the impact somewhat. Income growth for lower income working-age households may have particularly weakened due to the combination of rising prices and frozen working-age benefits, despite the welcome introduction of the National Living Wage and another fall in the number of workless households.

Figure 1: Income growth is set to slow*Growth in median household income, before housing costs*

Source: RF analysis of HBAI and RF nowcast

Notes: Incomes deflated using CPI before housing costs variant

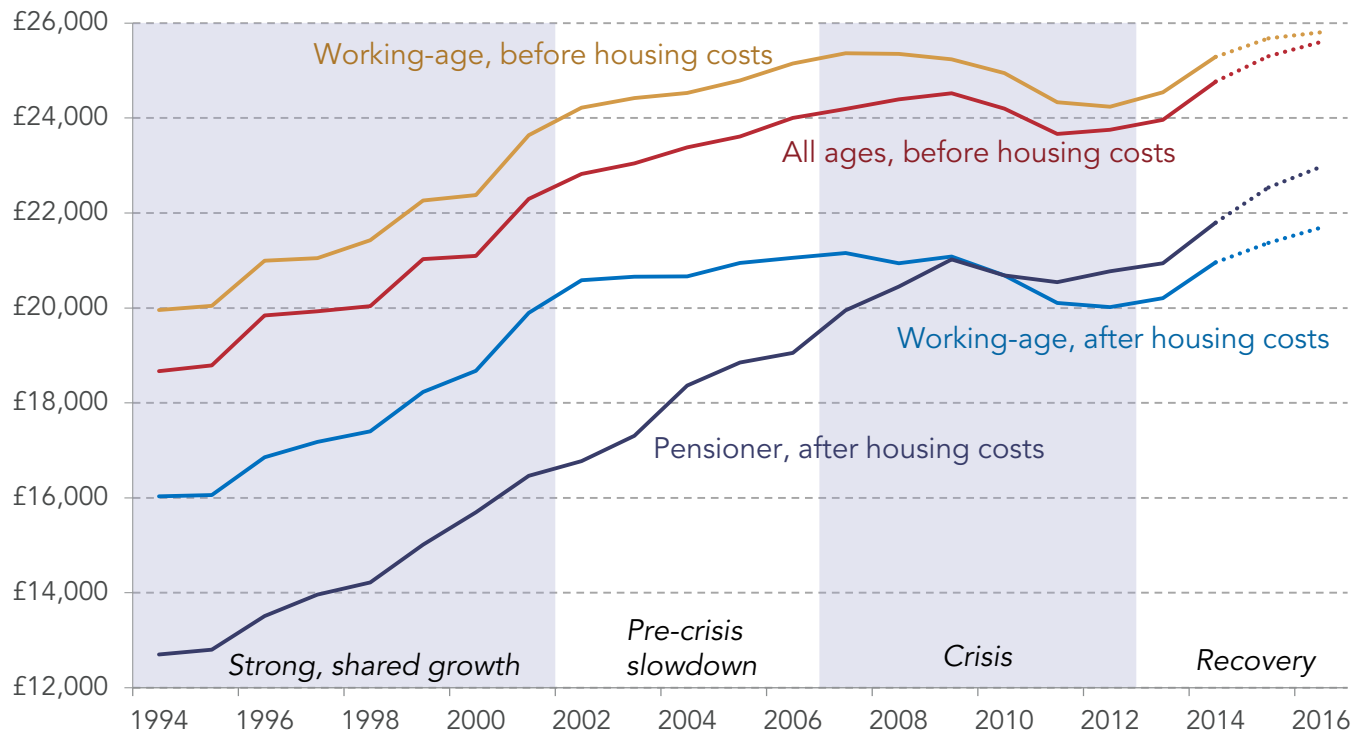
Taking a longer view: the winners and losers of the past 20 years

These recent changes must be situated within the last downturn and pre-crisis trends, both overall and for different regions, age groups and incomes.

Figure 2 shows the big picture of typical incomes since 1994-95. Overall, household incomes are now above their pre-crisis peak – despite the fact that average earnings are far below the highs seen before the financial crisis. But the great recession has cast a long shadow, with typical incomes £3,100 below where they would have been if the pre-crisis growth trend had continued.

Figure 2: Outturn and nowcasted median income

Median equivalised disposable income (adjusted using CPI variants)



Source: RF analysis of HBAI and RF nowcast

The crisis itself did not come on the back of strong increases in living standards, instead being preceded by a pre-crisis slowdown in income growth from the early 2000s that particularly affected low and middle income working-age households. The result is that, while the story of inequality in Britain today is principally one of steep rises in the 1980s to high levels followed by two decades of flat inequality, the proportion of income going to the very top 1 per cent grew even during this period. In pre-crisis Britain you need to go back to the period of the late 1990s and early 2000s to find a sustained period of genuinely strong and evenly shared income growth, making the short lived nature of the recent mini-boom all the more unfortunate.

Age differences are now a major division in how income growth plays out in 21st century Britain. Typical pensioner incomes have been growing consistently faster than working-age ones – ten times as fast in fact since the mid-2000s. This has meant a very welcome fall in pensioner poverty and has helped reduce overall inequality, but has also led to the unprecedented situation where **typical pensioner incomes after housing costs are now higher than those of**

a typical working-age household. Indeed incomes for households headed by 25-44 year olds are still not back to their pre-crisis peak, while incomes among pensioner households have grown by 9 per cent in the same period.

Regional inequalities persist, with incomes in the vast majority of the country more than 10 per cent lower than in the South East. The North East and the West Midlands have the lowest levels of income, both 20 per cent lower than in the South East. Contrary perhaps to received wisdom, London is not the region with the highest income, and once housing costs are taken into account incomes in the region are roughly 10 per cent lower than in the South East.

These inequalities remain despite the fact that the country has experienced strong, shared employment growth since 2011. Despite historic highs both nationally and regionally, employment rates in some regions remain lower than was ever the case in the best performing regions during the recession.

Living standards are a function both of the cash income available to households and the cost of goods and services that can be purchased with that income. Given the importance of inflation to living standards in recent years, both for better and worse, this paper also looks in some detail at how inflation has varied over time for different income groups – going beyond the regular assumption that inflation affects all households proportionally. **Inflation rose faster for lower income households since the turn of the millennium, though it has been disproportionately low for pensioners and for poorer working-age households over the last two years of the living standards mini-boom.**

Looking ahead: the worrying outlook for the rest of the parliament

With the eventual shape of Britain's withdrawal from the EU unknown, and pre-existing concerns about whether or not the historic trend of productivity growth will return, the medium-term outlook for the economy in general and for living standards in particular is especially uncertain. But, taking the November 2016 economic forecasts of the OBR together with stated policy on taxes and benefits, we are able to project the implied path of household incomes across the distribution. We find two distinct, and worrying, results: income growth is set to slow to extremely low levels and in a way that is highly regressive, with income falls for poorer households.

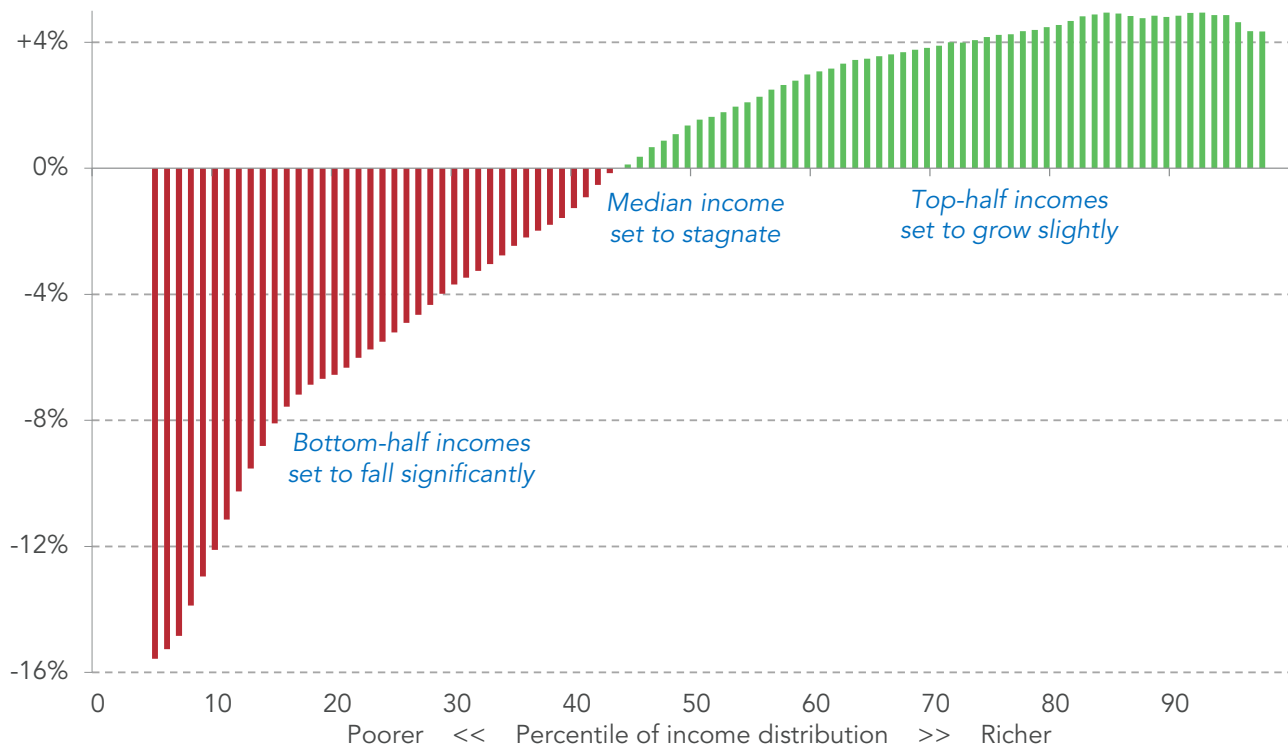
Overall, **the factors underpinning the end of the living standards mini-boom this year look set to persist, resulting in very weak growth of 0.3 per cent a year in median working age household income over the next four years, once we account for housing costs.** Inflation is expected to remain elevated above the Bank of England's 2 per cent target over the next two years, while employment is forecast to plateau around 32 million for the remainder of the parliament bringing an end to the fast employment growth of recent years. Nominal pay growth is also forecast to remain low on the back of another poor outlook for productivity growth in the latest OBR forecasts.

This overall weak growth also hides a division between growth for some and falling living standards for others, as Figure 3 shows. **Very significant cuts to working-age welfare of over £12 billion are a key component of what looks set to be falling living standards for almost the entire bottom half of the working-age income distribution between this year and 2020-21.** Chief among these welfare cuts are the remaining three years of a freeze in working-age benefits in the face of greater than previously expected price increases; the implementation of reductions to work allowances in Universal Credit to make the new system significantly less generous than existing benefits; and other cuts that impact on families with more than two children in particular.

In contrast, incomes in the top half of the working-age household distribution are projected to grow by a modest 4 per cent, largely comprising unimpressive pay growth and a slight boost from income tax cuts.

Figure 3: Forecast income growth from poorest to richest (working-age, after housing costs)

Real equivalised household disposable after-housing income growth, 2016-17 to 2020-21, working-age



Source: Resolution Foundation projection using OBR economic forecasts, planned tax and benefit policies and other assumptions.

Notes: Total change over four years. Smoothed change in average income of percentile group. Inflation-adjusted using CPI after housing costs.

The result is that **the parliament from 2015-16 to 2020-21 is on course to be the worst on record for income growth in the bottom half of the working age income distribution. At the same time, we project the biggest rise in inequality since the 1980s, with inequality after housing costs reaching record highs by 2020-21.**

Table 1: The current parliament could be the worst on record for the bottom half and the largest increase in inequality since 1987-1992



Source: RF analysis of DWP, HBAI; IFS, *Living standards, poverty and inequality in the UK*; and RF nowcast and projection

Overall income growth was weaker in the parliament from 2005-06 to 2010-11 than we are projecting for this one, but those on lower incomes were relatively protected. And while there were large increases in inequality and relative poverty in the 1980s, those were periods of overall high growth and at least some growth at the bottom. **Our projected combination of weak average growth, falling incomes for the bottom half and rising inequality is perhaps without precedent.**

The forecast is particularly bad for families with children and public sector workers. Meanwhile those without children or those with mortgages, who are expected to continue to receive a very significant boost from low interest rates, are projected to do better than average. Pensioner income growth is also expected to continue, the drivers of which will be covered in a forthcoming Resolution Foundation publication for the Intergenerational Commission.

Conclusion: worrying times, but time to make a difference

The outlook for living standards in 21st century Britain does not look promising. The end of an all too short lived period of strong income growth comes soon after the years of the last downturn. And the projections in this report on both the weak and regressive nature of income growth in the years ahead should concern us all. But they are far from inevitable

First, economic forecasts can change dramatically. Were employment to continue to surprise on the upside with a return to significant growth, and inflation not to rise above the 2 per cent target in the coming years, then living standards would be materially higher. However there are likely to be as many downside risks as upside ones. If inflation was in fact to rise above the OBR's projections – in line with some other forecasts – the outlook would look bleaker still.

Secondly – and more predictably – there is an opportunity to alter the projected trajectory by shifting policy choices, in particular on benefit cuts that are driving down income for the bottom of the income distribution and driving inequality up. As planned, these changes outweigh progressive wage growth associated with increases in the National Living Wage and the impact of planned further income tax cuts. Crucially, policy choices inherited from a previous government can be unmade – the opportunity to do which may be the only advantage to the fact that 2017 will be the year of two Budgets. But the government can influence more than just the tax and benefit system, and it is important that we do more to tackle the UK's chronic underperformance on productivity. And, learning the lessons of the last parliament, further progressive gains in employment can also be targeted.

We hope our projections are wrong. Certainly there is no way of knowing just how the future will play out, but what's clear is that a failure to act could have damaging and potentially unprecedented consequences for British living standards. Much of focus of the government's upcoming fiscal events, alongside its handling of Brexit negotiations throughout this parliament, should be on ensuring these grim forecasts do not come to pass.

Section 1

Introduction

UK living standards have largely been on the up for hundreds of years. But they can also be a rollercoaster. The financial crisis triggered a deep fall in incomes, yet more recently there has been a strong (though still unfinished) living standards recovery. Now, however, the outlook suggests that this much needed recovery will not last, and has indeed already slowed considerably. Recent data suggests that many of the things that boosted income growth recently, such as fast rising employment and low inflation, have come to an end. Looking further ahead the picture does not improve. Forecasts for key economic indicators, as well as planned changes to the tax and benefit system, indicate that income growth is likely to slow significantly in the next few years. This report provides detailed analysis of the state of UK living standards and also what might happen over the next few years.

Our discussions are not just about aggregate or average changes. Inequality in its various forms remains a key economic and political issue. Our report, as ever, gives special attention to low and middle income working-age households and the Prime Minister herself has instituted a new focus on this group who are only “just about managing”. Such a focus is welcome as 2017 promises to be an eventful year for the country’s economy. As well as the worry that it marks the end of the recent living standards mini-boom, this is the year that Britain is expected to formally begin its exit from the European Union and a year of two full budgets (Spring and Autumn), giving extra attention to tax, welfare and growth policies.

So this report, the Resolution Foundation’s eighth annual assessment of living standards, seems particularly timely. It aims to provide a comprehensive look at the state of household incomes in 21st Century Britain.

- » **Section 2** looks at the most recent data on the **factors that drive living standards**, such as employment, earnings, prices, welfare policy and housing; and assesses how these have evolved over the past few years.
- » **Section 3** then uses this timely data to estimate a **‘nowcast’ of household income levels**.
- » **Section 4** puts this recent growth in the **context of the past two decades** and explores **inequalities** in the UK – including between income groups, age groups and regions.
- » **Section 5** explores some caveats to the usual presentation of how living standards have changed over time, by exploring **differences in inflation experiences by group** and the limitations of assuming that price levels rise equally for everyone.
- » **Section 6** then turns to the (possible) future, setting out the **factors that will impact on living standards** and the Office for Budget Responsibility’s latest forecasts.
- » **Section 7** builds on these forecasts to construct a **projection of living standards in 2020-21**, including assessments of both which groups are likely to fare better or worse than others and how the current parliament may compare to previous ones for changes in living standards and inequality.
- » **Section 8** provides some concluding thoughts.

For more information, particularly for academic or expert readers, **Annex 1** provides a collection of statistics about low and middle income families and **Annex 2** gives technical details of our nowcast and projection methodologies.

Section 2

Recent drivers of living standards

The last few years have been good for UK living standards. Employment growth, which began in 2012, has continued, earnings growth has returned and inflation has been near zero for much of the period. The result is that households have experienced rising incomes. However, this followed some of the worst years for income in recent memory. And, more worryingly, there is evidence that the future will not be as bright.

Published household income data comes with a significant lag. But the factors that drive income levels are more easily measured. As a result these indicators can give us a timely picture of the economy and help us build up a picture of what is likely to have happened, and is happening, to living standards.

Employment and participation have performed very well, with record rates across the country. Growth has slowed more recently – potentially reflecting changed employment intentions around and since the EU referendum – but there is no sign of a reversal as yet. Average wages remain below their pre-crisis peak in real terms, and their long-term driver – productivity – remains weak. Nevertheless, real pay has been growing since 2014, boosted significantly by oil price falls. Yet while inflation remains low by historical standards, prices are now rising more rapidly due to a weaker pound and this will weigh on real pay growth which will, at best, be minimal in 2017. Despite very visible announcements, the real rate of state support was relatively protected over the course of the last parliament. This helped cushion the blow to living standards felt by many households as pay fell. However working-age benefits are now being pared back. Finally, home ownership has been in decline with more families living in the private rented sector where costs are higher. Therefore, although low interest rates will continue to help mortgagors, housing costs continue to be a challenge for many households.

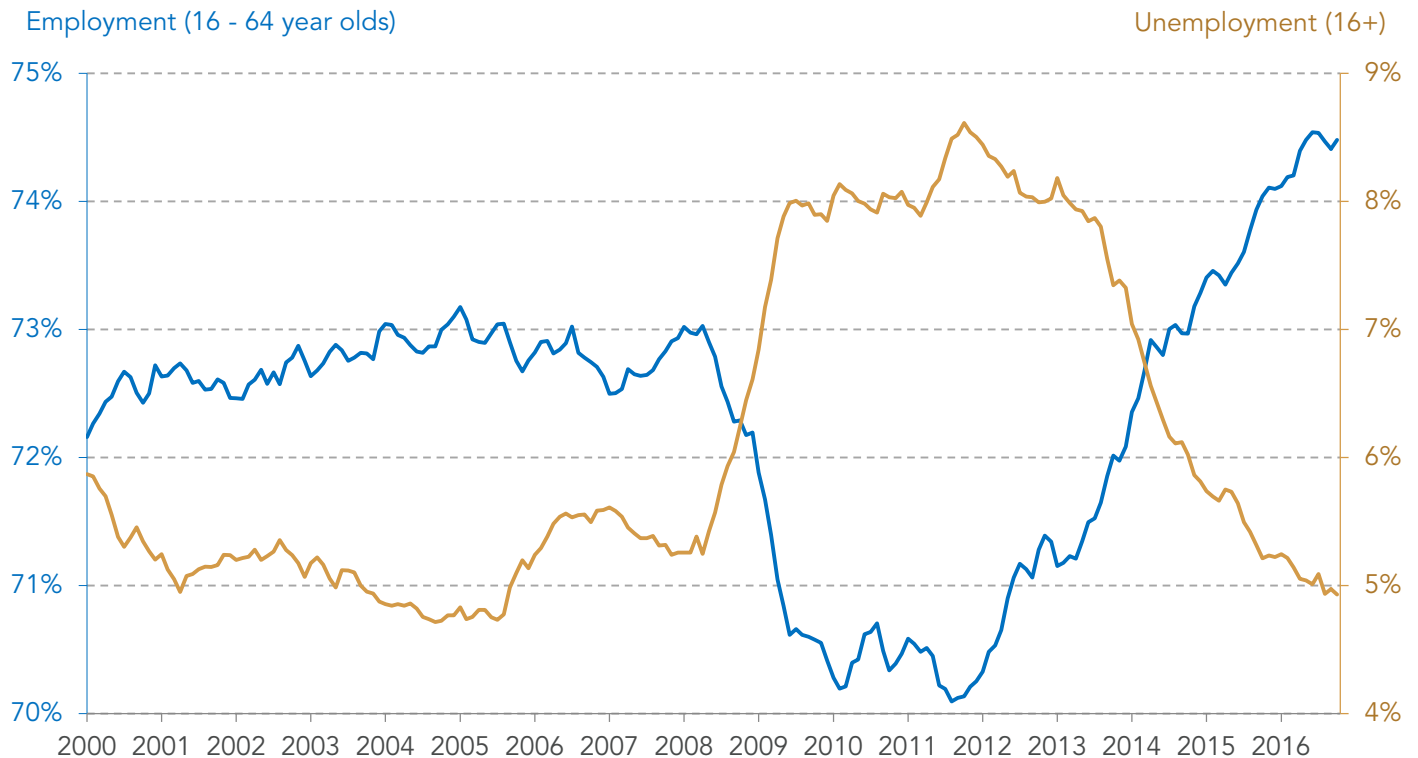
Future sections bring all this together to assess the current state of household incomes, and to look at what the rest of this parliament may hold.

Record employment has been a notable success story for the UK

One key determinant of living standards is the extent to which people are in work. Unemployment rose significantly following the financial crisis, though not as far as many people expected. But the recovery since 2012, both in terms of falling unemployment and rising employment, has been remarkable.

Figure 4 illustrates the shock of the financial crisis and the subsequent strong performance of the labour market. It shows that the employment rate is currently at a record high, with 74.5 per cent of people age 16-64 in work. In absolute terms, that is 30.6 million people – also a record. Part of the reason for this growth is increases in the female State Pension Age (from 60 in 2010 to 65 by 2018), but the proportion of people age 16 to State Pension Age is also at a record high of 75.3 per cent. And these figures come despite falling employment of those age 16-18 (who are now expected to be in full-time education) and increased university attendance.

Figure 4: Employment is at a record high and unemployment remains low



Source: ONS, Labour Market Statistics

Beneath the headline employment statistics we see differing trends across groups. On gender for instance the female employment rate is now at 69.9 per cent, up over 3 percentage points since 2006 and compared to around 53 per cent in the early 1970s. But the male employment rate is not at a record high having been significantly higher in the 1970s and earlier. Nevertheless it has returned to its pre-crisis 2000s norm of around 79 per cent.

There are also concerns about the nature of the job growth we've seen. Although the argument that the world of work is rapidly and radically changing may be overblown, it is certainly the case that more 'atypical' jobs have been created recently.^[2] This includes significant growth in self-employment and the numbers of people working for agencies or on Zero Hours Contracts (ZHCs). Recent research suggests that the number of agency workers has grown by 30 per cent since 2011^[3] while the number of people on ZHCs has risen by 15 per cent in the past year. Underemployment, measuring people not working as many hours as they would like to, remains above pre-crisis levels.

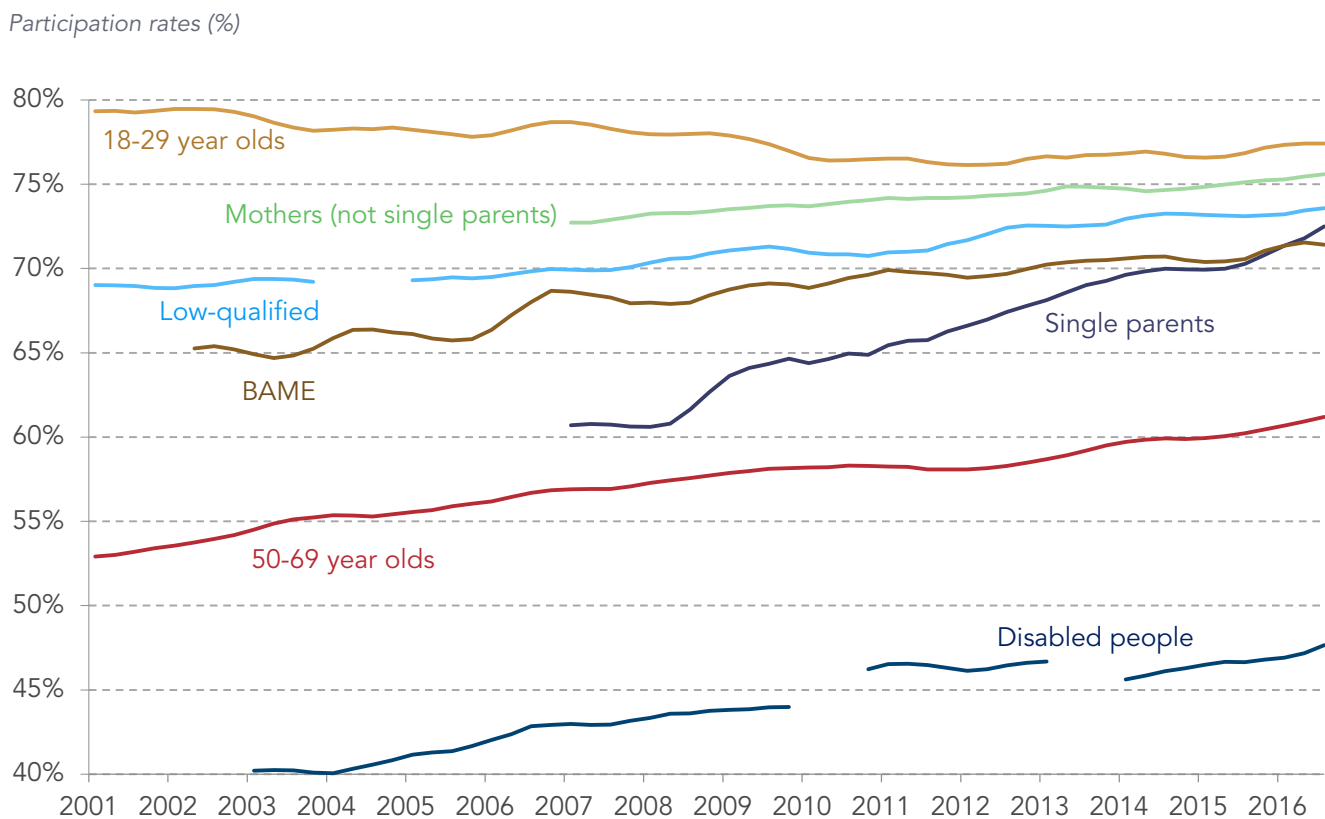
Such figures provide some useful caveats to the recent jobs boom and suggest that there may be more slack in the labour market than the headline employment and unemployment figures suggest. Nevertheless, the UK's recent performance on jobs remains nothing short of impressive. Particularly encouraging is the performance for those historically less likely to be economically

[2] [L Gardiner, Does the gig economy revolutionise the world of work, or is it a storm in a teacup?, The Economist Free Exchange, 23 October 2015](#)

[3] [L Judge & D Tomlinson, Secret Agents: agency workers in the new world of work, Resolution Foundation, December 2016](#) and [D Tomlinson, Zero-hours contracts: casual contracts are becoming a permanent feature of the UK economy, Resolution Foundation, 9 March 2016](#)

active. Figure 5 looks at the experiences of some of these ‘low activity’ groups over the past decade and a half. Positively we have seen strong increases in the participation rates of many groups, particularly the disabled, older workers and single parents, though the participation rates of most of these groups remains below average and their employment rates tend to be even further behind.

Figure 5: Most ‘low activity’ groups have seen significant increases in their participation rates



Source: RF analysis of ONS, Labour Force Survey

The government should look to build on this success. Opinions differ as to what would constitute ‘full’ or sustainable employment, but Resolution Foundation work has shown that there are a range of people and regions where more can and must be done to help those who are willing and able into work.^[4] More also needs to be done to keep people in work, with recent evidence suggesting that more people are moving from employment into health-related inactivity than previously.^[5] Encouragingly the government’s devolution programme does provide local government with the opportunity to create tailored employment support programmes, though it is likely that more will need to be done at both a national and local level if the country is to enjoy further significant gains in employment.

These statistics represent the proportion of *individuals* in work (or alternatively looking for work in the case of participation). But how that employment is distributed across *households* is also important for living standards. Crucially, the proportion of households with no one in work has,

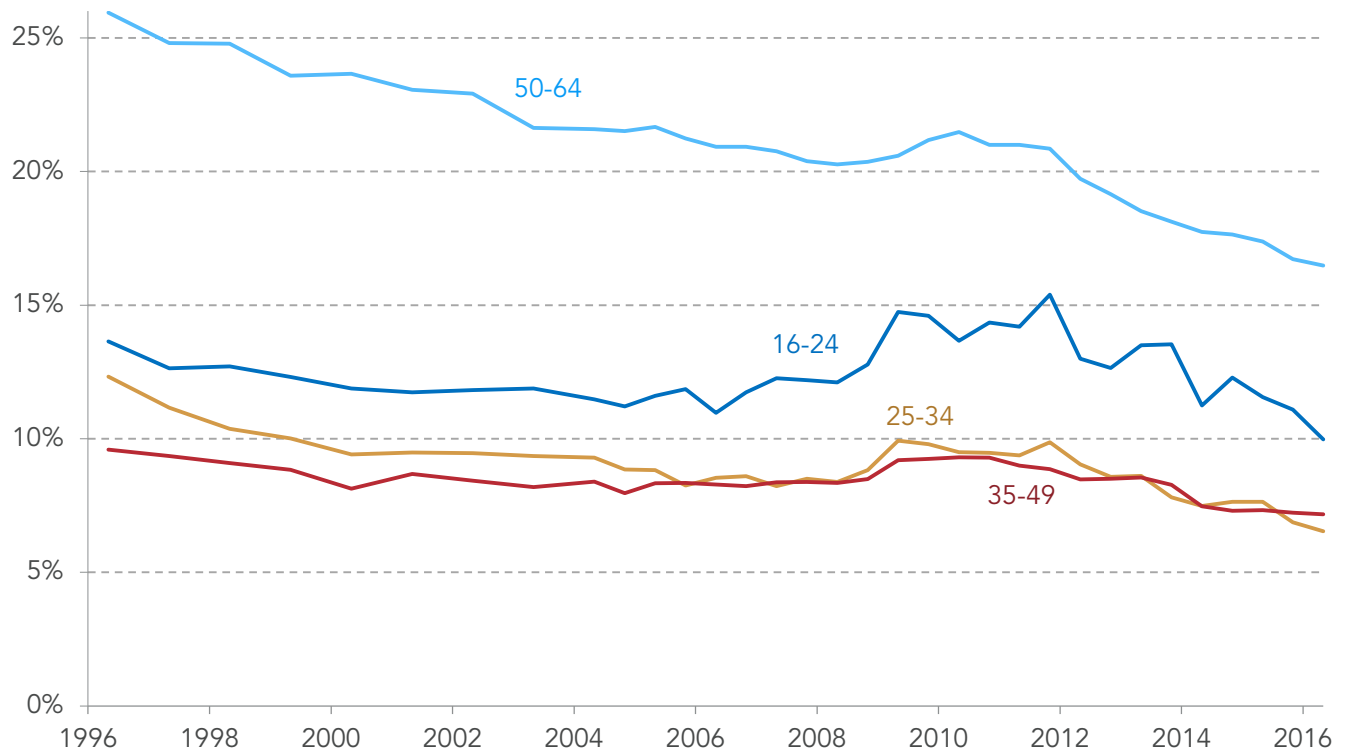
[4] L Gardiner & P Gregg, *The road to full employment: what the journey looks like and how to make progress*, Resolution Foundation, March 2016 & S Clarke, *City living: devolution and the living standards challenge*, Resolution Foundation, October 2016

[5] L Gardiner & D Gaffney, *Retention Deficit: A new approach to boosting employment for people with health problems and disabilities*, Resolution Foundation, June 2016

bar the recession, continued to decline since the mid 1990s. For all age groups this is now at a record low.

Figure 6: Household worklessness has continued to decline

Proportion of households with no-one in work (%)



Source: RF analysis of ONS, Labour Market Statistics

These changes in the labour market have provided a particularly progressive boost to household incomes, with the lower half of the income distribution benefiting most as those further up the income distribution tend to already be in work.^[6] However, they also point to the need for a change in political focus. With the long decline in the proportion of workless households, and the fact that worklessness among non-disabled couples with children is now almost zero,^[7] creating more second earners and boosting the pay of those in work become even more important.

Ultimately, the success of the employment recovery to date is likely to reduce the scope for this living standards boost to continue. Simply put, record employment rates make it harder to secure further gains and Figure 4 shows that the employment and unemployment rates may already have started to plateau, though there has been no obvious post-referendum impact.

[6] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/571529/Impact_on_households_distributional_analysis_to_accompany_Autumn_Statement_2016_web.pdf and IFS?

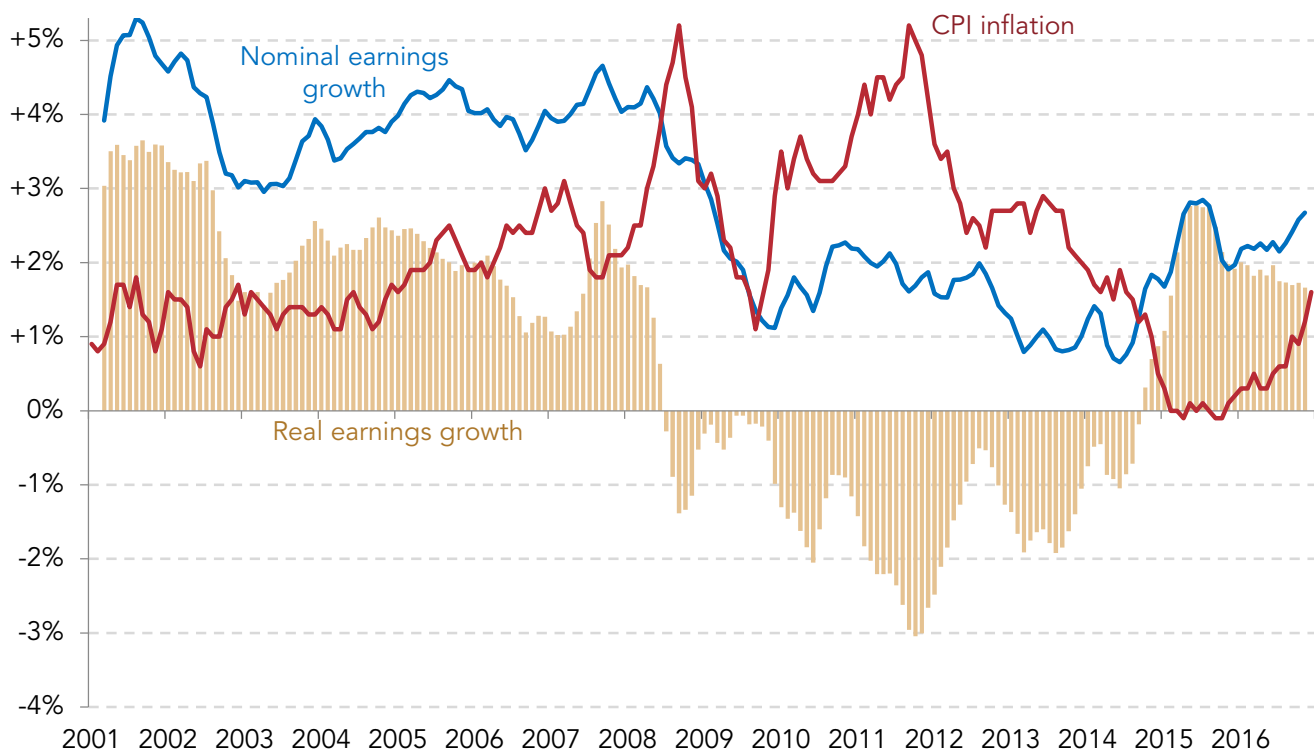
[7] P Gregg & D Finch, *Employing new tactics: the changing distribution of work across British households*, Resolution Foundation, January 2016

Real earnings received a big boost from oil price falls, but productivity growth remains sluggish

While rising employment and falling unemployment provided a welcome boost to household incomes, falling pay has been a significant drag. Figure 7 shows that between 2008 and 2014 real pay fell almost continuously as relatively meagre gains in nominal pay (growth averaged 1.8 per cent during the period) were eclipsed by inflation (growth in CPI averaged 3 per cent during the period). The cumulative impact of this is that average real pay towards the end of 2016 was lower than it was 11 years earlier – a truly shocking economic performance.

Figure 7: Real pay growth was negative for six years following the financial crisis

Annual growth in average weekly earnings and CPI inflation



Source: ONS, Average Weekly Earnings

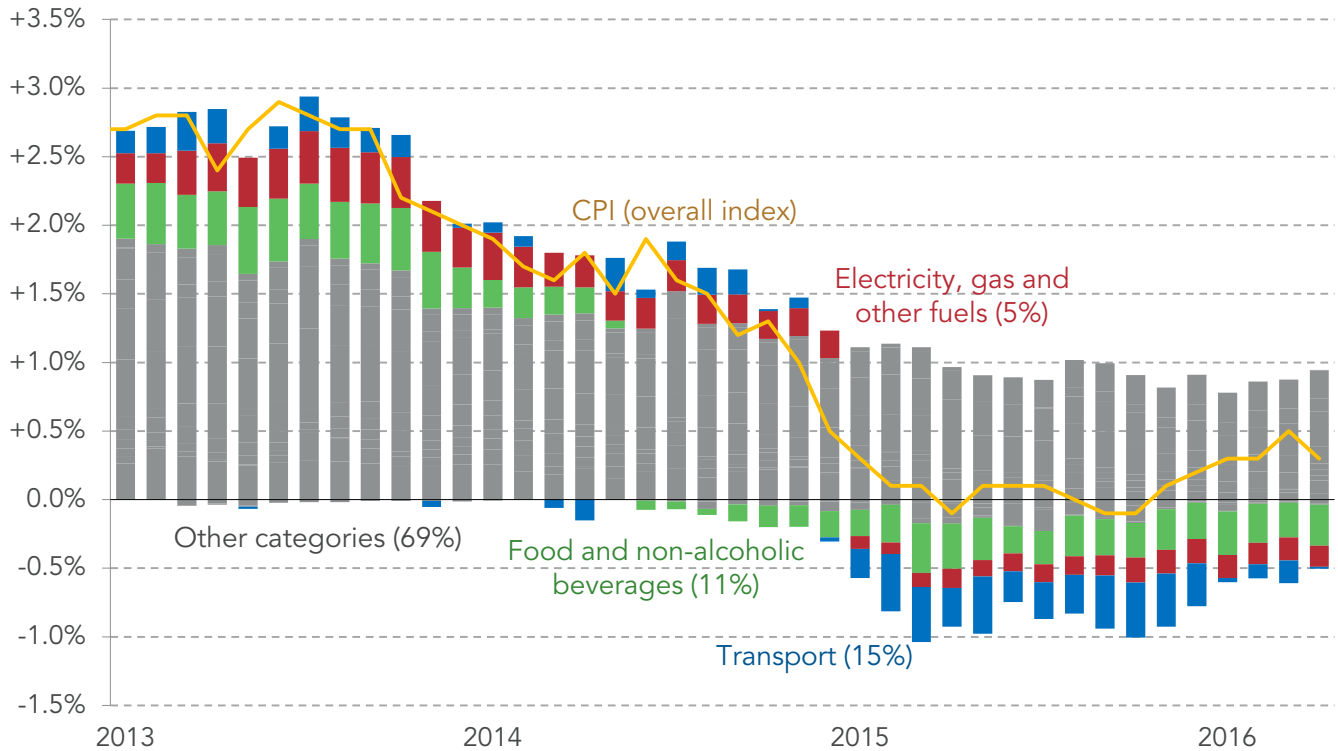
Starting in 2014, however, big falls in inflation alongside a strengthening of nominal pay growth helped boost real pay growth, which briefly even rose above its pre-crisis average of 2.2 per cent a year. However this was short lived, as inflation climbed in the second half of 2016 and nominal pay growth remained well below the pre-crisis average.

Recent real pay growth has been driven above all else by large falls in the price of oil in late-2014 and again in late-2015.^[8] As Figure 8 shows, it was this, together with knock-on falls in energy, food, transport and other costs that drove inflation down to zero.

[8] In turn driven by rising supply, such as in the US and Libya; and expected falls in demand due to slow-down fears in Europe and China.

Figure 8: Components of CPI inflation

Contributions to CPI inflation (%) (weight of categories in CPI)

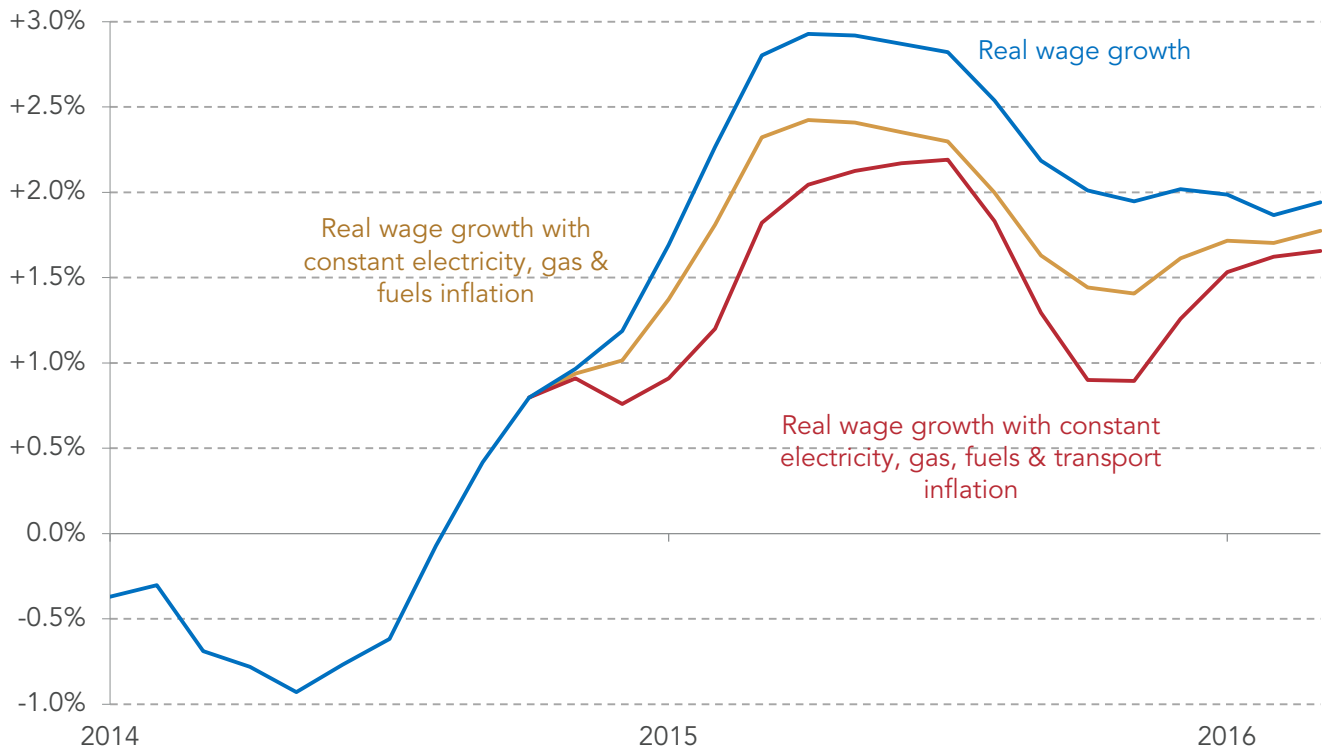


Source: RF Analysis of ONS, Consumer Price Inflation

This change significantly boosted UK living standards, and provided welcome growth after a long earnings squeeze. To get an idea of the importance of low inflation in boosting real pay during 2014 and 2015, Figure 9 compares real pay growth over this period with that which would have occurred had electricity, gas and fuels inflation continued at its previous rate rather than falling. It shows that real pay growth would have been 0.5 percentage points lower in the middle of 2015. If transport inflation had also not fallen then real pay growth would have been 1 percentage point lower in the middle of 2015. The oil price fall had knock on effects on food and other prices too, but these figures give a rough indication of the impact of the oil price windfall.

Figure 9: Low inflation has helped boost pay

Growth in real average weekly pay under differing inflation scenarios (%)



Notes: To calculate real wage growth under the two different inflation scenarios we produce two versions of CPI. The first holds electricity, gas and fuel inflation constant at the average inflation rate for these products in 2013. The second holds electricity, gas, fuels and transport constant at the average rate for these products in 2013.

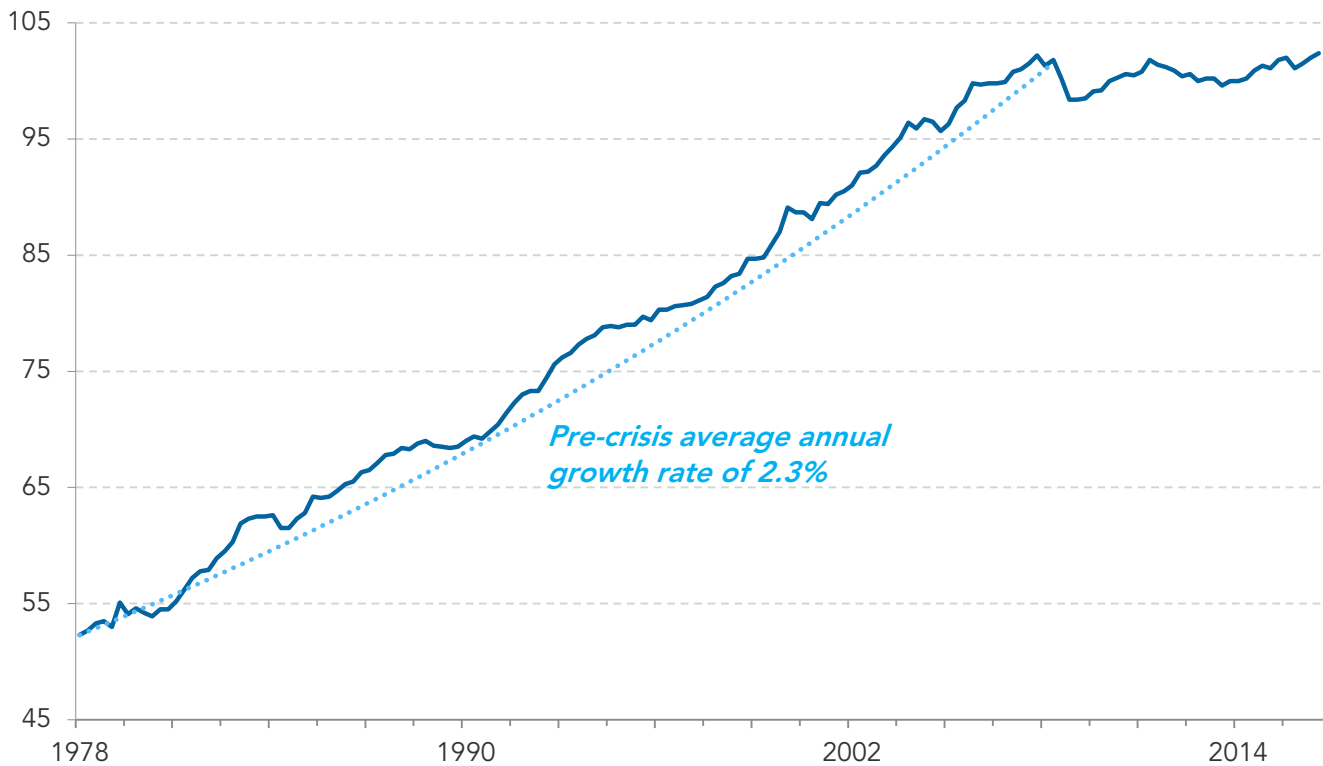
Source: RF analysis of ONS, Average Weekly Earnings and Consumer Price Inflation

Real pay growth during this period was therefore strongly driven by historically low inflation. In fact, despite an increase in 2014, we did not see nominal pay growth come close to reaching the levels recorded before the crisis.

The poor performance on pay has been underpinned by the underlying problem of slow productivity growth. UK output fell dramatically following the financial crisis. From its pre-crisis peak in the first quarter of 2008, overall gross value added (GVA) fell by 6.3 per cent by the second quarter of 2009. Part of this was the product of job losses, but there was also a fall in productivity (measured in Figure 10 using GVA per hour worked). Perhaps even more worrying is how weak productivity growth has been since then. Far from there being a rebound period of above-trend growth, there has been a profound slowing. Output per hour in Q3 2016 only narrowly topped its Q4 2007 peak, meaning nine years of lost growth. While productivity growth rates have fluctuated (with output notably weakening around 2012-13), quarterly year-on-year growth figures have not once hit their pre-crisis average since 2007.

Figure 10: Productivity has only just returned to its pre-crisis peak

Index of output per hour worked (2013 = 100)



Source: ONS, Labour Productivity, Preliminary Estimate of GDP time series dataset

Much has been written about this UK ‘productivity puzzle’ and – given slowdowns in a number of advanced economies – what the future may hold for productivity growth globally.^[9] Much uncertainty remains, but what is clear is that these figures are cause for great concern given that productivity growth is ultimately the main determinant of living standards and real pay growth.^[10] Unless productivity picks up it is unlikely that we will see sustained and robust increases in pay in the coming years.

Pay growth has been faster for the low paid and private sector

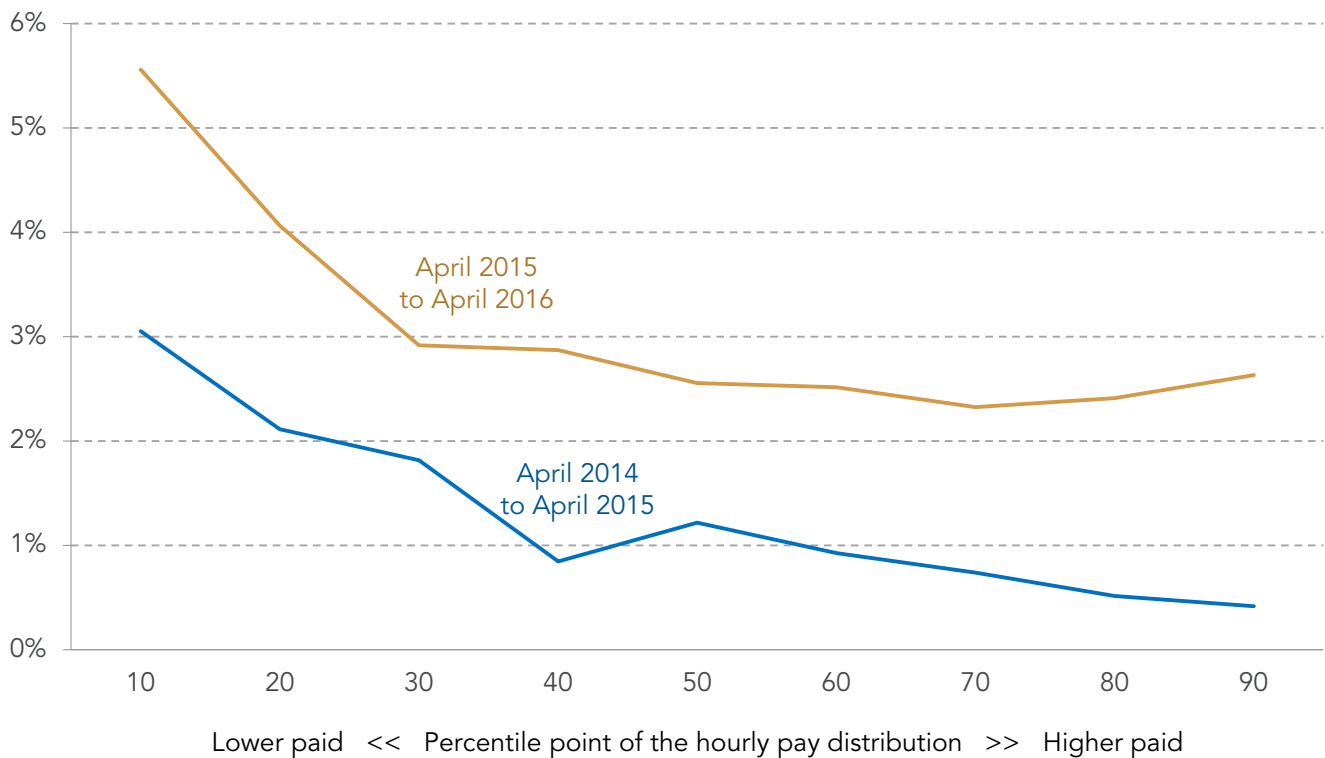
The recent uptick in pay growth has benefitted people to differing degrees. Figure 11 shows that real pay growth from (April) 2014 to 2015 was significantly higher for low earners, as was the substantial growth from 2015 to 2016. This is true both of hourly and weekly pay and was aided by increases in the National Minimum Wage (NMW) and then the introduction of the National Living Wage (NLW) in April 2016.

[9] See for example <https://bankunderground.co.uk/2016/11/17/there-are-two-productivity-puzzles/>

[10] Indeed, the OBR has, for now, downgraded its assumption of long-term productivity growth from 2.2 per cent to 2 per cent.

Figure 11: The minimum wage and then National Living Wage have helped deliver progressive wage growth

Growth in hourly pay (ex. overtime), RPIJ-adjusted



Source: RF analysis of ONS, ASHE

This new minimum wage for workers 25 years and older was introduced at £7.20 an hour. It will rise to £7.50 in April 2017 with the intention that its value reaches 60 per cent of a typical (over-25) worker’s hourly wage by 2020. This welcome boost to low earners is projected by us to deliver the first significant reduction in relative low pay that the country has seen since the introduction of the NMW.^[11] So far there is little sign of reductions in jobs or hours for low paid workers,^[12] and there is evidence of ‘spillovers’ in the form of rising pay for those already above the threshold and for often those under 25 too.^[13]

The NLW is likely to have some upward effect on prices and some modest employment effect is anticipated by 2020. It will also increase the number of people earning only the legal minimum and could therefore create new pressures around progression in some sectors and parts of the country. Nevertheless, the policy looks set to provide an important living standards boost.

As well as this growth difference between low and high earners, there are differences between sectors. Recently growth has been stronger in the private than the public sector. And within these broad categories some industries have experienced large pay increases while others have had more muted growth, or even real pay falls. This is something we will investigate in more detail in future. Notwithstanding these variations, however, average weekly pay remains four per cent below its pre-crisis peak.

[11] [S Clarke and C D’Arcy, Low Pay Britain 2016, Resolution Foundation, October 2016](#)

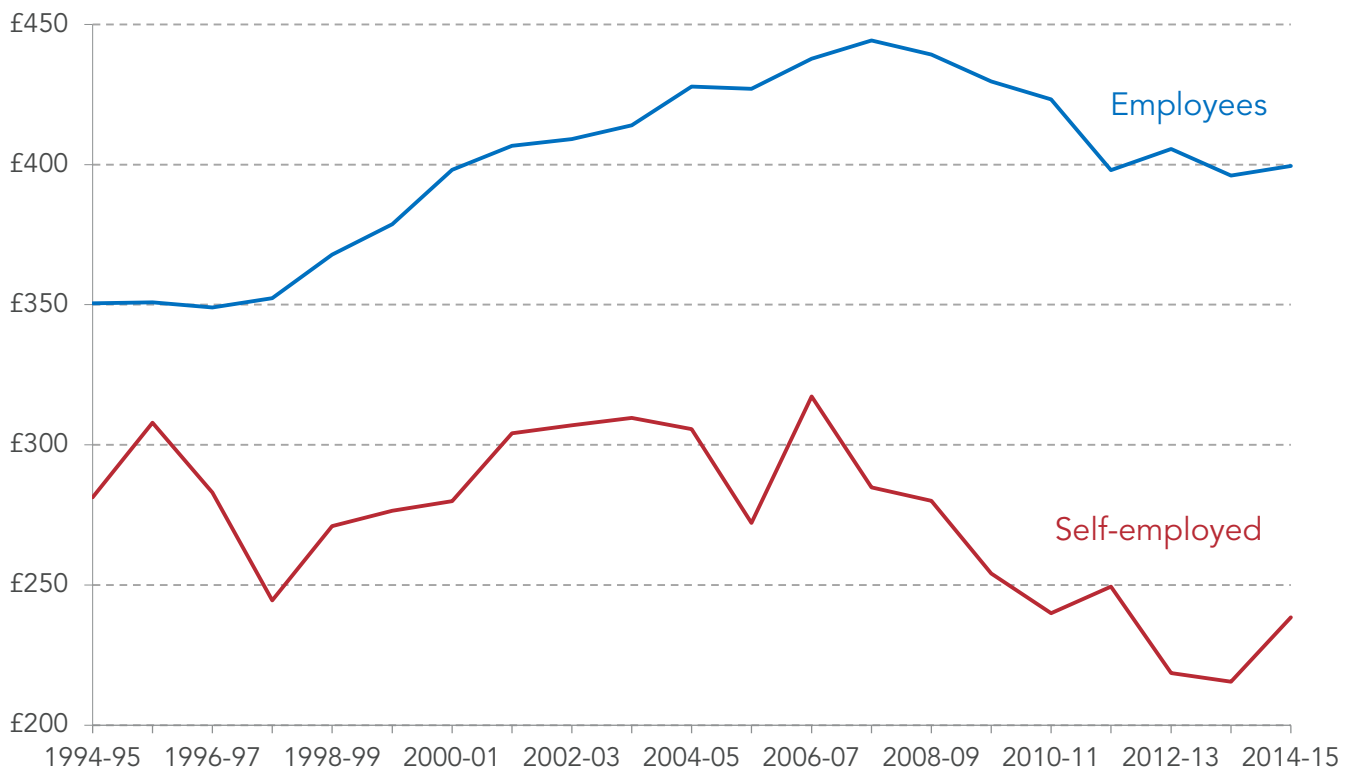
[12] [C D’Arcy and A Corlett, Taking up the floor: exploring the impact of the National Living Wage on employers, Resolution Foundation, September 2016](#)

[13] [Low Pay Commission, National Minimum Wage Low Pay Commission Report Autumn 2016](#)

One group of people not included in these figures is the self-employed. This is despite the fact that this group now makes up 15 per cent of workers. Due to the limitations of official data, we know far less about the earnings of the self-employed than we do about employees and they are not included in the regular pay statistics. The data we do have suggests that the self-employed typically have lower earnings than employees (though there are also many high-earning self-employed) and that they have experienced an even larger earnings decline since the financial crisis, as shown in Figure 12.

Figure 12: Typical self-employed earnings are lower than employees' and have fallen further

Median weekly earnings, CPI-adjusted (2014-15 prices)



Source: RF analysis of DWP, Family Resources Survey

In fact, it appears that typical self-employed earnings in 2014-15 were lower than they were 20 years earlier. This is partly – but only partly – down to a changing composition of the self-employed.^[14] The limited evidence available suggests incomes for the self-employed have turned a corner, but it remains to be seen whether this will continue.

The short era of low inflation has come to an end

We have seen that earnings for employees have at least been recovering in real terms, spurred by big oil price falls in 2014 and 2015. But this gain from ultra low inflation has almost certainly now run out of steam and may even go into reverse.

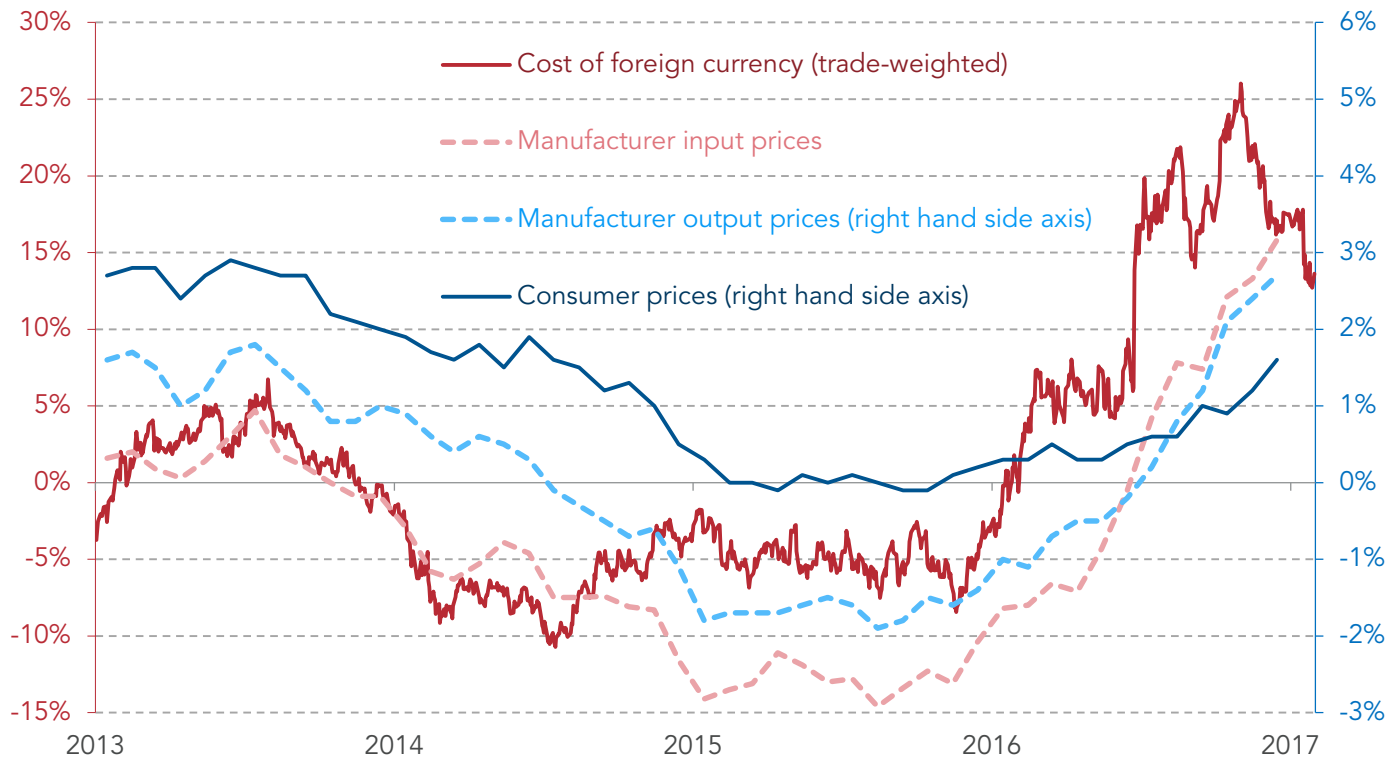
Following the result of the EU referendum, the (trade-weighted) value of Sterling has declined by between 15 and 20 per cent compared to the same time a year earlier, increasing the cost of

[14] A Corlett, Resolution Foundation Earnings Outlook

imports by the same margin. Indeed, the cost of liquid fuels was 22 per cent higher in the latest inflation data (December 2016) than in June 2016, air travel costs were up 20 per cent, and fruit costs were up 6 per cent. Overall, consumer price inflation has risen to 1.6 per cent, from 0.5 per cent in June.

Figure 13: Inflation in currency costs is feeding through to manufacturers and consumers

Year on year inflation



Source: ONS; trade-weighted exchange rate from Bank of England

Of course, inflation of 1.6 per cent is not high by historic standards and indeed is below the Bank of England’s 2 per cent target, reinforcing that the near zero inflation of recent years was never sustainable. However, inflation is expected to rise further and exceed the Bank’s target in the short term – as the currency changes gradually feed through to production costs (also shown in Figure 13) and then to consumer prices. It is clear that the period of super-low UK inflation has ended.

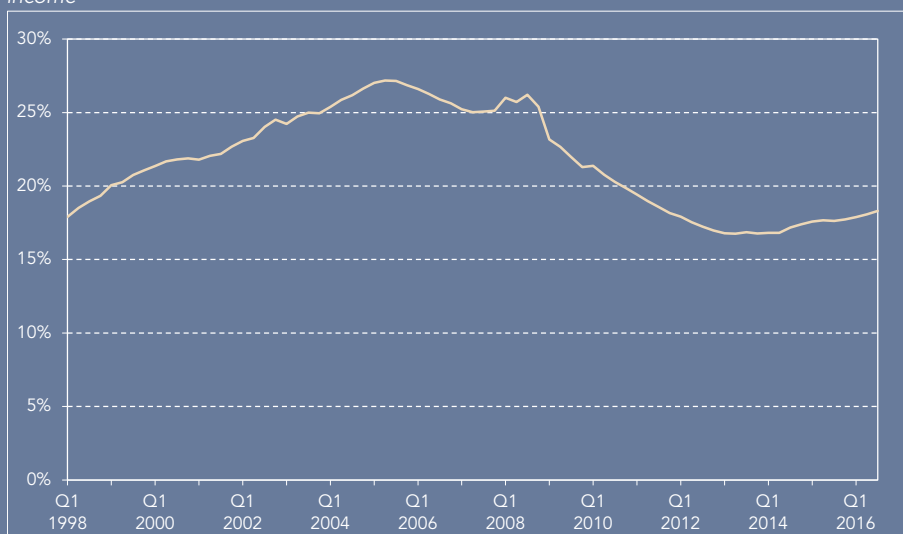
i Box 1: Household borrowing

This report focuses on household incomes as a proxy for living standards. But households can also borrow, run down savings or simply save less to boost their consumption.

Indeed, unsecured debt (excluding student loans) has been rising as a share of disposable household income since 2014, helping to fuel spending and ending the downward trend that began around 2005, as shown in Figure 14.

Figure 14: Unsecured debt has been rising, but remains far below pre-crisis shares of income

Outstanding unsecured debt (excluding student loans) as a share of disposable household income



Source: RF analysis of ONS National Accounts and Bank of England

Notes: Chart shows amount outstanding as a share of National Accounts disposable income on a 'cash' basis: that is, after removing 'imputed rental' income and other imputed transactions. For more detail see ONS, *Alternative measures of UK real household disposable income and the saving ratio*.

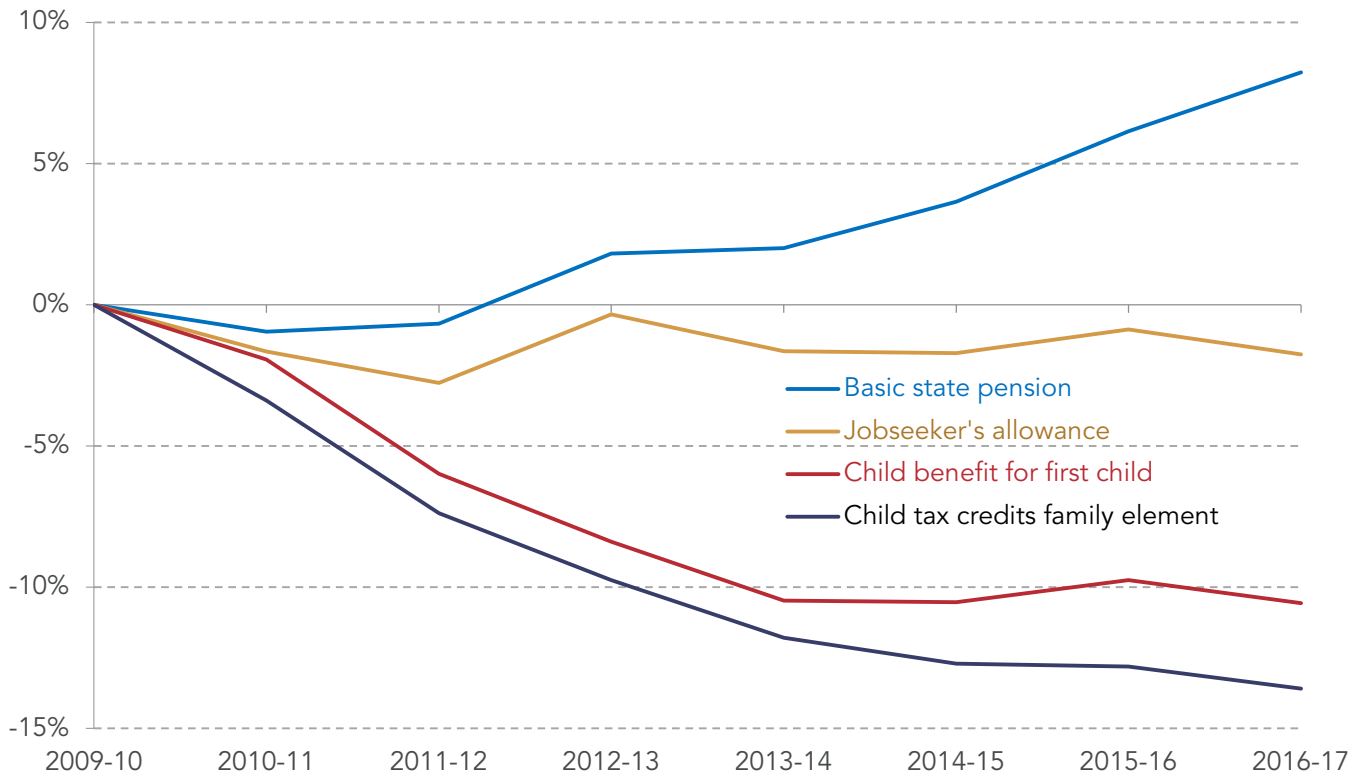
Average unsecured debt as a share of disposable income remains lower than at any point in the 2000s, at 18 per cent. However, borrowing and savings are inevitably very different for different groups. And for 12 per cent of working-age households, debt repayments take up more than 10p in each £1 of income, with even higher proportions and rates for poorer households. So although unsecured household borrowing is not historically high - and mortgagors have separately benefited from low rates - a reliance on borrowing to boost growth and the exposed position of some households to income hits or rate rises remains a concern.

Benefit cuts have been a headwind for living standards but low inflation has muted their effects recently

Oil price falls have boosted real earnings, as shown, but they have also protected the real value of welfare benefits. Benefits were uprated by 1 per cent annually between 2013 and 2016. That was relatively low by historic standards but, given that inflation fell dramatically in 2014, this meant that the real value of benefits was protected. Figure 15 shows that although the real value of Child Benefit and Child Tax Credits has fallen significantly since 2009, most of this fall came between 2009 and 2013 and that since then the value of both benefits has remained fairly constant. This trend is unlikely to last given that in the Summer Budget of 2015 the then-Chancellor George Osborne announced that working-age benefits (such as tax credits) would be frozen in nominal terms for four years from April 2016.

Figure 15: Cuts in the real value of working-age welfare had slowed in recent years due to low inflation

Cumulative change in real value since 2009-10 (CPI-adjusted)



Source: RF analysis

In many respects 2016-17 is a harbinger for what is to come. Over the rest of this parliament there will be further reductions to working-age benefits. Sections 6 and 7 will provide a full analysis of these changes but reductions in state support and the freezing of benefits in nominal terms will have a significant impact upon household incomes over the next four years.

To a small extent the reductions in working-age support were ameliorated in the Autumn Statement with the announcement that the 'taper rate' in Universal Credit (UC) will be reduced from 65 to 63 per cent allowing claimants to keep an additional 2p for every pound that they earn after tax. Nevertheless this change is small and only reverses 7 per cent of the effect of the planned welfare cuts.^[15] At present only around 6 per cent of claimants are on the UC system, which is still being rolled out and is expected to be fully in place by 2022. One hope of UC is that, by combining multiple benefits into one system, it will boost take-up. Current levels of take-up, which in many cases are shockingly low, are explored in Box 2.

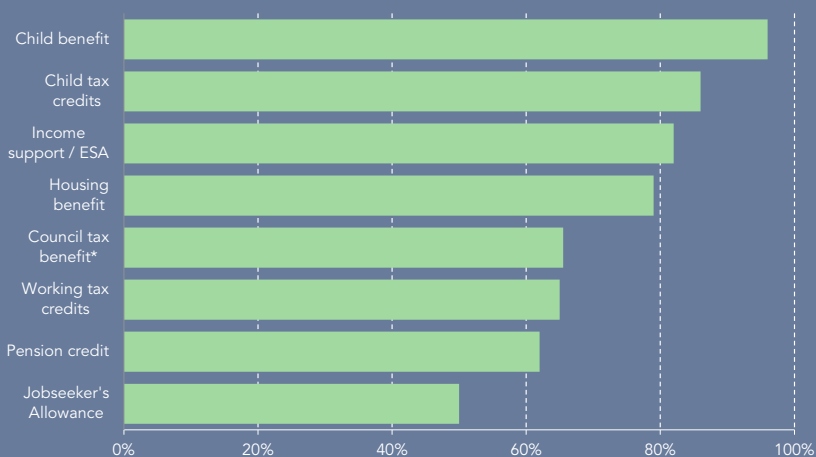
[15] [A Corlett, D Finch, L Gardiner, M Whittaker, *Bending the rules: Autumn Statement response*, Resolution Foundation, November 2016](#)

i Box 2: Benefit take-up

As well as the generosity of benefits the extent to which they are taken up also affects how much they support living standards. Figure 16 shows the take-up rates for eight different benefits. Take-up varies from a high of 96 per cent for Child Benefit to a low of 50 per cent for JSA. In some cases 'non take-up' may be the result of people choosing not to receive their entitlement. However, in many other cases it may be due to a lack of information or awareness of what people are entitled to.

Figure 16: Benefit take-up rate: 2014-15

Benefit take-up rate (% of eligible population)



Source: DWP, *Estimates of Take-up, 2014-15 (and 2009-10)*; HMRC, *Child Benefit, Child Tax Credit and Working Tax Credit Take-up rates 2014-15*

Note: Data for Council Tax Benefit is from 2009-10. This is the latest available. Council Tax Benefit has since been devolved (and renamed as Council Tax Reduction or Council Tax Support).

Figure 16 measures take-up by caseload, so takes no account of how much each award is worth. In some cases those not taking-up entitlements may only be eligible for relatively small sums. Nevertheless, boosting take-up could have a big effect on people's living standards. The roll-out of UC provides one opportunity to do this, and the government should actively pursue this goal.

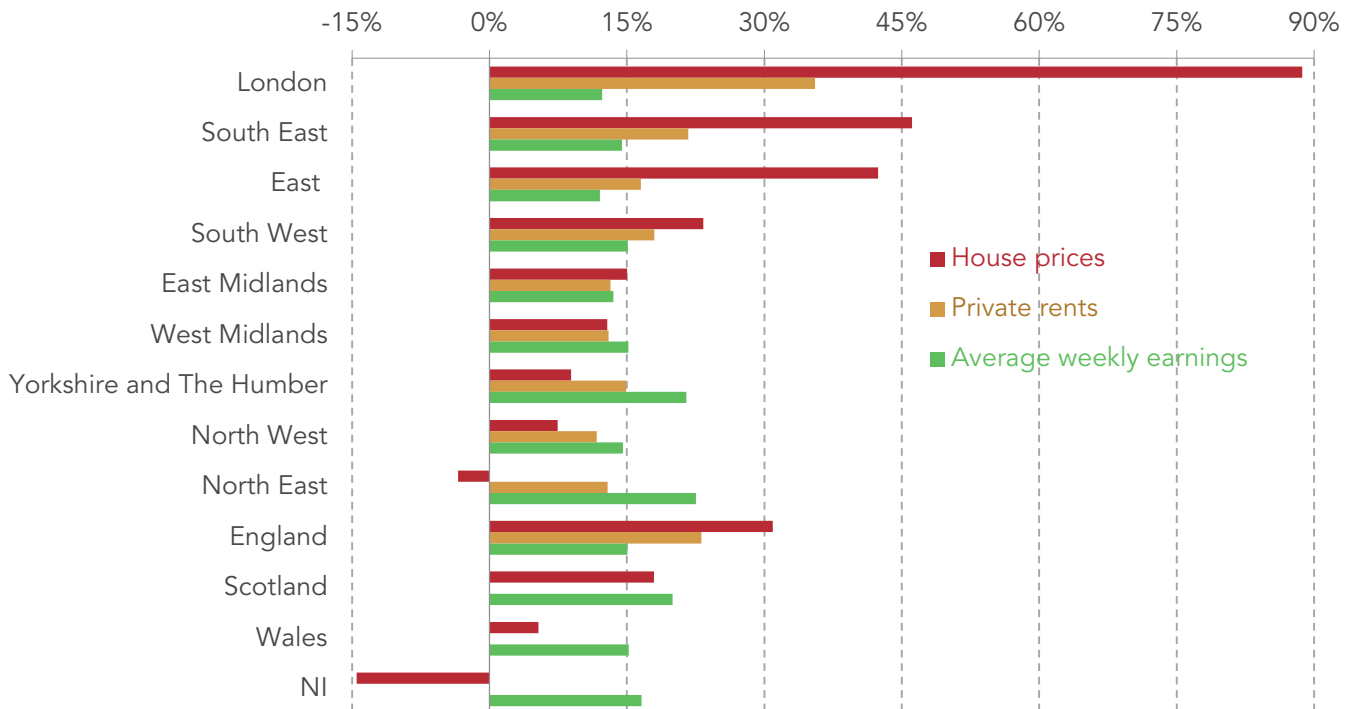
Housing has been a brake on living standards, but not universally

A final key component of living standards is housing costs. Paying for housing is the largest regular cost for most households, though naturally some pay more than others. Those renting privately tend to spend a larger amount of their income on housing, while those who own their home outright or rent in local authority or housing association accommodation spend the least.^[16] As Figure 17 shows, both house prices and private rents have increased faster than earnings in many, but not all, parts of the country over the past decade.

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

Figure 17: House price and rental growth has outpaced earnings growth in the south of England

Nominal growth, April 2006 to April 2016



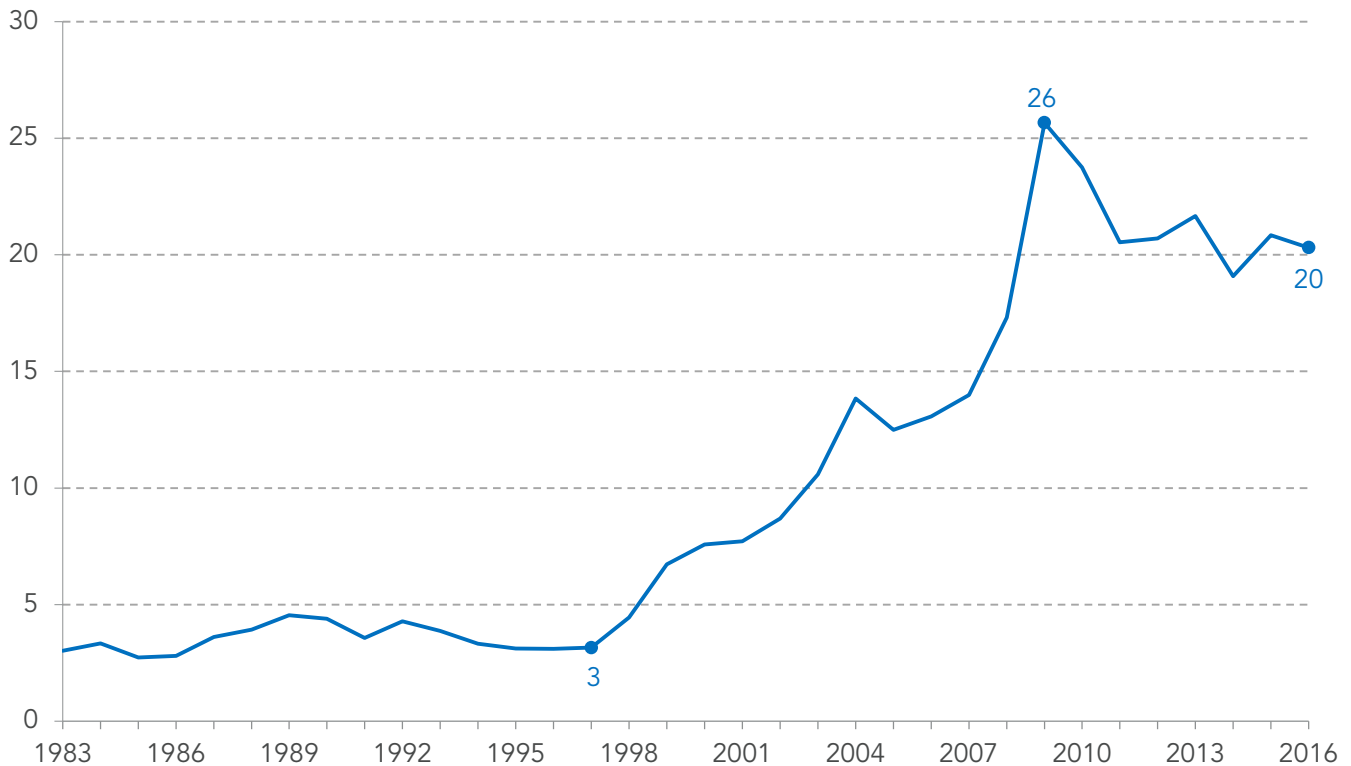
Source: RF analysis of ONS, ASHE, House Price Index and Index of private housing rental prices

Price rises have been particularly dramatic in London, the South East and the East but across England on average prices have risen more than earnings.

The result is that more and more households that would like to own their own home are finding it difficult to save up for a deposit. Given cost increases, as well as the availability of credit and the return on savings, we now estimate that it takes 20 years for a low to middle income household (a definition explained in Annex 1) to save for a first time buyer deposit, up from 3 years in 1998 (Figure 18). This is slightly lower than at the heights of the credit crunch as deposit requirements have since fallen, but remains higher than before the financial crisis.

Figure 18: Rising house prices means that it takes two decades for low to middle income households to save for a deposit

Estimated number of years required to save for a first time buyer deposit among low to middle income households: UK



Notes: Calculated by applying median first time buyer loan-to-value to average first time buyer house price in each year. Level of low to middle income household savings based on putting aside 5 per cent disposable income a year at five-year average interest rate. Appropriate stamp duty charges are added to the cost of the required deposit.

Source: RF analysis of ONS, The effect of taxes and benefits on household incomes. Lloyds Banking Group, Halifax House Price Index, Historical data FTB (ANN) CML, Table ML2

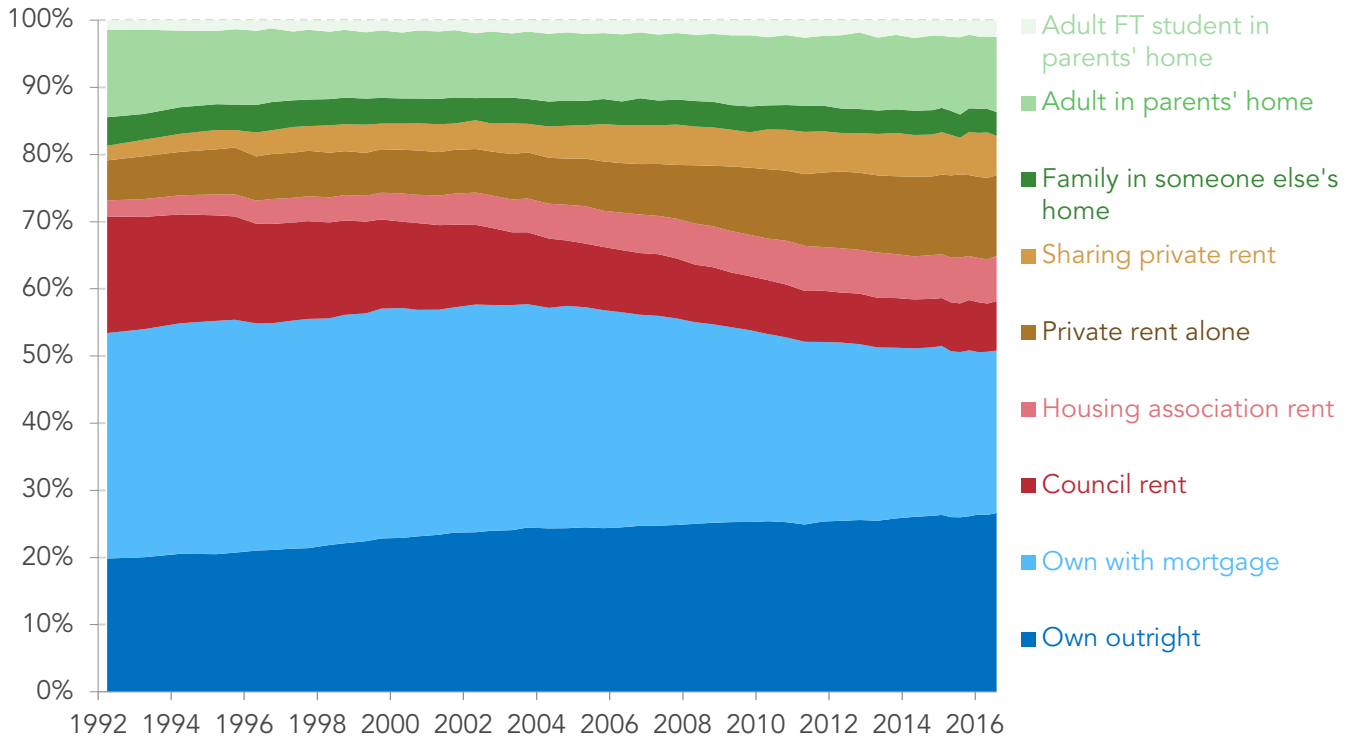
One of the consequences of these price and affordability changes has been the significant shift in housing tenure since the mid 2000s. Figure 19 shows the decline in home ownership and the social rented sector and the rise of the private rented sector. But the proportion of families owning their home outright has increased, with the number owning their home with a mortgage having declined particularly far since the financial crisis.

Figure 19 also shows some trends that are often missed by home ownership statistics. Whereas those statistics usually refer to the *proportion of households* in each tenure type, from the living standards perspective the more relevant question is what *proportion of families* do (here referring to any single person or couple, along with any non-adult dependents)?^[17] Using this alternative measure, we find more families living in the private rented sector, with many sharing within a single ‘household’. We also observe many adults living in their parents’ home but not in full-time education, and that this group grew in size following the financial crisis and is yet to shrink again.

[17] See <http://www.resolutionfoundation.org/media/blog/only-half-of-families-own-their-own-home-how-do-the-other-half-live/>

Figure 19: Following a decline in home ownership, only around half of couples or single people own their own home

Proportion of families by housing tenure



Notes: 'Families' here refers to benefit units.

Source: RF analysis of ONS, Labour Force Survey

The changing nature of the housing market has significant repercussions. Not only are a growing number of families frustrated in their wish to own their own home, but greater numbers are, as a result, living in the private rented sector where costs are generally higher and tenure more insecure. We shall see in Section 7 that how these trends change or continue will have an effect upon living standards over the next few years. However, before we get to the future, we first turn to an examination of recent trends in household incomes – driven by the range of factors explored so far.

Section 3

Recent trends in household incomes

Household incomes declined for several years following the financial crisis, but over the last few years for which data is available there has been relatively strong growth, supported by oil price falls and continued rises in employment. Building on the outturn described in Section 2, we use other sources of data to nowcast incomes in 2015-16 and find that this recovery likely continued.

However, we use a similar approach to estimate household incomes in 2016-17 and find that growth likely slowed markedly this year as inflation picked up but wages and working-age benefits did not. We also explore the differences between incomes before and after housing costs – with our focus for much of this paper being on the latter. Incomes after housing costs have been partially supported by falls in mortgage costs.

The next section then assesses these recent trends in the context of the past few decades and looks beyond the averages.

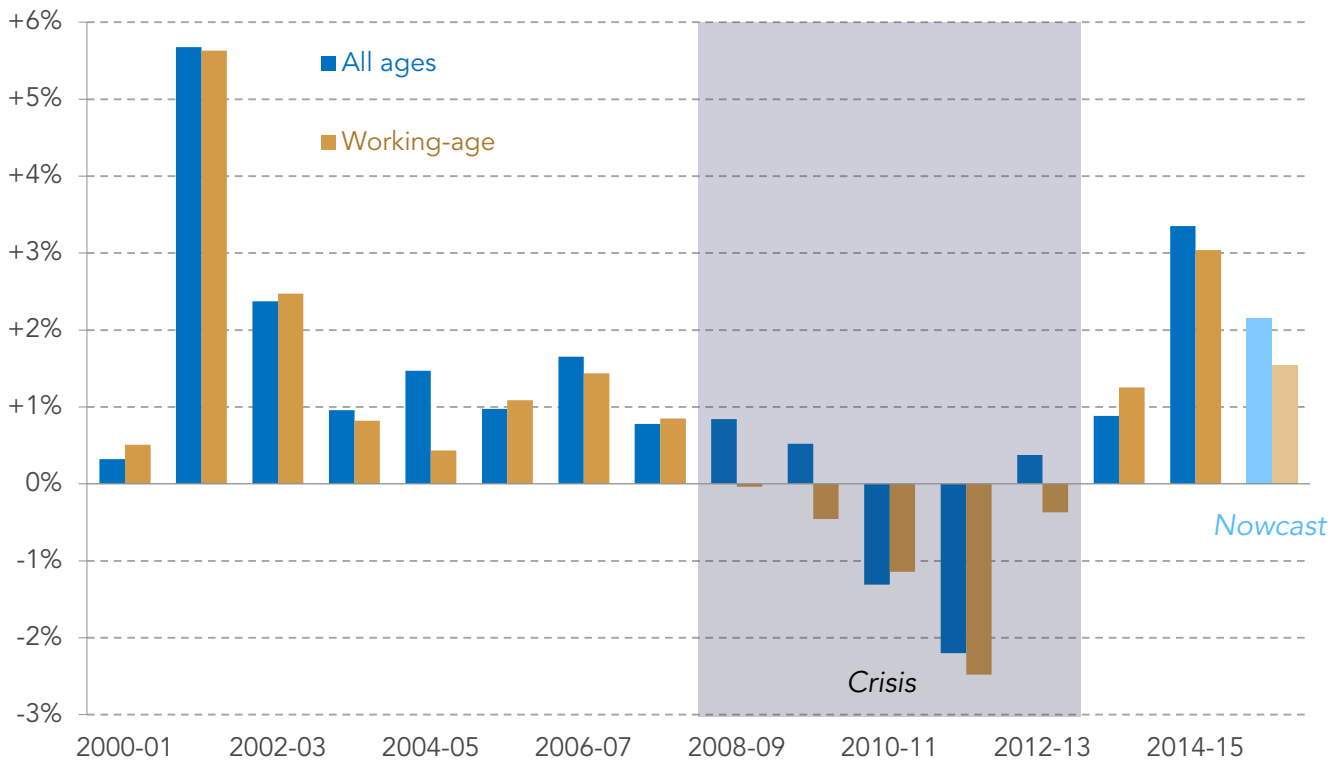
Following a very tough period, there has been a mini-boom in household incomes in recent years

Having looked at the various drivers of living standards, we now look at household incomes themselves – arguably the best proxy for living standards.^[18] Because of those trends, and in particular increased numbers of people in work and very low inflation, household incomes have also had healthy growth in recent years. Figure 20 shows how median income has grown each year after adjusting for inflation, both for all ages and for working-age (non-pensioner) households only. The impact of the financial crisis is clear. From 2000-01 to 2007-08 median working-age income growth averaged 1.7 per cent; while from 2008-09 to 2012-13 it averaged minus 0.9 per cent. But the same data shows growing household incomes in 2013-14 and 2014-15, with particularly strong growth in the latter.

[18] Note that incomes are 'equivalised' to account for household size: for example a single person on £30,000 is likely to have higher living standards than a single parent with three children living on that same income. An equivalence scale is used to adjust for this. Annex 1 discusses this further.

Figure 20: There has been some strong income growth following large falls, and we estimate that this continued in 2015-16

All age and working age median growth (BHC)



Source: FRS and RF nowcast

Comparable outturn data is not yet available for 2015-16, but we can speculate on what is likely to have happened by constructing a ‘nowcast’. Full details of how this is done are available in Annex 2, but in simple terms we take the 2014-15 household income data and adjust this in line with what we know – from more timely sources – has since happened to wages, employment, average housing costs, prices, and the tax and benefit system. Our nowcast suggests that the mini-boom continued in 2015-16, with median household income growing by 2.2 per cent and median working-age income growing by 1.5 per cent.

The outturn data in Figure 20 is based on the government’s Family Resources Survey (FRS). We view this as the gold standard for household income data, but it is worth noting that other data sources exist. One of these is the Living Cost and Food Survey (LCF), administered by the Office for National Statistics. The pros and cons of these two surveys are discussed in Box 3. Given its size and focus, the FRS is considered to be the better source though the LCF now has the advantage of timeliness, with outturn data for 2015-16 being published in January 2017.

The LCF figures suggest that median household income grew by 2.5 per cent between 2014-15 and 2015-16 (in real terms and using the same CPI variant as above), while mean income grew less strongly at 1.7 per cent.^[19] While this overall picture seems to support our nowcast findings, the headline figures convert into growth of just 0.5 per cent for non-retired households (and 3.4 per

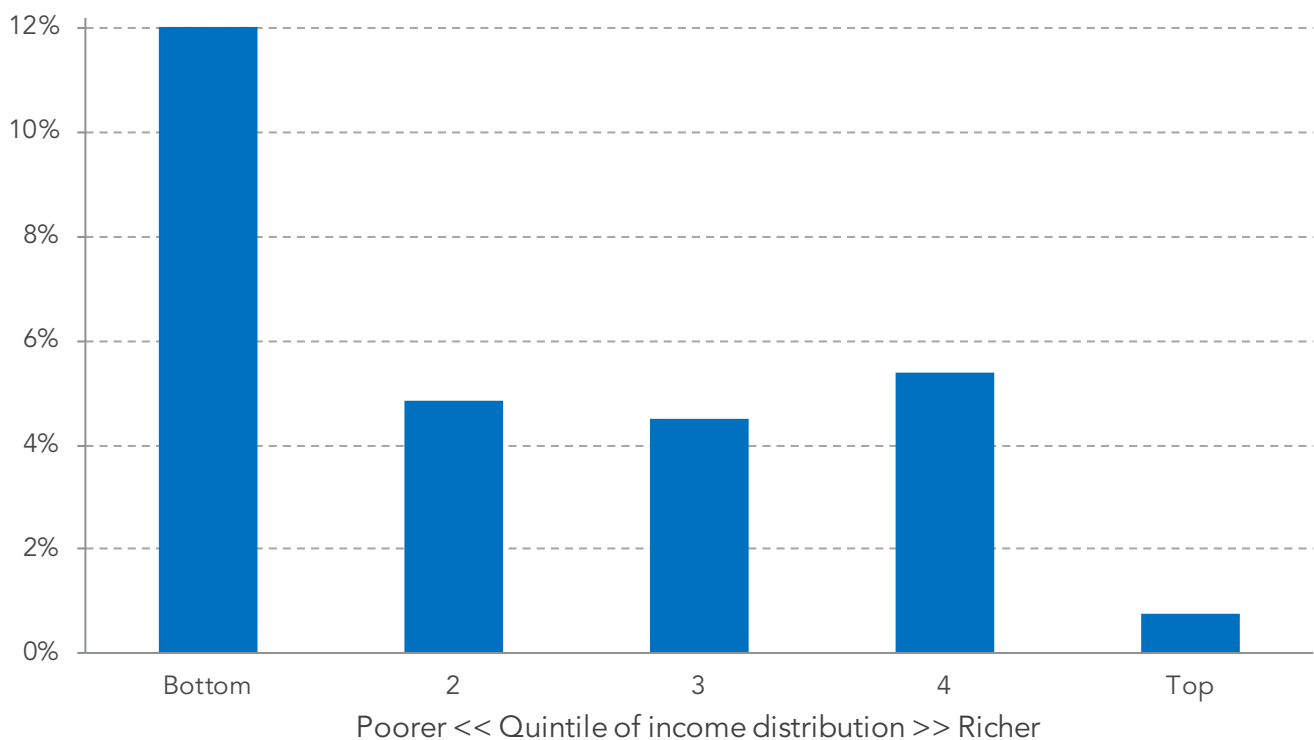
[19] ONS, *Household disposable income and inequality in the UK: financial year ending 2016*, January 2017

cent for retired ones).^[20] This is quite different from our nowcast, but it should be noted that the LCF recorded extremely strong real income growth in 2014-15 for non-retired households (over 4 per cent and higher than the FRS), and so it seems plausible that the LCF's 2015-16 incomes shows some regression to the mean. As discussed in Box 3, there is no reason to assume that the 2015-16 FRS outturn will match the LCF one.

While noting the differences between the LCF and FRS, it is worth looking in more detail at the distribution of outcomes described in the former in 2015-16. While the average non-retired income grew by 4.1 per cent in the two years from 2013-14 to 2015-16 (adjusted using CPIH), incomes in the bottom half seem to have grown even faster, as shown in Figure 21. Conversely, it is the highest-income non-retired households that have had the least growth in proportional terms.

Figure 21: Household income growth since 2013-14 by non-retired income quintile

Real growth in median disposable income of non-retired quintile, 2013-14 to 2015-16, CPIH-adjusted



Source: ONS ETB

According to the LCF, the incomes of the bottom 20 per cent of non-retired households grew by a huge 12 per cent over these two years, likely driven by rising employment and a falling number of workless (and part workless) households together with low inflation.

[20] Retired households are defined by the ONS as those where at least half the gross household income comes from retired individuals – who in turn are those who describe themselves as such along with those over pension age who describe themselves as “unoccupied” or “sick or injured but not intending to seek work”. This is slightly different to the pensioner household definition used elsewhere in this report (see Box 3).

i Box 3: Differing sources of household income data

With no means of directly recording all UK household incomes each year, a variety of sources and definitions exist. The main source used in this report is the Family Resources Survey (FRS). This survey is managed by the Department for Work and Pensions (DWP) and used in its annual *Households Below Average Income* (HBAI) publication – the main government assessment of the distribution of income and the risk of poverty for UK households.

The ONS publishes an alternative measure of household income in its *Effect of tax and benefits on household incomes* (ETBH) publication which, like HBAI, is based on a household survey (the Living Costs and Food Survey (LCF)). But whereas the FRS is specifically designed to collect detailed information on different sources of household income, the LCF is designed to collect information about both incomes and household expenditure. These different focuses can lead to different estimates of income. HBAI also includes an adjustment to better account for the incomes of the very richest.

Differences can also occur due to survey sample size. The LCF surveys roughly 5,000 private households, whereas the FRS captures around 20,000. Naturally, the greater the sample size the more likely that information collected is representative of the total population's 'true' characteristics. A larger sample reduces year-to-year variation in results caused purely by the differing make-up of the population sampled.

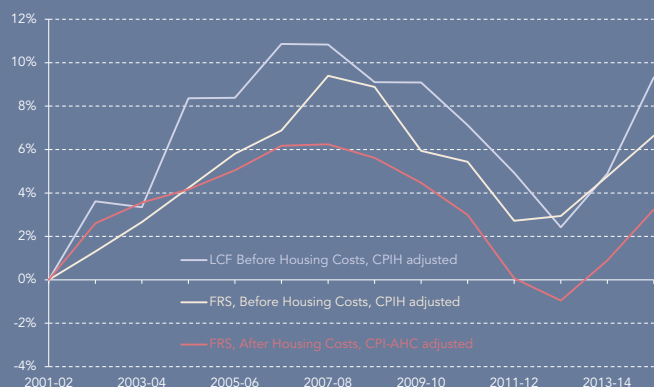
There are also differences of definition. The LCF distinguishes between working-age and 'non-retired' households by identifying those in which less than half of the household's income is derived from people 'retired' or over State Pension age, whereas the FRS simply sets a State Pension age cut-off. The definition of disposable income is also slightly different between the two surveys and our use of an 'after housing costs' income measure and deflator marks another difference from the LCF approach (see Box 4 for more about this). Finally, in calculating average incomes or inequalities, the ONS's analysis gives each household equal weight, whereas the DWP and Resolution

Foundation weight based on individual population.

It is hardly surprising then that while broad trends in the data are similar, the precise estimates and year-to-year changes vary. Figure 22 compares disposable income trends between the two surveys in the period since 2004-05. Two clear differences are evident: first, gaps are apparent even when we use the before housing costs approach in both surveys; second, a further divergence appears when moving the after housing cost approach (and distinct deflator).

Figure 22: The FRS and LCF can give different results for household income growth

Indices of median equivalised working age household income growth, constant price terms, 2001-02 to 2014-15



Source: RF analysis of ONS, *The effects of tax and benefits on household incomes* and DWP, *Family Resources Survey*

Notes: 'LCF' is the Living Costs and Food Survey where working-age is actually 'non-retired' that is where less than half of household income comes from those who report themselves retired or are over State Pension age. 'FRS' is the Family Resources Survey and defines working age as households in which no member is over State Pension age.

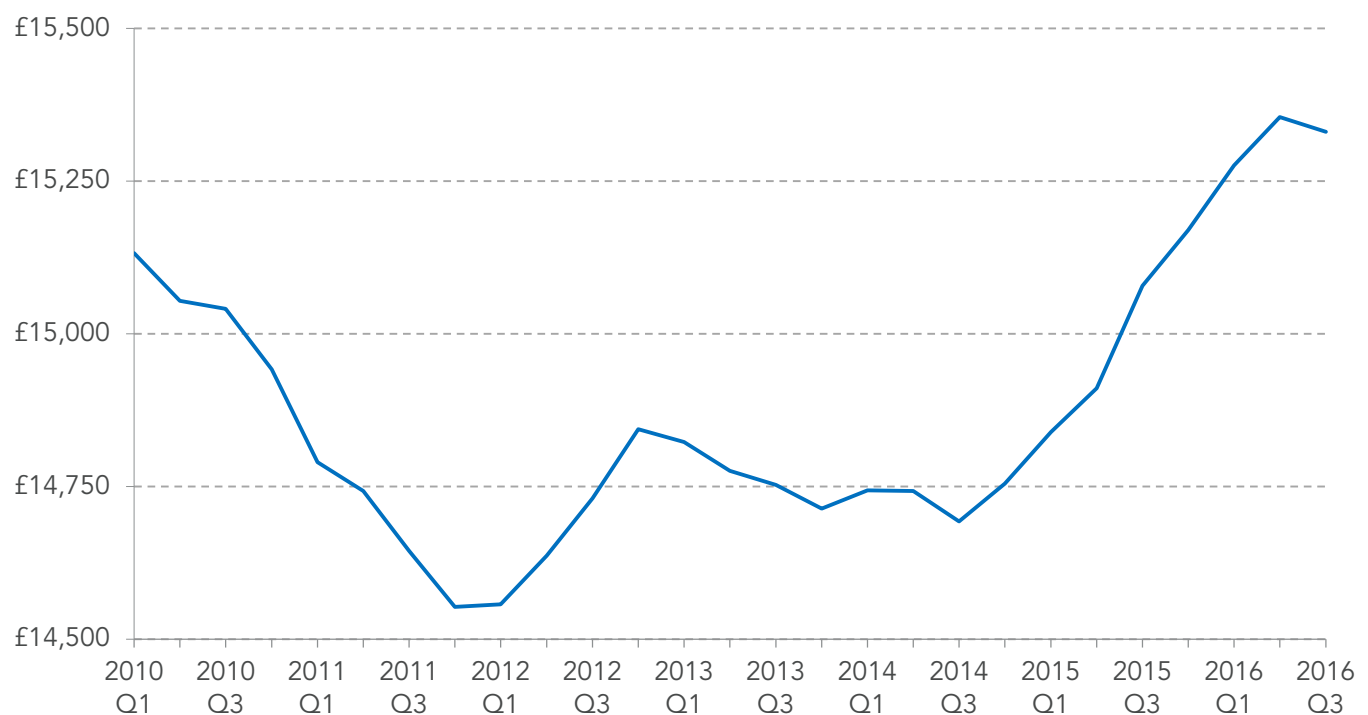
What's happened to living standards more recently?

Although 2015-16 is the latest complete financial year, and the latest with at least some firm data on household incomes, we can stretch our nowcast a little further in order to estimate what's happened to incomes and living standards more recently. Before looking at our own assessment of how incomes have grown in 2016-17, it is first worth looking at some other sources of outturn data.

One is the ONS's figures for average, economy-wide real household disposable income. This is very much a top-down method derived as part of the National Accounts rather than built up from data (or estimates) about individual households. But the ONS has also worked to make these figures a better representation of households' lived experience (for example by not including university income within the 'household sector' or imputed rental income for owner occupiers) by producing 'cash basis' average incomes. These quarterly figures are shown in Figure 23. Although referring to average rather than typical household incomes (and with no split by age group), they show again a strong recovery over the past few years.

Figure 23: The ONS's aggregate household figures suggest a strong recovery over the past two years

Cash basis real household disposable income per capita, rolling sum of past four quarters



Source: Resolution Foundation analysis of ONS [21]

Notes: Deflated using the households final consumption implied deflator

There is some tentative sign of a slowdown in this recovery in the latest periods, though we should be careful not to conclude too much from the dip recorded in Q3 2016. Taking these figures at face value, they imply a slowdown in annual income growth per person from 3.3 per cent in the first half of 2015-16 to 0.7 per cent in the first half of 2016-17 (Q2 and Q3 2016).

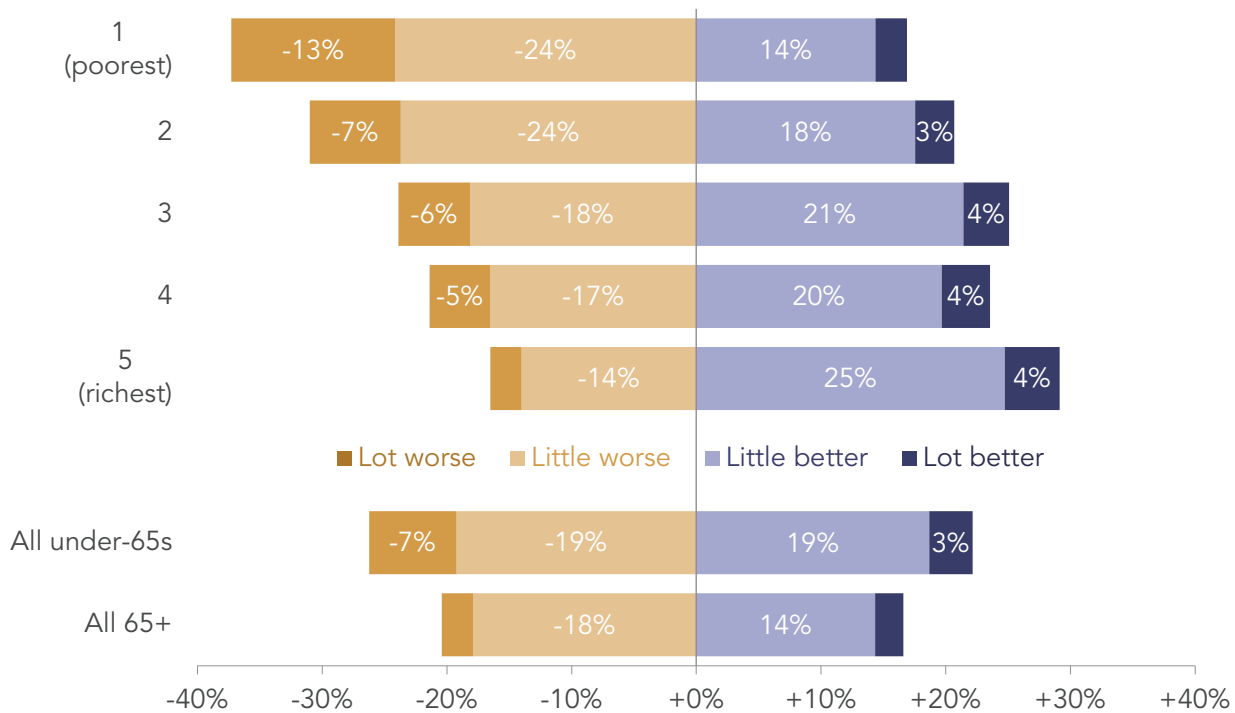
Another indicator of recent economic circumstances is the NMG survey undertaken on behalf of the Bank of England. This survey has the benefit of both timeliness (the latest findings relate to the second half of 2016) and the inclusion of some subjective measures. Figure 24 sets out households' perceptions of how their financial situation changed over the 12 months prior to the survey. Interestingly, despite the picture painted in Figure 23, it shows a (slight) net balance of

[21] ONS, *Alternative measures of UK real households disposable income and the saving ratio: Dec 2016, January 2017*

households reporting a deterioration in their circumstances. This balance is noticeably larger for working-age households, with 26 per cent saying things had got worse and 22 per cent saying things had improved.

Figure 24: Poorer people in the second half of 2016 were more likely to say that they had become worse off over the past year

Perceived change in household financial situation in the last 12 months, by equivalised working-age household income quintile and by age group: GB H2 2016



Source: Resolution Foundation analysis of NMG

There are good reasons not to expect income statistics and these self-assessed qualitative questions to match – and we do not have a time series for comparison – but they are nonetheless an interesting and worrying alternative indicator. If nothing else, these figures suggest there is little sense of a sustained ‘boom’ in living standards among a majority of households. When asked about how they expect their incomes to progress over the *coming* 12 months, people also gave very similar answers, though a larger proportion expected to be better off (27 per cent of working-age households) rather than worse off (23 per cent).

Turning to our estimate of what’s happened in 2016-17, we follow much the same approach as in our 2015-16 nowcast (though this time some of our input data is based on forecasts – again set out in more detail in Annex 2).^[22] While there is inevitably more uncertainty in this estimate, we can be sure that we will see no repeat of 2015-16’s ultra-low inflation in 2016-17. We estimate that inflation for this financial year as a whole will average 1 per cent. As explored in Section 2, this means that real pay growth is also likely to be the lower than the year before. With the benefits

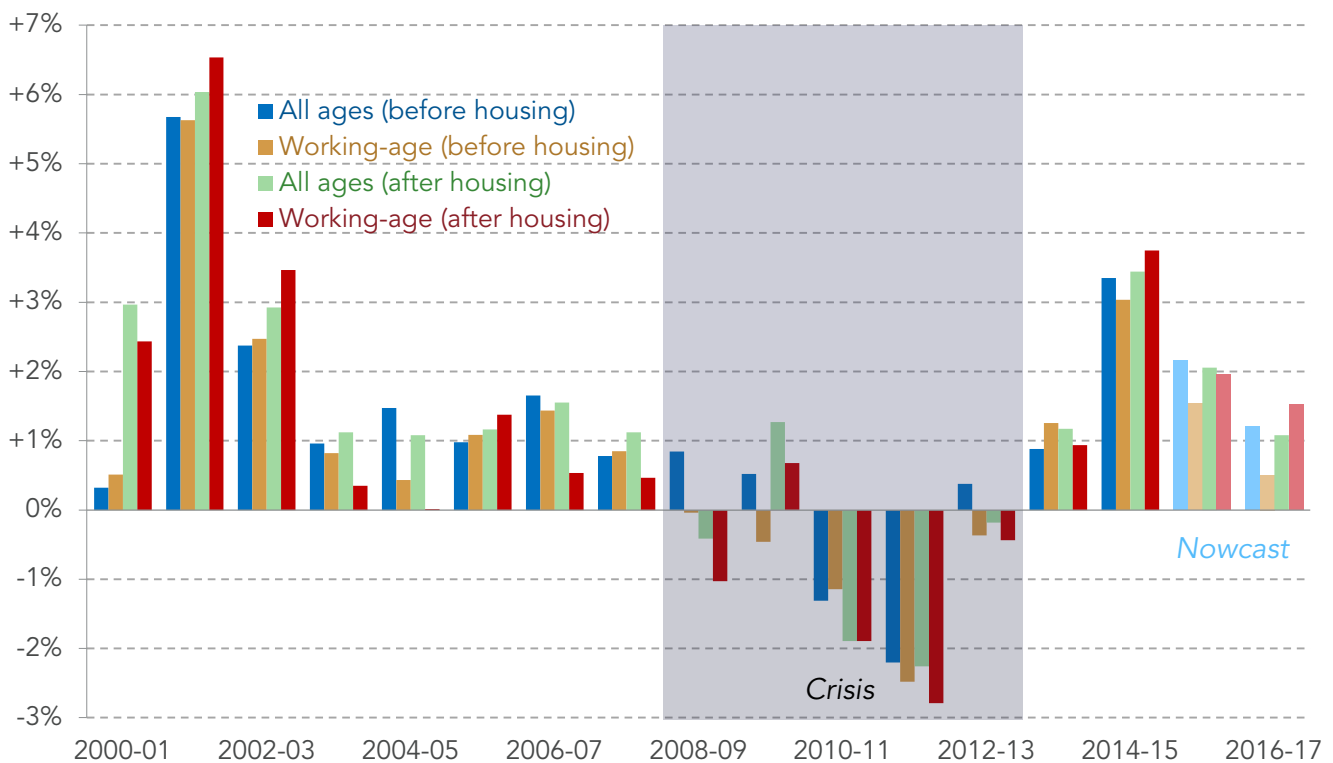
[22] We have data on earnings, employment, housing costs, inflation and more for much all or almost all of 2016, along with certainty about tax and benefit rates; but we rely on forecasts for how some of these components will progress in the last few months of the financial year, and we lack data on how earnings growth has been distributed though we can separately model the impact of the National Living Wage.

freeze beginning to bite and employment growth having slowed, the implication is that household income growth will not be as strong as in recent years.

Our projection, shown in Figure 25, is that the growth in typical incomes (before housing costs) slowed from 2.2 per cent in 2015-16 to 1.2 per cent in 2016-17. For working-age households we project a fall from 1.5 per cent growth (and 3 per cent the year before that) to 0.5 per cent.

Figure 25: Household income growth is likely to have slowed significantly in 2016-17

All age and working age median growth (BHC and AHC)



Source: FRS and RF nowcast

We also estimate that income growth has been slower in the bottom half of the income distribution in 2016-17 than in the top half, suggesting an increase in inequality.

The importance of housing costs should also be acknowledged. Until now in this section, we have presented income data *before* accounting for housing costs, in order to aid comparability to other sources. But the FRS permits us to remove housing costs from household incomes in order to capture living standards after accounting what is a large and often unavoidable expenditure. As shown in Figure 25, typical working-age income *after* housing costs actually rose slightly quicker than the before housing cost figures we noted above, boosted by the OBR’s estimation of a fall of over 5 per cent in the average mortgage cost payment in 2016-17. There are, however, a confusing array of methods by which housing costs can potentially be accounted for in income statistics, and these are explained further in Box 4.

Where possible in the remainder of this paper we focus on household incomes after housing costs. These are adjusted for inflation using a measure of CPI that *excludes* housing costs, to avoid

double counting the impact of housing cost changes. We also focus particularly on working-age incomes.

i Box 4: Accounting for housing in measures of living standards

The simplest measures of household incomes do not take account of housing costs – and income and expenditure are indeed separate concepts. But ideally measures of living standards should account for the benefits that come from property wealth (i.e. the money saved on rent, as well as other returns).

1. One might, for example, look at income before housing costs and adjust this over time using CPI. However, this would mean that changes in housing costs were largely completely absent from this calculation (though actual rentals are included in CPI's basket of goods).

2. An alternative is to use a deflator that includes housing costs. These include a bespoke CPI variant that includes mortgage interest payments and more, RPIJ and CPIH – which the ONS is moving to as its headline inflation measure. But this method assumes that housing cost inflation is shared equally across the population: in fact, changes may be particularly concentrated in certain parts of the country or certain age groups, as well as particular tenure types.

3. Our preferred measure in this report is to remove actual rentals and mortgage interest from disposable income. While this assumes housing cost increases are not the result of quality improvements or personal choice, it is closer to households' own experience of their disposable income, effectively accounts for housing wealth, and avoids the generalisation above.

4. There are some additional possible modifications. In *Housing headwind* we accounted not just for mortgage

interest but for principal repayments too.^[1] These are a form of saving, but for households are largely indistinguishable from other housing costs. Housing benefit can also be counted as a negative housing cost rather than as a form of income, though these lines will be blurred by Universal Credit.

Instead of looking at housing costs, comparison of living standards between homeowners and non-homeowners could also be done by including as income *imputed rent* – the virtual income that homeowners receive by not having to pay rent. This was one option recommended by Brewer & O'Dea in 2012.^[2] Finally, a perfect measure of income would also account for capital gains and depreciation from housing.

Work is ongoing on many of these. The ONS is exploring how to construct an 'Index of Household Payments' which would be an inflation index that measured a wider range of housing price rises experienced by households.^[3] And improved wealth data in future will open up new possibilities. We look again at the importance of how we measure inflation in Section 5.

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

[2] M Brewer & C O'Dea, *Measuring living standards with income and consumption: evidence from the UK*, IFS, March 2012

[3] ONS, *Developing an Index of Household Payments*, August 2016

We have considered a number of different sources of data in this section in order to assess what's happened to living standards beyond the time periods to which official survey data currently extend. There will be variation from source to source and the complete picture will not be apparent until additional data is published over the next 12 months or so. But there appears to be a clear pattern in which the mini-boom from 2013-14 to 2014-15 extended into 2015-16 before running out of steam in 2016-17. Our nowcast for this year implies a significant fall in typical working-age income growth from 1.5 per cent to 0.5 per cent before accounting for housing costs. Having looked at these last few years in detail, we now step back and look at these in the context of the past few decades as a whole, and look beyond averages to the UK's persistent income inequalities.

Section 4

The bigger picture of the past couple of decades

Typical incomes have now slightly surpassed their pre-crisis peak. But growth over the last 10-15 years as a whole has been very weak, with the short-lived 'boom' of the last couple of years doing little to counteract the combination of the pre-crisis slowdown and post-crisis squeeze.

This long period of sluggish living standards improvement has overall been broadly felt, with inequality flat or falling on several measures since the start of the 1990s. Despite this, income inequality remains too high and looks to have been more persistent once we account for housing cost pressures. The income share of the top 1 per cent – even when underestimated – also rose consistently until the financial crisis.

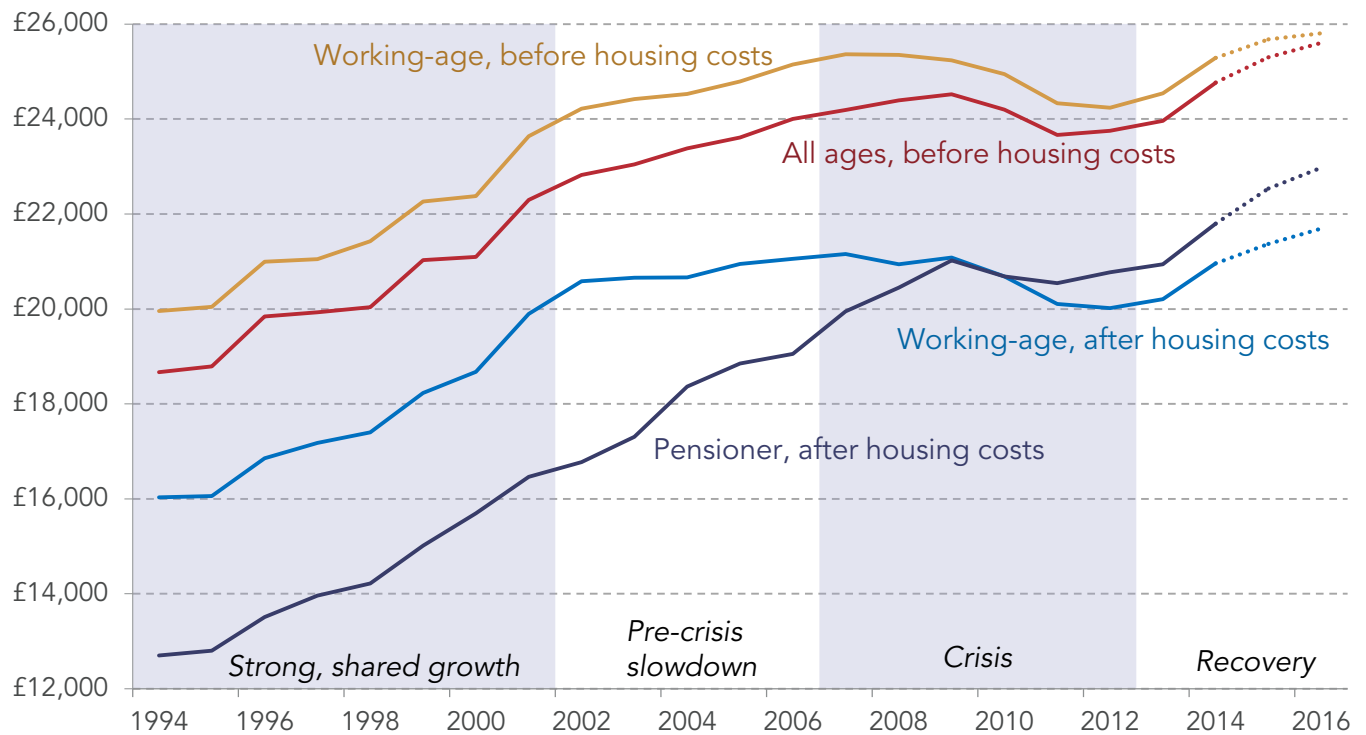
There is also evidence of differences across age groups. Relatively strong growth among older households – even in recent years – mean those aged 65+ no longer form the poorest group. In contrast, incomes among households aged 25-44 do not yet appear to have recovered their pre-crisis levels.

Incomes have only recently surpassed their pre-crisis peak

The relatively strong, but slowing, growth over the last few years that we identified in Section 3 must be seen in the context of the previous two decades. Median incomes, including for the working-age, have likely now surpassed their pre-crisis peak, as Figure 26 shows. But given the depth and length of the post-crisis living standards squeeze, many people may find it hard to feel positive about a few years of moderate income growth, particularly in comparison to the sustained, strong growth of 1994-2002.

Figure 26: Typical incomes are higher than ever, but growth has been limited for working-age households, particularly after housing costs

Median equivalised disposable income (adjusted using CPI variants)



Source: RF analysis of HBAI and RF nowcast

Figure 26 also highlights how different trends can be depending on what age range is included and on whether incomes are measured before or after housing costs.^[23] It shows how typical pensioner incomes after housing costs overtook those of working-age households following the financial crisis. It is noticeable how the working-age after housing costs measure was almost flat even more the crisis hit. On this basis, our 2016-17 figures leave typical working-age incomes only £1,100 higher than in 2002-03. This compares to a rise of £4,600 in the eight years from 1994-95 to 2002-03.

Growth has not always been shared equally

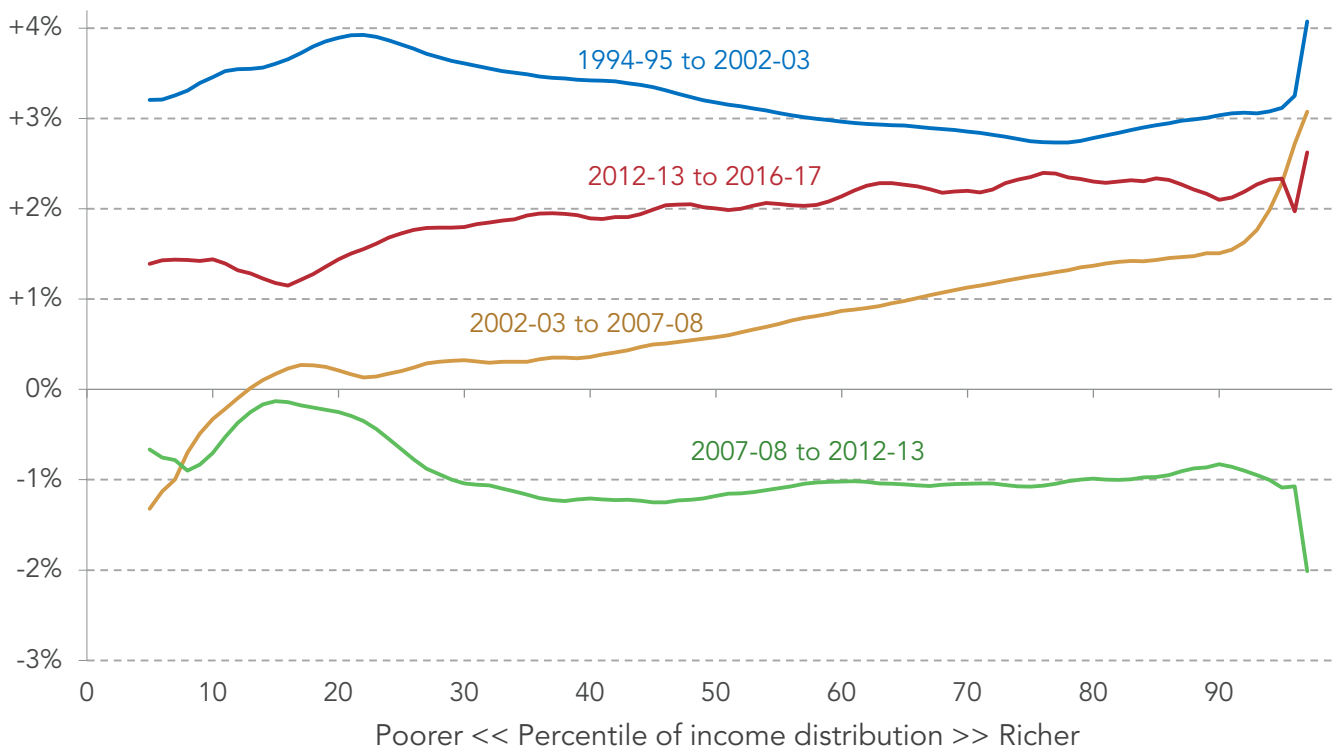
The chart above notes four distinct periods: strong growth before 2002-03, a pre-crisis slowdown, the post-crisis hit, and the recent recovery. Another way of looking at these four periods is to look beyond the median and explore how incomes grew for all parts of the income distribution. For example, while median working-age income growth averaged around 0.6 per cent per year in the period from 2002-03 to 2007-08 after housing costs, it was even lower for the bottom of the income distribution and higher for the richer parts, as shown in the yellow line in Figure 27. As ever, these figures do not imply that individual households have necessarily seen such income growth: the median household in one year will not be the same as the median household in another, for example. It is the income distributions in each year which are being compared, not the progress of individual households.

[23] Note however that the 'before housing costs' lines are still partially affected by housing costs, as these are included in the deflator used. See Box 4 for more details.

The figure shows that recent growth has been relatively strong and relatively equally shared. It compares favourably to the period from 2002-03 to 2007-08 where housing costs weighed substantially on growth, particularly in the bottom half of the income distribution. In part, recent growth has been a mirror image of the financial crisis – in which incomes fell most for the richest – as some of the effects of that period such as job losses are reversed. Even this ‘mini-boom’ falls short of the strong, sustained period of growth enjoyed from 1994-95 to 2002-03 though. And it should be noted that none of these periods displayed the scale of inequality growth seen around the 1980s.

Figure 27: Growth incidence curves for working-age people (after housing costs)

Average real annual working age income growth, after housing costs



Source: RF analysis of HBAI.

Notes: GB only before 2002-03. Smoothed.

It is clear that growth has varied across the income distribution in different periods. One group that appears to have fared particularly badly in the period since 2002-03 is those working-age households on low to middle incomes (LMIs). This group is at the heart of the Resolution Foundation’s work, and we take a more detailed look at their outcomes in Annex 1. As looked at in a previous paper,^[24] LMIs are often ‘just managing’ as the Prime Minister would put it. This concept is explored further in Box 5, which analyses recent survey data about people’s own perceptions of their financial circumstances, showing that younger, poorer families are more likely to be only just – or not even – managing.

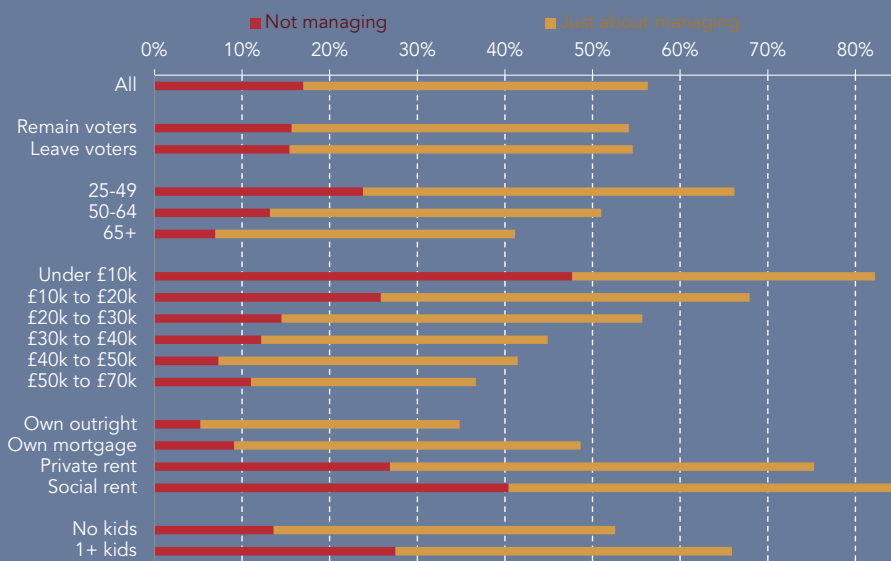
[24] D Finch & M Whittaker, *Under New Management: options for supporting ‘just managing’ families at the Autumn Statement*, Resolution Foundation, November 2016

i Box 5: Who is just about managing or not even managing?

The Prime Minister has often referred to helping those who are ‘just about managing’, a term that has a lot in common with our ‘low and middle income’ focus. In addition to the income statistics that are the basis of this report, it is interesting to explore people’s own, qualitative assessment of their financial position.

A survey by pollsters YouGov found that (excluding those who were ‘Not sure’) 39 per cent of people consider themselves to be ‘just about managing financially’ while a further 17 per cent are ‘not managing’ or ‘not really managing’. The remaining 44 per cent are ‘relatively comfortable’ or ‘very comfortable financially’. But some groups are much less likely than others to be financially comfortable, as Figure 28 shows.

Figure 28: People’s own assessment of their financial position



Source: YouGov, 24th - 25th November 2016

Notes: The remaining per cent are those who are ‘comfortable’ financially. Excludes those who answered ‘Not sure’.

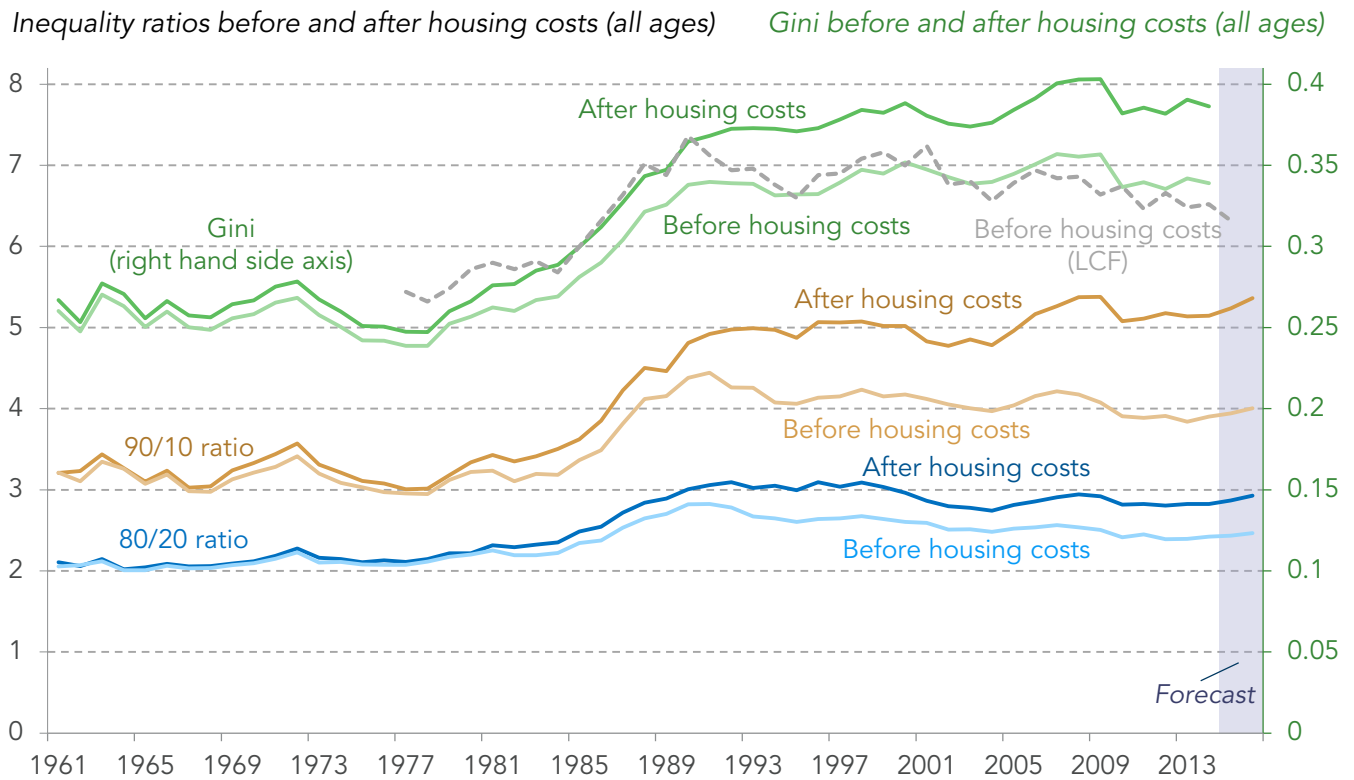
The groups with the highest proportion who are just managing or not managing are younger people, those with low household incomes (perhaps unsurprisingly), private and social sector renters, and those with children. Conversely, those with higher incomes, older people and homeowners are much more likely to be in a comfortable financial position. Of course, there will be wide variation within each of these groups, and different groups may have different definitions of ‘managing’, but these figures provide an additional (yet reassuringly familiar) assessment of British living standards.

Overall inequality has fallen or remained flat recently

The growth incidence curves presented in Figure 27 above are one way of showing changes in inequality. But there are, of course, also a range of measures that aim to capture income inequality in a single number. Three of these are shown in Figure 29: the Gini index (where 1 is perfect inequality and 0 is perfect equality); the 90/10 ratio (the income of a household 90 per cent of the way up the income distribution divided by that of one only 10 per cent of the way up); and the 80/20 ratio (similarly). All are useful measures and all show the same big picture: that inequality rose substantially in the 1980s but that we’ve not seen anything similar since. Inequality was broadly flat before the financial crisis, but the recession reduced inequality (though not in the way one would hope for, with very large income falls for higher income households pulling down

on inequality but providing little comfort to lower income households experiencing their own income squeeze). Since then inequality has been essentially flat, though our 2016-17 projection includes a small uptick.

Figure 29: Inequality has changed little over the past 15 years as a whole, but is higher after housing costs



Source: HBAI/IFS, and RF nowcasts, except for LCF comparison line.

However, there is also a substantial difference between measures of income inequality before housing costs and those after taking housing costs into account. Looking at the 90/10 ratio, income inequality before housing costs peaked in 1991 and has been largely flat or falling since then. But after housing costs, this ratio was higher in 2014-15 than at any point in the 1980s or 1990s.

It should be noted that the LCF survey, discussed in Section 3, has shown a more pronounced fall in inequality since the start of the 1990s. On those ONS figures (shown in the grey dashed line), overall inequality fell in 2015-16 to a level not seen since 1986 (a Gini coefficient of 0.316). Inequality in original income – i.e. before any taxes of benefits – has not been lower since 1984. However, these figures are on a before housing costs basis, and use a different source and methodology. The comparable FRS-based figures have generally shown a flat rather than falling Gini.^[25] As the larger survey (see Box 3), the FRS is likely to provide a ‘truer’ picture of inequality than the LCF. However, even the FRS has its limitations – as explored in Box 6 with regard to benefit receipts and below with regard to the richest households.

[25] Two possible reasons for this are that the HBAI includes an added adjustment to better measure the incomes of the very richest, and that it weights households based on the number of individuals in them; whereas the LCF will give a single-person household and a six-person, shared private rental household equal weight.

i Box 6: Underestimation of benefit income in the Family Resources Survey

This report treats the Family Resources Survey (FRS) (and derived Households Below Average Income) as the gold standard for household income data, as set out in Box 3. However, potential biases in this data should be noted. In particular, benefit and tax credit income reported in this household survey appears to be significantly lower than the levels HMRC and DWP know is being spent. Analysis by the Institute for Fiscal Studies has shown that only 80 per cent of benefit spending was captured by the FRS in 2013-14, and even less for means-tested benefits.^[1] For example, only 59 per cent of pension credit spending and 71 per cent of tax credit spending is captured. Additional DWP analysis has shown that 2.1 million people received pension credit in 2014-15, yet only 1.4 million appeared to do so in the FRS.^[2]

[1] C Belfield et al., *Living Standards, Poverty and Inequality in the UK: 2015*, IFS, July 2015

[2] DWP, *Family Resources Survey*, Table M.6

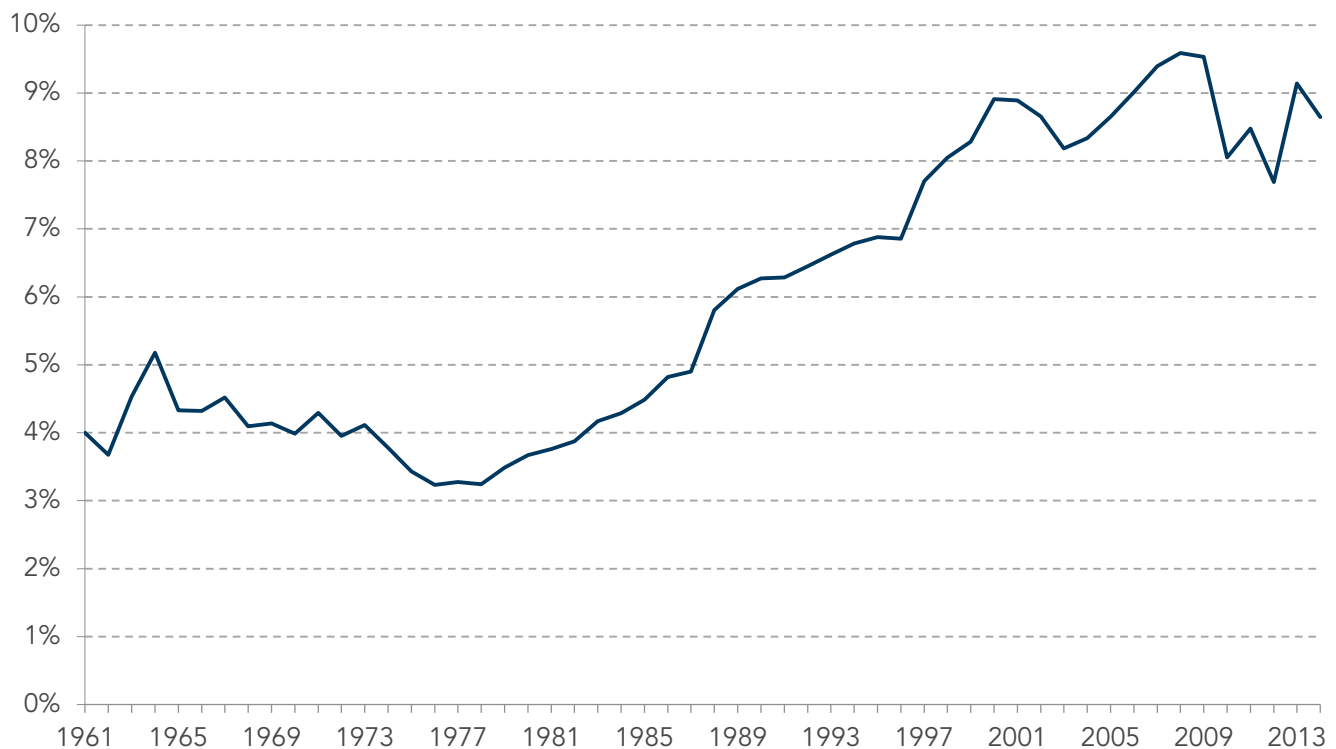
This oversight suggests that the survey will underestimate living standards and overestimate poverty (perhaps especially for pensioners). It also appears that this problem has worsened over time, leading also to an underestimation of income *growth*.

Suggestions have been made to improve the questions and wording used in the survey to boost accuracy,^[3] and it is possible that the survey could be linked with administrative data at some point. But for now this remains a problem for the government to resolve and for readers to be aware of.

[3] M Balarajan & D Collins, *A review of questions asked about receipt of state benefits on the Family Resources Survey*, DWP, 2013

The income share of the richest one per cent remains high

While broad measures of inequality were relatively flat in the 1990s and 2000s, inequality between the richest one per cent and the rest continued to grow. Figure 30 sets out the share of income taken by the top one per cent of households since 1961 and shows that, by the time of the financial crisis, they accounted for almost 10 per cent of disposable income. This share appears to have fallen during the recession, but it remains to be seen if this was only a temporary blip or a more permanent end of this inequality increase. In any event, the share remains significantly higher than the levels that prevailed in earlier decades.

Figure 30: The estimated share of income going to the richest one per cent of households rose for thirty years*Top percentile household income share, after housing costs*

Source: RF analysis of HBAI and IFS's HBAI

The underlying survey data for this is supplemented to some extent with administrative data from HMRC to better account for high income individuals (who may not respond to the surveys, for example). But academic work has suggested that this can be improved, and that the top one per cent income share is higher than estimated above and grew more in the years preceding the financial crisis.^[26]

Different age groups have seen different income growth

Income tends to rise over the life course, before falling back in retirement. It is therefore not surprising that younger and older households tend to be overrepresented towards the bottom of the income distribution. But the extent to which younger households appear to have been particularly badly hit in recent years – with still-elevated underemployment, a deeper wage squeeze, housing pressures and benefit cuts – implies a shift in inequality between age groups or generations.

Figure 31 shows median income for five age groups over the past 22 years (including our nowcast and part-forecast). Worryingly, it shows that household incomes for younger people in 2016-17 may still have been lower than their pre-crisis peak.

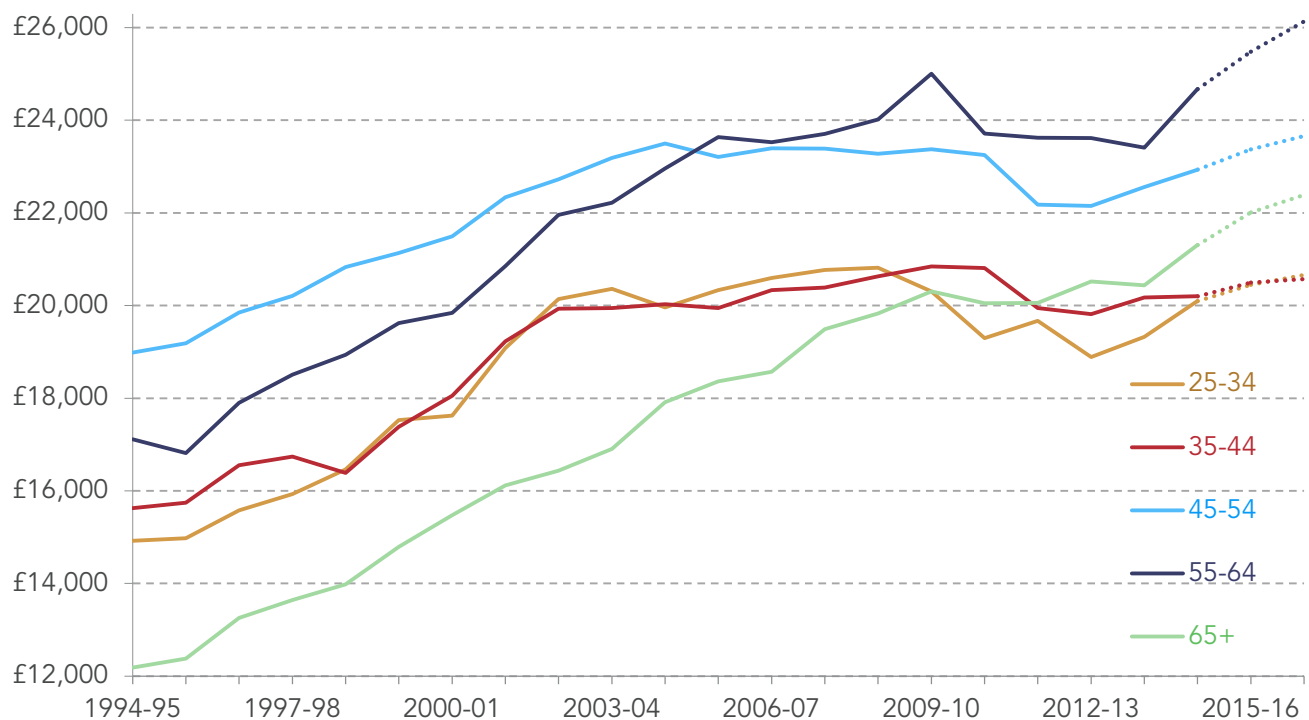
Matching the results shown in Figure 26 for pensioner households, typical incomes for those age 55-64 and those age 65+ have grown more consistently, with the latter overtaking the incomes of those age 25-34 and 35-44. It is not the case that older groups have experienced particularly rapid growth – and indeed they too were affected by the financial crisis – just that their slowdown

[26] R Burkhauser, N Héroult, 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

was less pronounced. The change in income growth and inequality between pensioners and non-pensioners – as well as *within* these groups – will be the focus of an upcoming Resolution Foundation paper for the Intergenerational Commission, but is influenced by changes in home ownership and rapid growth in average private pension income as well as by public policy. There is little reason to think these trends have ended. Nor does the projection described in Sections 6 and 7 give much reason for optimism for the incomes of younger households and particularly those with children.

Figure 31: Typical incomes for younger age groups may not have fully recovered from the financial crisis yet

Median equivalised disposable income after housing costs (2016-17 prices)



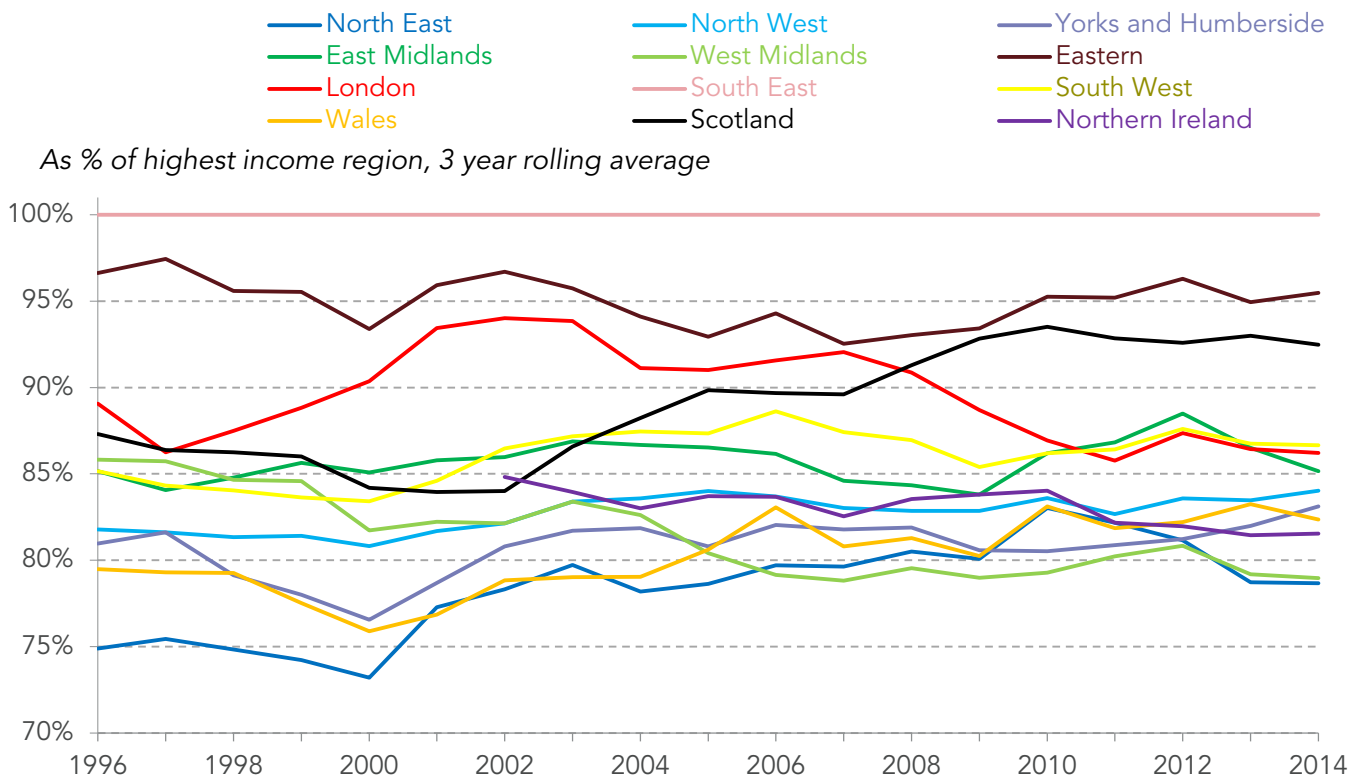
Source: RF analysis of HBAI, and RF nowcast

Large inequalities between regions remain

Regional inequalities in the UK are long-established, with the 1980s being a particularly polarised period of growth. Indeed the government has stated its intention to help deliver a society “where wealth and opportunity are spread across every community in our United Kingdom, not just the most prosperous places in London and the South East.”^[27] Yet these inequalities have proved persistent. Figure 32 shows how typical incomes in each region, after housing costs, compare to the highest income region (the South East). It shows that the poorest region (a toss up between the North East and the West Midlands on this measure) has a typical income around 20 per cent lower than the richest. This gap is even larger before taking into account housing costs, and is larger still – and with a less favourable trend – if we look at mean rather than median incomes.

[27] Industrial strategy

Figure 32: Regional disparities in median income (after housing costs) have narrowed only slightly



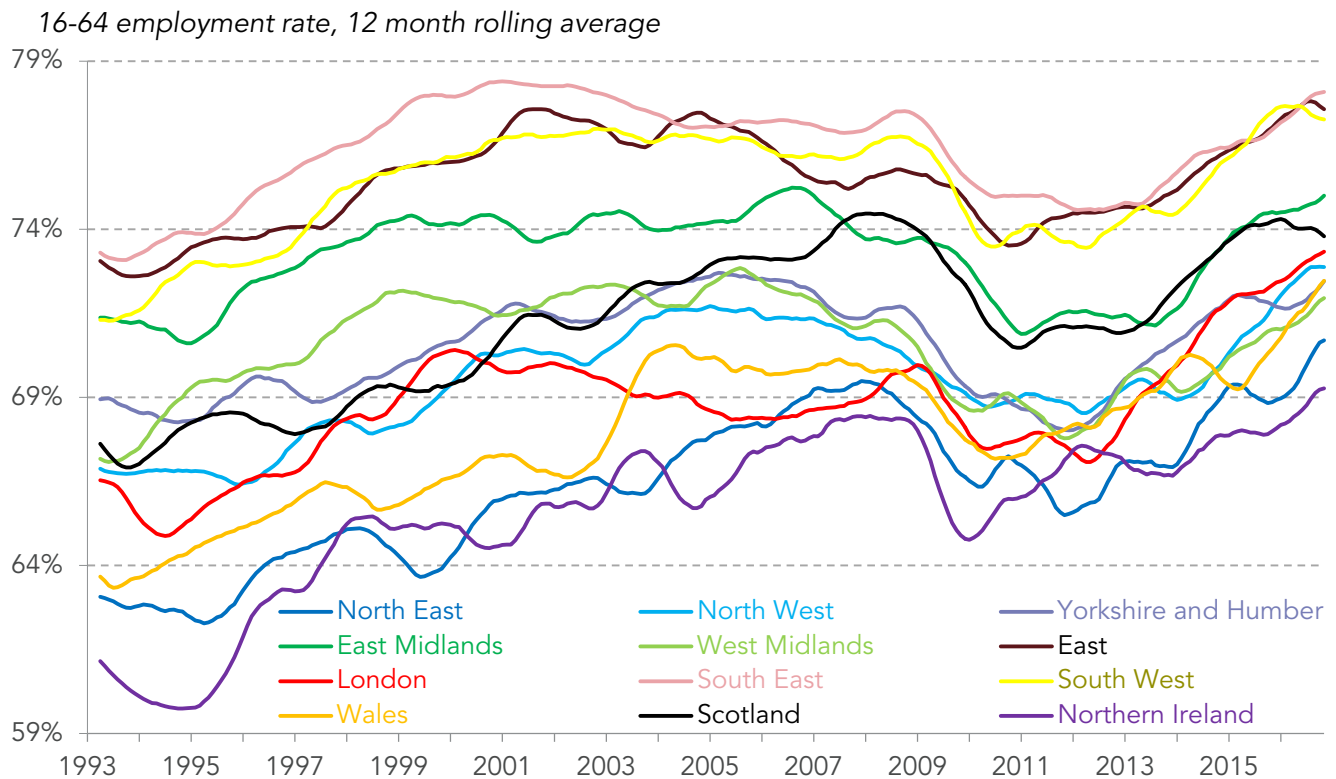
Source: RF analysis of HBAI

It is perhaps surprising that London is not the highest income region (based on place of residence rather than work). But in fact the South East is now the highest income region both before and after housing costs and for both the working-age and pensioners. London has the second highest median income before housing costs, but only the fifth after housing costs. London's inequality is also higher than any region (measured using the 80:20 ratio), and indeed is much higher than the country as a whole, though it has declined significantly since the financial crisis. London's poor are the poorest in the UK after housing costs.

In terms of employment too, the gaps between regions has narrowed only slightly if at all despite strong employment growth in all regions. Even now, with historic highs both nationally and regionally, employment rates in the North East and Northern Ireland are lower than was ever the case in the best performing regions (the South East, South West and East) – even during the recession.

Figure 33: Big employment differences between regions remain but are not as large as they once were

16-64 employment rate, 12 month rolling average



Source: RF analysis of ONS

Clearly demographic and other compositional factors play a role in regional differences, but as explored in previous Resolution Foundation work there is a lot of capacity to raise employment further with the right policies. Reducing inequalities between and within regions, including new city regions, will continue to be a focus of our work.^[28]

So, the recent mini-boom noted in Section 3 has been broadly felt, with overall inequality little changed, but the poor economic performance of the past 15 years as a whole, particularly for low and middle income households, is likely to mean that few people feel like celebrating. Other divides have also come to the fore – not least in terms of different incomes experiences across age groups. But it should also be noted that different groups have had differing experiences of cost pressures in recent years, also affecting people’s experience of living standards changes. This is something we explore in the following section.

[28] L Gardiner & P Gregg, *The road to full employment: what the journey looks like and how to make progress*, Resolution Foundation, March 2016 & S Clarke, *City living: devolution and the living standards challenge*, Resolution Foundation, October 2016

Section 5

Getting real

As noted in the preceding sections, inflation has played a key role in shaping living standards in recent years. Ultra-low Inflation supported the mini-boom, and it is inflation again which will define how this unwinds over the coming years. Given this importance, it's worth looking in some more detail at our inflation measure. In particular, we can look beneath the headline rate to consider the 'lived experience' of inflation for different groups – reflecting the fact that as shown in previous research we find that inflation tended to rise faster than the headline rate would suggest for lower income households from the turn of the millennium. But we also show that the ultra-low inflation of the last two years has been especially beneficial for this same group of lower income working-age households.

'Real' income figures can obscure variations in inflation for different groups

Throughout this report we have adjusted cash figures to account for inflation, in order to compare living standards over time. The principle is well-established and straightforward. For example, if prices a quarter of a century ago were only half what they are today, nominal incomes from that time would need to be doubled to allow for a fairer comparison with today's incomes. Inflation is usually calculated for the country as a whole – though there are different approaches to dealing with housing costs (see Box 4) – and this is useful to get a sense of how prices have changed in general, and how this has affected living standards most broadly.

However, when trying to compare changes in living standards for specific groups, it is important to be aware that the headline rate of inflation is likely to understate changes in the cost of living for some, and overstate it for others. This is because using a common rate of inflation assumes that the rising cost of goods and services has applied equally to all households. In reality, some costs will rise more than others, and some groups will be higher consumers of those products or services than others.

For example, private school fee inflation contributes to headline CPI but is mostly only relevant to richer households with children. Similarly, incomes for the over 75s are deflated using a whole-economy price index which includes the BBC TV licence, even though these are provided free for this age group. Even more significantly, different groups spend differing shares of their incomes on basic goods such as food or fuel.

In another respect CPI, and variants such as CPIH (which includes housing costs) and CPI-AHC (which we use when presenting incomes on an after housing cost basis) may understate inflation rises because the relative contribution that each household makes to how the index is weighted is based on its expenditure.^[29] This means that the expenditure patterns of high spending households have more influence on the headline rate. Given that the same households tend to have higher incomes it could be that CPI understates inflation for lower income households if prices have risen more for those goods (such as food) that they consumer as a greater proportion

[29] These are described as 'plutocratic' weights, if all households contribute equally to the weights this would be a 'democratically' weighted index.

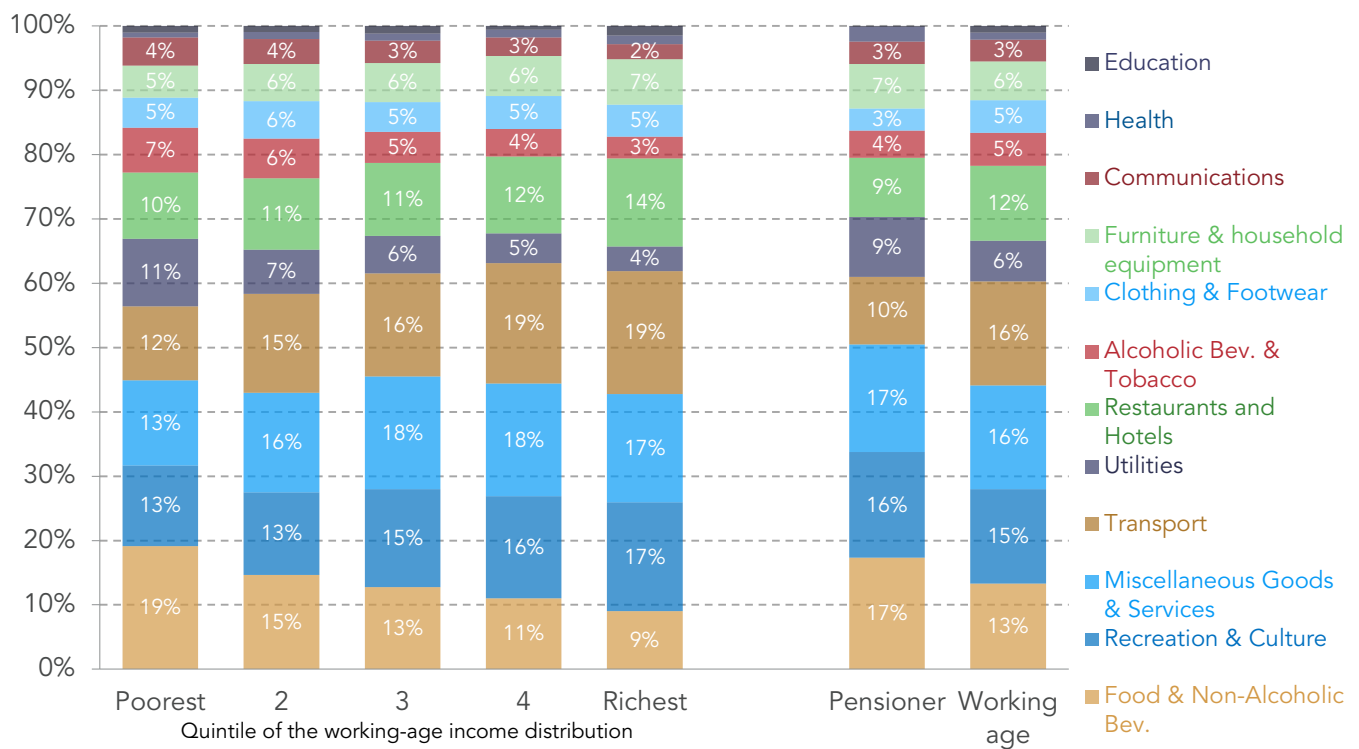
of their income than higher income households.^[30]

Figure 34 shows how working-age households of different incomes, along with pensioner households, allocate their spending. In keeping with our approach elsewhere in this report, we do this on an after housing costs basis (i.e. excluding rent and mortgage interest).^[31] The removal of housing costs from the income side of the living standards equation provides a much more accurate assessment of how such costs drag on incomes.

The chart shows that lower income households direct a higher share of their total spending towards food, drink and utilities. In contrast, higher income households allocate a greater share of their total spending on transport, recreational and cultural activities, and restaurants and hotels. For example, food and drink accounts for 19 per cent of spending among the bottom fifth of the working age income distribution and just 9 per cent among the richest fifth; whereas transport comprises 12 per cent of spending at the bottom and 19 per cent at the top.

Figure 34: Spending by different household groups: 2014

Share (%) of monthly spending by different spending categories (AHC)



Notes: Spending on housing costs: rents, mortgage payments (principle and interest), maintenance repairs, water and sewerage charges are excluded. Spending shares are taken from the LCF and are adjusted using the difference in spending between LCF and CPI as provided by the ONS.

Source: RF analysis of ONS, *Living Costs and Food Survey (LCF)*

[30] T Flower and P Wales, *Variation in the inflation experience of UK households: 2003 – 2014*, Office for National Statistics, 15 December 2014 concludes that CPI is broadly representative of the price experience of households around two-thirds of the way up the expenditure distribution.

[31] Spending on housing costs includes: rents, mortgage payments (principle and interest), maintenance repairs, water and sewerage charges.

Combining this information with detailed price change data, we can see how the lived experience of inflation has varied across the distribution over time.^[32] That is, we can apply the recorded change in the price of – say – food and non-alcoholic drinks and weight it for each group based on how much of their total spending it accounts for: this is similar to work carried out by the ONS but is updated to cover a wider time range and focuses specifically on the distribution within the working-age population.^[33]

Based on this approach Table 2 shows inflation rates for the five income quintiles of working-age households, from the poorest fifth to the richest, as well as inflation rates for pensioner and working-age households. For comparison the table also shows headline CPI(AHC) inflation that we make use of when measuring incomes after housing costs. Over the period from 1996 to the end of 2016 most groups experienced relatively similar year-on-year inflation rates, but in some years some groups experienced far higher inflation. For instance from 2007-08 to 2008-09, the poorest fifth of households experienced an inflation rate of 5.5 per cent, whereas the richest fifth of households experienced a rate of 3.9 per cent.

Table 2: Consumer price inflation (excluding housing costs) by financial year for different groups

	Equivalised disposable income quintile (working-age)					Age		Headline CPI (AHC)
	1	2	3	4	5	Working-age	Pensioner	
1996-97	1.3%	1.5%	1.7%	1.8%	1.9%	1.7%	1.5%	1.6%
1997-98	1.3%	1.3%	1.5%	1.4%	1.5%	1.4%	1.4%	1.4%
1998-99	0.9%	1.0%	1.1%	1.1%	1.2%	1.1%	1.0%	1.0%
1999-00	0.8%	0.8%	1.0%	1.0%	1.0%	0.9%	0.9%	0.8%
2000-01	1.5%	1.3%	1.5%	1.4%	1.4%	1.3%	1.7%	1.4%
2002-03	1.1%	1.1%	1.3%	1.3%	1.4%	1.2%	1.3%	1.2%
2003-04	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%
2004-05	1.4%	1.5%	1.6%	1.5%	1.6%	1.5%	1.5%	1.5%
2005-06	2.2%	2.2%	2.2%	2.2%	2.3%	2.2%	2.3%	2.2%
2006-07	3.5%	3.0%	2.9%	2.6%	2.6%	2.7%	3.4%	2.9%
2007-08	2.4%	2.4%	2.4%	2.4%	2.5%	2.4%	2.4%	2.4%
2008-09	5.5%	4.6%	4.4%	4.0%	3.9%	4.2%	5.3%	4.4%
2009-10	2.7%	2.7%	2.8%	2.8%	2.8%	2.7%	2.8%	2.7%
2010-11	4.5%	4.6%	4.7%	4.7%	4.7%	4.7%	4.4%	4.6%
2011-12	6.3%	5.9%	5.7%	5.5%	5.5%	5.7%	5.9%	5.7%
2012-13	4.0%	3.6%	3.5%	3.3%	3.3%	3.5%	3.7%	3.5%
2013-14	3.9%	3.4%	3.2%	3.0%	3.0%	3.2%	3.5%	3.3%
2014-15	1.4%	1.3%	1.3%	1.2%	1.4%	1.4%	1.2%	1.3%
2015-16	-0.4%	-0.2%	-0.1%	-0.1%	0.1%	0.0%	-0.4%	-0.1%
Apr16-Dec16	0.8%	1.1%	1.2%	1.3%	1.5%	0.8%	0.5%	1.2%
Average	2.3%	2.2%	2.3%	2.2%	2.3%	2.2%	2.3%	2.2%
Cumulative	29.1%	28.0%	27.9%	27.3%	27.7%	27.9%	28.4%	27.9%

Notes: Inflation rate is the average year-on-year change in inflation for the financial years. Spending shares are taken from the LCF and are adjusted using the difference in spending between LCF and CPI as provided by the ONS. Spending shares are calculated as an average of the spending shares of 2001 and 2014 and these shares are used to calculate differential inflation indices for the different groups based on the inflation rates of various spending categories. A further adjustment is made to each inflation index to align it with overall CPI inflation after housing costs.

Source: RF analysis of ONS, LCF and ONS, *Consumer Price Index*

[32] Specifically we use an average of the expenditure shares by equivalised disposable income quintile of 2001 and 2014. Although the amount households spend on different categories do not differ much over time (especially when housing costs are excluded), taking an average takes into account any changes in spending that may have occurred over the period.

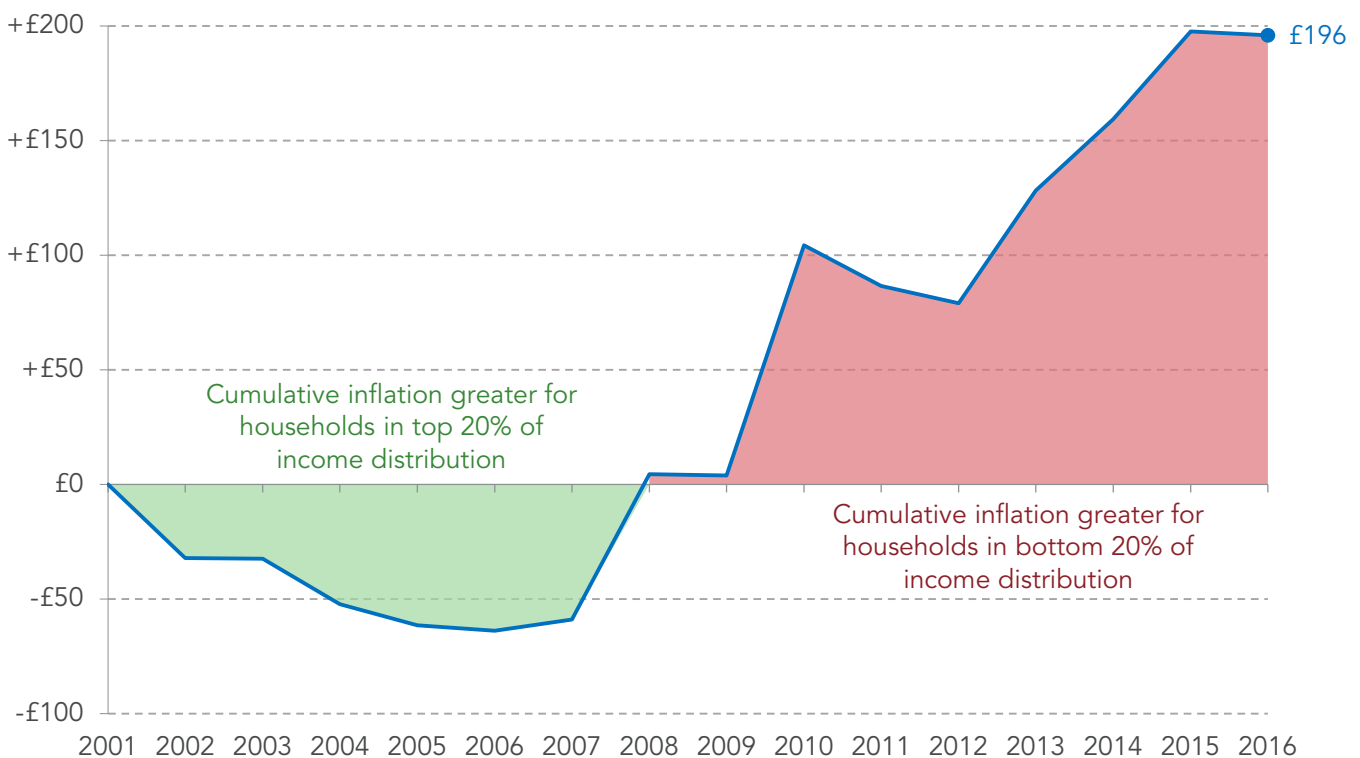
[33] T Flower and P Wales, *Variation in the inflation experience of UK households: 2003 – 2014*, Office for National Statistics, 15 December 2014

Over the whole period, inflation was highest for the poorest fifth of households. Cumulative inflation for this group was 29.1 per cent, compared to 27.7 per cent for the richest fifth. Importantly, relatively minor in-year differences can build over time to represent a non-trivial cumulative difference in spending power.

We bring out this difference in Figure 35. The chart looks at how inflation has affected the spending power of the poorest fifth of households since 2001. Specifically it examines how much greater this group’s spending power would have been if they had instead experienced the inflation rate of the richest fifth of households over this period. Figure 35 shows that the poorest households would today have an additional £196 of annual spending power. This figure would be £221 if we instead used the inflation rate experienced by the second richest quintile – the group that experienced the lowest rate of cumulative inflation during this period. To put this in context £196 to £221 is equivalent to about 8 per cent to 9 per cent of spending on food for the poorest households.^[34]

Figure 35: Low income households would be better off if they had faced only the inflation experienced by higher income ones

The cumulative effect (£) upon annual spending power of the difference between the inflation experienced by households at the top and bottom of the income distribution



Source: RF analysis of ONS, LCF and ONS, Consumer Price Index

Notes: This is calculated by deflating total household income (after housing costs) for the 20 per cent of households at the bottom of the income distribution by the inflation rate for this group over the period, and by the inflation rate for the 20 per cent of households with the highest incomes. The cumulative difference between these two series is then calculated. A further adjustment is made to each inflation index to align it with overall CPI inflation.

Working-age and pensioner households also have different consumption patterns and so may also experience different inflation rates. Looking at the period from 2001 to 2016, retired and working households experienced broadly similar inflation (27.7 versus 28.2 per cent). However, there is a noticeable difference between pre and post-2014. For example between 2001 and late 2014,

[34] This is based on spending data for 2014: the latest year for which we have consumption data.

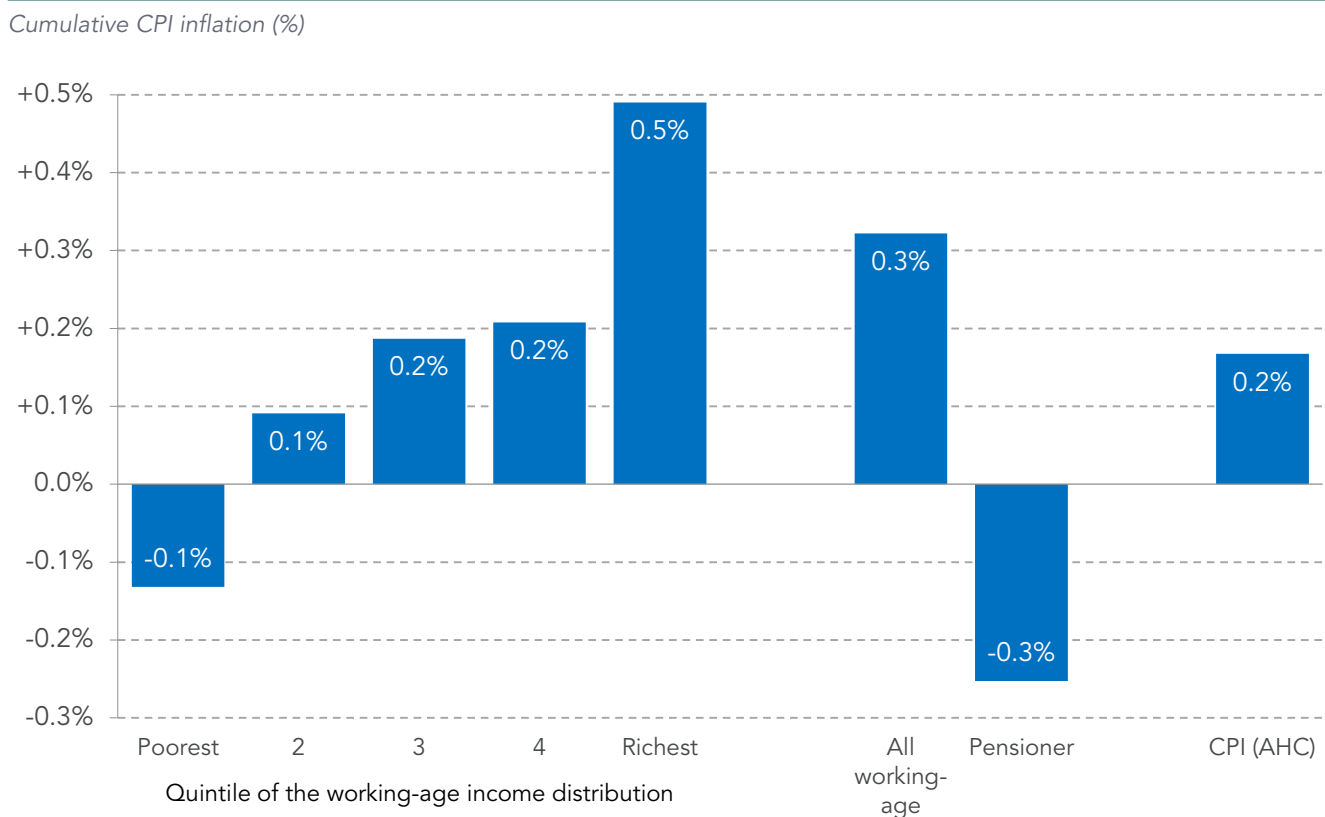
although generally similar, pensioner households tended to experience higher inflation than their working-age counterparts, particularly at times of heightened inflation. Between 2007-08 and 2008-09 – a period of relatively high inflation – pensioner households experienced an inflation rate of 5 per cent, compared to 3.9 per cent for working-age households. More recently however, inflation has been higher for working-age households.

Recent low inflation has disproportionately helped households at the bottom of the income distribution

Between mid-2013 and early-2015, inflation fell from over 2.5 per cent to just above zero. This was in large part because of a dramatic fall in the price of oil, which fell from around \$110 a barrel in January 2014 to around \$50 a barrel in January 2015. The resultant low inflation helped boost living standards, increasing people’s spending power and raising real incomes.

Our analysis shows for the first time that this period of low inflation was also progressive, in the sense that inflation was lowest for households further down the income distribution. The 20 per cent of households at the top of the income distribution had an inflation rate of just below 0.5 per cent (Figure 36), whereas the 20 per cent of households at the bottom of the distribution actually experienced *deflation* – inflation was -0.1 per cent for this group. Pensioners also experienced deflation during this period, boosting their spending power relative to working-age households.

Figure 36: Inflation experiences of different groups during the recent period of ultra-low inflation: January 2014 – January 2016



Source: RF analysis of ONS, LCF and ONS, *Consumer Price Index*

Notes: Differential inflation indices calculated as above. January 2014 and January 2016 figures are three month averages centred on January. CPI (AHC) is CPI minus housing costs (rents, mortgage payments (principle and interest), maintenance repairs, water and sewerage charges)

However, as set out in Section 2, this period of low inflation has come to an end. In December 2016 year-on-year inflation reached 1.6 per cent and most forecasters expect a continued rise to over 2 per cent in the course of 2017. This will drag on living standards and potentially squeeze real pay. As in previous periods it is likely that this will affect different groups to varying degrees.

What does recent data tell us about who will be most affected? Since the middle of this year it appears that rising inflation is being felt relatively equally across all income groups. Between July and December 2016 cumulative inflation rate ranges from 1.4 per cent to 1.5 per cent across the five quintiles of the income distribution. Working-age and pensioner households are also experiencing similar inflation rates. It is difficult to know if this will continue, though research by the IFS (using unadjusted LCF spending shares) suggests that the fall in the value of Sterling will have a broadly similar effect upon households across the expenditure distribution.^[35] Beyond the impact of Sterling's depreciation, it is possible that any increases or decreases in import tariffs following the UK's exit from the European Union could also affect prices in a distributionally uneven manner.

Given this, it will be important to continue to monitor differences in inflation for different groups. We welcome that the ONS has committed to developing sub-group indices.^[36] It should also be noted that our methodology could be further improved, particularly by exploring expenditure differences at a finer level than the 12 broad spending categories we have used. Moreover, it is important to note some of the limitations of *all* measures of inflation in terms of measuring living standards, as explored in Box 7. We will publish a fuller examination of how inflation is felt by different groups and a discussion of the developments in official inflation measures shortly.

Whatever the distributional implications, if inflation continues to rise it will have a pronounced impact upon living standards in the years to come. Yet it is not the only factor. The next section outlines the key determinants of future living standards and explains how we use each in order to forecast income growth for different households between now and 2020-21.

[35] P Johnson, P Levell & T Waters, *The fall in Sterling: who is hit by the rise in inflation?* Institute for Fiscal Studies, 15 November 2016. The authors categorise households into deciles based on how much they spend – not their household income – and find that the households with the lowest level of spending will see around a 2.5 per cent increase in costs, whereas a household with the highest level of spending will see around a 2.8 per cent increase in costs.

[36] ONS, *Developing an Index of Household Payments*, 15 August 2016

i Box 7: Are we overestimating inflation and its effect on living standards?

Consumer price inflation compares the cost of a fixed basket of goods and services at two different times. New goods can occasionally be added to this basket, or goods removed, or the amounts altered to reflect new preferences. However, these changes are accounted for in such a way (chain linking) that a changing basket never has any direct impact on inflation and inflation rates only ever refer to changes in the cost of identical baskets. This is a problem.

Imagine a single shop that sells only two products - apples and oranges - and a single shopper who slightly prefers oranges. If the apples and oranges both cost £1 each, the shopper buys 10 oranges and 0 apples. But what if the cost of an orange were to rise to £1.50 and the cost of an apple were to fall to 20p? A consumer price index in this microcosm would show inflation of 50 per cent: this being the price increase for oranges and oranges being the only item in the original basket. But our shopper can now buy 50 apples for no more than 10 oranges used to cost (£10) - and s/he only slightly preferred oranges. Does a 50 per cent inflation rate - meaning a drop in real income of one third - really accurately represent the change in the shopper's living standards?

While this is of course an exaggerated example, it is not a theoretical problem. Consumers may buy little of a particular good until it is available on a special offer, or until the price of some new technology has fallen sufficiently, and so the fall in price would not be given much weight in the consumer price index. Or, given the fall in Sterling's value (or future import tariff changes), a rising cost of imports might lead people to change their spending patterns (e.g. fewer oranges and fuel use; more apples and haircuts). It is also possible that demand for a good may rise at the same time as prices - such as if that price change is demand driven - producing the opposite effect.

The 2015 'Johnson review' of Consumer Price Statistics made clear that "Current price indices measure the change in the price of a basket of goods over time. They do not measure changes in the "cost of living" - the amount by which spending would have to change to maintain living standards. That is essentially because the indices are not

constructed to take account of substitution behaviour - they do not take account of the fact that if the cost of meat rises a household may buy less meat and more beans. They effectively assume the household continues to buy just as much meat throughout the year, independent of any change in price."^[1] This 'substitution bias' was also noted in the US's Boskin Commission in 1996, as well as 'outlet substitution bias' - missing the ways in which people move to shop at cheaper outlets as prices change.^[2] At the most elementary stage of CPI calculation, some substitution is implied (through the use of geometric means rather than weightings) but this does not apply to substitutions between items (or even different options for the same item in most cases).

And the potential size of this omission could be big. Experimental research by the ONS tentatively suggests that a 'superlative index', which could account for a changing basket (but with a greater publication lag), might have given inflation around 0.5 percentage points lower each year than CPI from 2007 to 09.^[3] This is only indicative, but compounded over many years such a difference would have a very large impact on real income statistics.

For now, there appear to be no official plans to produce a useable superlative inflation index for the UK. However, it is encouraging that the ONS has committed to developing a household payments index. While this is not a superlative index, the aim is to move closer towards capturing how households experience costs - with potential for sub-indices that more accurately reflect the experiences of different groups. If robust and estimated in a timely enough manner, this has the potential for use in uprating items such as benefits and deflating income from household surveys to better reflect changes in living standards.

[1] P Johnson, UK Consumer Price Statistics: A Review, January 2015

[2] The Boskin Commission Report, Toward A More Accurate Measure Of The Cost Of Living, December 1996

[3] G. Clews, R Sanderson, J Ralph, Calculating a Retrospective Superlative Consumer Prices Index for the UK, February 2016

Section 6

Component forecasts for the rest of this parliament

We have seen that living standards grew relatively strongly in 2014 and 2015, with a slow-down in 2016-17. What does the end of this ‘mini-boom’ suggest will happen in the next few years? With a new Prime Minister and Chancellor, substantial policy legacies from their predecessors, and the ongoing Brexit process, we now look at what the rest of this parliament may hold. To do this we look at how the key drivers of living standards will evolve over the next few years, using – where possible – the most recent forecasts from the Office for Budget Responsibility.

Looking forward, it appears that the previous drivers of living standard improvements – ultra-low inflation and large increases in employment – are not set to persist. Employment is expected to be broadly flat, with little scope for the scale of gains achieved in recent years. Far more worrying is the fact that rising inflation is set to pull back on real-terms wage growth: in fact we can expect stagnant, or even falling, real earnings in the short-term. Higher inflation will also make the freeze on working age benefits bit harder. In combination with reductions in eligibility and tax cuts that predominantly favour the better-off, the overall impact of public policy is set to be very regressive.

There is some good news – albeit very uncertain – in relation to housing costs. Mortgagors are expected to continue to benefit from rock-bottom interest rates. Welcome too is the continued roll out of auto-enrolment, though increased pension saving will lower household income in the short term.

These forecasts are inevitably uncertain; perhaps more so in the current climate than is usually the case. But in general, they point to a further slowing down of income growth. We explore just how much – and for who – in the next section.

Both the economic outlook and public policies will determine living standards

In Section 7 we will forecast income growth between 2016-17 and 2020-21. To do this we need to use projections about the probable path of some of the key determinants. This includes key economic variables such as inflation and earnings, as well as housing costs. It also includes the impact of taxes, and spending on benefits. In addition to this we need to take into account other, more specific, developments which impact people’s incomes, including for instance the recent decision by the government to permit local authorities to bring forward planned council tax rises in order to fund social care. Finally, we also have to take into account demographic shifts, this includes population growth and also changes in living arrangements. For example we expect there to be more people living in the private rented sector and fewer mortgage holders by 2020-21.

A full overview of the elements of our forecast is provided in Annex 2. Where possible we use official forecasts made by the independent Office for Budget Responsibility (OBR) in its most recent Economic and Fiscal Outlook, which was published in November 2016 alongside the Autumn Statement. Below we take a look at some of these in order to gain an initial idea of how each will impact upon living standards in the coming years. In Section 7 we forecast incomes in 2020-21, which coincides with the likely end of the current parliament.

Employment is expected to remain high, but not record the same gains as in the last parliament

At present employment in the UK is at an all-time high, with a 16-64 rate of 74.5 per cent. As set out earlier, the rapid increase in this rate since 2013 provided a large boost to living standards. This boost was particularly felt by those lower down the income distribution due to the fact that people in lower income households are less likely to be in work than those in higher income households. The unemployment rate, at 4.9 per cent, is also significantly down from the high of 8 per cent that it reached in September 2011. The jobs market was a bright spot in the country's recent economic performance, and even when unemployment rose following the financial crisis it performed better than expected.

Looking forward the OBR's projection is that the employment rate for those 16 and above will decline slightly in the next couple of years, from 60.5 to 59.9 per cent (partly driven by demographics), while the unemployment rate will rise from 4.8 to 5.4 per cent. Other organisations also provide their own forecasts, and these are compiled on a regular basis by the Treasury. Most forecasts for unemployment in 2020 range from 5 per cent to 6.7 per cent.^[37] Therefore while the precise scale of unemployment is a matter of debate, there is a general consensus that the improvement of recent years will not continue.

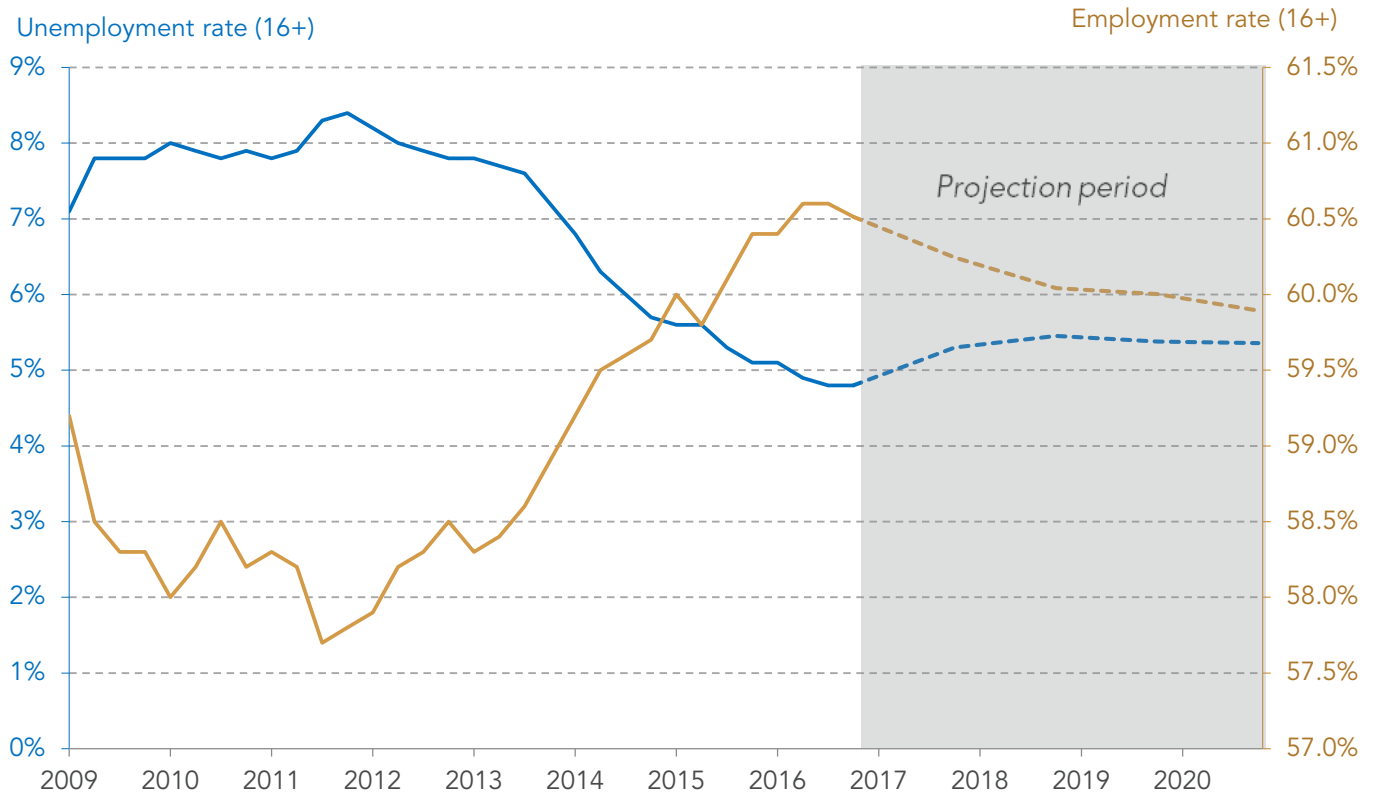
However, such projections have been wrong before. A lot of forecasters were surprised by the strong performance of the jobs market since 2012 and so it is possible that even more people will move into work. As described in Section 2, there is scope for even higher employment if there is more of a focus on 'low-activity' groups including the disabled, black, Asian and minority ethnic people and mothers.^[38] Previous work has shown that a 16-64 employment rate of 78 per cent could be achievable.^[39] Nevertheless, given the barriers to employment that many of these groups face a significant rise in employment could be more difficult in future.

[37] There are two outliers in the most recent summary of independent forecasts: Beacon Economic Forecasting project that the unemployment rate will fall to 3.6 per cent and Societe General predict it will rise to 8.6 per cent.

[38] We use the term 'low activity' to describe groups that are more likely to be out of work and may face barriers to enter work. This includes single parents, mothers, black, Asian and minority ethnic people, younger and older people, disabled people and those with low levels of education.

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

Figure 37: The OBR expects employment to fall and unemployment to rise slightly



Source: OBR, Economic and Fiscal Outlook

There are also concerns about the type of employment, though this is not easily projected. The OBR projects that the share of workers who are self-employed will remain at around 15 per cent for example; yet this share has risen from 13 per cent to 15 per cent since 2009, suggesting that their forecast could underestimate future rises. If it did, then this may overestimate future income growth (and tax receipts) given that self-employed workers tend to earn less (and be taxed less).

Inflation has already risen and is expected to overshoot its target in the medium-term

Like rising employment, low inflation has provided an important boost to living standards in the last couple of years. Inflation rose relatively quickly between 2010 and mid-2011, weighing on people’s earnings. But since 2012 inflation has fallen, and for the last year and a half has been below 0.5 per cent. Such low inflation has meant that even relatively muted nominal earnings growth (of around 2 per cent to 3 per cent) has significantly boosted households’ spending power.

Following the decline in the value of the pound (see Section 2), it is forecast that inflation will continue to rise relatively rapidly in the near future, reaching around 2.5 per cent by mid-2017. And it is expected to remain around this level until 2019 when it is assumed to fall back to the Bank of England’s target of 2 per cent for the rest of the forecast period. While far from ‘high’ by historic standards, such an increase in inflation is likely to be enough to pull back on still modest increases in pay (see below).

Figure 38: The expected path of inflation

CPI inflation and projection (%)



Notes: The chart graphs CPI inflation. We use this in our forecast rather than CPIH and CPI-AHC because the OBR produces projections of this but not CPIH and CPI-AHC

Source: OBR, *Economic and Fiscal Outlook*

Again there is uncertainty as to the path that inflation may take. Some forecasters predict that it will rise to 3.5 per cent this year and still be at around 3 per cent in 2020, others expect it to only rise to current levels of around 1.5 per cent. The OBR's forecasts are close to the average of those collected by the Treasury.

As set out in Section 5, it should also be noted that the lived experience of any future path of inflation may be felt quite differently across different parts of the population.

Earnings growth may struggle to keep pace with inflation

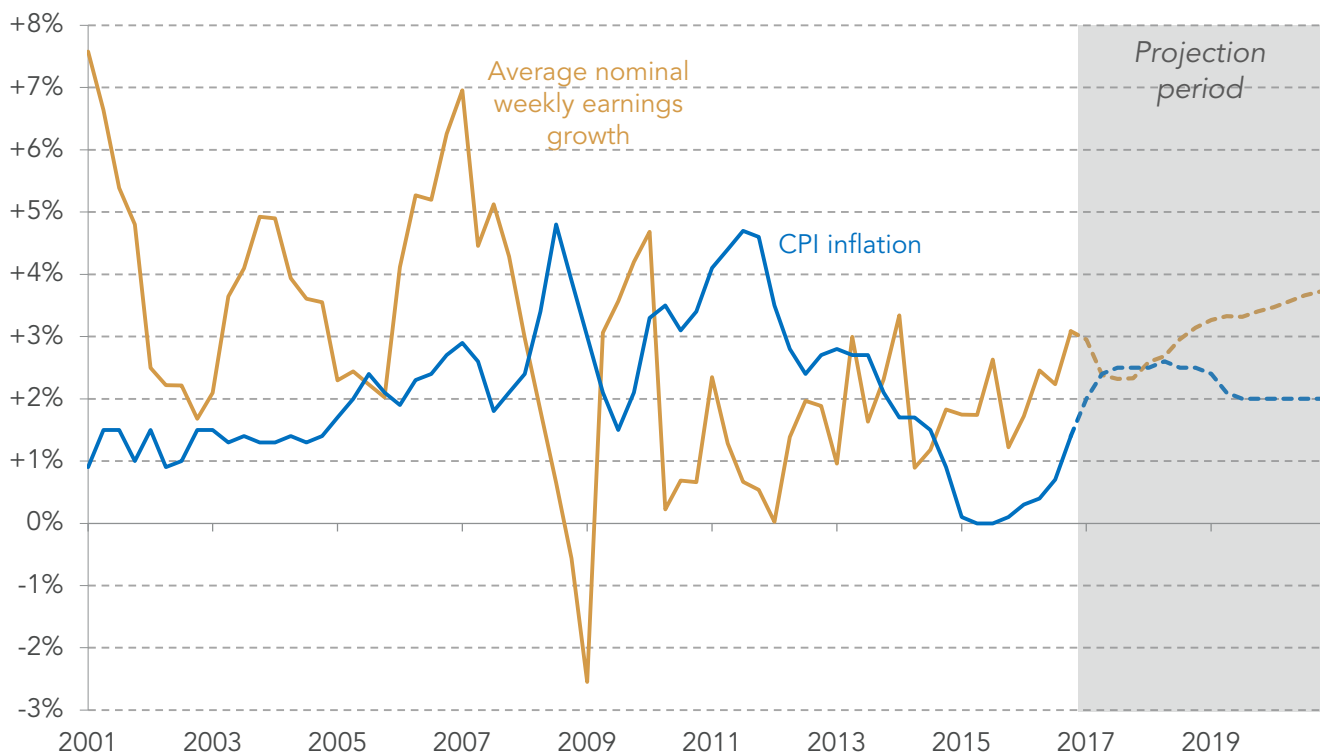
In and of itself, higher inflation shouldn't be considered a problem. Indeed, inflation has been further away from its 2 per cent target over the past few years than it is forecast to be in the coming months. It becomes problematic from a living standards perspective however if income growth fails to pick up in such a way as to offset the rise. As we'll see below, this is an obvious issue in relation to the freeze on working-age benefits. But nominal wage projections suggest that inflation is set to pull back quite significantly on real-earnings growth too.

Following a five year squeeze, average weekly earnings have been rising in real-terms since mid-2014. There has been no sign of any sustained 'rebound' and pay growth has fallen below its pre-crisis trend in recent months – leaving average earnings still some way off their peak – but the gains have been steady. The combination of projections for only modest improvements in nominal pay growth and rising inflation mean that real pay is expected to be roughly flat until

mid-2018, as set out in Figure 39. Inflation may even rise above nominal earnings growth in late 2017, providing a brief return of the pay squeeze. If and when inflation falls back to around 2 per cent in 2019 real earnings are expected to increase. However, it is currently expected that earnings will not recover to their pre-crisis peak until late 2020, meaning that workers will have experienced more than a lost decade of pay growth.

Figure 39: Real earnings are expected to stagnate or even fall in the short-term

Year-on-year growth in average nominal weekly earnings and CPI (%)



Source: OBR, Economic and Fiscal Outlook

Pay growth is likely to be more robust for the low paid, however, due to planned increases in the National Living Wage (NLW). Given the intention for this to rise to 60 per cent of typical median pay (for those age 25 and over) by 2020, real terms increases each April are likely. And in addition to those directly affected by the NLW (i.e. those who would otherwise be below it), we continue to assume that there are spillover effects to those on higher incomes, and that some under 25s also receive the benefits.

There is also likely to be a pronounced pay growth difference between public and private sector workers that we can capture in our modelling. Due to a policy of capping average public sector pay increases at 1 per cent, public sector pay is likely to fall in real terms over the next four years to 2020-21.

The success of pension auto-enrolment will have a short-term living standards cost

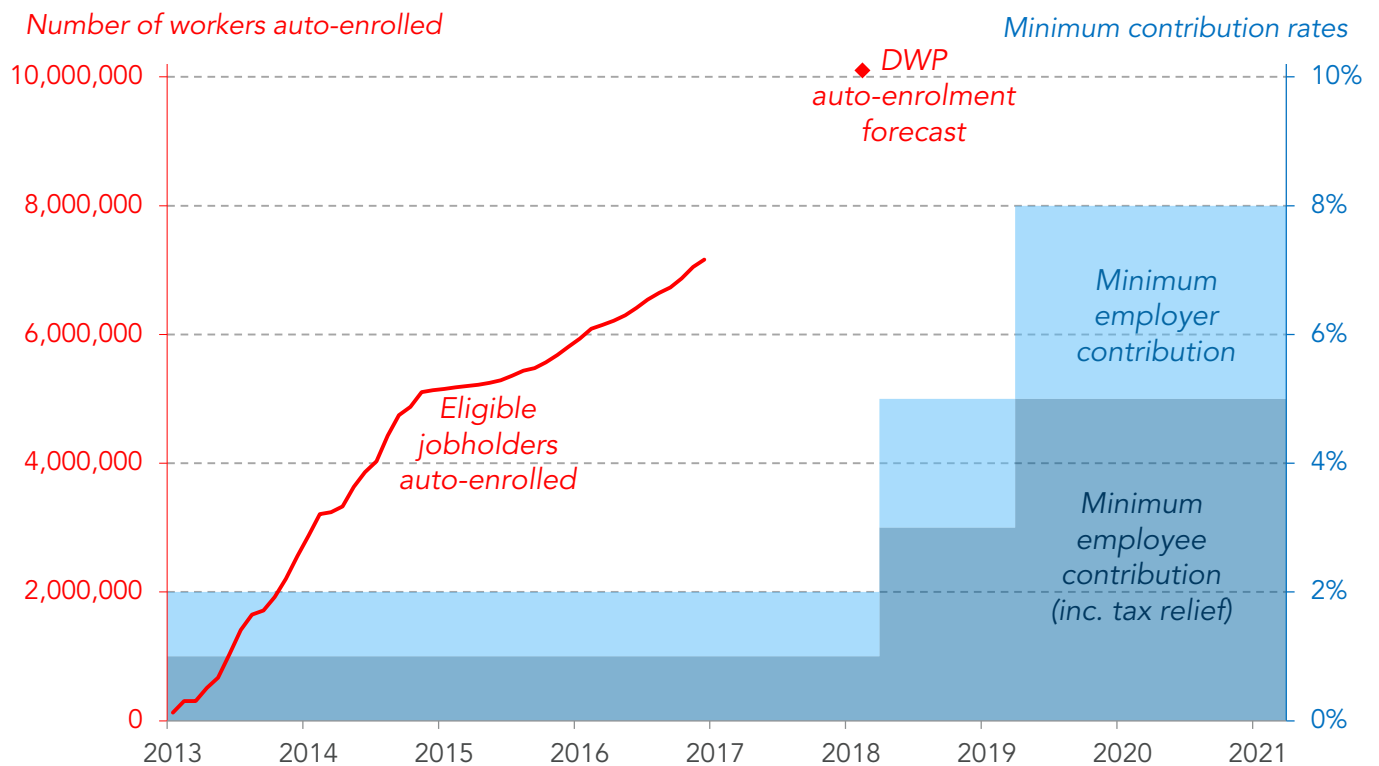
Household incomes, our preferred proxy for living standards, are strongly linked to earnings growth. But for the analysis of disposable incomes purpose what matters are earnings net of

occupational pension contributions – which are one way to defer income.

It is almost universally accepted that there is a need for higher private pension saving following the Turner Report.^[40] However, any increase in pension saving of course means lower disposable income in the short term.

From 2013, auto-enrolment^[41] has been extended to more and more companies. By the end of 2016, 7.2 million people had been automatically enrolled into a relevant pension scheme,^[42] and the DWP expects that 10.1 million will be newly saving or saving more by 2018.^[43] This roll-out to a greater number of people – shown in Figure 40 – will have some impact on short-term living standards. However, the minimum employee contribution rate at present is only 1 per cent of pensionable salary, and this includes some income tax relief. More significant may be planned increases in this minimum to 3 per cent in April 2018 and then 5 per cent in April 2019.

Figure 40: Pension auto-enrolment will mean more people saving and at higher rates



Source: The Pensions Regulator and DWP

[40] The Pensions Commission, *A New Pension Settlement for the Twenty-First Century*, 2004

[41] Automatic enrolment refers to the regulations that stipulate that most UK employers must put in place a qualifying workplace pension scheme and automatically enrol their qualifying workers. Employers then have to make contributions to their workers' pensions every pay period.

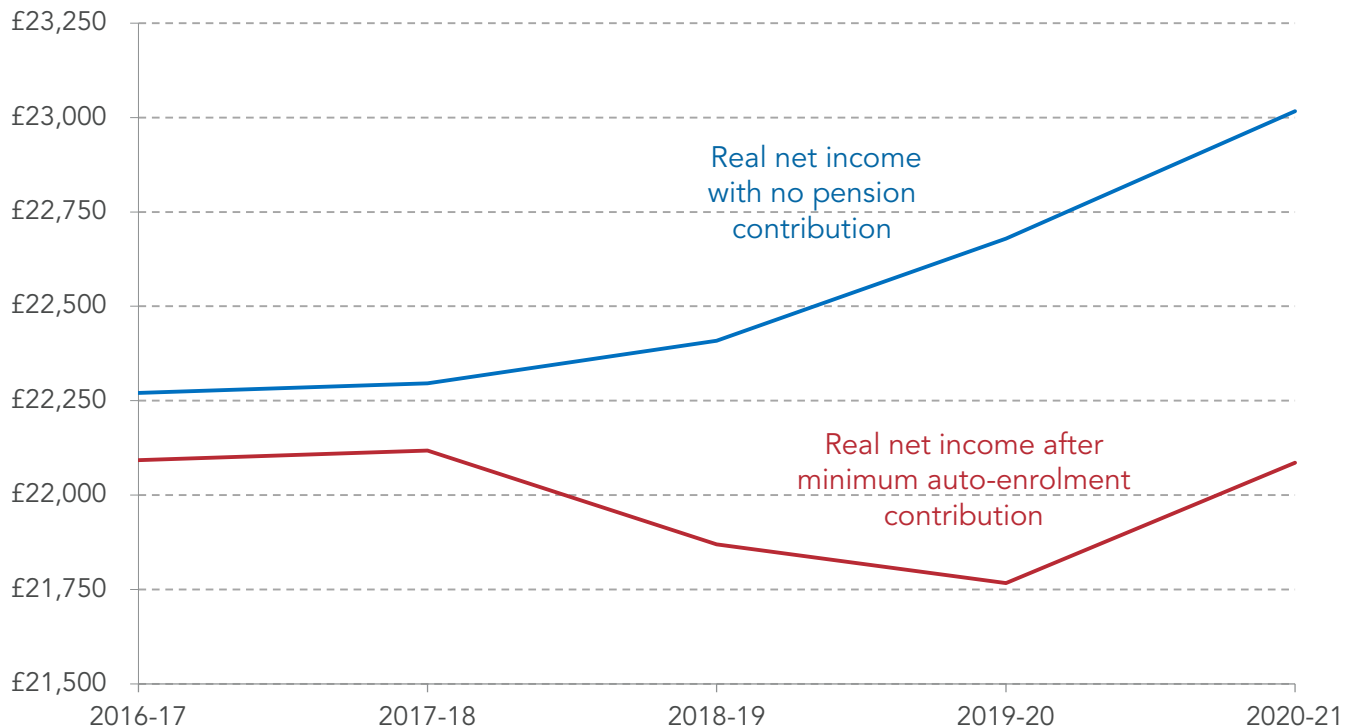
[42] The Pensions Regulator, *Automatic enrolment: declaration of compliance report*, January 2017

[43] DWP, *Workplace pensions: update of analysis on automatic enrolment 2016*, October 2016

These will be accompanied by increases in the minimum contribution that employers must make, and the combination of employer contribution and generous tax treatment mean that there is a strong incentive for employees to save in this way.^[44] Nonetheless, the short-term hit is appreciable. A savings step-up of 2 per cent in 2018-19 and another 2 per cent in 2019-20 may cancel out any real take-home pay growth for many people in those years, despite the long-term benefits for them. Figure 41 shows an example of a typical full-time employee whose gross pay rises in line with the OBR's earnings forecast. If they were not contributing to a pension at all then their take-home pay would rise by £750 over the next four years (given our forecast tax thresholds). But if they were contributing the auto-enrolment minimum then the increase in rates in 2018-19 and 2019-20 – together with the short-term pay slowdown outlined earlier – would leave them slightly worse off in 2020-21 than in 2016-17 in terms of disposable earnings.

Figure 41: The step up in pension contributions could mean flat disposable earnings for many employees over the rest of this parliament

Real income, 2016-17 terms



Notes: Median full-time employee pay in April 2016 using ASHE. Minimum contribution rises from 1 per cent to 3 per cent in 2018-19 and then to 5 per cent in 2019-20. Assumes a £12,500 income tax threshold in 2020-21. Income tax relief is accounted for.

It should be noted that the roll-out of auto-enrolment did not prevent some high household income growth over the past few years. And the opt-out rate for eligible workers so far has only been around 10 per cent, while many who were not automatically eligible (e.g. those on very low incomes) appear to have enrolled themselves too.^[45]

[44] For more details on tax relief see A Corlett & M Whittaker, *Save it for another day: pension tax relief and options for reform*, Resolution Foundation, March 2016

[45] J Cribb & C Emmerson, *What happens when employers are obliged to nudge? Automatic enrolment and pension saving in the UK*, IFS, November 2016

The government is rightly considering how to extend auto-enrolment to even more people, such as the self-employed and those with multiple low-paying jobs.^[46] And many others have suggested or discussed further raising the minimum contribution rates from a planned total level of 8 per cent to 12, “at least 12”, 12.5, 15 or even 16 per cent.^[47] Clearly this is a policy issue that will be relevant for some time. And while higher pension saving by those currently facing inadequate retirement incomes is welcome, it should be recognised that lower income, private sector workers – those most likely to be helped by auto-enrolment – will continue to face this income pressure.

Our forecast of household income growth to 2020-21 does not include any modelling of the numbers and levels of people saving. It will therefore overestimate disposable income growth, particularly for lower income private sector workers. We plan to look at this issue in greater depth in a forthcoming piece of research.

A further cost for an increasing share of people are student loan repayments. Rather than accumulating an asset the repayment of a student loan is the paying down of a liability. Nevertheless it has a similar effect, in that it reduces take-home pay. We are unable to project future increases in student loan repayments, but discuss this issue in Box 8.

[46] DWP, *Automatic Enrolment Review Scope*, December 2016

[47] See Policy Exchange, PLSA, Aviva, TUC and ACA respectively.

i Box 8: Student loan repayments in future

The number of people who are in higher education has an impact on living standards both through the lower incomes of students while at university, and (hopefully) through higher incomes later in life. But the existence of tuition fees and student loans will also have three effects on the overall income growth of working-age people.

First, an increasing number of people going to university will mean more younger people repaying student loans. In England, over 42 per cent of people age 18/19 in 2015/16 were accepted into higher education – a record high.^[1] Second, of course, increases in tuition fees and loan interest will reduce the future disposable income of graduates. And third is a simpler cohort effect, as those who studied before tuition fees were introduced in 1998-99 gradually leave the labour market and those who came of age after that point come to dominate.

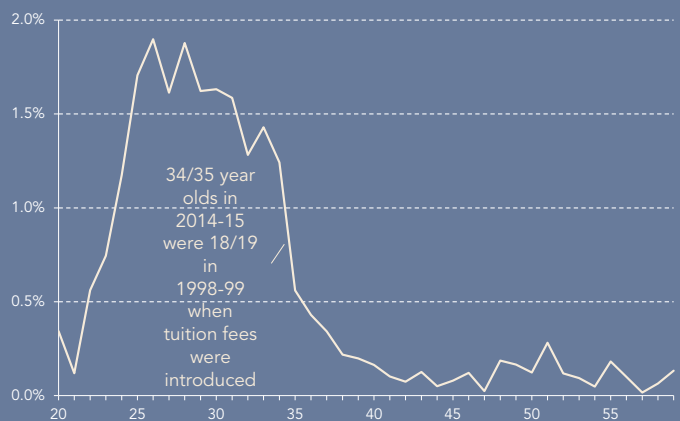
Figure 42 shows the overall burden of student loan repayments for each single-year age group in 2014-15 (including both graduates and non-graduates). As should be expected, these repayments currently take up a significant portion of overall employment income for younger adults only, and not those aged over 35 in 2014-15. They can be expected to affect gradually more people as the impacts of the 1998-99 introduction work through, together with increased numbers of graduates and subsequent increases in tuition fees.

This is not to argue for or against any system of university funding. But it should be noted that while the positive impacts of increased university attendance (i.e. higher wages) should be baked into OBR forecasts, and while any lower taxes as a result of lower public support will also be included in our modelling, we do not forecast future increases in student loan repayments. In fact, the factors outlined above are likely to act as a small drag on

working-age disposable incomes – particularly for those on higher incomes – for many years to come.

Figure 42: Student loan repayments are a significant outgoing for younger cohorts

Aggregate student loan repayments as a share of aggregate gross employment income



Source RF analysis of FRS 2014-15

Notes: Includes both graduates and non-graduates. Includes only those who responded to the relevant FRS questions.

[1] UCAS EOC report 2016

Tax cuts will raise incomes, but the bulk of the benefits will go to richer households

People's after-tax or net pay is a better determinant of their living standards than their gross pay. Taking into account just the taxes people pay, not the benefits they may receive (which we will look at below), two main tax changes in the next few years promise to provide a small boost to household incomes.

First, the government has committed to raising the personal tax allowance to £12,500 by 2020-21. This will mean that anyone earning below this amount on an annual basis will pay no income tax (though many will still be liable for National Insurance) while many earning much more than this will pay less tax. In addition to this the government are also committed to raising the higher rate

of income tax to £50,000 (though this will not happen in Scotland - see Box 9). This will mean that anyone earning below this amount will only pay the basic rate of tax (20 per cent) on any earnings above £12,500 and will only start paying the higher rate of 40 per cent when they earn over this amount. Most importantly the planned increases in both the personal allowance and the higher rate threshold are above expected inflation, meaning that they will provide a boost to living standards relative to the default uprating rules.

However, these tax cuts will only benefit certain earners. Given that annual earnings for the typical worker were approximately £23,000 in 2016, and only around 10 per cent of workers earned over £50,000 last year, the raising of the higher rate threshold will do nothing to improve living standards for the majority of households. The raising of the personal tax allowance will provide a boost to incomes for many households, but as this has already risen over recent years, increasing numbers have already been removed from income tax and so don't benefit from further threshold changes. The tax cut will also benefit dual-earning households twice, and dual-earning households tend to have higher incomes. Our analysis suggests that 80 per cent of the benefits of raising the higher rate threshold and personal allowance will benefit the richest fifth of households.^[48]

A small further change will be the abolition of the flat-payment Class 2 National Insurance for the self-employed from April 2018, which will save them around £150 a year each.

i Box 9: Differences in taxation in Scotland

Continuing devolution of powers means that tax policy may now differ significantly across the UK, and particularly in Scotland. Our forecast (discussed further in Section 7) does not account for such differences, instead assuming a single UK-wide policy. So it is important to note the expected differences. In Scotland:

- » The higher rate threshold will increase only in line with inflation. In 2017-18 this will mean a threshold of £43,430 while in the rest of the UK it will be raised faster than inflation to £45,000. National Insurance contributions are unaffected meaning that the income at which NI rates change and the income at which income tax rates change will become decoupled in Scotland.
- » The structure of council tax will be changed slightly from April 2017 such that those in the most expensive

properties (bands E-H) will pay more.^[1]

- » Accompanying this, the Council Tax Reduction system will be made more generous for eligible families with children. It has also been previously protected (and in Wales too) from cuts made in most of England.

Wales will now also be able to vary its income tax from 2019-20, though no plans to do so have yet been announced.

Differences are also opening up in the benefits system. The Scottish government has announced that Universal Credit recipients will be able to receive their payments weekly rather than monthly and have their housing element paid direct to their landlords; though these changes will not directly impact on incomes overall.

[1] A Corlett, *Battle of the bands: the prospect of council tax reform in Scotland and beyond*, Resolution Foundation, April 2016

Benefit cuts will have a large impact on those affected

We have seen that tax cuts will have a positive impact (albeit small and regressive) upon household incomes in the years to come. By contrast, planned changes to the benefit system will have a significant negative impact upon household incomes in the years ahead – particularly those with children and/or lower incomes. The largest planned cuts include:

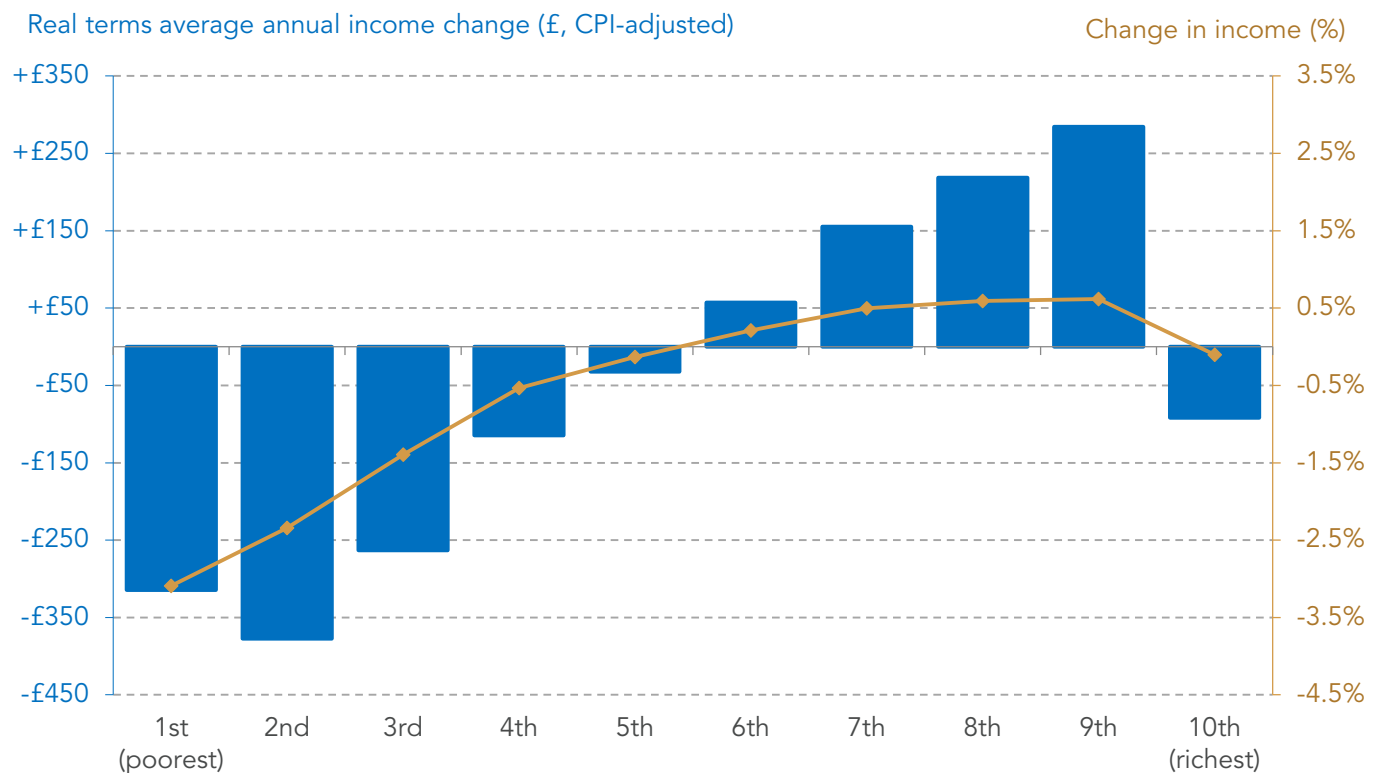
[48] A Corlett, D Finch, L Gardiner & M Whittaker, *Bending the rules: Autumn Statement response*, Resolution Foundation, November 2016

- » A freeze in all working-age benefits and housing allowances in 2016-17, 2017-18, 2018-19 and 2019-20 – likely to be made more severe than at the time the policy was announced by higher-than-expected inflation
- » Large cuts in the amount that can be earned before Universal Credit (UC) begins to be tapered away (note that a similar policy was originally also intended to apply to tax credits but this was later cancelled)
- » Ending the family element (over £500 per family) in UC and tax credits for new claims
- » Limiting the child element of UC and tax credits to two children for new claims

Figure 43 shows the expected combined impact of planned changes to the tax and benefit system this parliament (mid-2015 to 2020-21). This includes all the aforementioned tax and benefit changes, as well as freezes to fuel duty and planned additional hours of free childcare. As with similar combinations in the last parliament, the changes are expected to be regressive. Households in the bottom ten per cent of the income distribution will on average be 3.1 per cent or £314 per annum worse off as a result whereas households in the top half of the income distribution (aside from the top 10 per cent) will be better off.

Figure 43: Impact of tax and benefit policies: 2015-16 - 2020-21

Cumulative impact of tax and benefit policies announced this parliament



Notes: Assumes full entitlement take-up, UC 80 per cent rolled out & measures affecting new claims/births half in place.

Source: RF analysis using the IPPR tax-benefit model & OBR, *Economic and Fiscal Outlook*, November 2016

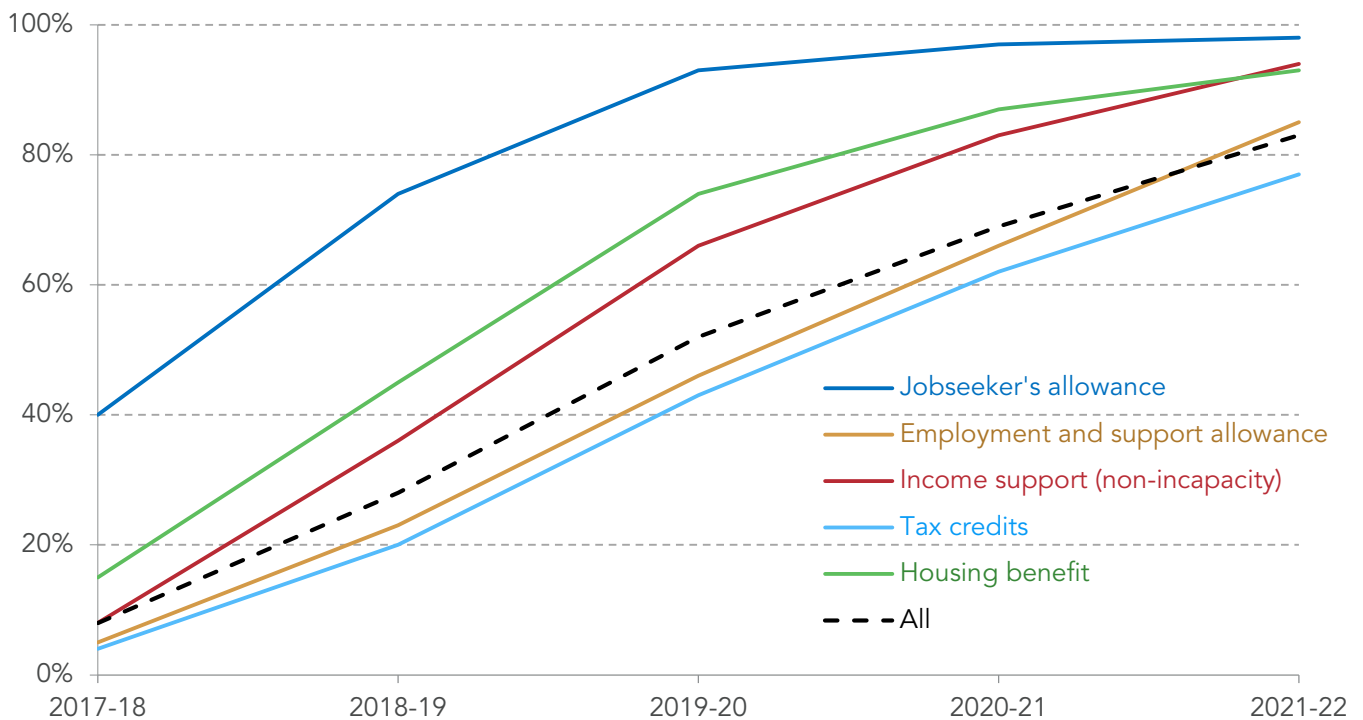
We have also taken into account the small reversal to the planned benefits cuts announced at the Autumn Statement - the reduction of the taper rate under UC. Lowering the taper rate – the proportion of each extra pound earned that is withdrawn via a lowering of entitlement – from

65 to 63 per cent could in some cases benefit a couple with children by £200 a year. However, this is relatively small when compared to the wider benefit cuts that we have detailed above. The changes announced by the Chancellor at the Autumn Statement will only reverse 7 per cent of the reduction in household incomes arising from the planned policy changes this parliament.^[49]

While many tax and benefit changes take place overnight each April, some of the most significant changes in this parliament will be phased in over time and across different groups. The roll-out of UC, which is replacing six working-age benefits or tax credits, will make some people better off and others worse off (particularly through the cuts to work allowances and the Minimum Income Floor for the self-employed). But whether or not a particular family will be on UC or not over the next few years will depend on their location (with a gradual roll-out across the country) and their circumstances (with the roll-out being most advanced for single jobseekers). The expected timetable for transitioning people from existing benefits to UC is shown in Figure 44. Given repeated delays in the past, the OBR assumes a further six month delay beyond the current DWP timetable. It is expected that by 2019-20 the large majority of jobseekers will be on UC rather than JSA; while the transition of in-work claimants on tax credits will be slower.^[50]

Figure 44: Most of the roll-out of Universal Credit is expected to happen over the next five years

OBR forecast of proportion of caseload migrated to UC



Source: OBR. Assumes a further six month delay relative to the government's timetable.

[49] A Corlett, D Finch, L Gardiner & M Whittaker, *Bending the rules: Autumn Statement response*, Resolution Foundation, November 2016

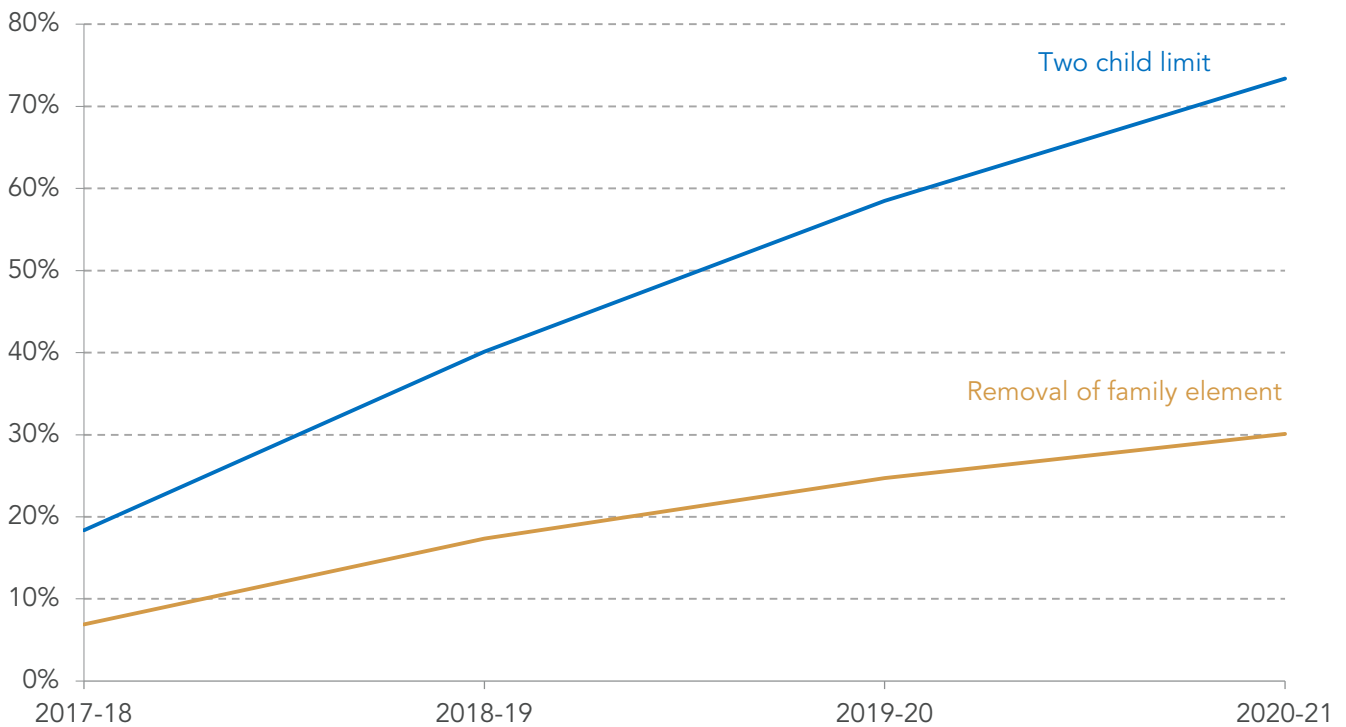
[50] As noted in relation to Figure 43, our modelling deals with this gradual roll out by considering four outcomes then weighting the outcomes so as to approximate 70 per cent roll out. See Annex 2 for full details.

There is a system of transitional protection to limit the number of households made worse off by UC. However, this ceases to apply if households have any change of circumstances. The OBR expects the cost of transitional protection to reach only £0.3 billion in 2020-21, suggesting that its impact will be limited relative to other factors.^[51]

Also particularly important for the living standards outlook is the phasing-in of the two child limit for tax credits or UC, and the ending of the family element. Given that the limit only applies to claims made from April 2017, many existing claimants will be able to continue to claim for many years.

Figure 45: Roll-out of family element and child cuts

Proportion of total caseload impacted by cuts to family support



Source: RF analysis of HMRC, *Child and Working Tax Credits Statistics*, December 2016 and DWP, *Welfare Reform and Work Bill: Impact Assessment of Tax Credits and Universal Credit, changes to Child Element and Family Element*, July 2015

We take into account the different phasing in timetables in our projections. However it is worth remembering that, no matter what the timetable, the ultimate impact will be the same. Insofar as some cuts will not be fully in place by 2020-21, this simply means they will continue to weigh on income growth in the next parliament.

Finally, it should be clear that although taxes and benefits are in a sense one of the most predictable elements of our forecasts, they are also one of the levers that policy makers have most control over. So our forecast is not inevitable, but does reflect current plans for the tax and benefit system.

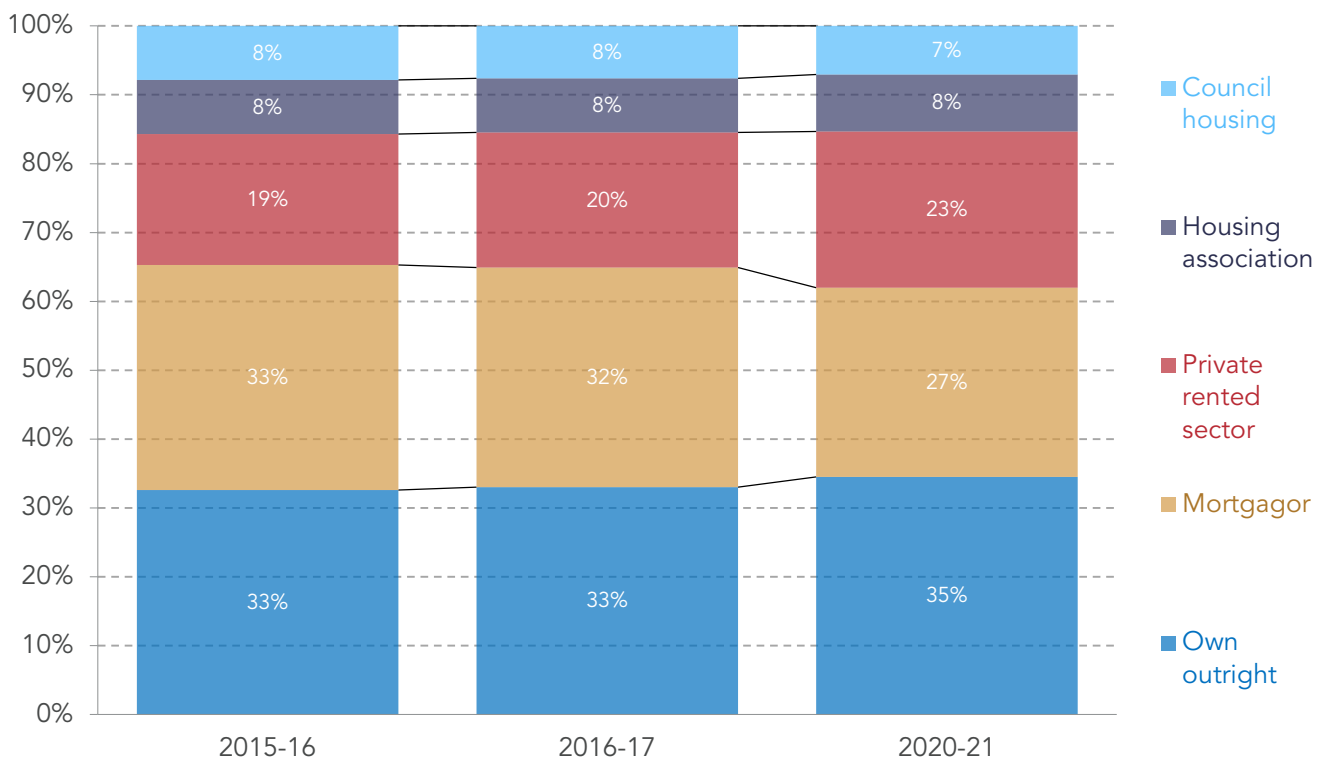
[51] AS16 OBR tables (fiscal tab 2.22). Given the complexity involved in capturing the movement of cases onto UC for such a relatively small effect we have not included transitional protection in our forecast.

Housing costs are likely to rise, but this will vary by tenure

The final significant driver of future living standards is housing. We know from previous work that whether a household lives in local authority or housing association accommodation, rents privately, or owns their own home affects housing costs, and in turn their disposable income.^[52] To take this into account we need to project how housing tenure will change between now and 2020-21. Our projections (outlined in Figure 46) are simply based on current trends which suggest that there will be fewer mortgagors, and a greater share of people in the private rented sector and those who own their own home outright.

Figure 46: On current trends, the number of mortgagors may decrease and the private rented sector grow further

Share of the population in different housing tenures (%)

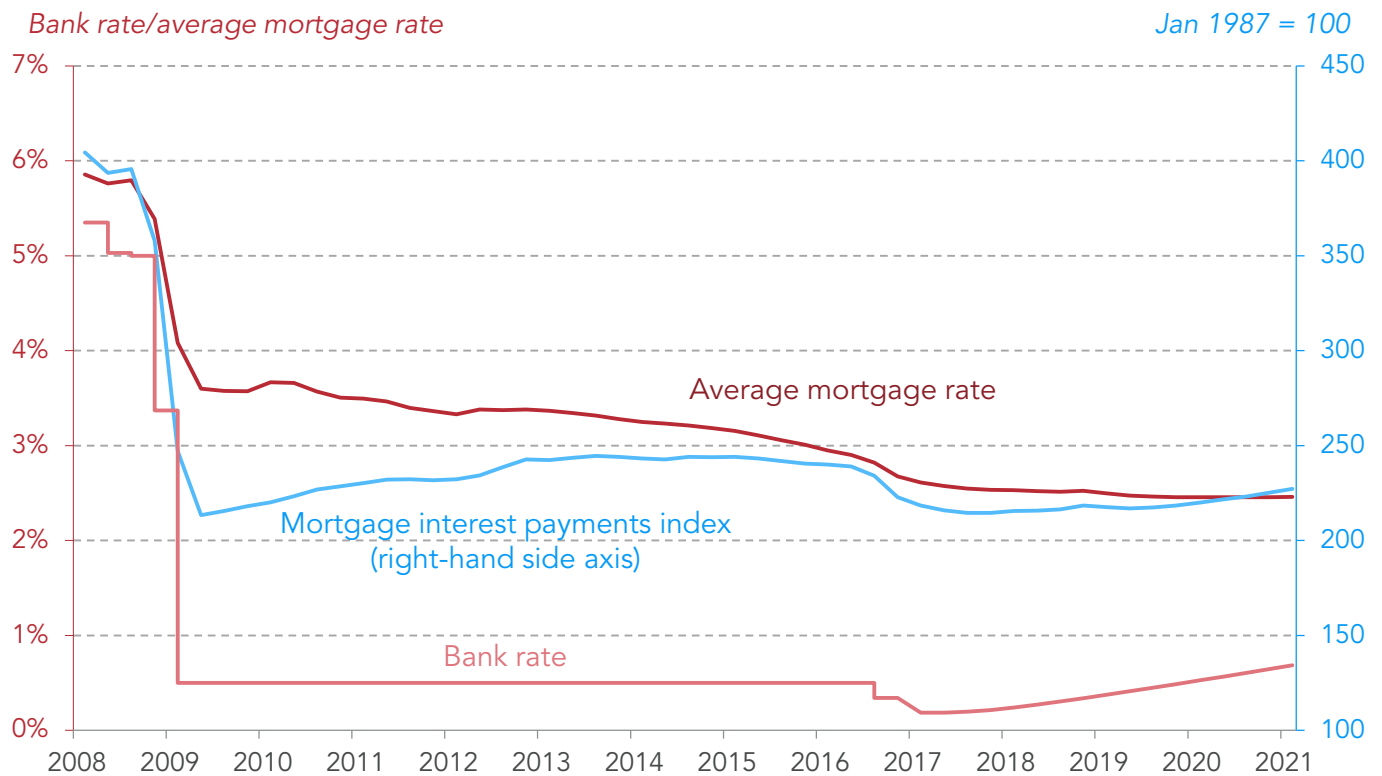


Source: RF analysis of ONS, Labour Force Survey; with projection using the historic trend from 2010-11 to 2015-16.

In addition to household tenure we also need to project changes in housing costs. For households with mortgages we use the OBR’s projections for average mortgage interest payments. These are a function of both average mortgage rates (in turn affected by the Bank rate) and changes in house prices. Remarkably, the average mortgage interest payment is expected to be lower in 2020-21 than in 2016-17 in nominal terms, and lower even than in 2010-11. This is one legacy of the fall in Bank rate to historic lows. However, these figures do not necessarily imply that the up-front financial and regulatory hurdles of buying a home have got any easier to clear.

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

Figure 47: Average mortgage rates are continuing to fall, holding down costs for mortgagors



Source: OBR

Housing costs in the social sector are also likely to be supportive of living standards. Despite previous policies of above-inflation rent increases, the government has mandated that nominal social sector rents in England should fall by 1 per cent for four years from 2016-17. This reduces the income of councils and housing associations, and for many families the costs are entirely covered by housing benefit in any case so makes little difference to disposable income, but the change will nonetheless have a positive impact for many.

For private renters, however, we assume that rents will grow at the same rate as average weekly earnings, in line with the OBR. As we showed in Figure 17, rent cost growth may differ substantially across the country but any assumption about future patterns would be extremely uncertain. The freeze in local housing allowances will also mean that a diminishing proportion of rents will be covered by housing benefit.

The future is always difficult to predict, and the state of the economy in 2020 is perhaps more uncertain than usual. However, there is strong evidence to suggest that employment growth will remain relatively subdued and that there will be only modest increases in real pay as inflation picks up. Benefits are not falling in generosity – at least for working-age households – and tax cuts will only provide a modest boost to income. Unlike the past, housing costs are expected to be less of a drag on income, but this effect will be marginal. Looking at all these factors in the round, what is the likely outlook for household incomes and their distribution? That’s the question we turn to in the next section.

Section 7

The living standards outlook for 2020-21

Using forecasts for the various drivers of living standards explored in the previous section, including inflation, employment and productivity, we are able to project the strength and distribution of household income growth over the next four years. While these are inevitably uncertain, the current outlook implies a severe slowdown in household income growth with near-stagnation in median working-age income. For the bottom half of the working-age income distribution, average real incomes are expected to be significantly lower in 2020-21 than in 2016-17, with the incomes of the poorest part of the distribution falling by over 10 per cent. With positive income growth forecast for higher income households – albeit historically weak – we also project a large increase in inequality to record highs after accounting for housing costs.

This section looks at how the current parliament as a whole would compare to past ones if nothing happened to change our projection. We find that it would be the largest increase in inequality since the parliaments of 1983 to 1992, and the worst parliament on record for the living standards growth of the bottom half – which would be negative for the first time.

But, while the outlook is clearly gloomy, we should avoid economic determinism. The government has the opportunity to shift policy in a way that can both boost overall growth and share the gains more evenly. Our projections are inevitably uncertain; given the right intervention we hope they prove to be materially wrong.

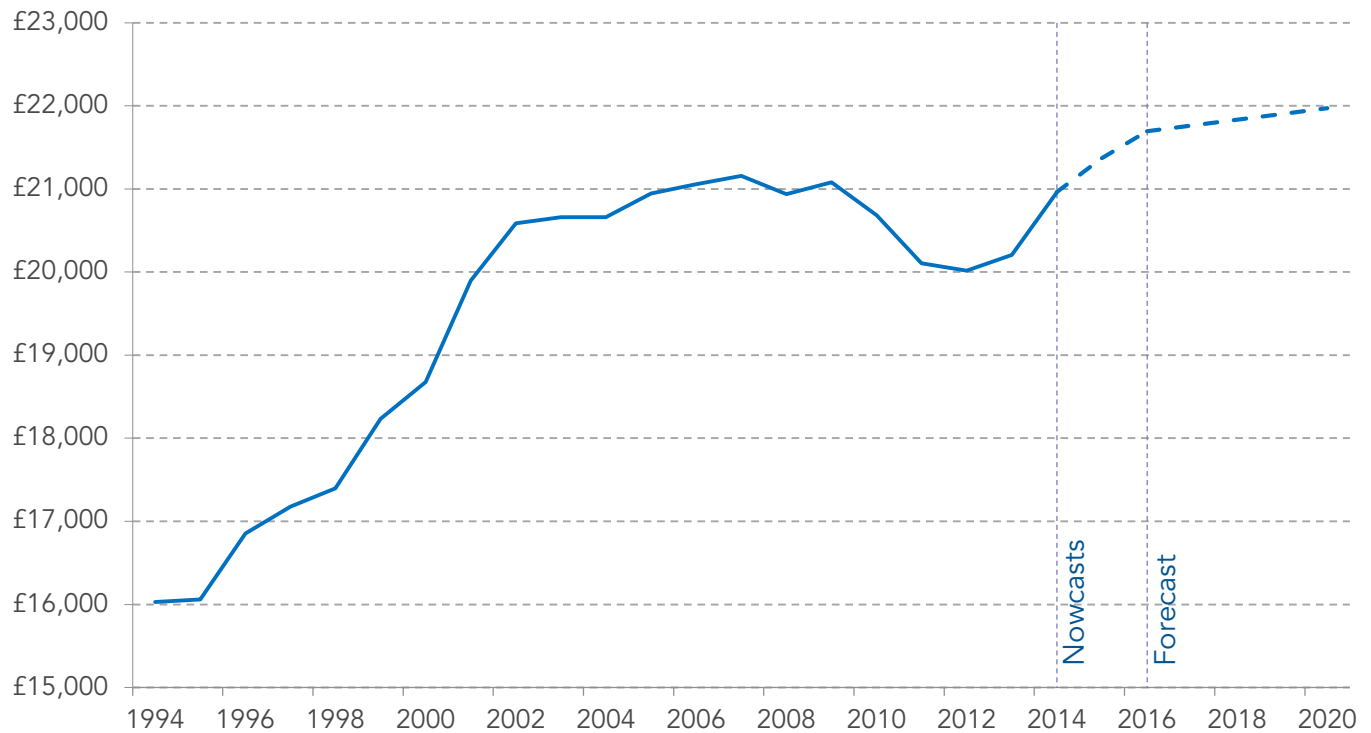
Typical household incomes are expected to grow only slightly

Putting together the projections for the different drivers of living standards explored in the previous section, we can project household incomes for 2020-21. It is worth reiterating once again just how much uncertainty surrounds each of the inputs we use in this approach, and we also note that our projections could be shifted by future policy action: we should not be fatalistic about the implied outcome. Nevertheless, based on current projections for pay (public, private and in relation to the rising wage floor), employment, inflation, demographics, housing tenure, taxes and benefits, we can model indicative levels of income growth over the income distribution in the coming years. A detailed description of our methodology is provided in Annex 2.

Our modelling suggests a severe slowdown in real income growth over the rest of this parliament. For working-age households we forecast that typical real incomes after housing costs will grow by just 1.3 per cent between 2016-17 and 2020-21. As Figure 48 shows, this essentially means typical working-age incomes will be flat over the period as a whole. Coming on top of both the squeeze associated with the financial crisis and the slowdown of the pre-crisis years (which was driven partly by rising housing costs), this would leave typical working-age incomes just 7 per cent higher in 2020-21 than in 2002-03.

Figure 48: The typical working-age household is expected to be little better off in 2020-21 than in 2016-17

Median working-age equivalised disposable income after housing costs (adjusted using CPI ex. housing)



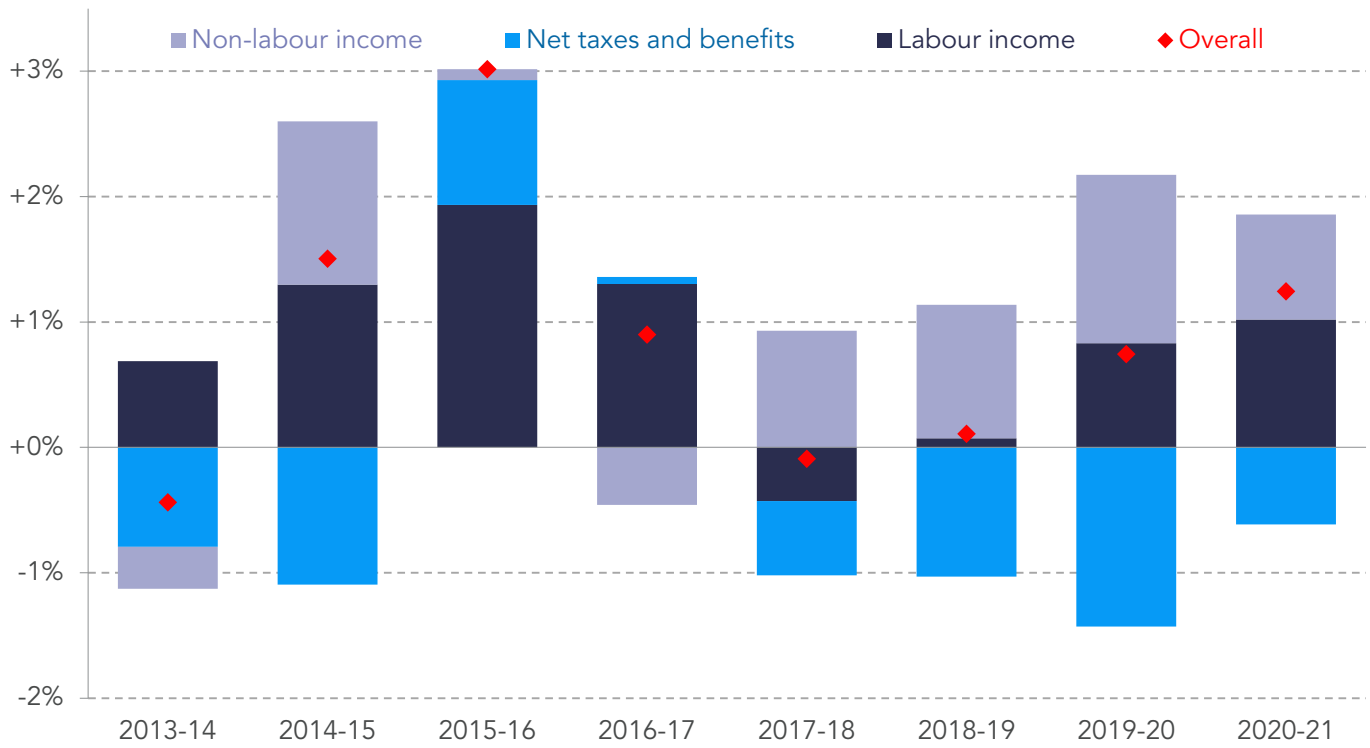
Source: HBAI with RF nowcasts and forecast

Although the trend of pensioner income growth exceeding that for working-age households looks set to continue, whole population measures of median income growth also look set to be weak, with growth of just 2.1 per cent (or 0.5 per cent per year).

While we have not attempted to forecast each year to 2020-21 separately, there is good reason to believe that there will be more of a squeeze in the short-term (2017-18 and 2018-19) than beyond (2019-20 and 2020-21). As set out in the previous section, it is in the former period that inflation is expected to be highest, real wage growth lowest and the benefits freeze most impactful. Such a trajectory would also match the OBR's aggregate forecasts (for all ages, and before housing costs). These are set out in Figure 49 and show that per capita labour income growth is expected to be negative in 2017-18 and very subdued in 2018-19.

Figure 49: The OBR’s forecasts suggest a living standards slow-down in the short-term especially

Contributions to per capita real household disposable income growth: outturn and OBR projections



Source: OBR EFO

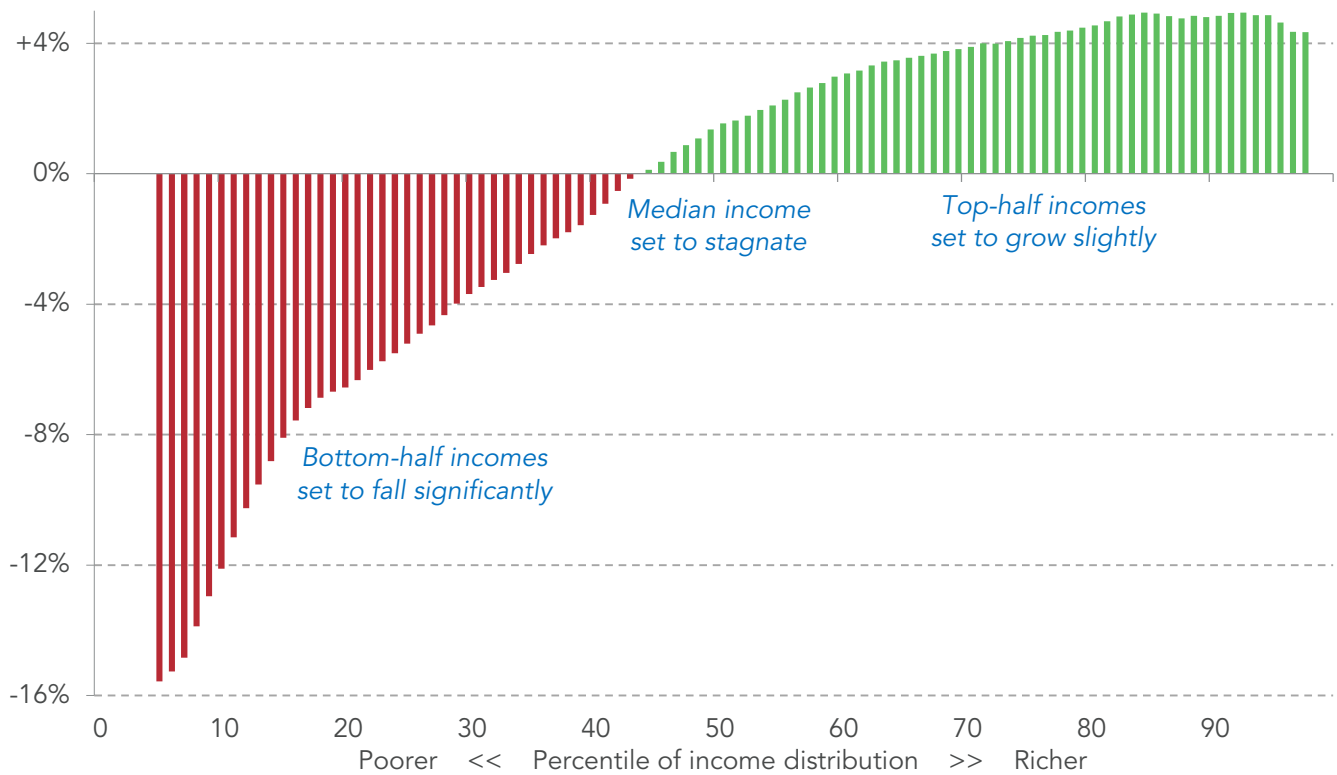
Note: 'Non-labour income' includes imputed rental income

Incomes are expected to fall in the bottom half of the distribution

The median working-age household income data depicted in Figure 48 provides a useful overview of trends in living standards over the coming years, but outcomes are likely to differ somewhat across the income distribution. Figure 50, which shows our forecast for total growth over the next four years for each percentile of the working-age income distribution, paints a highly regressive picture.

Figure 50: Incomes in the top half of the distribution are likely to rise, while those in the bottom half are set to fall significantly

Real equivalised household disposable after-housing income growth, 2016-17 to 2020-21, working-age



Source: RF forecast

Income growth of 4.5 per cent over four years for the top third of the distribution is weak by historic standards, and this is as good as it gets for any part of the income distribution. Most shocking are the cumulative reductions in real-terms incomes across most of the bottom half of the distribution. We project falls of over 10 per cent in the poorest tenth of the distribution.

As discussed in Section 6, this forecast does not account for the significant impact of expected increases in pension contributions over this period due to auto-enrolment. The forecast would look worse were this impact included, although higher pension saving is only a *deferral* of income and so would not negatively impact income in the long-term.

Our projections vary also when looking across different types of household. Typical incomes among working-age families with children are expected to fall, particularly where there are three children or more. Income growth is projected to be small, but positive, for typical working-age households without children. Aided by the relatively positive forecast for average mortgage payments, as well as the position of homeowners in the income distribution, we find that typical after housing costs incomes are likely to rise the most among mortgagors. In contrast, typical incomes are expected to fall furthest among social sector renters (driven by welfare cuts rather than housing costs).

Even with small income gains expected for typical pensioner households, the whole population income growth projection remains heavily regressive: the average income of the top half of the distribution is projected to rise by 4 per cent over the next four years, while the bottom half looks set for a 3 per cent fall.

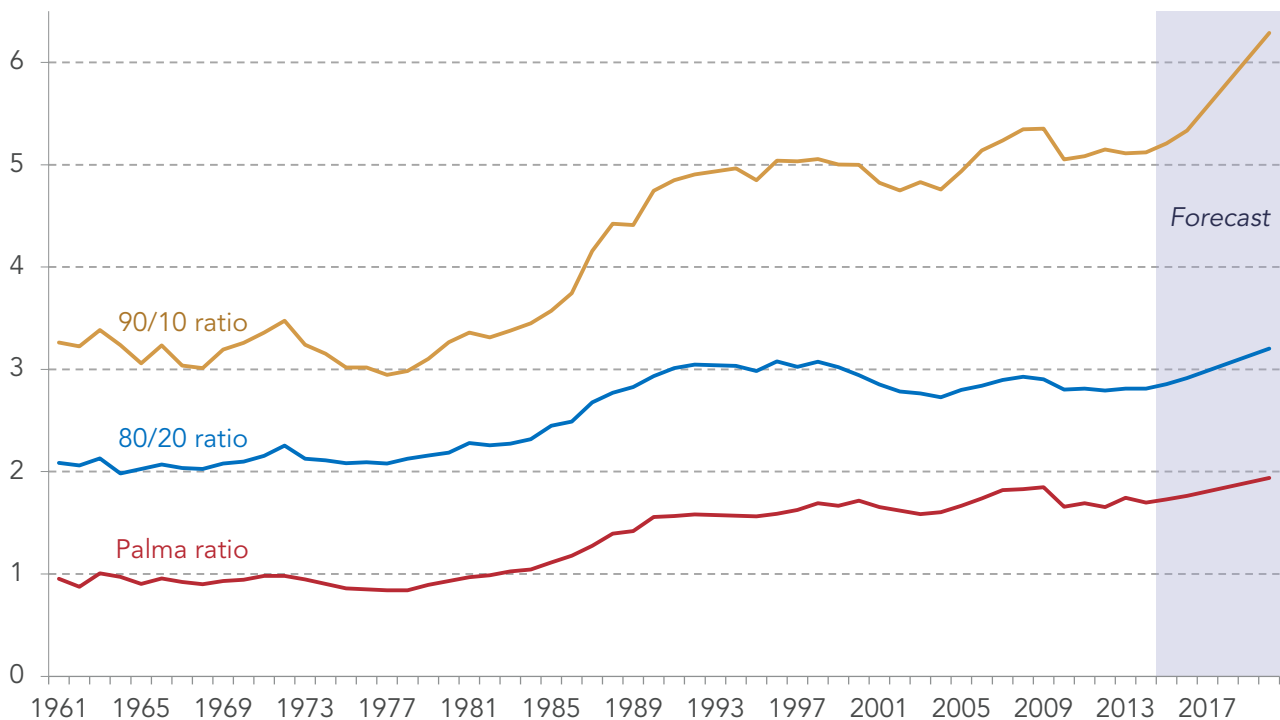
Inequality is forecast to rise to record highs

Given our forecast that incomes will fall in the bottom half of the distribution and rise towards the top, it should be no surprise that we also forecast an increase in inequality. As described in Section 4, there are a number of ways in which inequality can be measured, but we look at three and all show similar patterns: the 80/20 ratio (the income of a household richer than eight out of ten households divided by that of one richer than only two in ten households); the 90/10 ratio (similarly); and the Palma ratio (the income share of the top 10 per cent divided by the income share of the bottom 40 per cent). As discussed in Section 4, the income share of the top 1 per cent is also an interesting indicator but given that their incomes are particularly volatile there would be far more uncertainty surrounding any attempt to forecast it so we do not attempt to do this.

Figure 51 shows the historic path of these three inequality measures, together with our nowcast and projection. Again, we do this on an after housing costs basis to better reflect living standards and housing wealth inequality. All forecast measures show large increases in inequality over the next four years, with all reaching record highs by 2020-21. This is a starkly different pattern from the trend of the past 20 years, over which time inequality has been broadly flat or even declining.^[53] While not shown, we also forecast a large rise in the Gini measure of inequality.

Figure 51: Inequality is forecast to rise to record highs

Inequality ratios after housing costs (all ages)



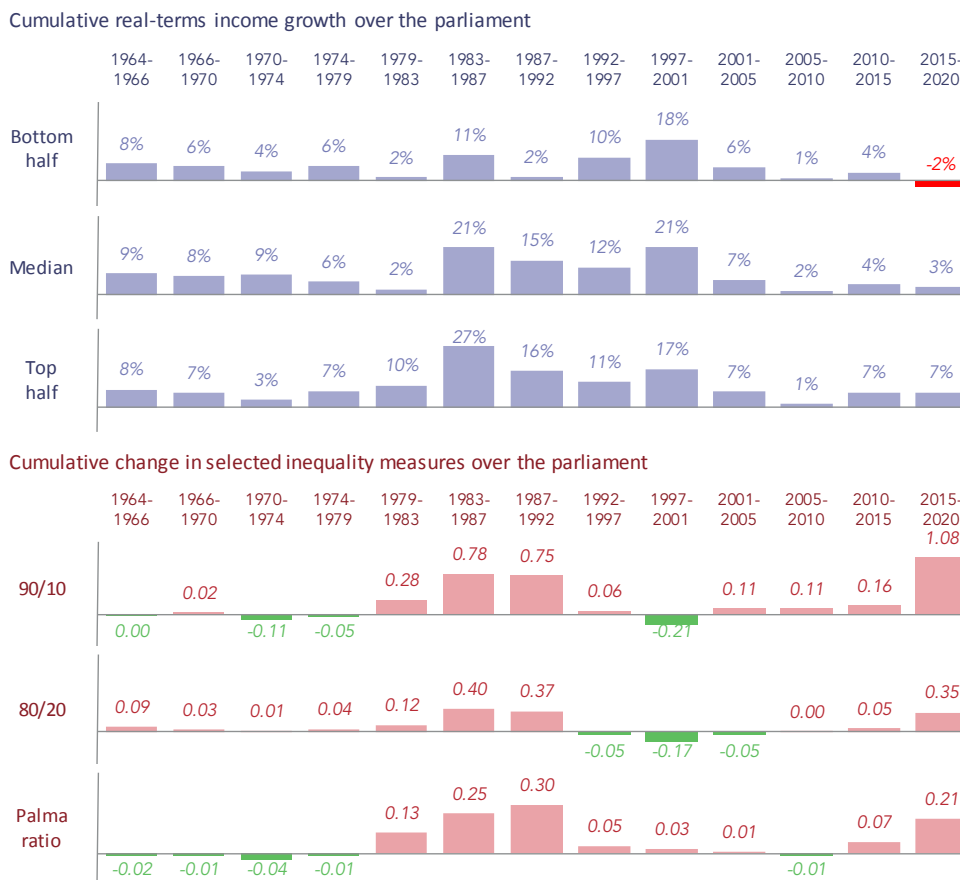
Source: RF analysis of HBAI, and RF forecast

[53] The LCFS indicated that inequality was falling in 2015-16. This is partly because the LCFS release – see ONS, *Household disposable income and inequality in the UK: financial year ending 2016* – was done on an before housing basis but also because it is a different survey from the FRS (see Box 3). We believe the FRS is a superior survey because it is a lot larger than the LCFS (18,000 versus 5,000 people sampled) and this reduces mismeasurement and year-to-year variation.

The 2015-20 parliament could be the worst for income growth for the poorest half of households since comparable records began, and the worst since Margaret Thatcher for inequality

Assuming that the next election will be in April 2020 (as set by the Fixed-term Parliaments Act) we can look at how income growth and inequality have changed over each parliament since the 1960s. Treating 1970-1974 as one parliament, and 1974-79 as another (as we lack the data to analyse the February-October 1974 parliament, which would in any case be almost meaningless), we have data for the past 12 parliaments (through nowcasting for 2015-16) as well as our forecast for the current one.^[54]

Table 3: The current parliament could be the worst on record for the bottom half and the largest increase in inequality since 1987-1992



Source: RF analysis of DWP, HBAI; IFS, *Living standards, poverty and inequality in the UK*; and RF nowcast and projection

[54] We base these on financial years (and calendar years 1961-1993) and compare, for example, average incomes in 2015-16 with those in 2010-11. While the elections themselves happened early in these financial years (at the start of May), it is fairest to treat incomes and inequality in 2010-11 as being determined by the previous administration given that tax and benefit rates are already fixed and a new government may not have much immediate impact on living standards.

Table 3 on the previous page shows the growth in average income of the poorest half, median and richer half (again after housing costs and for all ages) in each of these parliaments, as well as changes in inequality.

Looking at income growth of the bottom half, if our projection were to prove accurate then the current parliament would be the worst on record and the only one in which average incomes fell in either the top or bottom half of the distribution (despite the fact that this parliament is assumed to be longer than many parliaments which were only four years).

On inequality, the forecast rise would not be the largest ever over a parliament – except on the 90/10 measure – but would be the largest since the Thatcher (/Major) parliaments of 1983-1987 and 1987-1992.

The upshot is that 2015-16 to 2020-21 would be unique in having both poor income growth *and* rising inequality. In comparison, 2005-06 to 2010-11 included a large income hit from the recession, but inequality did not rise; and the 1980s featured rising inequality but very strong income growth for the top half and moderate income growth for the bottom half.

This parliament would also be the third in a row of weak growth for the poorest half, driven by a quadruple hit of housing costs in the 2000s, the recession, and upcoming welfare cuts and inflation effects. Incomes in the bottom 30 per cent of the working-age income distribution are projected to be lower or no higher in 2020-21 than they were in 2002-03.

How certain is this projection?

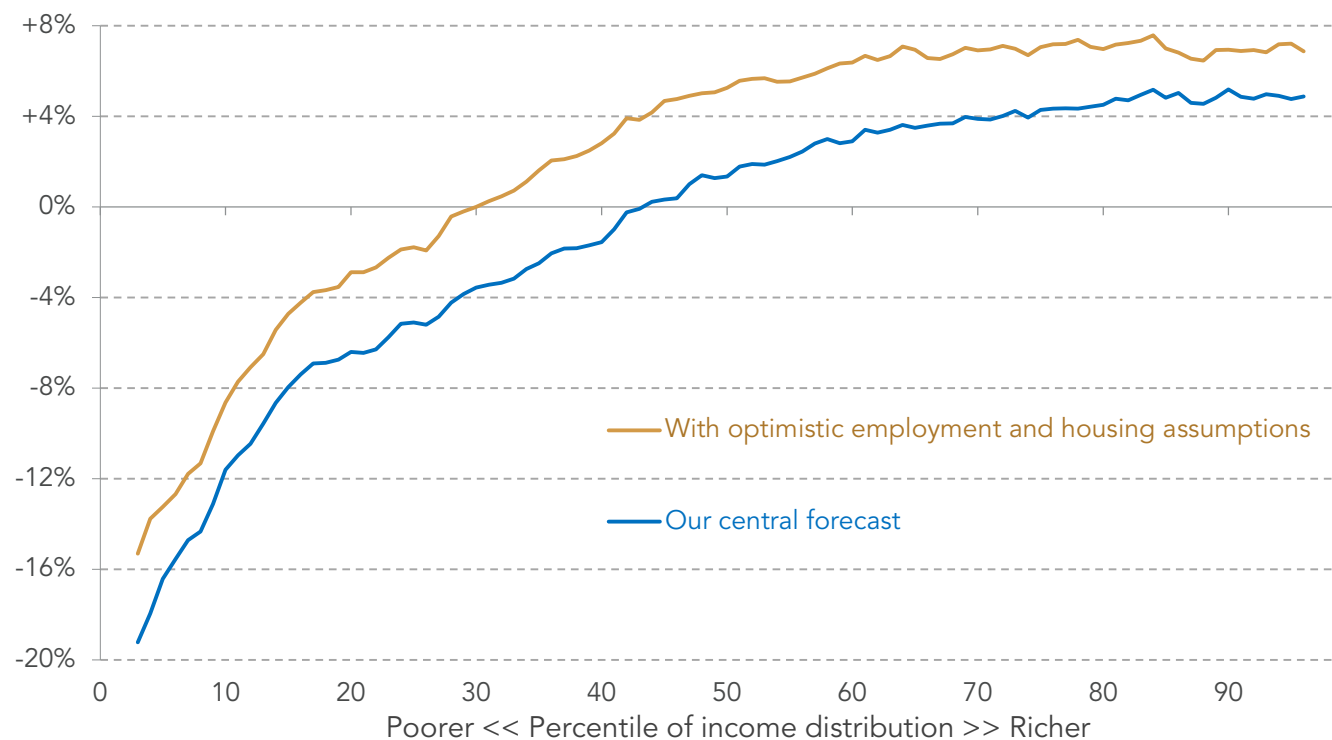
Of course, this is only a projection (and indeed we do not yet even have full data for 2015-16 and 2016-17) and relies on the OBR's economic predictions alongside other assumptions. As outlined in Section 6, inflation could of course be higher or lower which would lower or raise real income growth. And nominal earnings growth could be higher too – though all else equal this would increase the size of the inequality rise if benefits did not also rise.

It should be noted that the OBR's forecast does not assume anything close to a recession, nor any large rise in unemployment, nor significant falls in real earnings. The only major 'Brexit impact' is the OBR's forecast increase in inflation driven by a currency devaluation that has already happened. And, as noted above, our forecast does not account for the medium-term impact of auto-enrolment on disposable incomes.

On the upside, we can look at how our forecast might differ if the employment rate were to surprise forecasters yet again. Figure 52 shows how our income forecast would differ if the 16+ employment rate were to continue to grow at the same rate as it did from 2010-11 to 2015-16, rising from 60.5 per cent in 2016-17 to 62.2 per cent in 2020-21 (rather than falling to 59.9 per cent as the OBR currently expects). This equates to 1.2 million more people in employment than in our central forecast (all in the private sector we assume). This is extremely high, though as our previous work has shown not outside the realms of possibility if policy can do more for particularly excluded groups. We also assume that housing tenure changes in a way that reduces overall increases in costs relative to our baseline forecast, with the proportion of renters falling back to its 2015-16 level.

Figure 52: If we were much more optimistic about employment and housing tenure, our forecast would look significantly better for the middle and top of the income distribution

Real equivalised household disposable after-housing income growth, 2016-17 to 2020-21, working-age



Source: RF projections

We find that this optimistic scenario improves the working-age outlook significantly, especially for the middle and top of the income distribution, but does not change the picture on inequality or large income falls for much of the population.

Crucial for our forecast is the outlook for tax and benefit policy. And while these are sensitive to inflation forecasts, for example (given the working-age benefits freeze especially), their impacts are comparatively certain unless the policy itself is changed. As part of our forecasting we also model a range of scenarios relating to the roll-out of UC and of the two-child limit for tax credits and UC. These are shown in Annex 2. A slower transition to the two-child limit, for example, does make a significant difference to the incomes of the bottom half – but as pointed out previously this would only delay the impact rather than remove it altogether.

As ever, there may be behavioural responses to policy changes that we cannot model. For example, if households had fewer children in response to cuts in benefits directed at children, this would of course reduce the impact of those changes. Benefit changes could also drive people to earn more or work more, though it just as probable that cuts to work allowances will worsen some work incentives. Although welfare policy is far from the only determinant of our forecast, it is unavoidable that multi-billion pound welfare cuts (made worse still by high inflation) will leave many people much worse off. Even if benefits were not cut in real terms, inequality would be likely to rise if they failed to keep pace with other sources of income such as earnings.

Our modelling suggests that income growth has slowed in 2016-17, and our projection points to a further hit in 2017-18 as a result of rising inflation. Despite a projected pick-up in real-terms pay growth towards the end of the parliament as inflation normalises, the implication is that the



coming years will prove to be incredibly disappointing on living standards – particularly for those on low to middle incomes. But the record of this parliament as a whole is not yet fixed and the lesson of recent years is that policy intervention can make a difference. Clearly however, both the economy and the policy outlook need to outperform expectations if a new living standards squeeze is to be averted.

Section 8

Conclusion

Having looked at the past, present and possible future of British living standards, there is certainly cause for concern. Our poor outlook for the next four years, based on the latest official forecasts, would be another hit to living standards on the back of the recession and the pre-crisis slowdown. This outlook is not certain, but there are some good reasons why we should not expect the relatively strong growth of the past few years to continue.

While incomes grew at a steady pace over 2014-15 and 2015-16, this outcome was reliant on falling oil prices – and a consequent drop towards near zero inflation – and on fast rising employment. Neither of these factors could be expected to continue to make such contributions indefinitely, and the only sustainable driver of income increases – productivity growth – has been in short supply.

The vote to leave the European Union does not, thus far, appear to have impacted on the macroeconomy or employment in any meaningful way. But it has hastened the end of ultra-low inflation and increased its likely level over the next couple of years, as the increase in import costs associated with the fall in Sterling feeds through into higher consumer prices and lower living standards growth. Ongoing efforts to reduce the fiscal deficit must also come at some short-term cost to current households overall.

Yet, in some ways regardless of the average level of household income growth, Britain is also actively choosing to increase inequality. Despite welcome policies such as the National Living Wage, the plans the new Prime Minister has inherited in relation to taxes and benefits are likely to ensure that the proceeds of growth are shared unequally and that many families are made worse off.

But these plans are not intractable: the government can choose to pursue a different path. And, as ever, policy to drive forward productivity growth – including through technology, education, housing and other investment – remains crucial to improving the long-term living standards outlook. We should learn the lessons of recent years as well, in which income inequality has fallen slightly thanks to a surge in employment that has been particularly beneficial to lower income households. Given record levels of employment, repeating this trick will take active involvement in the labour market. With 2017 set to be a year of two Budgets (Spring and Autumn), there is plenty of potential to change the living standards outlook for the better.

Annex 1 – Defining and measuring the fortunes of ‘low to middle’ income families

The Resolution Foundation’s mission is to improve the lives of people on low to middle incomes (LMIs). From a conceptual perspective, we define 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 are in receipt of benefits but they are not reliant on state support.

There are 5.8 million low to middle income households in the UK

From an analytical perspective, we consider the group to include those of working age who are on below-median incomes who are not reliant on state support for a significant proportion their income. While median income is relatively straightforward to establish as an upper threshold, it is difficult to determine when people become largely independent of state support, particularly as all income groups are entitled to some welfare payments. The statistical definition used has therefore evolved over time and has been dependent in part on limitations imposed by the data sources we have analysed. It remains unavoidably imperfect, but it is designed to ensure that as many as possible of those households that could be considered to sit within our conceptual definition are captured statistically. Box 10 describes how we create this group in the main source of data that we use, the Family Resources Survey.

i Box 10: Defining lower middle income households in the Family Resources Survey

A majority of the figures presented in this report are derived from analysis of the DWP's Family Resources Survey (FRS) and the associated Households Below Average Income (HBAI) survey, using a three-stage process, whereby we filter on the basis of age, net income and benefit receipt.

We first remove retired households from the overall population. The reduced earnings faced by most people at retirement means that many of those considered LMIs during their working lives will fall into the benefit-reliant group in retirement, while some higher income households will drop into the LMI group. However, because such households are also likely to face reduced spending commitments, the pressures they face should be less intense than those experienced by working-age households in corresponding income bands.

Among the remaining population of working-age households, we equalise net incomes to account for differing household sizes and compositions, using the modified OECD scale. This matters because, for any given income, a household of five adults is likely to achieve a lower standard of living than a single-person household. The equalisation process takes account of such differences by inflating the incomes of smaller households and deflating the incomes of larger ones. Incomes before housing costs (BHC) are used.

We next rank the working-age households on the basis of their equalised incomes and separate them into

ten equally-sized deciles (where decile 1 has the lowest income). Given that we are concerned with those on low to middle incomes, we use median income – the boundary between deciles 5 and 6 – as the upper threshold of the LMI group. At the lower end we create a threshold at the boundary between deciles 1 and 2. We do this because decile 1 often produces unusual results due to the large number of households within it that have temporarily low incomes or incomes that come neither from employment nor the state.

Therefore, at this stage, the LMI group comprises all of those working-age households with equalised gross incomes in deciles 2-5 of the income distribution. For simplicity, we refer to those households with above median incomes as 'higher income', while those households with the lowest incomes are classified as being 'benefit-reliant'.

Our third stage reduces the size of both the higher income and, more particularly, the LMI groups by filtering all those households that receive more than one-fifth of their household income from income-related benefits (child benefit is still considered a non-income related benefit in the FRS) into the benefit-reliant group. We omit tax credit receipts from our calculation of income-related benefits because these payments were designed specifically for LMI households, meaning that it would be counter-intuitive to exclude households from the group on the basis of their receipt.

It is important to note that our analysis focuses on LMI households, in an effort to remove the distortions associated with capturing a large number of students and non-working members of higher income families when adopting an individual approach. The cost of this approach is that, in relation to households in which income and expenditure is not equally shared, we are likely to miss some individuals who fit the LMI profile. However, in making the assumption that income is usually shared, we are consistent with the approach used by the DWP in its Households Below Average Income study.

Table 4 provides an overview of the three groups: benefit-reliant, low to middle income and higher income. There are 5.8 million LMI households in the UK containing 10.4 million adults and 5.3 million children. There are more LMI families – 7.8 million – due to the fact that some households contain more than one family. Of the 7.8 million LMI families the most common family type is a couple with children.

Table 4: The working-age population by Resolution Foundation income groups: UK 2014-15

	Numbers (000s)		
	Benefit reliant	LMI	Higher income
Households			
<i>Total</i>	3,800	5,800	9,600
With children	1,700	3,000	3,200
Without children	2,100	2,800	6,500
Adults			
<i>Total</i>	5,600	10,400	18,500
Men	2,700	5,000	9,800
Women	2,900	5,400	8,700
Children			
<i>Total</i>	3,100	5,300	4,900
Benefit units (families)			
<i>Total</i>	4,700	7,700	12,300
Couple with children	700	2,300	2,900
Single male	1,500	1,700	2,900
Couple no children	500	1,400	4,300
Single female	1,000	1,500	1,900
Single parent	1,000	700	200

Source: RF analysis, of DWP, Family Resources Survey

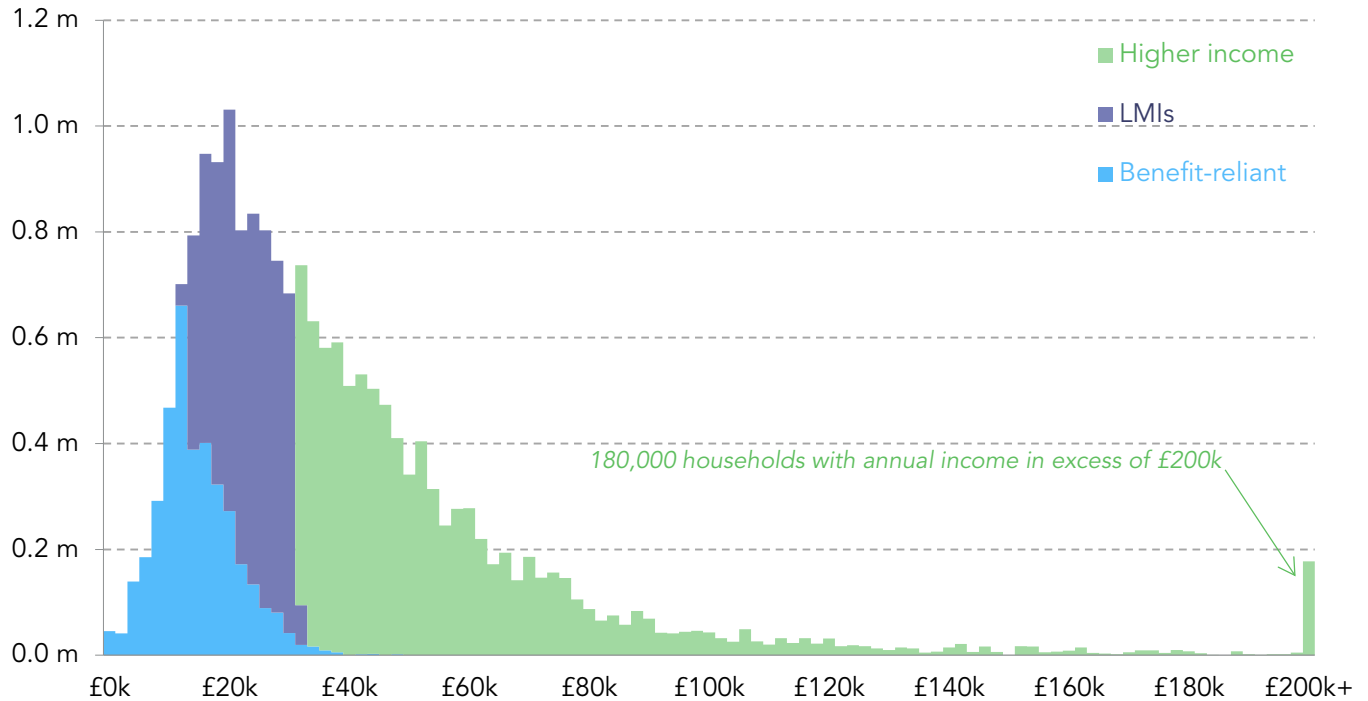
Household incomes for LMIs range between £12,000 and £36,000

Household incomes for LMIs range between £12,000 and £36,000

So what are the household incomes of these groups? How far a household’s income goes depends on the number of people in that family, as a given level of income goes further in a smaller household. For example £21,000 for a single person household with no children is assumed to go as far as £44,000 for a household made up of a couple with two children. Producing comparable figures for different sized households involves ‘equivalising’ household income by inflating or deflating incomes to take into account household size. This has been done in Figure 53 which looks at all households in the UK in 2014-15. Figure 53 shows that LMI households have equivalised incomes of between £12,000 and £36,000.

Figure 53: Position of low to middle income households in working-age equivalised income distribution: UK 2014-15

(Millions of households in £K income bands)



Notes: Income is adjusted using the OECD equivalence scale

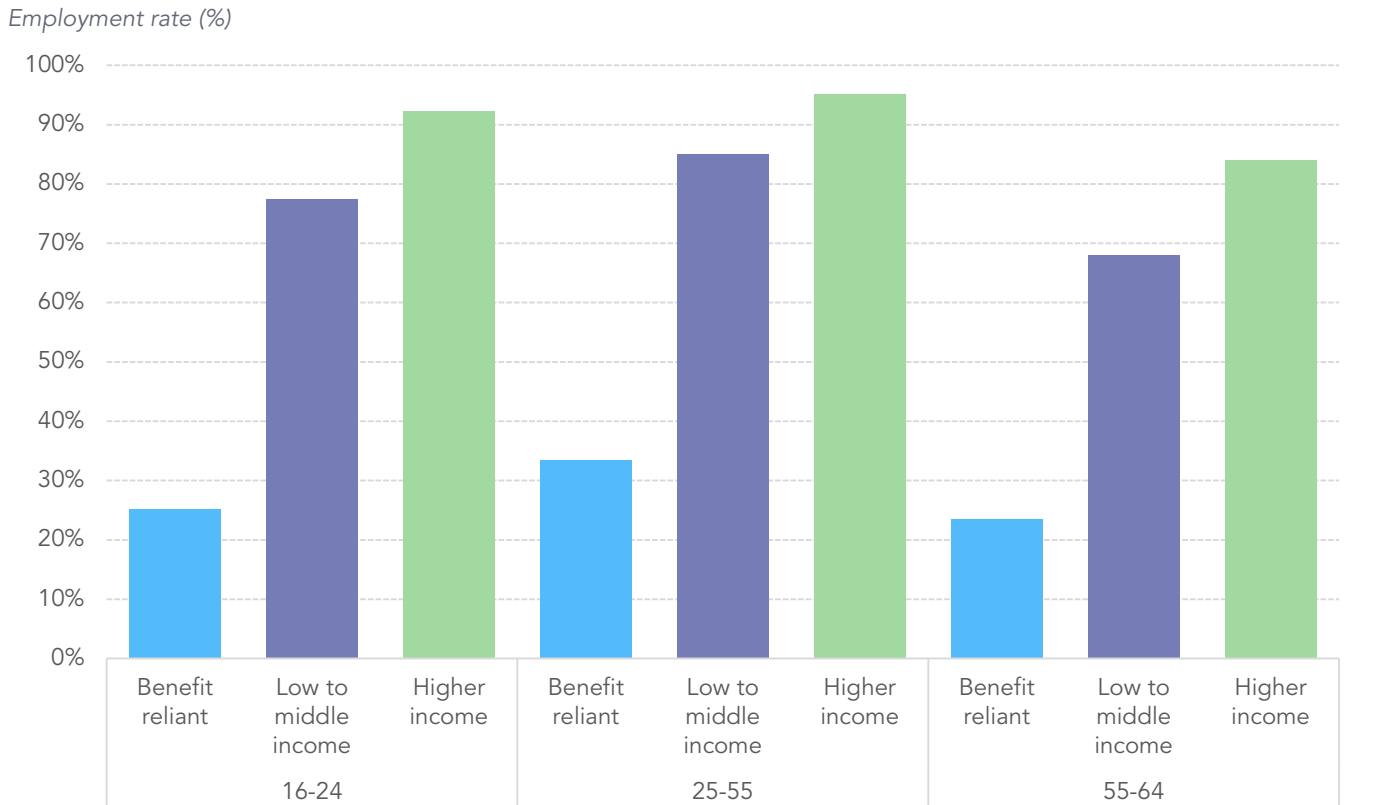
Source: RF analysis of ONS, FRS

Most LMI households contain people in work, but their pay is relatively low

The body of this report has been concerned with how living standards across the income distribution have evolved and are projected to evolve up to 2021, with a particular focus on LMI households. This section takes a more detailed look at the living standards of LMI households in 2014-15, the period for which the most recent data is available. In particular we look at the money that households earn through work, the state support they receive, and the savings and financial assets at their disposal.

Beginning with the labour market, we find that LMI individuals (individuals within LMI households) are a lot more likely than people living within benefit reliant households to be in work. As Figure 54 shows, the employment rate among prime age adults (those aged 25-55) is 85 per cent among LMIs, just 10 percentage points lower than for higher income individuals. The gaps between LMI individuals and higher income individuals are higher at younger and older ages; nevertheless, it is clear that people living in LMI households are highly engaged with the labour market.

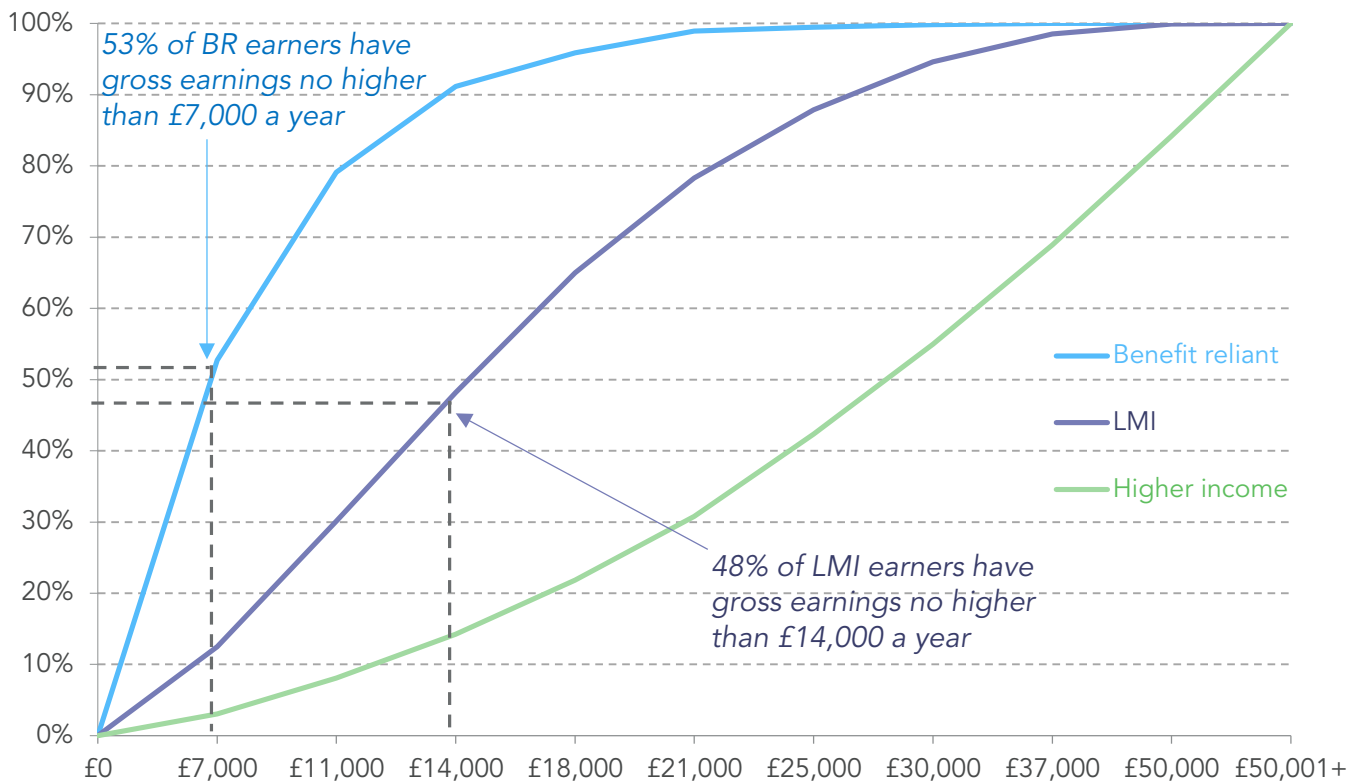
Figure 54: The employment rates of individuals: UK 2014-15



Source: RF analysis of DWP, Family Resources Survey

How do LMI earners fare in the labour market? Figure 55 shows the cumulative earnings distribution for employees in the three different groups. Half of benefit reliant earners take home no more than £7,000 a year, whereas half of all LMI earners take home no more than £14,000. A similar share of higher income earners take home no more than £28,000. In this respect the earnings distribution looks different to the employment picture above. Whereas in terms of the probability of being in work LMI individuals are more similar to higher income individuals than benefit reliant ones, the earnings of LMI employees are nearer to those of the benefit reliant group.

Figure 55: Annual earnings for different groups: UK 2014-15



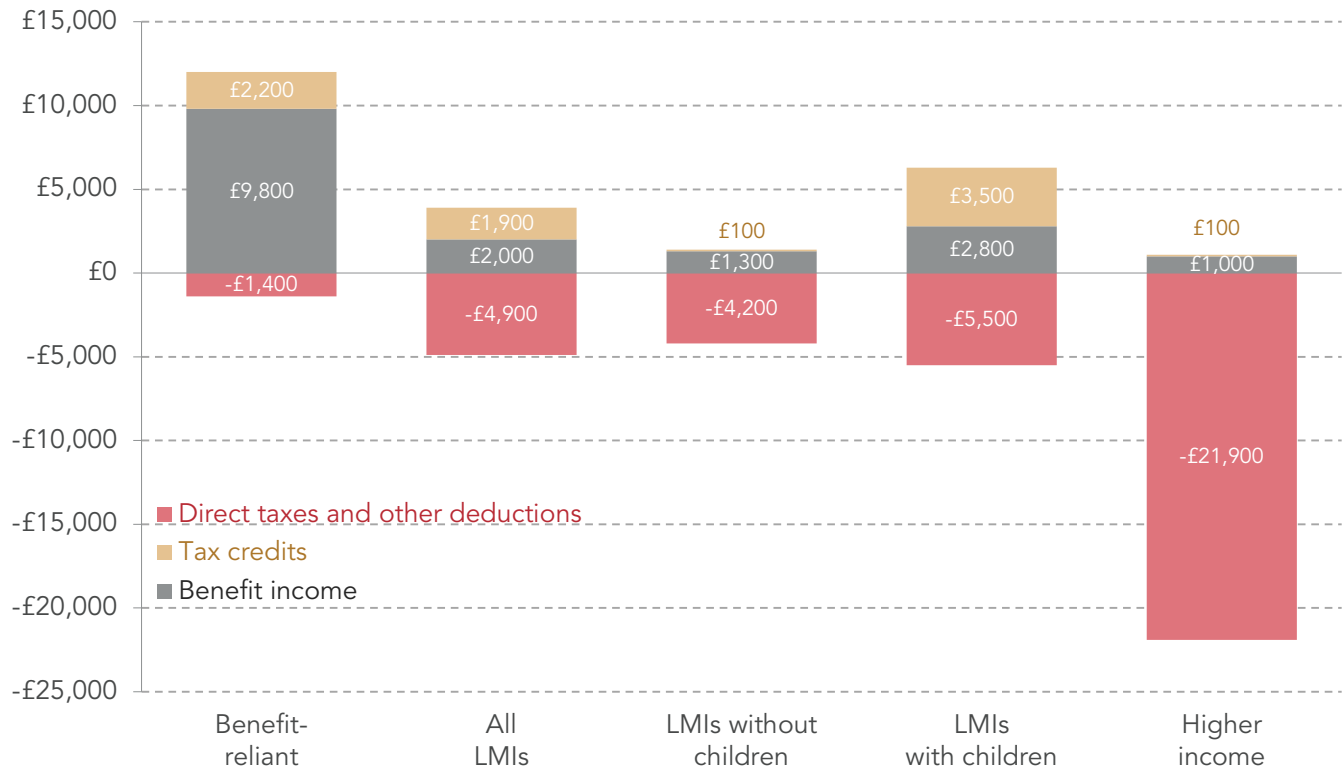
Source: RF analysis of DWP, Family Resources Survey

LMI households receive some state support but contribute a similar share of their income in taxes

Given that the typical earnings of an LMI household is around £23,000 it is perhaps not surprising that most receive some support from the state. On average, an LMI household receives benefits worth 17 per cent of their original earned income. However, LMI households also pay national and local taxes and must meet other financial obligations such as student loan payments. Such taxes and payments are worth around 21 per cent of their original earned income on average. On state support then, LMI households look different from both benefit reliant households (who receive 3.4 times as much income from the state as they earn) and higher income households (who receive benefits worth 2 per cent of their original earned income). There are also differences within LMI households, those with no children are net contributors while those with children are (just) net recipients. This is encapsulated by Figure 56 which also shows that LMI households with children receive more state support than those without.

Figure 56: Benefits received and taxes paid: UK 2014-15

Average benefit income, tax credits and direct taxes, and other deductions (£)



Source: RF analysis of DWP, Family Resources Survey

We have now built up a fairly complete picture of the finances (excluding savings and other financial assets which we will explore below) of LMI households. In keeping with Figure 56, Table 5 provides a full overview of typical annual gross household income for the three different groups, and also LMI households with and without children. What is most apparent is that LMI households' original (non-benefit) income is relatively identical to the net income that the household is left with once benefits have been received and taxes paid. By contrast benefit-reliant households are substantially better off after redistribution and higher income households are obviously worse off.

Table 5: Average annual gross household income by income group: UK 2014-15

£	Benefit-reliant	LMIs without children		LMIs with children		High income
		All LMIs				
Original (non-benefit) income	£3,500	£22,800	£20,500	£25,100	£71,000	
Benefit income	£9,800	£2,000	£1,300	£2,800	£1,000	
Tax credits	£2,200	£1,900	£100	£3,500	£100	
Remaining income ¹	£500	£1,400	£1,800	£1,000	£1,200	
Direct taxes and other deductions ²	-£1,400	-£4,900	-£4,200	-£5,500	-£21,900	
Net household income	£14,600	£23,300	£19,600	£26,900	£51,600	

Notes: ¹ Includes income derived from sub-tenants, odd-jobs, free school milk and/or meals, private benefits (such as personal health insurance, trade union strike pay and government training allowances), student/school grants, royalties, allowances from friends, relatives or an organisation and allowances from local authorities for foster and adopted children.

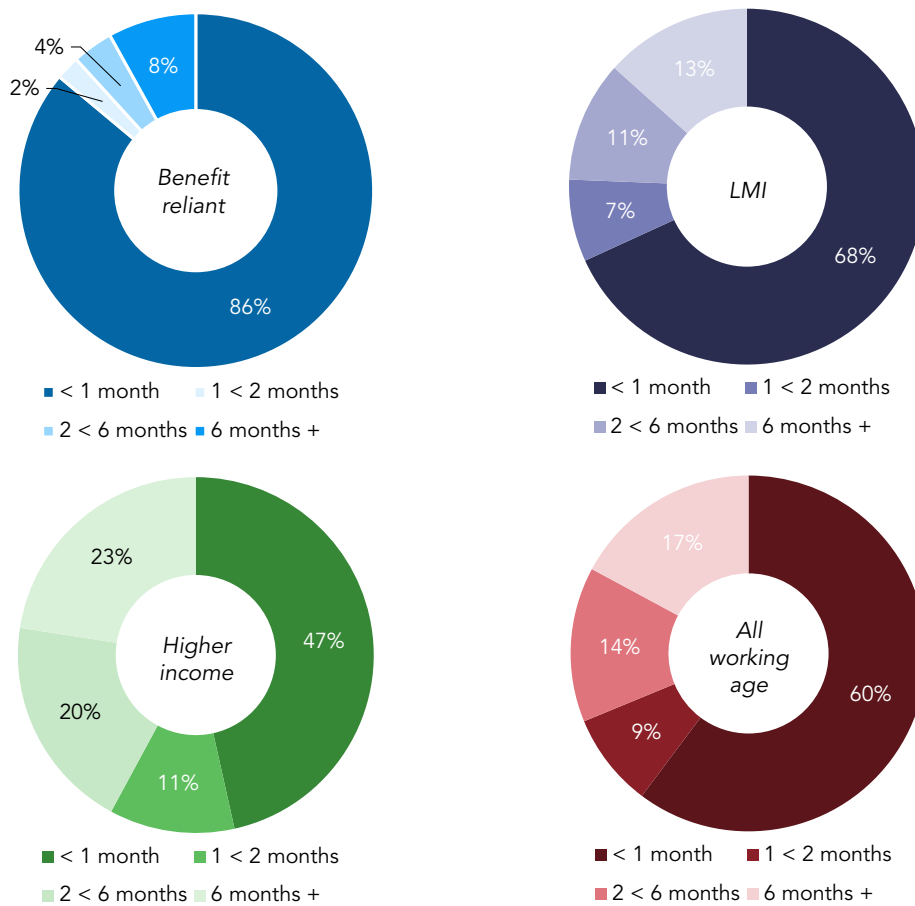
² Income is net of: income tax payments; NICs; domestic rates/council tax; contributions to occupational pension schemes; maintenance and child support payments; parental contributions to students living away from home; and student loan repayments.

Source: RF analysis of DWP, Family Resources Survey

Having looked at the incomes of LMI households we now turn to their assets and their liabilities. Figure 57 reveals that 68 per cent of LMI families^[55] have less than six month’s net income held in savings. Interestingly nearly half of all higher income families also have little savings, though a lack of savings is clearly a bigger problem as one moves down the income distribution. Such small savings does suggest that many LMI families live in a precarious financial situation where an unexpected large cost could seriously stretch household finances.

Figure 57: Number of months’ net income held in savings/financial assets by families: UK 2014-15

Number of months’ net income held in savings/financial assets by families: UK 2014-15



Source: RF analysis of DWP, Family Resources Survey

Data from the Bank of England’s NMG Survey supports this claim. Only 35 per cent of the poorest 20 per cent of working-age households feel that they have enough saved for emergencies, compared to over half of the rest of all working-age households. Perhaps unsurprisingly there is evidence that many LMI families wish to save more but a lack of income prevents them from doing so. For example 43 per cent of LMI families would like to save at least £10 a month but they cannot afford it.

As well as saving for unexpected costs, individuals and households need to save for retirement. Following a steady decline over time, the proportion of LMI adults contributing to a pension picked up by 5 percentage points between 2013-14 and 2014-15, taking the total to 39 per cent. This

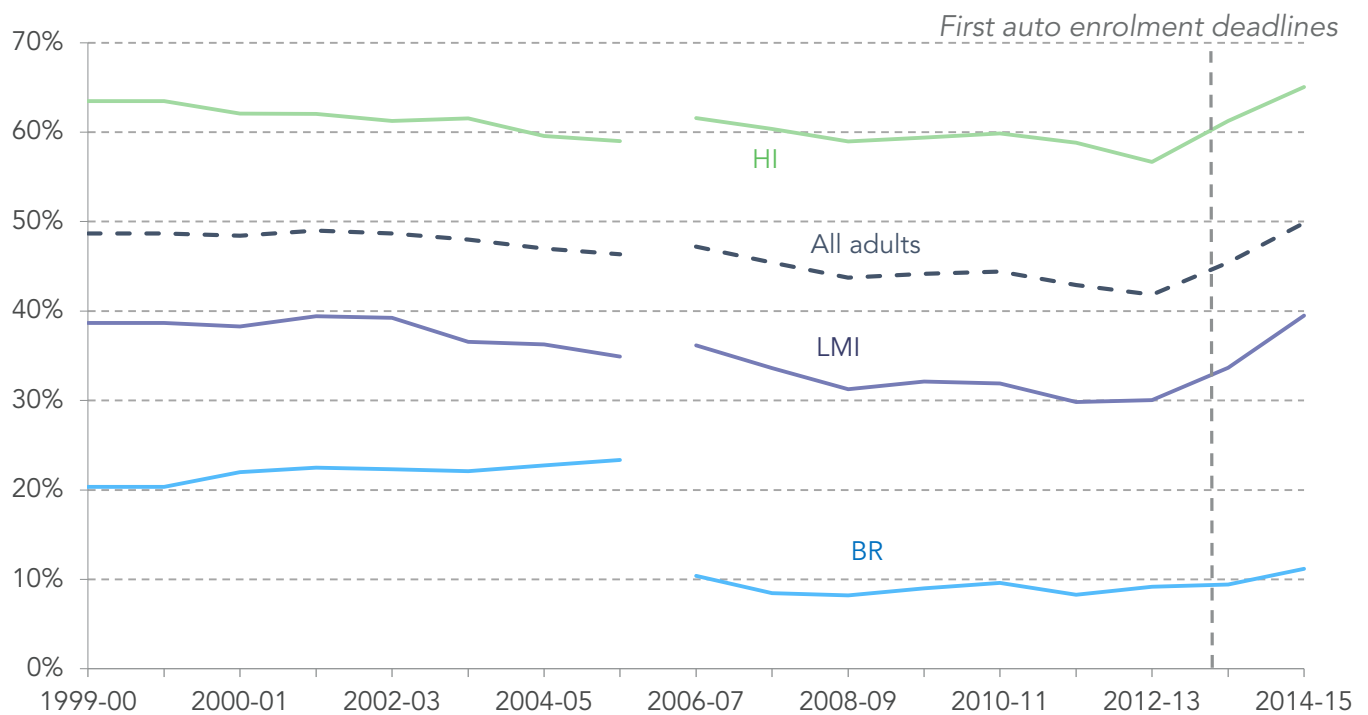
[55] We refer to benefit units here as families.

rise is most likely associated with the introduction of auto-enrolment with the trend replicated among higher income and benefit reliant adults too. The largest companies had to have enrolled their staff by February 2014 and companies with 50 to 249 employees had to have done so by April 2015. The smallest companies will have to do so by April 2017 and so it is likely that the number of people covered will increase further.

The recent rise is welcome but it is questionable whether people are saving enough. At present it is planned that employees will have to contribute more to their pension, by April 2019 mandatory contributions will rise to 5 per cent of salary. This will help but for some employees this may still not be enough. Another problem is the fact that some people are not covered by auto-enrolment. In particular the self-employed are not covered, neither are some ‘atypical’ workers^[56] and workers that do not meet the minimum earnings requirement. Given that many LMI individuals fall into such categories it is especially important that more is done to ensure that those who are most likely to run into financial difficulties later in life are saving enough for their retirement.

Figure 58: Pensions coverage: UK 2014-15

Share of the adult population (%) actively contributing to an occupational or personal pension



Notes: Break in series in 2006-07 due to change in questions asked. After this date, interviewer specifically checks if respondent has a pension. Prior to this, figures are based on responses to series of questions about ownership of different types of pensions. Personal pension/no pension questions only cover adults who have worked at some point, even if currently unemployed/inactive. Occupational pension question only covers those currently in work. The figure only refers to adults that are actively contributing to a pension, and so excludes those who may have contributed to a pension in the past but are not currently doing so.

Source: RF analysis of DWP, Family Resources Survey

[56] This includes workers on zero hours contracts, temporary workers, seasonal and agency workers.

Annex 2 – Methodological notes

As discussed in the body of the report, our living standards analysis is underpinned by two pieces of modelling which aim to, first, ‘nowcast’ household incomes as reported in the Family Resources Survey 2014-15 into 2015-16 and then 2016-17, secondly, to forecast outcomes through to 2020-21. Sections 2 and 6 outline many of our assumptions for these nowcasts and forecasts, respectively, but this Annex provides additional detail. The two nowcasts and the forecast have three broad components: modelling incomes, modelling housing costs and then adjusting the population. Where we have had to project economic variables such as employment, earnings and inflation we have used the OBR’s data as outlined in its November forecast. In this annex we provide some more detail on the processes behind these approaches.

Nowcasting

Nowcasting involves the use of outturn data from timely data sources in order to roll forward more detailed data from less timely sources. Our approach is to bring forward the 2014-15 version of the DWP’s Family Resources Survey (FRS), first by 12 months, covering the period from Q2 2015 to Q1 2016 (2015-16), and then by another 12 months to Q1 2017 (2016-17). For the most part we use outturn data to do this, however for the second nowcast (2016-17) we need to use some projections as we wish to update the FRS to April 2017.

For our first nowcast to 2015-16 we use outturn data from the LFS, adjusted to match the annual weekly earnings release,^[57] in order to determine the trends in pay over 12 months until April 2016. We calculate growth rates for vintiles (20ths of the pay distribution) and apply these growth rates to the pay distribution in the FRS. For the self-employed, for whom reliable earnings data is unavailable, we apply the average growth in wages.

In order to update wages in our second nowcast (2016-17) we use projections from the OBR for wage growth between 2015-16 and 2016-17 and also take into account the expected effect of the NLW over this period. The OBR provides a projection for total public sector pay and employment and we can use this to calculate private sector pay growth and pay growth for the self-employed. In order to take into account the effect that the NLW has and will have between April 2016 and April 2017 we update wages for the low-paid in the FRS. We assume that the NLW has an effect in the bottom 30 per cent of the wage distribution, because those on the minimum wage have their pay increased and so do other low-paid workers as firms seek to retain pay differentials. Pay is raised for those aged 25 and older (the population group that the NLW applies to) but we also assume that around 10 per cent of workers below this age benefit. Both of these assumptions are drawn from initial evidence of the beneficiaries of the NLW provided by the Low Pay Commission.^[58]

For both nowcasts we also account for changes in demographics, employment and family status over time. For the 2015-16 nowcast we create groupings based on region, employment, family status, age and occupation and then reweight the FRS data to account for recorded changes between 2014-15 and 2015-16. Finally, we apply housing cost uprating factors which vary depending on the tenure held by each households. We use ONS data on private rents (and update London separately to reflect the very different trend in rents here), CLG data on social rents and Bank of England figures on mortgage lending and interest rates to establish reasonable growth rates.

[57] We do this because AWE provides more accurate wage data than the LFS.

[58] Low Pay Commission, [National Minimum Wage Low Pay Commission Report Autumn 2016](#)

For the 2016-17 nowcast we need to partly project housing tenure and costs due to a lack of outturn data for the most recent months and because we wish to uprate the data to April 2017. To do this we use projections based on current tenure trends. For costs we use the OBR's projections for interest rates and secured debt, the OBR's projections for the growth in eligible rent, which measures the growth in the element of rent eligible for Housing Benefit, and private rents are uprated based on ONS data (latest outturn data is November 2016). To take into account recent changes in population and employment levels (which we do not have outturn data for), we follow a similar method to that of the 2015-16 nowcast but account only for changes by age, sex, economic activity status split by public or private sector employment, region and whether or not people in the household work. We utilise the IFS-built Stata command 'reweight2' to estimate how population clusters will change by April 2017.^[59]

Once we have produced two 'nowcast' versions of the FRS (for 2015-16 and 2016-17) we then feed these household datasets through the IPPR tax-benefit model, which we update to account for changes in tax and benefit policy.^[60] Our model assumes 100 per cent take-up of benefits which has the effect of overestimating the impact of cuts (as not all people take-up the benefits that they are entitled too – see Box 2). The model provides us with figures for changes in net household income for each record, which we apply to the original 2014-15 FRS dataset. This produces an uprated and re-weighted '2015-16' FRS sample and a '2016-17' one, which we can cut in order to report income trends by percentile, age and region.

Forecasting

Our forecast builds on the nowcast for 2016-17 but takes it forward to 2020-21 using projections of inflation, employment, population, earnings and housing costs based on either OBR economic assumptions from the November 2016 Economic and Fiscal Outlook or announced government policy. On population and employment levels, we follow a similar method to that of the 2016-17 nowcast and utilise the IFS-built Stata command 'reweight2' to estimate how population clusters will change by 2020-21.^[61]

Earnings growth overall rises in line with OBR projections, but similar to the 2016-17 nowcast we split this by public and private sector employment and account for the implementation of the National Living Wage and compositional effects from our reweighting procedure. Income from self-employment rises in line with the overall average earnings projection. We use the OBR's forecast for average mortgage interest payments, which account for the expected path of both interest rates and secured debt. Private rents are assumed to rise in line with earnings growth and social housing rents are based on projections for eligible rent.

We uprate private pensions by 2.9 per cent per year in real terms, which was the average from 2010-11 to 2014-15 using the FRS (below its longer-term average). The exception is 2015-16 where the ONS's published Effect of Taxes and Benefits on Household Income data gives a 7 per cent increase. Note that this is not intended to model the experience of individual pensioners but rather the aggregate effect of each cohort of pensioners having higher private incomes than the last. We do not model increases in state pension entitlement nor disproportionate increases in employment among pensioners, though both of these would be reasonable assumptions that would further boost pensioner incomes.

Once we have produced an uprated household dataset for 2020-21 we apply the tax and benefit regime for 2020-21 to account for policies announced up to and including Autumn Statement

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

[60] Our model does not take into account free childcare benefits, government matching in the Help to Buy ISA, Lifetime ISA and Help to Save scheme. The model does not include transitional protection provided to some claimants that lose out when transitioned to UC.

[61] In the Forecast we do not reweight according to the changing numbers of workless families due to a lack of projections for this.

2016. Key measures include: increases to the personal tax allowance and higher rate threshold including the government's plan to raise the former to £12,500 and the latter to £50,000; reducing Universal Credit (UC) work allowances; freezing working-age benefits for four years from April 2016; reducing social rents by 1 per cent a year from 2016-17; removing the family element from new claims to tax credits or Universal Credit from April 2017; and limiting support to two children for new births or claims from April 2017. We also take into account the reduction in the 'taper rate' from 65 per cent to 63 per cent.

To take account of the transition from the tax credit system to UC, and the impact of 'flow' measures (those that affect new claims to the benefit system but not existing claimants), we produce four estimates for household income in 2020-21 and take a weighted average. These four scenarios take into account the fact that new claims are dealt with using the new UC system whereas existing claimants remain on the Tax Credit (TC) system. This takes into account the proportion of in-work households on the new system and assumes that out-of-work households are treated similarly in UC and TC systems. Our weights are based on current projections which suggest that around 70 per cent of the caseload will have moved onto UC by 2020-21, but this will mask significant variation across different cases, with nearly all JSA claimants on UC at this point but 60 per cent of tax credit claims on the new system. We do not account for transitional protection given the relatively small sums involved (current projections are that around £0.3 billion will be spent on this by 2020-21) and the complexity of capturing the movement of cases onto UC. As with the nowcasts, we run both our 2016-17 baseline and 2020-21 constructed dataset through the IPPR tax-benefit model.

Table 6: The sources and assumptions that underlie our nowcasts and forecast

	2014-15 → 2015-16 nowcast	2015-16 → 2016-17 part-nowcast	2016-17 → 2020-21 forecast
Income			
Employee earnings	LFS, adjusted to match AWE	OBR pub/priv + NLW modelling	OBR pub/priv + NLW modelling
Self-employed	AWE	OBR average earnings	OBR average earnings
Private pensions	ONS outturn	Recent trend	Recent trend
Other investment	OBR average earnings	OBR average earnings	OBR average earnings
Tax & benefits	Outturn system	Outturn system	Implied by current policy & pledges
UC roll-out	0%	0%	56% (using figure for those in-work)
Family element cut roll-out	0%	0%	30%
Two child policy roll-out	0%	0%	50%
Costs			
CPI-AHC deflator	ONS/DWP published	Published + extrapolation	Derived from OBR CPI & housing
Mortgage interest	OBR	OBR	OBR
PRS	ONS by region	Part-year ONS by region	OBR average earnings
Social rents	Assumptions by country	OBR (eligible rents)	OBR (eligible rents)
Eligible rents	Assumptions by country	OBR (eligible rents)	OBR (eligible rents)
Other housing costs	CPI	CPI	CPI
Reweighting			
Employment etc.	OBR	OBR	OBR
Workless households	LFS	LFS	-
Pop'n by region	ONS	ONS	ONS
Pop'n by age / SPA	ONS	ONS	ONS
Tenure	LFS	Trend projection	Trend projection



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- » *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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