Resolution Foundation

The State of Living Standards

The Resolution Foundation's annual audit of living standards in Britain

February 2014

James Plunkett
Alex Hurrell
Matthew Whittaker

Introduction

For the first time in five years the economic horizon is brightening. The UK economy remains 2.1 per cent smaller than it was in 2008 but four successive quarters of economic growth have significantly narrowed the gap. This return to growth starts the third chapter in a story that began in 2008: first the immediate crisis, then a long downturn, and now a process of rebuilding.

New questions are now at the heart of political debate: will the recovery quickly feed into rising living standards for most working households? And, not unrelated, will today's recovery be sustained?

It has become harder to live a comfortable life on a modest or even typical income in modern Britain

This report parses the latest data to describe the state of living standards in Britain. The picture it presents is complex. Some things are clear: it is beyond doubt that the best measures of living standards have fallen sharply and to an unprecedented degree since 2009. Yet it remains unclear at what point in the recovery they will rise again. And while some indicators of importance to living standards, such as employment, have greatly outperformed expectations, others, like wages, have seriously underperformed. And the impacts of the downturn—and the likely benefits of the recovery—are spread unevenly across groups: by income, gender, region and particularly by age.

As well as mapping living standards, the report helps us understand how long the rebuilding will take. The answer depends partly on how much of the damage caused by the crash proves to be permanent. But it also depends on the extent to which today's squeeze on incomes is cyclical, and the extent to which it is structural, pre-dating the crash. Our evidence suggests that the decline since 2008 has indeed been steep but that some of our problems started before the crash. In important respects it has become harder to live a comfortable life on a modest or even typical income in modern Britain.

Finally, the report considers what may happen to living standards over the medium term given recent signs of improvement as well as the headwinds that are blowing against a shared recovery. Forecasts for wage growth remain surprisingly weak and ongoing reductions in state support will define the recovery for a large swathe of Britain, dragging on household incomes. This raises concerns about the level of debt that still sits with households who are already close to the edge, suggesting problems when interest rates start to normalise.

Chapter 1 starts by comparing the story of GDP and living standards over the last five years, asking how

Britain's macroeconomic health differs from that of households. Chapter 2 dissects these trends to show how different groups fared from 2008 to 2013. Chapter 3 details a drift towards a polarised labour market before 2008, a transition that has only quickened since. And Chapter 4 shows how an unprecedented decline in incomes and earnings, together with shifts in relative prices, is changing the kind of life a typical working household can afford to live. Finally, Chapter 5 sets out projections for real incomes in the recovery, exploring the likely path of living standards in the coming years and the implications for household debt.

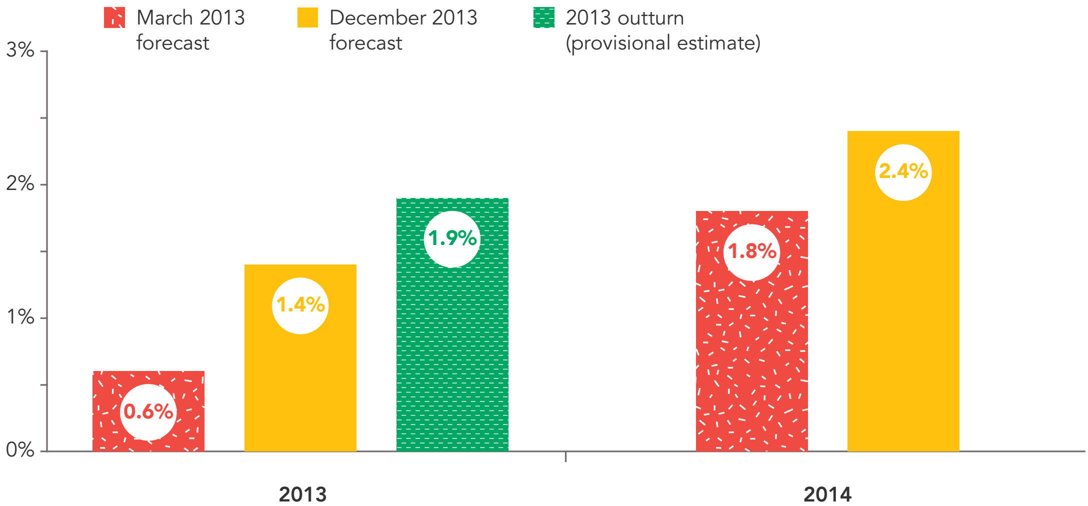
The report draws on the latest data available, but with an important caveat: much of this data is already significantly out of date. This is a perennial challenge, and one that this year is more noteworthy than ever as the economic picture is changing so rapidly. Some of the data we report relates to late 2013, in other cases to 2011-12. Where we can do so accurately, we extrapolate to show what the data are likely to mean for living standards today and over the medium term.

It should also be said that there are ongoing debates about how to measure living standards, including which measure of inflation should be used. In some instances we show trends against more than one measure and, where we have to choose, we err on the side of measures that paint a more optimistic picture (for example using more conservative measures of inflation). The box on p7 – Measures Matter – gives more detail.

Chapter 1
Charting the squeeze

In the last year the UK economy has returned to growth. After a rapid contraction in 2009 and a period of stagnation from 2009 to 2013, GDP has now risen for four successive quarters, growing in the latest figures at an annualised rate of 1.9 per cent. Even after this growth, the UK economy remains 2.1 per cent smaller than it was in 2008, and fully 16 per cent smaller than it was on course to be before the 2008-09 crisis struck. Yet a nascent recovery has brought new optimism to forecasts for the UK macro-economy which is fast feeding through into hope about living standards.

Figure 1: Latest GDP growth revisions



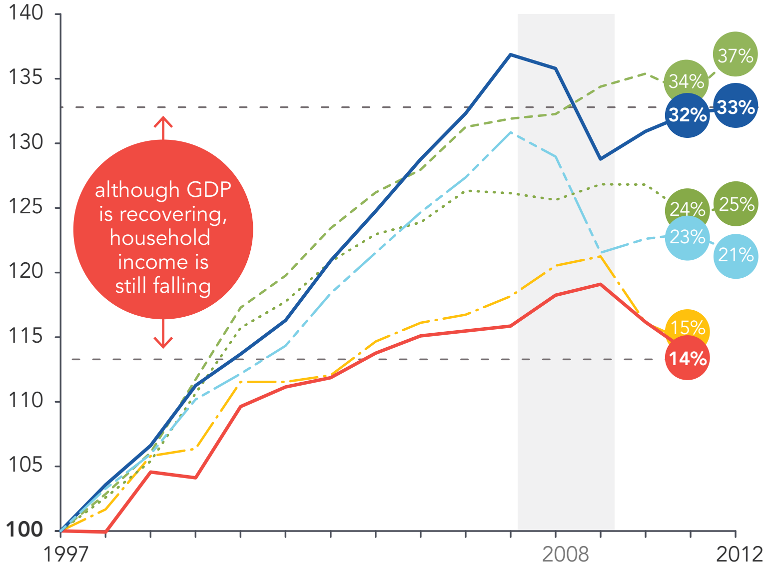
GDP tells a different story to living standards...

The link from GDP to living standards is far from simple. So how does the story of GDP over the last five years compare to the course of the downturn for households? The GDP story is as follows: a steep slump in 2008/09, a brief rebound, several years of stagnation and now a recovery. Living standards are following a different course. The best measures of household incomes show slow growth from the mid-2000s, then resilience at the height of the downturn, and a steep and sustained slide in 2010-11 and 2011-12 as GDP stabilised. Data suggests that this slide continued in 2012-13, meaning that the squeeze on living standards started earlier, and is lasting far longer, than the recession for the overall UK economy.

It is important to note, however, that there are different ways to measure household income. Figure 2 compares trends in GDP over the last 15 years with a full set of 'official' measures. Some give a misleading picture of how households are faring. For example, aside from a brief interruption in 2011, total disposable household income has risen throughout the downturn. This is widely recognised as the wrong measure of living standards because total income in the economy partly reflects population growth. It does not tell us how typical households are faring.

When we turn to a far more useful but still flawed measure – disposable income per capita – we get a different picture of living standards. Incomes per head have been essentially flat since 2008, growing or falling only marginally in each of the last five years. As a whole, from 2008 to 2012, disposable incomes per head fell by just under 0.2 per cent. This follows a period of weak growth in per capita incomes starting in the early 2000s. This measure of living standards is useful, and a legitimate way of understanding recent trends, because it is the timeliest data we have for incomes. But it is also flawed because it represents all non-market, non-government income and therefore includes parts of the economy that do not reflect the position of households, such as the income of religious institutions and universities.

Figure 2: Recent trends in GDP and net household income growth



	2008 - 2011	2008 - 2012
Real Disposable Household Income	1.2%	3.5%
Real Gross Domestic Product	-2.5%	-2.3%
RDHI per head	-1.0%	-0.2%
Real GDP per head	-4.6%	-5.8%
Mean household income	-5.0%	
Median household income	-3.8%	

On the most accurate measures, living standards have fallen steeply...

By far the best, if less timely, account of trends in living standards comes from large scale surveys that measure incomes directly. These provide the most accurate measure of what really happened to households throughout the downturn. The Family Resources Survey, recognised as the best source of data on UK household incomes, is the one we present here. The results tell a far more pessimistic story about living standards than the official and widely-reported measures of disposable income that sometimes dominate debate.

Mean net household income in the UK fell 5 per cent from 2008-09 to 2011-12. In the same years, median household income – the income of the typical household – fell 3.8 per cent (or 5.2 per cent if gross), continuing to fall fast in 2011-12 as GDP stagnated. Median incomes also saw a clear slowdown in growth before the crisis struck, starting in the early 2000s. When this period of weak income growth is added to the subsequent slump, we see that real median household incomes in 2011-12 are back to the level they were in 2004-05. (On the basis of RPI inflation, household incomes would be back to their level in 2001-02.)

One way to understand the full costs of the crisis is to compare this lost decade to the long-run trend rate of income growth. If median incomes had continued to grow at their rate from 1997-98 to 2008-09 (a period that included years of strong growth as well as much weaker years), the typical household in Britain would have been 8 per cent better off than they in fact were in 2011-12. This is equivalent to £1,800 a year for a couple with no children.

Measures matter

As the continuing squeeze on incomes has pulled living standards to the heart of UK political debate, there has been growing scrutiny over how incomes are measured. These debates matter, often changing the story significantly, and so it is important to choose measures carefully and to be open about which measures are being used.

Some arguments over measuring living standards are clear cut; some measures are simply the wrong way to understand how households are faring. Perhaps the most common error is to use aggregate statistics for the UK as a whole, for example the 'total quantity of household income' or the 'number of people in employment'. These measures are unhelpful in a debate about living standards because they partly reflect population growth. Instead, what matters for living standards is how much income there is per household, or what percentage of people are in employment. When politicians or commentators use total measures they often mistake the country getting bigger for an improvement in standards of living.

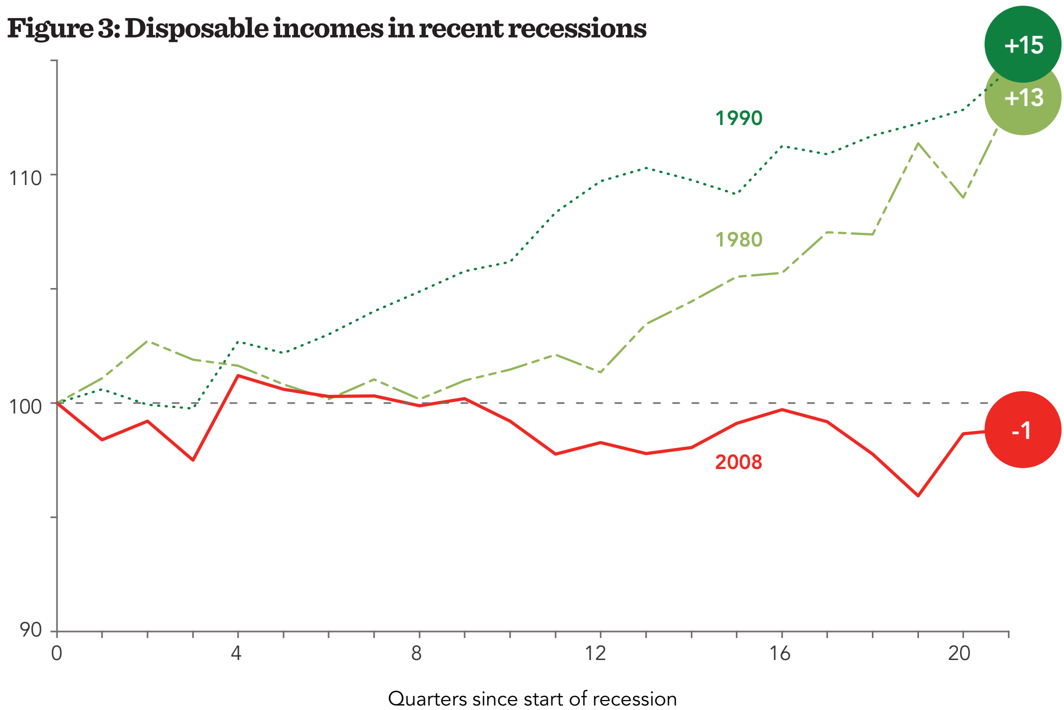
A trickier question is: what measure best reflects the way people actually receive and spend their money? When looking at living standards overall, we favour household measures over individual ones because people typically share their incomes within households. As is standard, we 'equivalise' these incomes, meaning that we adjust them for household size. This is for the simple reason that a single person is better off than a family of four on the same income. And we generally favour net incomes over gross incomes because the former captures both the losses from benefit cuts and the gains from tax cuts. Of course, sometimes gross measures are most appropriate, for example when trying to understand a phenomenon like our changing labour market.

Perhaps the most contentious debate is over how best to measure inflation. Historically there have been two official measures of inflation: the Consumer Prices Index and the Retail Prices Index. Choosing one or the other can alter results dramatically, with the CPI historically showing lower inflation than the RPI. Neither is a perfect measure of the changing prices faced by consumers. The RPI is based on a faulty formula that many think makes it artificially high, yet the CPI excludes mortgage costs – a large part of many people's budgets and a particularly volatile one in recent years given dramatic cuts in interest rates. To counteract these problems the ONS has built a new measure, the RPI-J, which maintains the coverage of RPI but attempts to fix the formula.

Our preference is to use the RPI-J measure where possible. But, because no forecasts are available for this new measure, we are required to make a choice between RPI and CPI when producing projections. In these instances we choose to err on the side of optimism by using CPI. With the gap between CPI and RPI set to increase as interest rates rise, this means that we are more likely to understate than overstate inflation, making the prospects for real incomes or earnings look better. For this reason some people may say we understate the hit to living standards.

This downturn has been unusually bad for living standards … Sustained falls in real income of the kind seen in the last five years are unprecedented in modern times—including in past downturns. The aftermath of the 2008 recession, still ongoing, has already squeezed incomes far more severely than either the 1980s or 1990s recessions. Based on RDHI – the only available measure for this comparison – at the equivalent point after the 1980s and 1990s recessions, per capita disposable incomes were 13 and 15 per cent above their pre-recession peak respectively. Real disposable income per head is today 1 per cent down on its 2008 level. As we show in Chapter 3, these figures hide substantial variation, with some groups faring far better and some faring significantly worse.

Figure 3: Disposable incomes in recent recessions



Are wages already rising?

As the UK's economic prospects have improved, an early controversy has arisen over the performance of wages. Some have claimed that wages are already rising faster than prices for many workers, while others claim that they continue to fall in real terms. Some aspects of this debate are spurious, reflecting the way that partial statistics such as 'take-home pay' flatter the performance of wages (take-home pay makes wage growth look higher by taking into account tax cuts but not cuts to benefits or tax credits). However, other parts of the debate raise a genuine and useful question about what is really happening to wages in the labour market.

At the heart of this puzzle is a gap between the two key datasets that are used to measure UK earnings: the monthly publication Average Weekly Earnings (AWE) and the Annual Survey of Hours and Earnings (ASHE). The latest AWE data show that average earnings rose just 0.7 per cent in the year to November 2013 to £475 a week, an historically low growth rate that is far below CPI inflation of 2.1 per cent. »

The latest ASHE data for the year to April 2013 suggested that average weekly earnings grew 2.2 per cent in the year to £502, much closer to the 2.4 per cent inflation prevailing at that time. Under AWE, wages continue to fall steeply, under ASHE wage growth appears to be broadly flat.

Some of the difference between the two datasets is explained simply by timing, particularly in 2013. ASHE is conducted annually in April. In April 2013, the ASHE data is likely to have been influenced by a temporary spike from bonus payments and attempts to take advantage of an income tax cut for the highest earners in April of that year. The same spike can be seen in the AWE data for April.

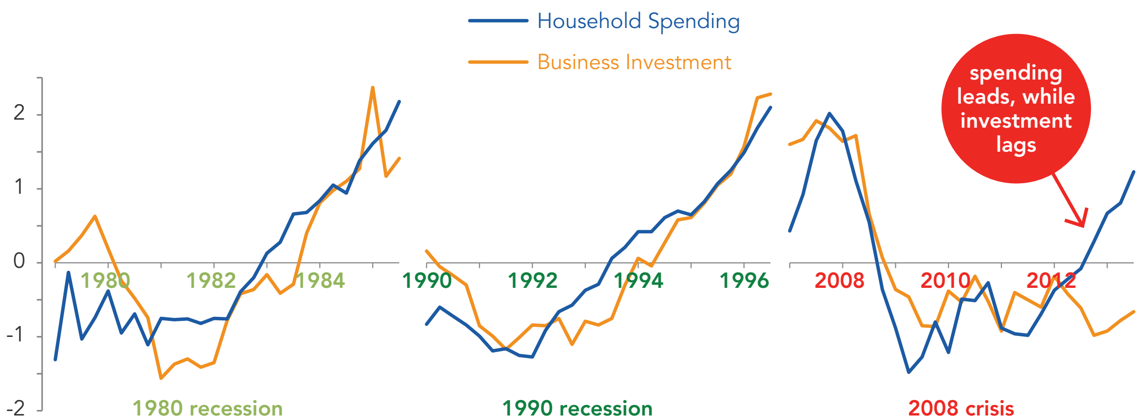
Even so, AWE appears to show lower wage growth than ASHE over the longer term. Technical differences may explain this. While both AWE and ASHE are official datasets, published by the Office for National Statistics and drawn from large-scale employer surveys, the ASHE survey is thought to give a more accurate estimate of wages. It is taken directly from questions about individual employees while the AWE is instead derived by asking employers separate questions about their total pay-bills and their employee roles, and dividing the two to calculate wages per employee. This can lead to distortions, particularly when employers are increasing their headcount, pushing down the apparent wages per employee.

It is also important to note that both datasets, and therefore much of Britain's debate about wages, suffers from an important weakness: neither AWE nor ASHE includes the UK's 4.4 million self-employed workers. Self-employment has risen rapidly in the last five years at the same time as the income of the self-employed has fallen sharply. Including these workers would drag down the overall figures.

Weak incomes are worrying because the recovery is so far built on spending...

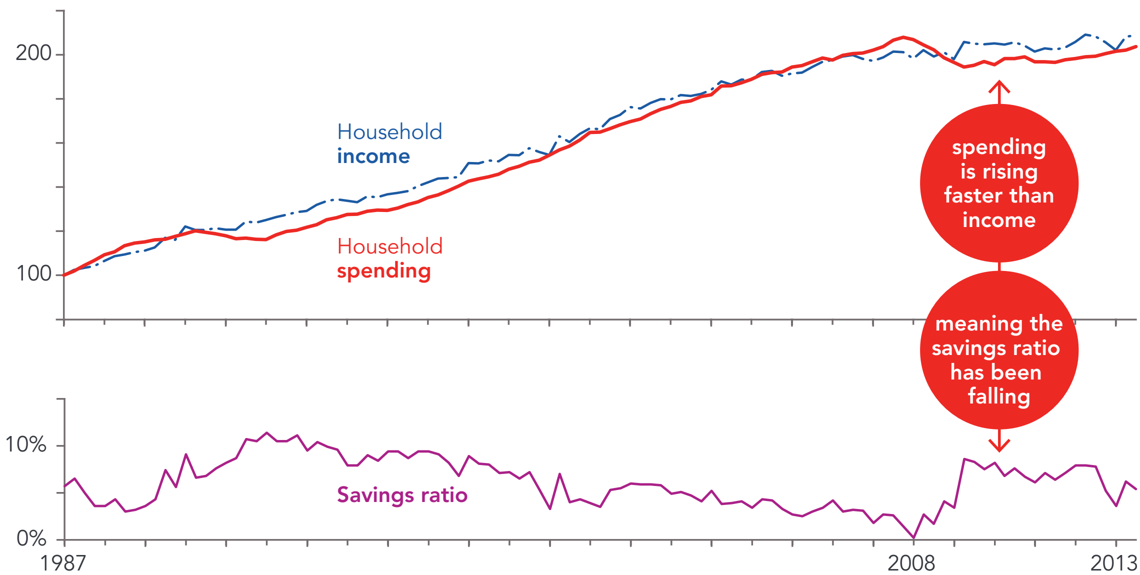
Recent trends in household incomes raise concerns about the day to day pressures facing Britain's households. But they also raise wider economic questions about the sustainability and stability of the recovery. As Figure 4 shows, the recent growth in GDP has come mainly from consumer spending. This is similar to past recessions, after which the engine of household spending has always restarted first, restoring economic momentum. Business investment has followed soon after. The difference this time around, so far at least, is that business investment has remained stagnant—something that was not the case at this point after the 1980s or 1990s recessions. Today's nascent recovery is flying on the single engine of household spending power.

Figure 4: Household spending and business investment after recessions



Increased spending has so far been dependent on a falling savings ratio...
The recovery's reliance on consumption is worrying because the recent uptick in spending is built on anticipated rather than real income growth. This has the inevitable and hopefully short-term implication that households are funding spending by lowering their savings rate. The UK savings rate saw ten years of decline until 2009 and then rebounded sharply. The savings rate today is still some way above its pre-crisis low. But since Q2 2009 it has now fallen from 8.6 per cent to 5.4 per cent (the small spike in savings in 2013 was largely due to the timing of bonus payments). A falling savings ratio cannot continue indefinitely. This makes an improvement in the short- to medium-term prospects for household incomes central to the sustainability and financial stability of the recovery. Either business investment rebounds, household incomes quickly recover, or else the depletion of savings—and with it the recovery—will run out of road. We assess whether households are right to anticipate an imminent pick-up in incomes in Chapter 5.

Figure 5: Income, spending and savings



Are wages falling behind economic growth?

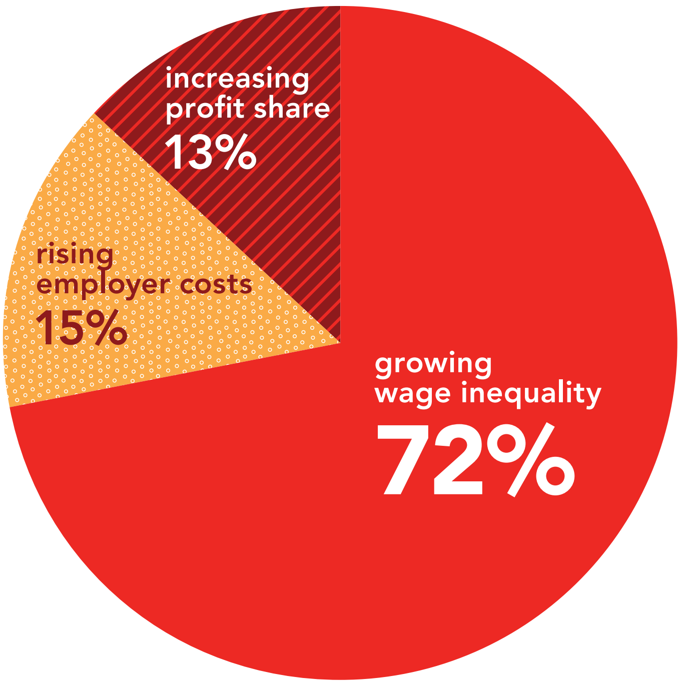
This chapter has focused on household incomes and their relationship to changes in economic growth. But there is also an important, if narrower, debate to be had about the link between economic growth and the wages of a typical worker. This issue was first examined for the Resolution Foundation by Professor John van Reenen in mid-2012 and has since grown in prominence. The Treasury and others have more recently examined particular aspects of the changing link between wages and economic growth.

Our previous work showed that in the years running up to the crisis there was an unusual amount of pressure on the earnings of a typical worker. First, there was a decline in the share of GDP going to labour, and a rise in the share going to profits, squeezing » overall workers' compensation. Second, there was a rise in non-wage costs, mainly employer pension contributions as employers sought to clear large pension fund deficits, but also rising employer National Insurance payments, squeezing the amount of compensation left over for pay. Third, strong earnings growth for the very highest earners meant the bottom half received a falling share of overall earnings. This triple squeeze helps to explain the stagnation of median earnings while GDP grew strongly in the 2000s. It meant that the state, through rising tax credits, provided the biggest source of income growth in low to middle income households from 2003 to 2008.

This unusual period followed a much longer-term weakening of the link between GDP growth and the wages of a typical worker. Over a period of decades, a falling share of UK GVA has found its way into the pay packets of workers in the bottom half. Three factors account for this change. The rise in wage inequality explains nearly three quarters (72 per cent) of the decline in the share of GVA reaching wages in the bottom half. A slight fall in the labour share since 1977 accounts for 13 per cent. And rising non-wage employer costs account for 15 per cent. Since last year, these results show a smaller effect from the labour share because the profit share has recently fallen, as is usual in a downturn.

Figure 6: What accounts for the falling share of GVA going to wages in the bottom half

1977-2012



Chapter 2
Sharing the pain?

We have seen that a new year of data confirms this to be an historic moment for living standards. The last five years now stand out even more starkly than was previously understood. But we also now know more than we did about how the impacts of the crisis have been shared. The immediate fallout from the crisis has been more broad-based than many anticipated, with incomes falling widely across the spectrum. As we look to the next few years there are concerns that inequality will increase. We also show in this chapter the extent to which the state of living standards differs for people of different regions, genders and ages.

The crisis and early recovery have made the UK more regionally imbalanced…

The most immediate sign of unevenness in the UK economy comes in the geography of the downturn. From 2008 to 2012, overall UK Gross Value Added fell by £40 billion in real terms. Despite being the largest economic region of the UK, constituting 22 per cent of UK GVA, London accounted for just 1 per cent of this decline. Scotland made up a disproportionately large 19 per cent, despite being just 8 per cent of the total UK economy. Yorkshire and the Humber meanwhile accounted for 16 per cent of the decline in GVA from 2008 to 2012 while the North West accounted for 12 per cent. In the South East, excluding London, GVA actually grew slightly in this period.

The richest ten per cent now have nearly twice the income between them of the entire bottom half

This measure of total GVA reflects overall economic output but tells us little about living standards. For this it is more useful to look at GVA per head, taking account of changes in regional populations. Here we see by far the biggest falls in Northern Ireland, where GVA per head fell 10 per cent from 2008 to 2012. In Scotland we see an 8 per cent fall. Yorkshire and the East of England also saw big declines while London's small fall in overall GVA translated into a relatively large fall in GVA per head – 6 per cent from 2008 to 2012 – due to ongoing growth in London's population at this time. On this basis, even while overall UK GVA flat-lined in 2012, in all but three geographic areas of the UK (the South East, North West and Wales), GVA per head was still falling. In essence, at this per capita level, the remaining ten regions and nations of the UK economy remained in recession in 2012.

Inequality flat-lined in the crisis but is now set to rise again…

There has been much debate since 2008 about how broadly the pain of the crisis has been shared. This has been motivated, in part, by the fact that the UK is one of the developed world's most unequal societies. The latest data confirm this. In 2011-12, a tenth (11 per cent) of all original income in the UK went to the top 1 per cent and a third (34 per cent) to the top 10 per cent. The richest ten per cent of the UK working-age population now have nearly twice the original income between them of the entire bottom half (18 per cent).

The UK tax and benefit system significantly moderates these inequalities. After taxes and benefits, the share of the top 1 per cent falls to 8 per cent of all post-tax

Figure 7a: Share of decline in gross value added by region

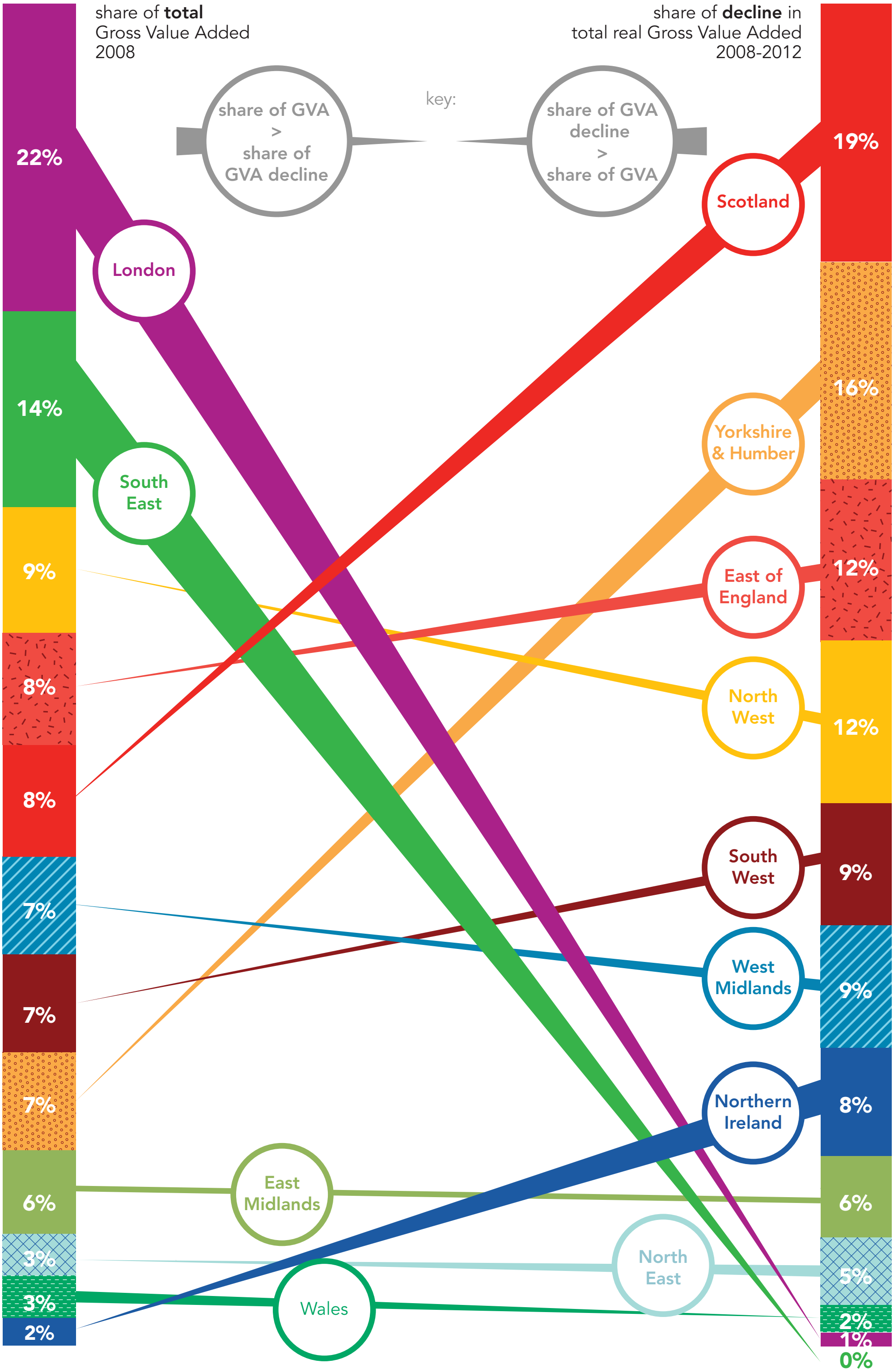
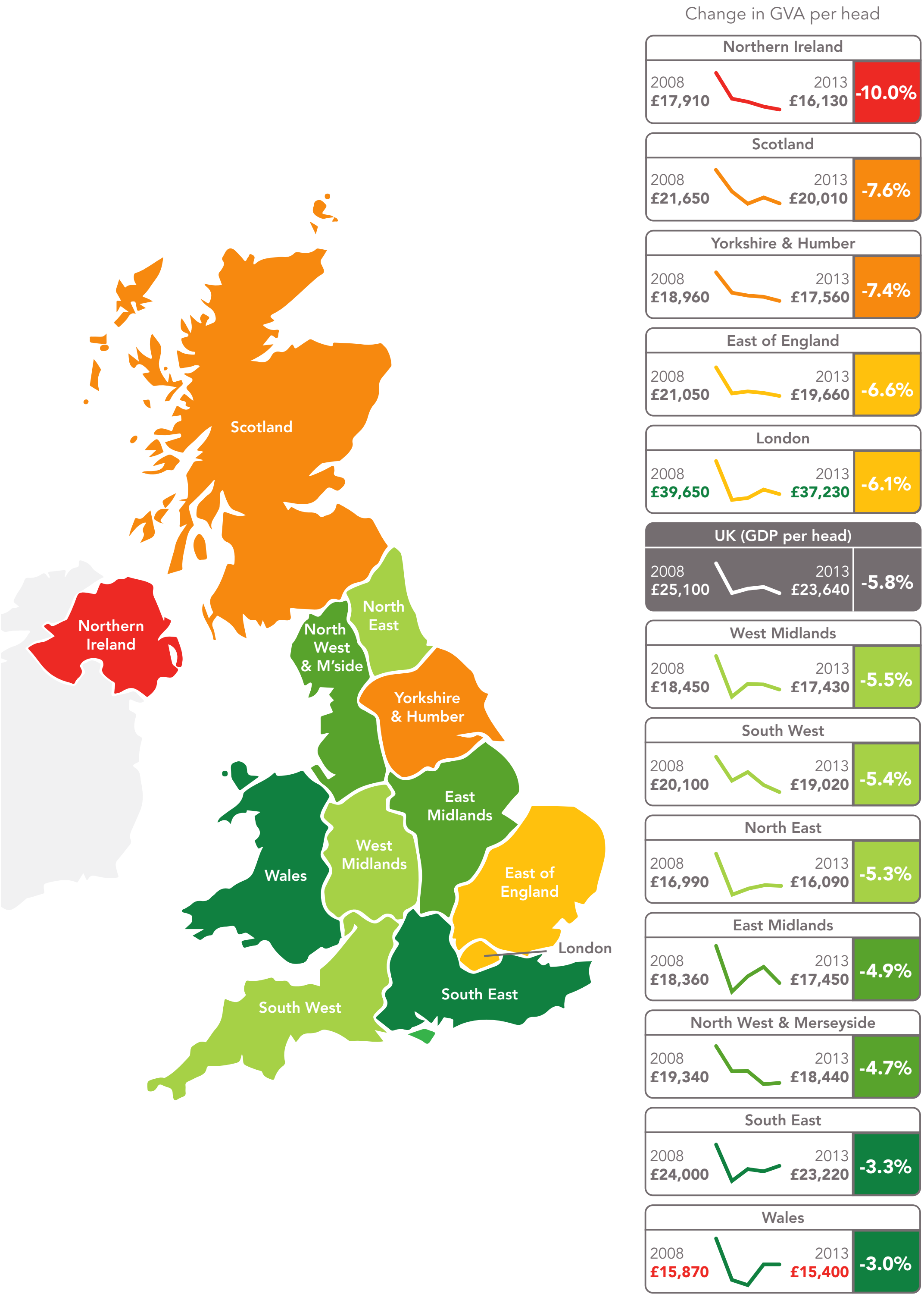
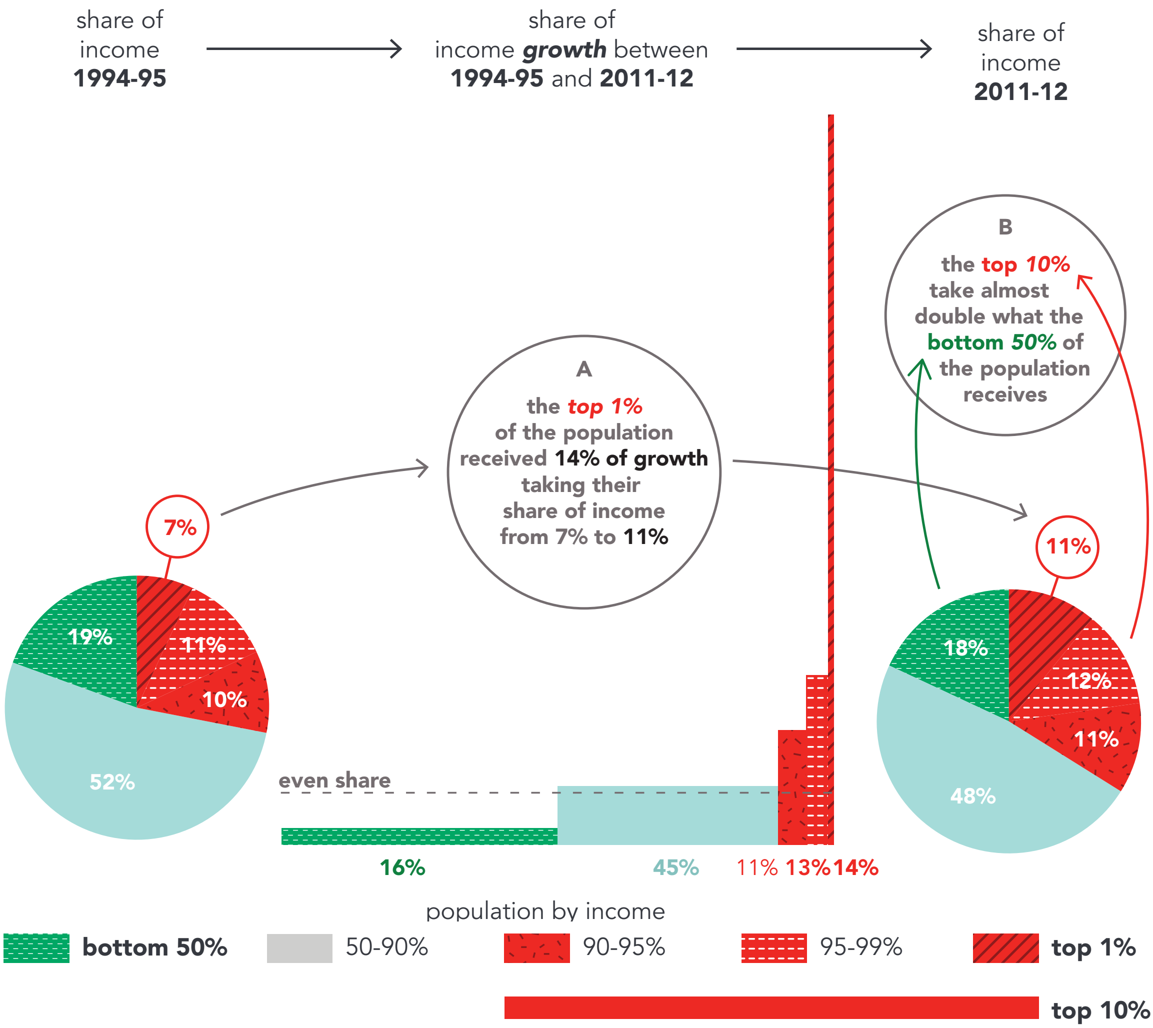


Figure 7b: Decline in gross value added per head by region



income. Yet because original market income is so unequal in the UK, the tax and benefit system has to work hard to moderate these high levels of inequality.. Even after redistribution through taxes and benefits the top ten per cent of Britain's working age population have as much income as the bottom half combined (27 per cent).

Figure 8: Share of income and income growth



In the early years of the crisis inequality appeared to fall slightly, a pattern that is common in recessions because households with lower incomes are often more protected by the welfare state while those on middle and higher incomes are more exposed to a weakening labour market.

The latest data, however, adds to the suspicion that part of the apparent fall in inequality in 2010-11 was the result of earnings being moved between financial years. The 50p rate of income tax introduced in April 2010 may have incentivised the highest paid to 'reduce' their earnings in 2010-11 by bringing forward earnings into 2009-10, distorting data over a number of years. The subsequent reduction of the 50p rate to 45p from April 2013 may have incentivised artificial 'cuts' in top earnings, this time in 2012-13, and led to corresponding increases in 2013-14. Stepping back, it now seems likely that general measures of inequality were fairly flat from 2010 to 2013, perhaps falling slightly.

In the last two decades, a bigger share of growth went to the top 1 per cent than to the bottom half combined...

The changes in inequality that took place during the downturn look small against long-term trends. The GINI coefficient, widely used as a measure of general inequality, grew throughout the 1980s and more slowly in the 1990s before flatlining in the 2000s while incomes at the very top—particularly the top 1 per cent and even more so the top 0.1 per cent—accelerated away. Even after the slight moderating effect of the crisis, around 14 per cent of the growth in household incomes from 1994-95 to 2011-12 went to the top one percent. This is just slightly less than went to the entire bottom half of working-age households (16 per cent). It is now highly likely that inequality will resume its rise as the recovery takes hold, with welfare cuts hitting lower income households, while a strengthening labour market first benefits those higher up.

The weak labour market has hit young people hardest...

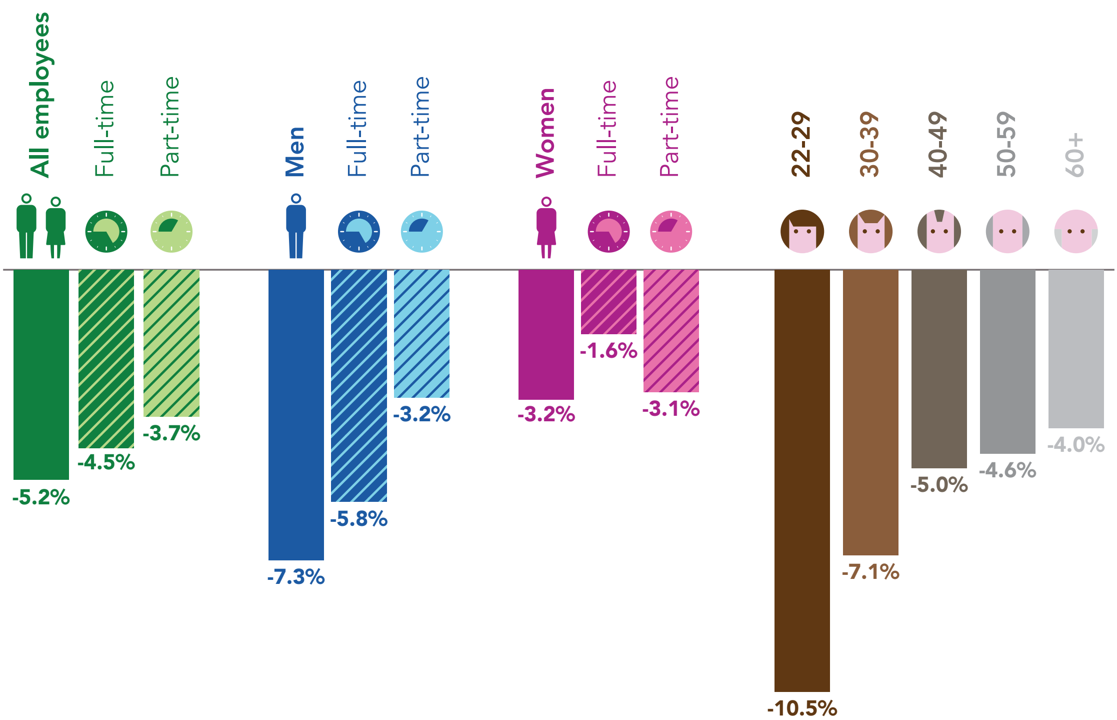
Aside from tax and benefit decisions, much of the uneven impact of the crisis can be attributed to changes in the labour market. Unemployment has risen quite evenly for men and women: the unemployment rate for both being around 50 per cent higher in late 2013 than in 2008 (unemployment rose from 5.5 per cent to 8.3 per cent for men and from 4.7 to 7.2 per cent for women). Men however have seen far larger falls in earnings. Male median weekly earnings fell 7.3 per cent from 2008 to 2013 compared to 3.2 per cent for women. This continues a longer-term trend that is slowly narrowing the gender pay gap.

Figure 9: Weekly wage growth from low to higher earners

The fall in wages has been relatively even across the earnings spectrum. From 2008 to 2013, weekly earnings fell most at the 20th percentile (7.9 per cent) and by slightly more for higher earners than at the median. Relatively small falls at the 10th percentile may be explained by a limited degree of protection from the National Minimum Wage, which fell sharply in these years but rose slightly relative to median earnings. In the latest data for the year to April 2013, earnings growth was close to zero across the spectrum but mildly progressive on a weekly basis – from plus 0.6 per cent at the 10th percentile to minus 0.8 per cent at the 80th, though this reflects a disproportionate increase in working hours at the bottom of the distribution rather than any improvement in hourly pay.

The biggest differences in labour market performance, however, play out by age. Youth unemployment (for under-25s) stands at 20.0 per cent compared to 7.1 per cent for the population as a whole. And when it comes to pay, the young have suffered hardest again. Focusing on the 18 to 21 year old age group, median weekly wages fell staggeringly – by a quarter (25 per cent) – in real terms from 2008 to 2013. This group is unusual in that it is strongly affected by changes in composition, as some young people decide to remain in education or take different routes into work, leaving a different group of young people in the labour market in 2013 to the one in 2008.

Figure 10: Earnings growth by employee group (2008-13)

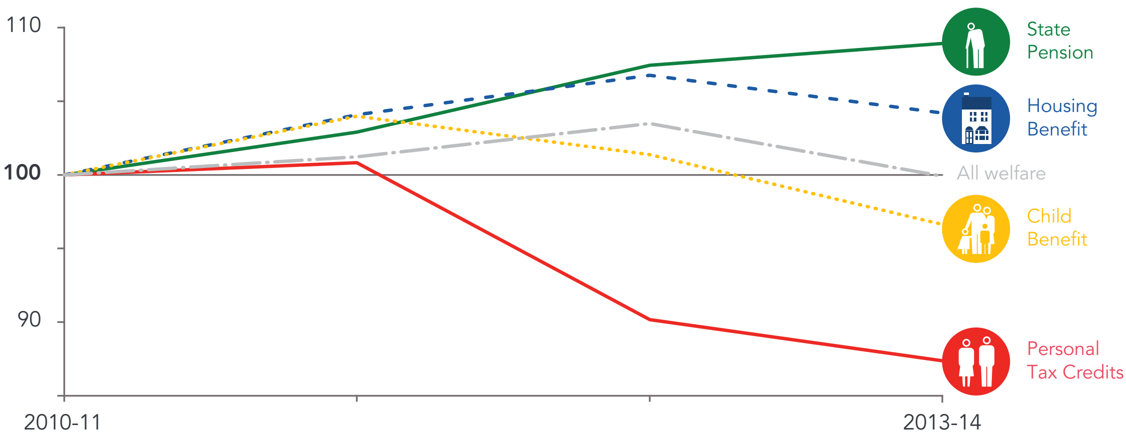


But even among groups of young workers that are less affected by compositional shifts, pay has collapsed. Median weekly earnings for younger workers aged 22 to 29 fell 10.5 per cent in real terms to 2008 to 2013 while wages for workers in their 40s fell 5 per cent and for those in their 60s 4 per cent. The sharp fall in wages for workers in their 20s follows a long period of wage stagnation for young workers prior to 2008: typical wages for workers in their 20s fell 0.8 per cent even in the boom years from 2003 to 2008. As a result, median weekly wages for workers in their 20s are now lower than they were in 1997.

Welfare spending decisions have protected the old and hit the young...

Decisions made over welfare spending have accentuated rather than mitigated generational inequalities in the UK labour market in the last five years. In 2013, the government restated its commitment to a state pension settlement that has seen the vast bulk of reductions in Annually Managed Expenditure being drawn from working-age households. Tax credits, focused on working-age families, have been particularly hard hit. The state pension by contrast has continued to rise throughout the period of fiscal consolidation, helping to explain the fact that total real terms 'welfare' spending has risen annually throughout the crisis and that this rise in welfare spending is projected to continue throughout the forecast period to 2018.

Figure 11: Changes to different parts of welfare spending



Median working-age household income is back to the level it was at in 2001

Taken together these labour market and welfare trends mean that the pattern of household income gains and losses varies greatly by age group. The average income of pensioner households remains far lower than for working-age households, though the gap is substantially narrower after housing costs. But pensioner incomes have long been growing faster, narrowing the gap. This trend continued during the period of weak income growth in the 2000s. From 2002-03 to 2007-08, median income for pensioner households grew by 10.2 per cent cumulatively while working-age households saw income growth of 2.6 per cent.

Since the crisis, the trend has accelerated. While median income among working-age households fell 6.2 per cent from its peak in 2008-09 to 2011-12, the incomes of pensioner households rose 1.1 per cent. On average, these changes equate to a real terms loss for working-age households of over £1,500 and an average gain for pensioner households of £200. The result is that working age households have in effect lost many years of income growth while pensioner households have seen a far smaller adjustment. Pensioner incomes are 31 per cent above their level in 1997-98 in real terms and remain at a level last seen in 2008-09. By contrast, the income of a typical working age household was no higher in 2011-12 than it was a decade earlier in 2001-02.

Figure 12a: Net incomes for pensioner and working-age households

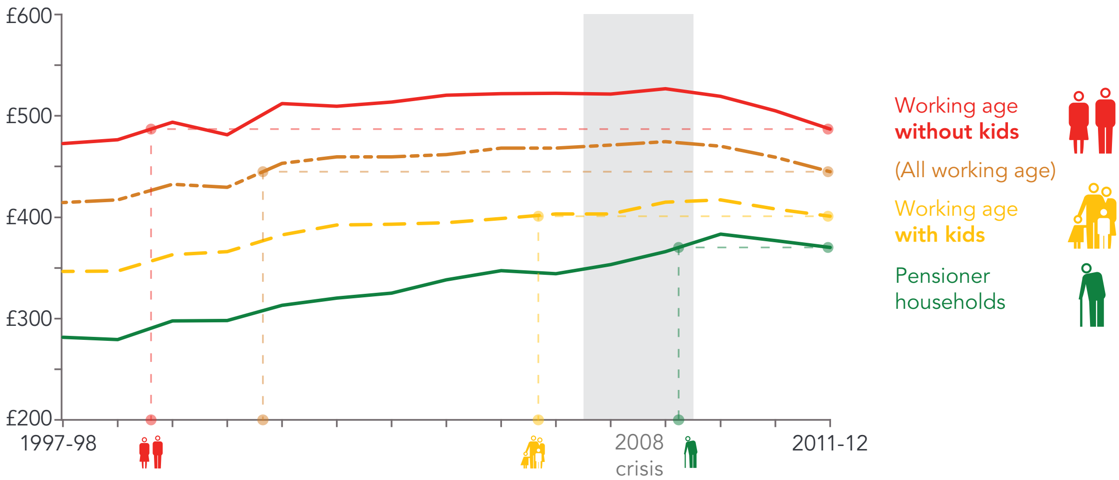
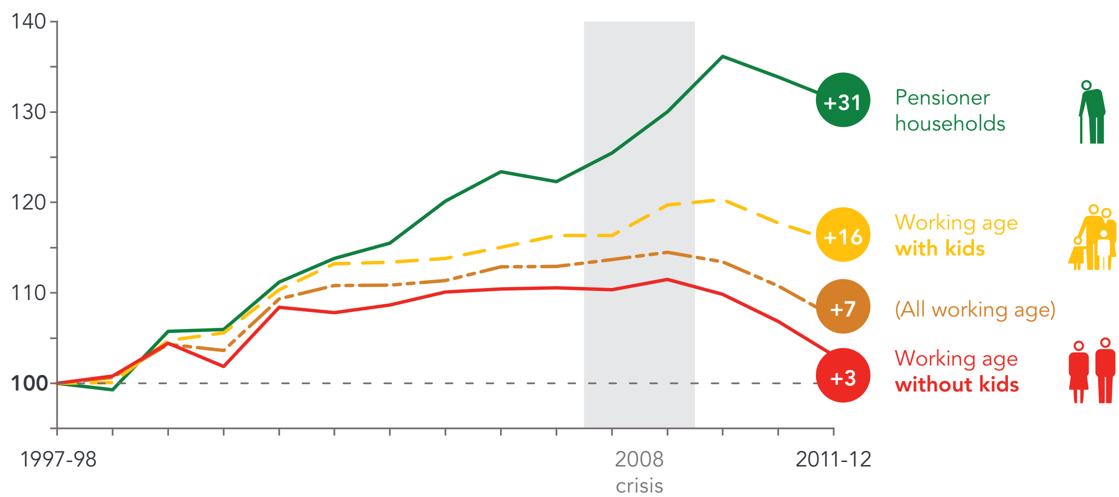
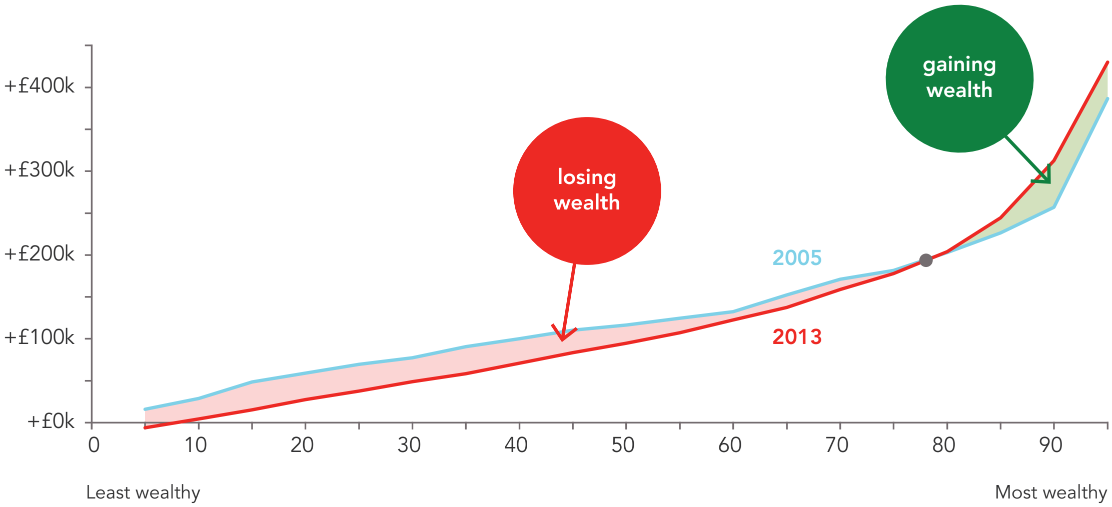


Figure 12b: Growth in net income for pensioner and working-age households



Finally, it is important to consider how the crisis has reshaped the distribution of wealth. In this respect the crisis has unambiguously increased inequality. Among mortgagors, net worth – savings, shares and property wealth – fell across the bottom 80 per cent of people from 2005 to 2013 but rose for the top 20 per cent. In the bottom half of the distribution, these falls have been substantial, wiping upwards of £30,000 off the average net worth of households across much of the bottom half. A key question in 2014 will be whether or not these trends accelerate on the back of unequal regional trends in the housing market.

Figure 13: Changes in net worth since the crisis



Chapter 3
The new labour market: Jobs rich, pay poor

We have seen that an unprecedented downturn has altered the course of living standards. And with incomes having fallen unevenly across regions and groups of workers, the past five years have also reshaped the social landscape. But to understand the state of living standards in contemporary Britain, and the prospects for households in the recovery, we need to step back to consider more fundamental ways in which the UK economy has changed. The surprising performance of the UK labour market has been a defining feature of the downturn. Understanding our new polarised labour market is key to anticipating what will happen next.

Employment has outperformed while concern about job quality has grown...

Even before 2013, the balance of concern had shifted away from the quantity of jobs being created by the UK economy towards the quality of those jobs. This shift intensified in the past year. The pace of jobs growth in 2013 was remarkable. Unemployment fell faster than the most optimistic forecasts, employment rose sharply and inactivity rates hit historic lows. Jobs boomed in some high paid sectors. Yet, for typical workers, real wages continued to decline or at best stagnate, underemployment remained high and new forms of insecurity continued to take hold. This mixed picture raises the prospect of a polarised labour market in which some thrive while many struggle.

The single most striking feature of today's UK jobs market is an unparalleled collapse in real wages. In the most accurate large-scale survey data, the median wage of UK employees was £23,800 in 2007-08. Five years later in 2012-13 it was £21,900, a fall of 7.8 per cent. A drop in wages of this magnitude has not been seen before, including in recessions. This in part reflects a sharp decline in productivity since the start of the crisis. The unprecedented fall in wages has made accurate forecasting problematic. As recently as 2010, the Office for Budget Responsibility thought average wages would fall 1.5 per cent and recover to their pre-recession level by late 2012. Their most recent assessment now says average wages will fall 5.1 per cent from 2010 to 2013 and not recover their previous level until mid-2017, extending the squeeze from four years to nine. Official forecasts look dramatically worse under the RPI measure of inflation (see box on p7).

The surprising performance of the UK labour market has been a defining feature of the downturn

The surprising fall in wages since 2008 cannot solely be attributed to the depth of the downturn, although this is clearly a big factor. It is also likely to reflect a shift in the relationship between real wage growth and unemployment that occurred prior to the financial crisis. This change means that a given level of unemployment has a greater chilling effect on real wage growth than was the case in previous decades. It helps to explain why wage growth has continually disappointed in recent years.

Figure 14: Fall in median annual wages since the crash

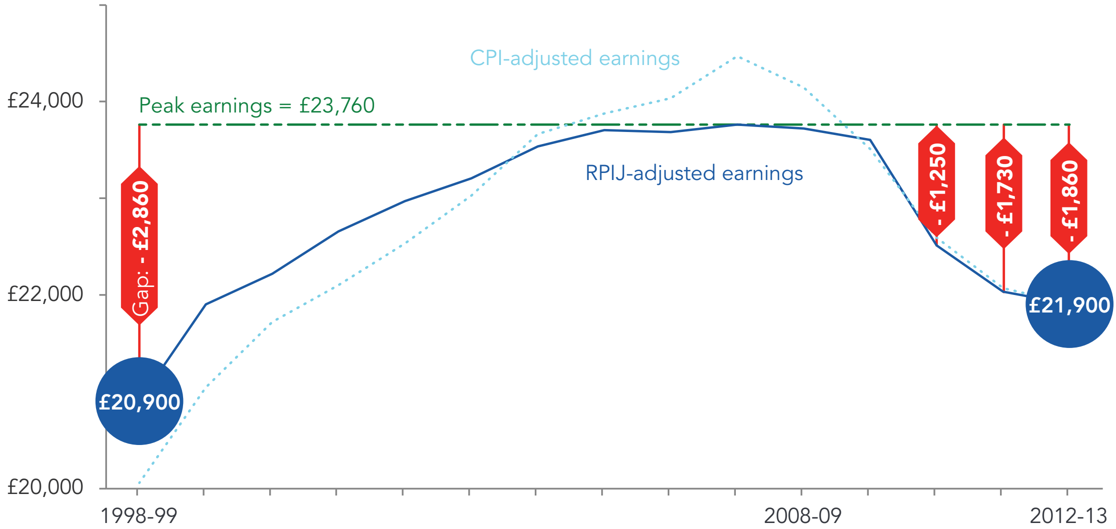


Figure 15: UK productivity, growth in output per hour

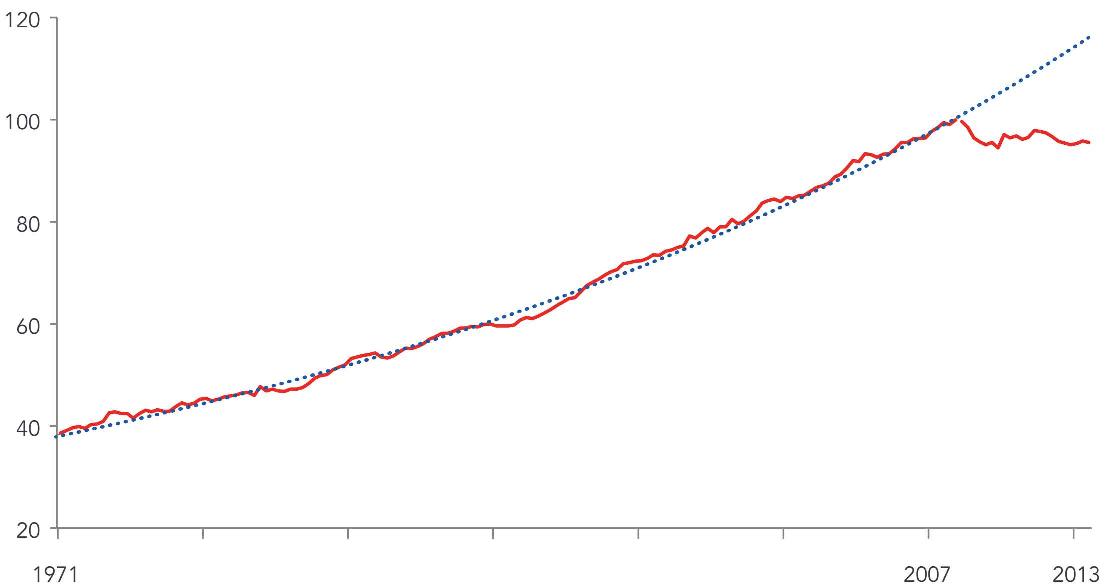


Figure 16a: Changing prospects for wage growth

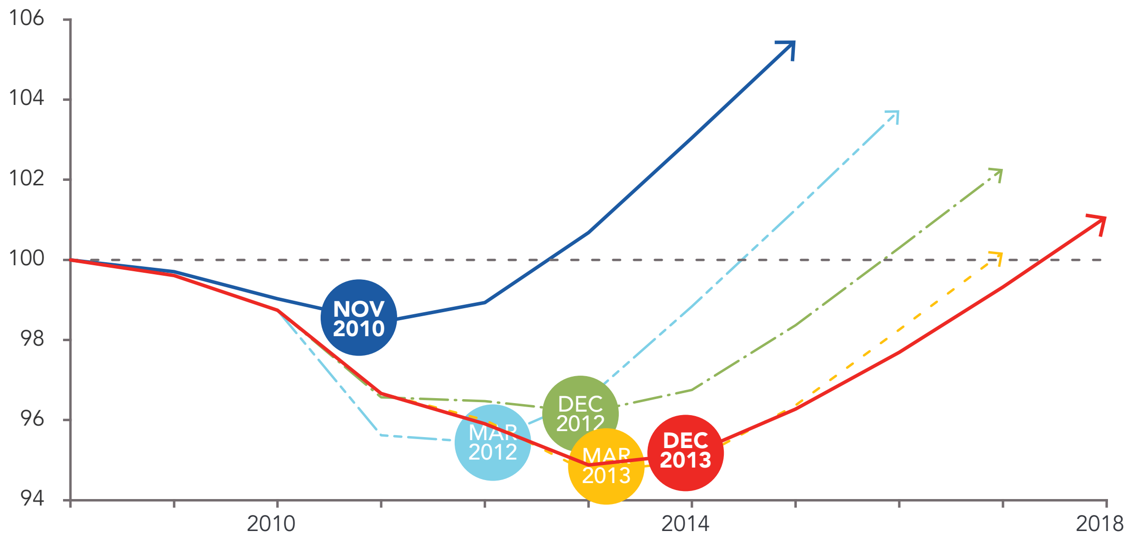
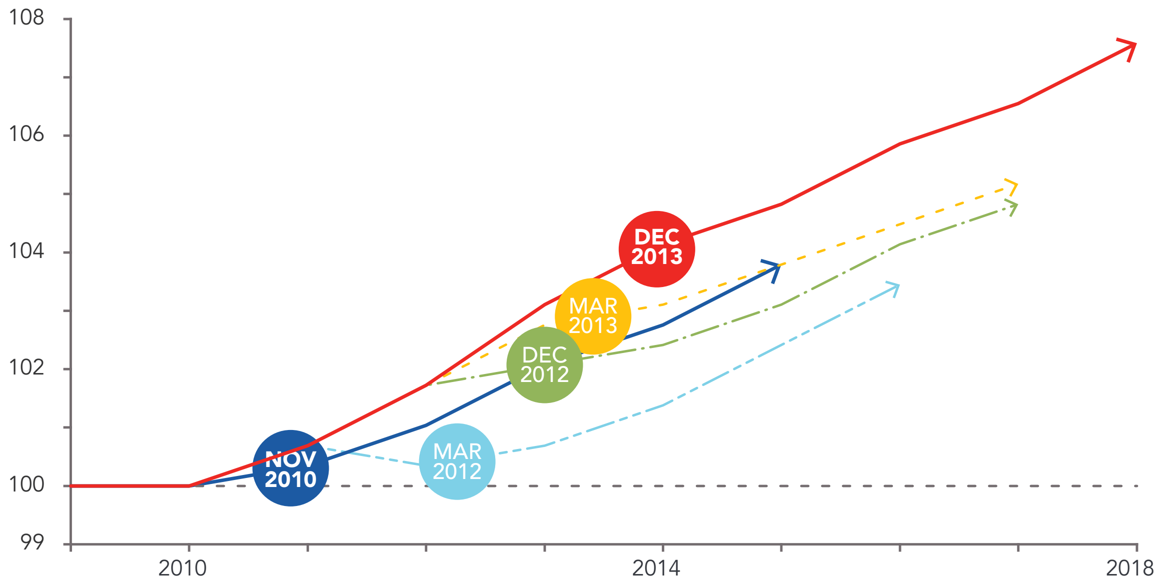


Figure 16b: Changing prospects for growth in the employment rate



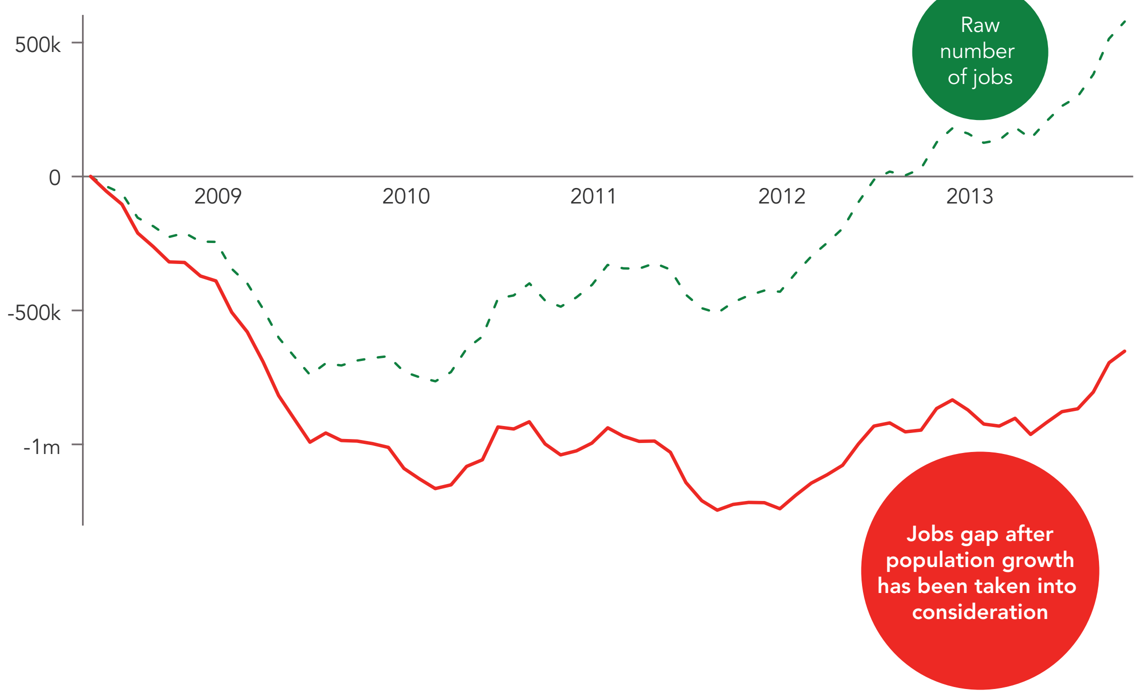
Even with strong employment, the road to a jobs recovery remains long...

The flip-side of the collapse in wages has been exceptional growth in employment. This pattern became even more sharply defined in 2013. Falls in unemployment began steadily in early 2013 and quickened later in the year. Latest data show an unemployment rate of 7.1 per cent in September to November 2013, suggesting that the Bank of England's 7 per cent threshold was likely passed in October to December 2013 (data for this period is released on 19 February). This is just three months after the Bank forecast that the unemployment rate would remain above 7 per cent until 2016. More importantly, the employment rate is also now rising, driven by an uptick in full-time jobs. Inactivity is at its lowest rate since 1991.

These figures all compare well with the UK's main international competitors. But impressive employment growth should not obscure how far the UK jobs recovery still has to run. As an indicator of the work still left to do, we calculate the UK jobs gap, the number of additional jobs the UK needs to create to restore the employment rate of 2008. For the population aged 16-64, the jobs gap is now all but closed, with the employment rate back to its pre-recession level.

But with an ageing population, employment for those over 65 also matters. For the UK population aged 16 and over, the UK jobs gap still stands at 650,000. Even now, in its latest, more optimistic, forecasts, the OBR anticipates that this gap will not have closed by 2019. Their forecasts leave the UK with a lower employment rate for workers aged 16 and over in early 2019 than in 2008. This helps to show not only how far the UK fell in the crisis, but also how hard it will be to climb back against the pull of an ageing workforce.

Figure 17: The UK jobs gap

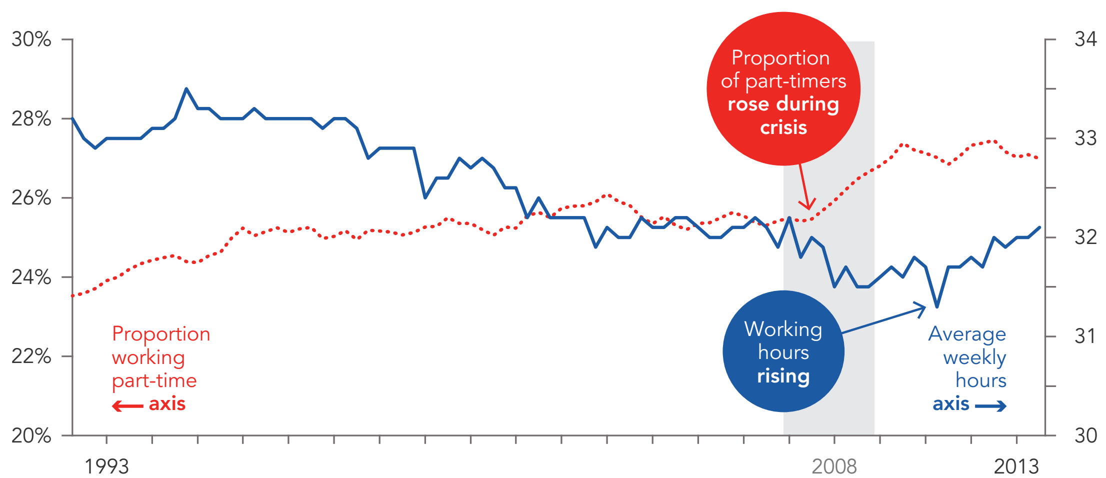


Underemployment remains a problem, but it is widely misunderstood...

The UK's persistent jobs gap dents the sanguine view that a jobs recovery is already with us. But the basic point holds: the jobs picture is far better than anticipated and the picture for wages far worse. Yet falls in wages only explain part of the shift in concern away from the quantity of jobs in the UK economy towards job quality. Another major explanation is underemployment—people working fewer hours than they would like. This remained an important feature of the UK economy in 2013 although some parts of the picture have now begun to improve. Full-time jobs have driven recent employment growth, redressing a shift to part-time work in the downturn. Working hours have also performed strongly of late.

These recent improvements only underline the fact that underemployment has been widely misunderstood throughout the downturn. In recent years, including in 2013, it has often been asserted that working hours have fallen. In fact average working hours are already back to pre-crisis levels and did not fall unusually fast in 2008-09. On the contrary, the last five years ended a long-running decline in working hours that typified Britain's more prosperous years. Far from falling, average working hours are now higher than they were on course to be without the crisis.

Figure 18: Average weekly working hours and part-time work

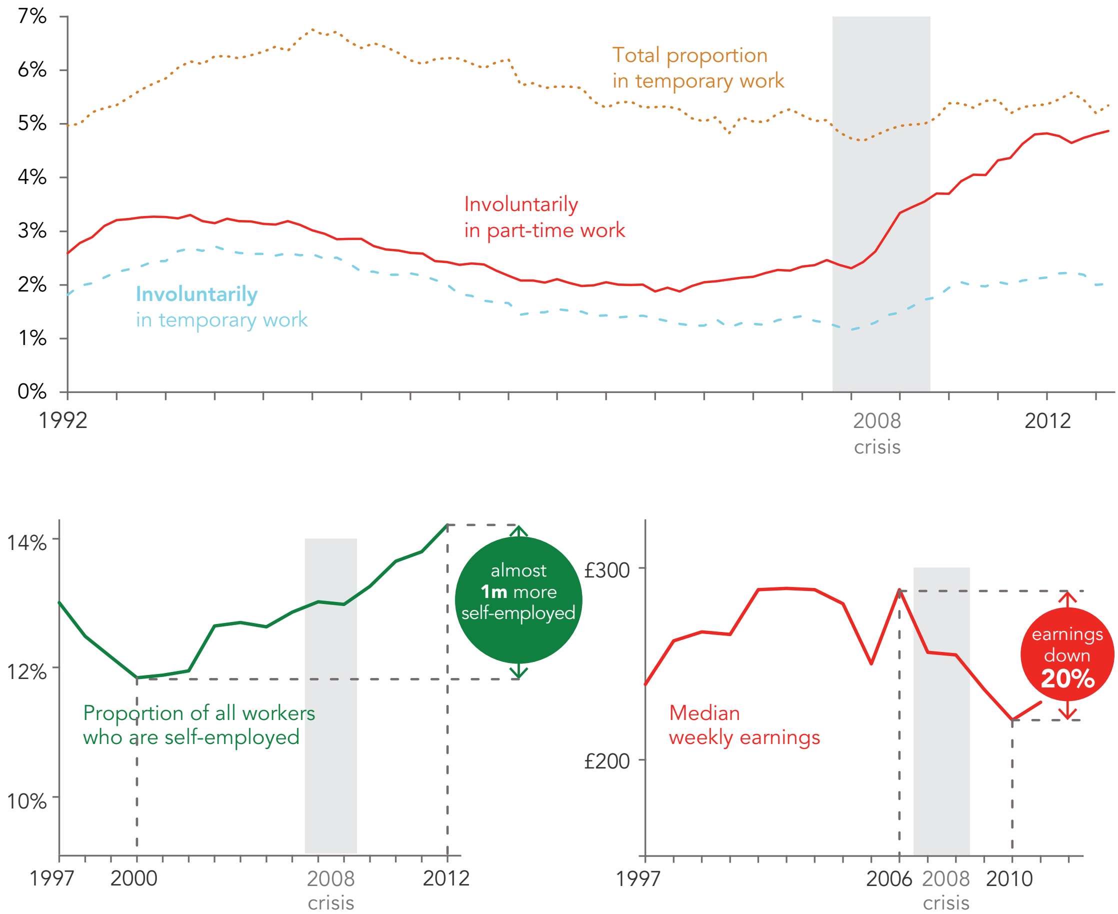


The true story of underemployment is more complicated, reflecting a mixture of pressures on workers. First, evidence suggests that it is the historic wage squeeze, rather than cuts in hours, that accounts for the high share of people who say they want more work. This explains how involuntary part-time work can be at double its pre-crisis rate even while average working hours among part-time workers are up. People are being paid less, so they need to work more.

Second, where there have been cuts in hours, these have come mostly from a shift from full-time to part-time work (one that has lately begun to reverse)—not in general from part-timers having their hours cut. Third, new forms of insecurity, most prominently zero hour contracts, have been embraced by employers in some sectors, and are being abused by a minority. Such changes may help to explain high levels of self-reported job insecurity.

Yet perhaps the most overlooked feature of our new labour market is a transformation in the scale and nature of self-employment. Self-employment continued its long-term rise throughout 2013. In only five years since 2008 more than a third of a million (370,000) people have moved into self-employment and nearly 1 million (940,000) since 2000. This historic migration of employees into self-employment runs alongside a slump in the earnings of the self-employed. The median annual earnings of self-employed people fell 20 per cent in the last ten years, from £15,000 to £12,000. This data highlights a growing phenomenon of 'odd jobs', in which low pay is accentuated by the income insecurity of self-employment.

Figure 19: Trends in under-employment and self-employment



Britain's drift toward a polarised labour market pre-dates the crisis...

As these surprising trends in the UK jobs market have materialised, the question arises as to whether they are structural or cyclical. The recent rise in full-time work is reassuring, suggesting that one of the pressures behind underemployment may start to ease. But indicators of job quality—the median pay of new jobs, and their temporary status—have proven more stubborn.

Certainly Britain has a chronic problem of low pay. One in five (21 per cent) workers in the UK earn below £7.50 an hour, two thirds of the UK median wage, putting them under the official OECD definition of low pay. Over a quarter (26 per cent) of women are low paid and one in six men (16 per cent), not least because 43 per cent of part-time workers—overwhelmingly women—are low paid. Swathes of the UK economy depend on paying wages too low to sustain a family. In hotels and restaurants, two thirds (68 per cent) of workers are low paid. These figures help to explain the transformation that has occurred in the nature of poverty in Britain in the last two decades. This year for the first time the majority of people living in poverty in Britain are from working families.

While the most extreme low pay has been countered by the National Minimum Wage, which also appears to have protected the lowest paid workers to a degree since 2008, this protection too has eroded. The real value of the minimum wage has now fallen for five years in a row, putting it back to a level last seen in 2004. There is now an apparent consensus that this decline should reverse in the recovery, with the Chancellor announcing in early 2014 his view that the UK minimum wage should restore its lost value as economic growth picks up.

For many, low pay proves hard to escape ...

The extent of low pay in Britain would be less worrying if low pay was a temporary state, affecting workers at the start of their careers. But by tracking Britain's low paid workers in 2002 over ten years we know that only one in five (18 per cent) escaped low pay over the decade. Just under half (46 per cent) cycled in and out of low pay while a quarter (27 per cent) remained stuck, being low paid in every year they worked. While this suggests low levels of earnings mobility, it represents an improvement. The proportion of workers stuck on low pay for a decade rose in the late 1970s but then stabilised for the next 15 years and has since fallen. In the decade from 1991 to 2001, 35 per cent of the low paid remained stuck compared to 27 per cent in the decade from 2002-2012.

Figure 20a: Low pay by gender, age and hours

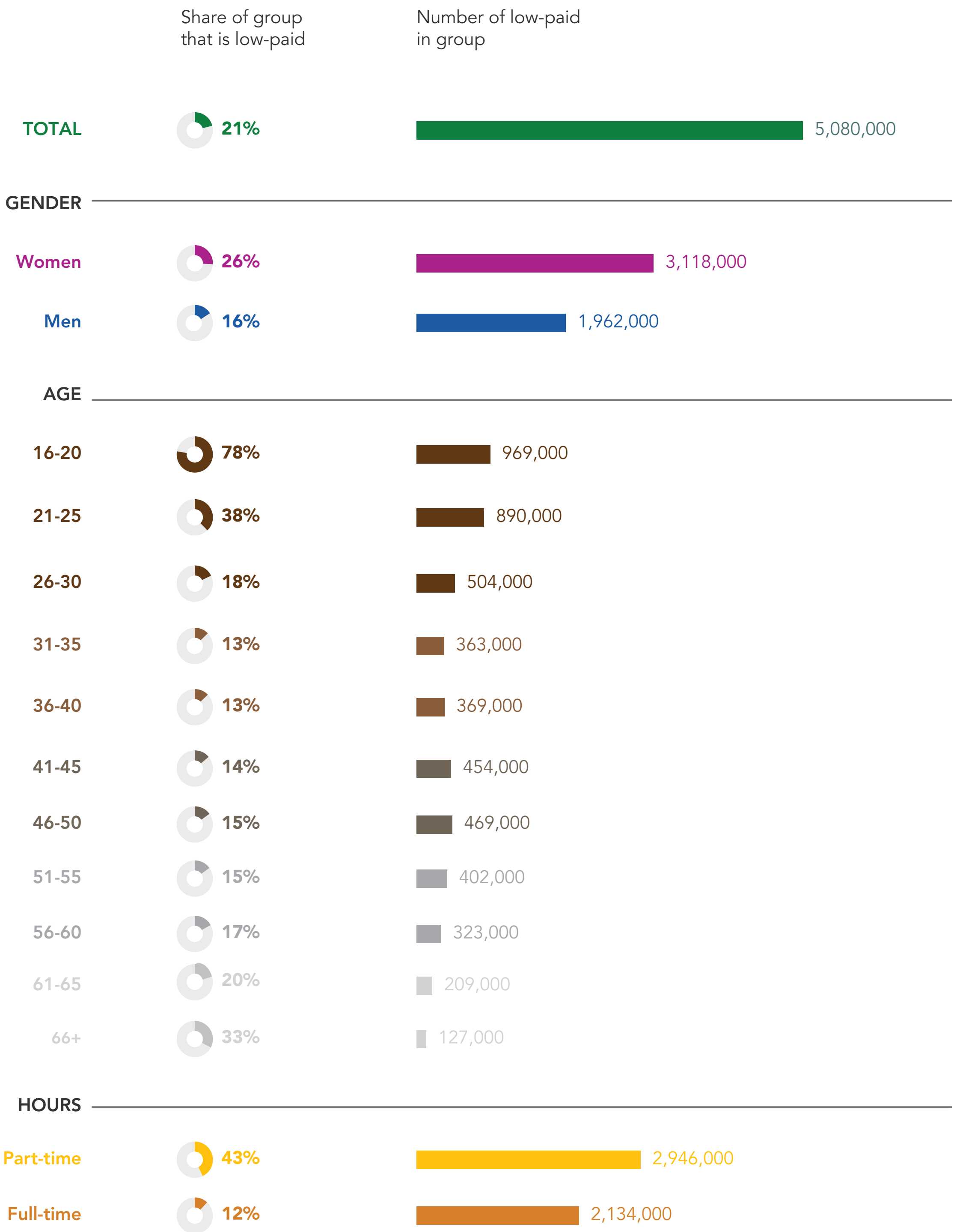


Figure 20b: Low pay by sector

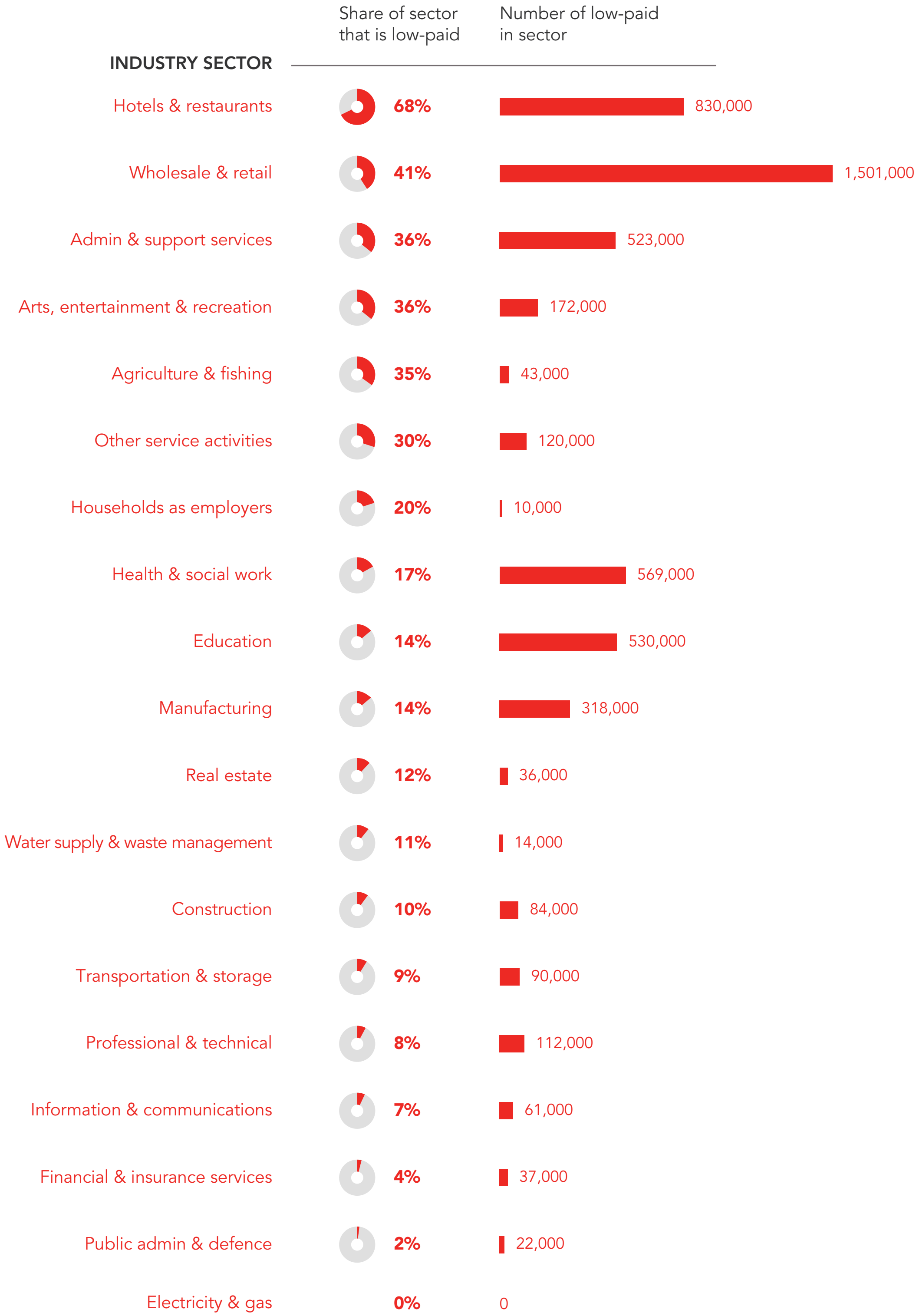
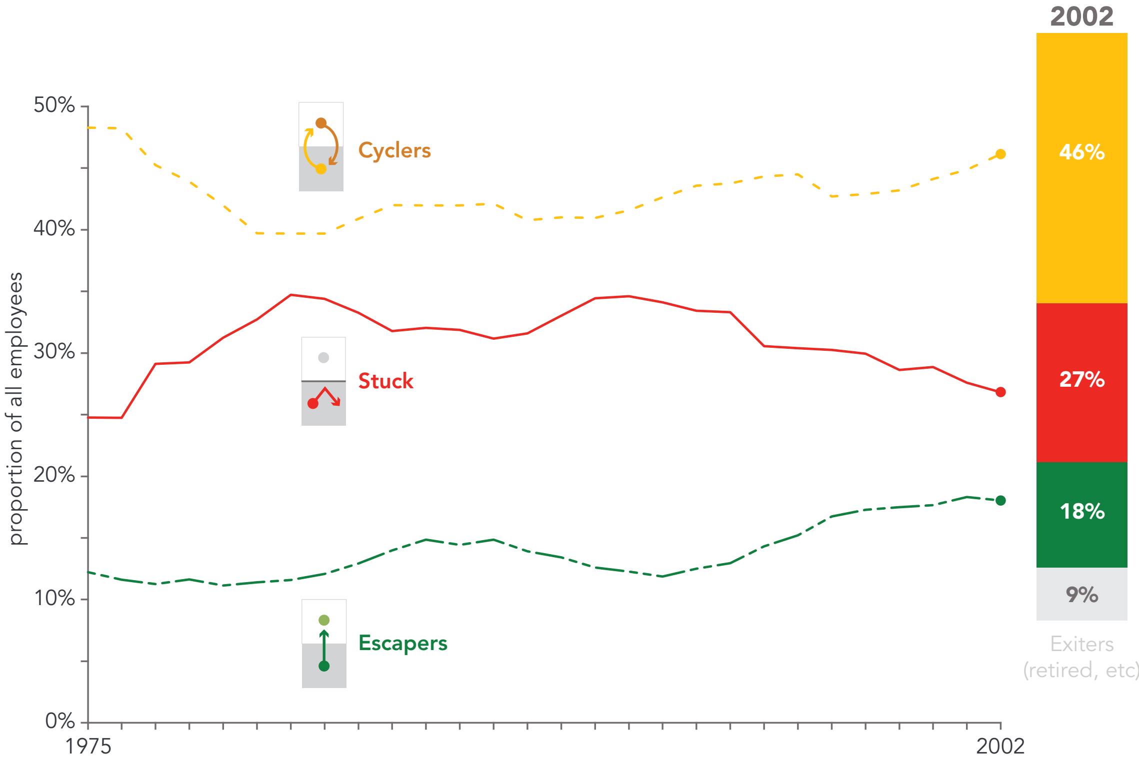


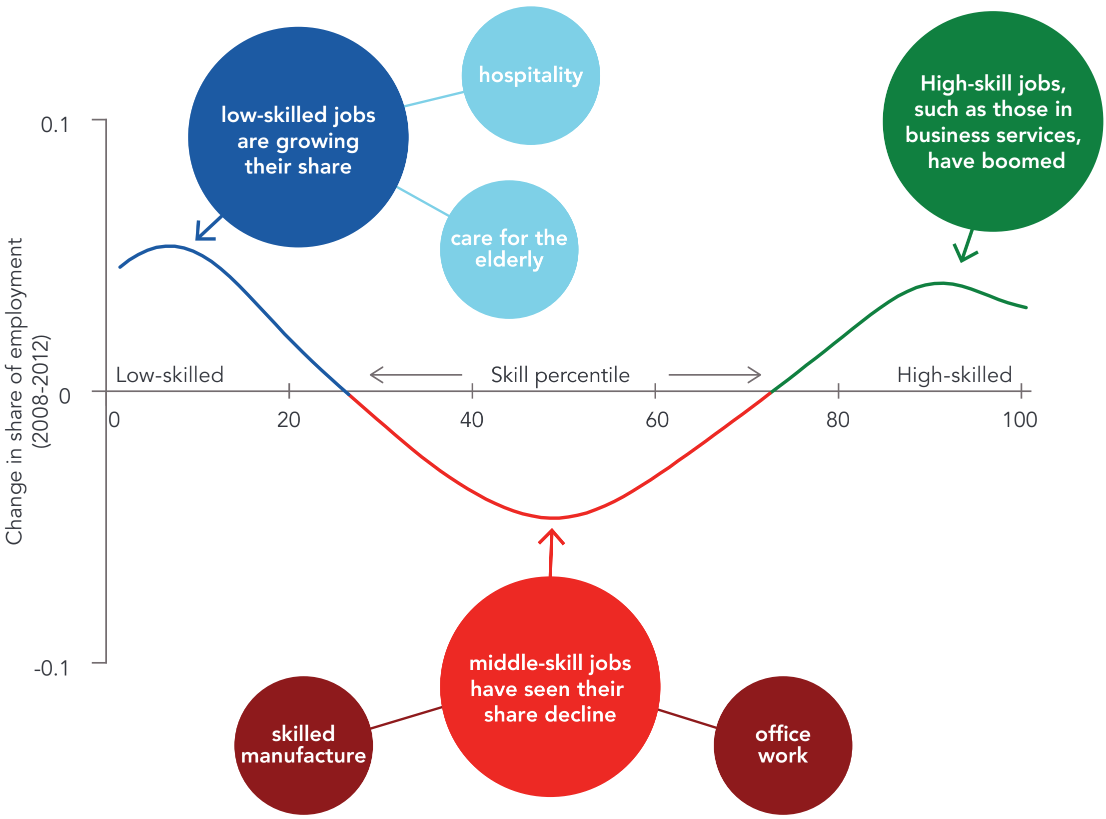
Figure 21: Earnings mobility over time



The crisis has accentuated the polarisation of the UK labour market...

To better understand whether recent shifts in the UK labour market are here to stay, we can look at changes in the types of jobs the UK economy is creating. Resolution Foundation research had already shown that the UK labour market was polarising before the crisis struck. In common with other mature economies, middle-skilled occupations have been falling as a share of employment while low and high-skilled jobs were expanding. We now know the crisis accelerated these trends. From 2008 to 2012 Britain's low- and high-skilled jobs expanded their share of employment while middle-skilled jobs declined faster than they had previously.

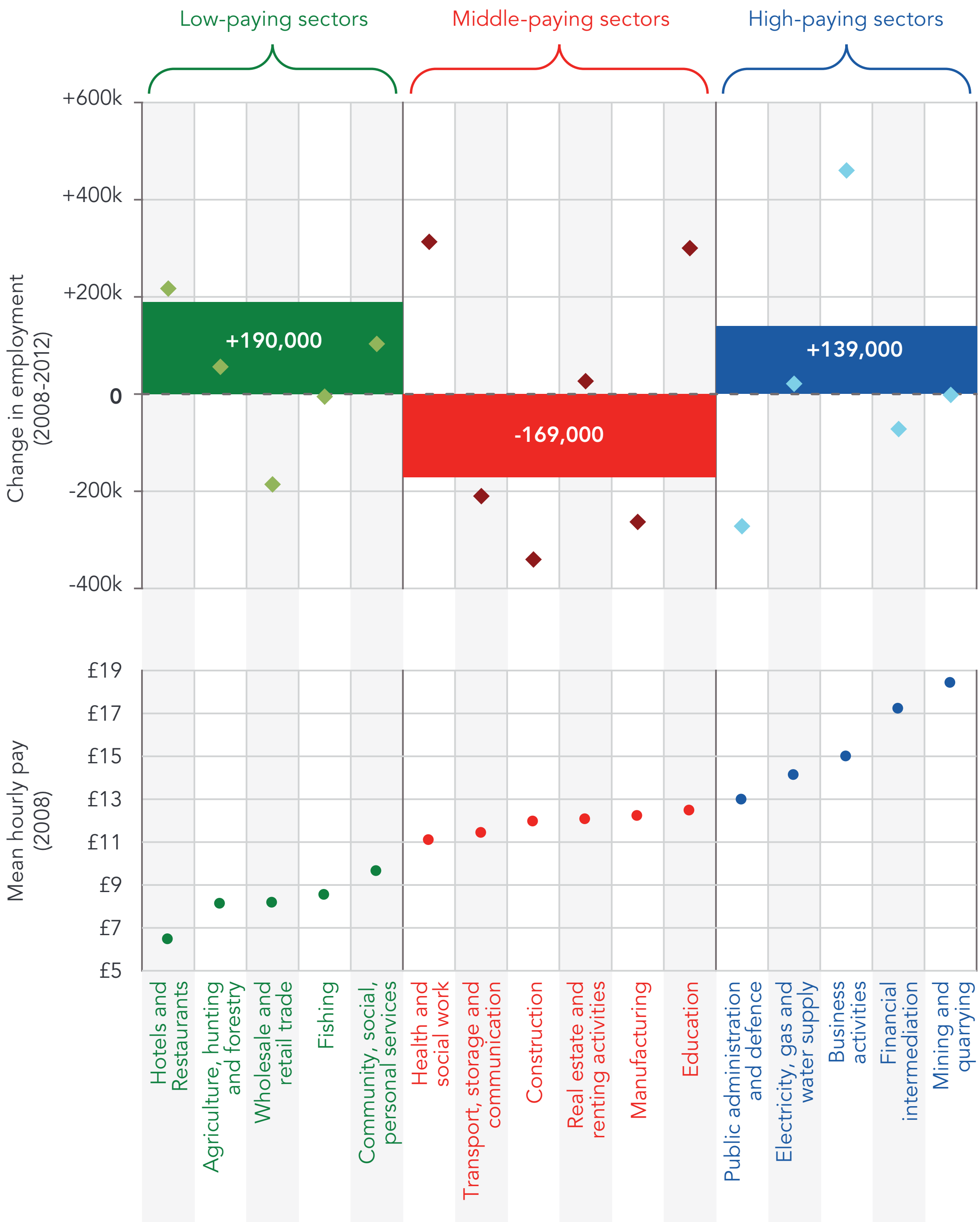
Figure 22: Labour market polarisation in the crisis



The crisis also hit industries unevenly. And again there were success stories at the top and bottom. From 2008 to 2012, the UK's lowest paying sector, hotels and restaurants, saw the fastest employment growth. While overall employment was static, hotels and restaurants, paying an average wage of just £6.78 an hour, saw employment grow of 17.1 per cent. At the other end of the spectrum, business services, paying an average of £15.26 an hour in 2008, boomed. Net employment grew 461,000 (15.5 per cent) from 2008 to 2012, creating large numbers of jobs.

Overall, then, an audit of living standards raises justifiable concerns about the UK's drift towards a polarised jobs market. While some recent changes in the occupational and industrial make-up of the UK are clearly cyclical in nature, and so likely to be temporary, others appear to be more structural, resulting from technological change and globalisation. Add to this demographic trends expanding our low paid and insecure social care workforce, and the UK risks creating a sharper division between low paid and insecure personal service roles at the bottom and a growing number of high paid roles (often in traded services) at the top.

Figure 23: Labour market polarisation in the crisis



Chapter 4
Life on a low to middle income

So far our account of living standards has focused on trends in earnings and incomes taking account of inflation. How do these changes feel for the households living through them? In important ways, the squeeze has changed the kind of life a typical working family can afford to live in modern Britain. To understand this in more detail we need to consider not just changes in real wages and incomes but also shifts in the prices of important goods and services.

The work of the Resolution Foundation focuses in particular on those living on low to middle incomes. These 5.8 million households, not the very poorest in society but below the middle and often struggling to get by, are a barometer of the economic health of working Britain.

The average post-tax income in low to middle income household fell 7.4 per cent in real terms between 2008-9 and 2011-12 but these figures vary significantly for different households. Table 1 brings these experiences to life and casts these figures forward with three case studies of how family incomes are being affected by the downturn. Most striking is the scale of falls that are typical, with incomes in these cases set to drop by between 4 and 11 per cent from 2010-11 to 2015-16. Across these families, the squeeze on earnings has been substantial, though some family types – particularly those who earn enough to pay tax and too much to receive substantial state support – have seen an overall gain from the increased personal allowance. The families hit hardest are those affected by both an earnings squeeze and cuts to state support. In some of these case, families lose as much as £4,500 over the life of the parliament, with the gains from tax cuts easily outweighed by reductions in tax credit support.

Table 1: How family budgets have been affected—three case studies



		GROSS EARNINGS	INCOME TAX & NICS PAID	POST-TAX EARNINGS	WORKING TAX CREDIT	CHILD TAX CREDIT	CHILD BENEFIT	TOTAL INCOME	CHANGE FROM 2010-11: WAGE SQUEEZE	TAX/BENEFIT SQUEEZE	CHANGE
Aaron & Sophie **3 children** *3, 5 and 7* **single-earner** *(35hr/wk)*	**2013-14**	**£35,034**	£8,462	£26,572	£0	£1,259	£2,389	**£30,220**	- £2,564	+ £1,279	**- 4.4%**
	2014-15	**£35,402**	£8,511	£26,890	£0	£891	£2,360	**£30,141**	- £2,197	+ £833	**- 4.6%**
	2015-16	**£35,907**	£8,672	£27,234	£0	£498	£2,336	**£30,068**	- £1,692	+ £254	**- 4.9%**
Ben & Mandie **2 children** *under 1 and 4* **dual-earners** *(42hr/wk total)*	**2012-13**	**£31,030**	£4,473	£26,558	£5,062	£5,838	£1,709	**£39,166**	- £2,271	- £1,739	**- 9.2%**
	2013-14	**£31,356**	£4,486	£26,870	£4,576	£5,764	£1,688	**£38,898**	- £1,945	- £2,333	**- 9.9%**
	2014-15	**£31,803**	£4,603	£27,200	£4,081	£5,701	£1,671	**£38,652**	- £1,498	- £3,026	**- 10.4%**
Nikki **2 children** *3 and 17 (in education)* **single parent** *(32½hr/wk total)*	**2012-13**	**£24,023**	£4,939	£19,084	£3,496	£5,838	£1,709	**£30,128**	- £-1,758	- £1,609	**- 10.1%**
	2013-14	**£24,275**	£4,951	£19,325	£3,141	£5,764	£1,688	**£29,917**	- £1,506	- £2,072	**- 10.7%**
	2014-15	**£24,622**	£5,061	£19,561	£2,776	£5,701	£1,671	**£29,708**	- £1,160	- £2,626	**- 11.3%**

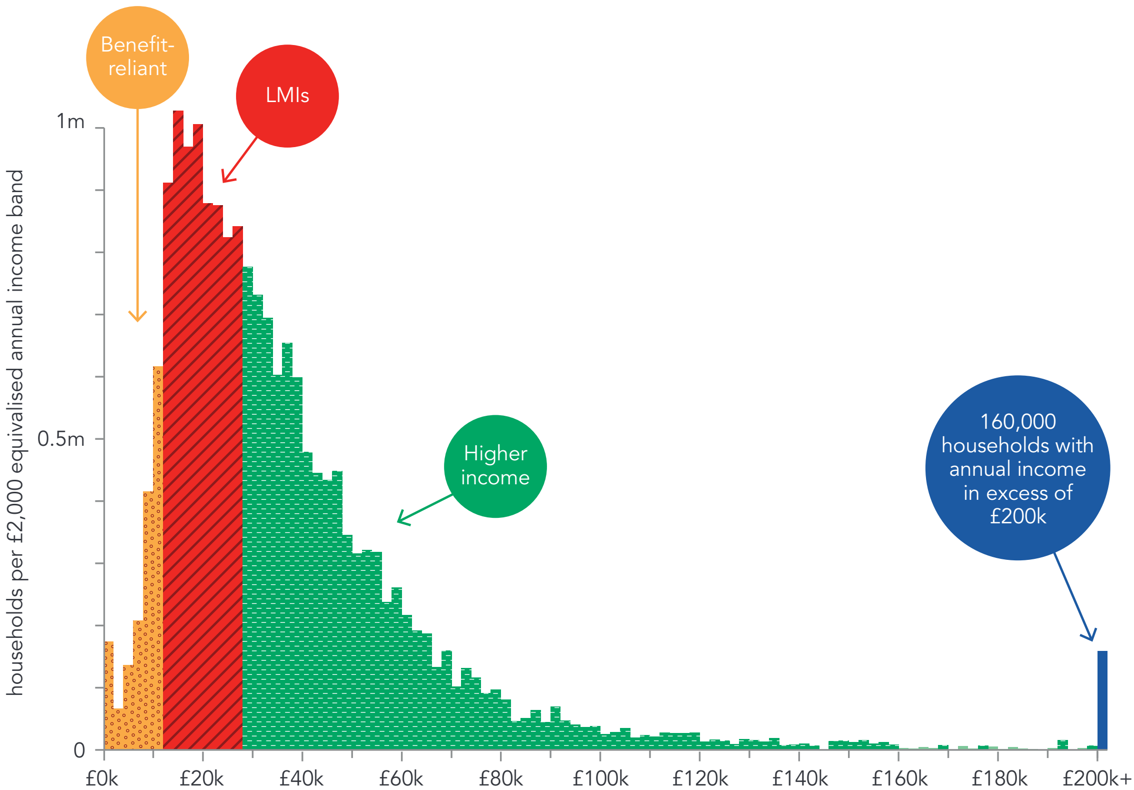
Households on low to middle income

Households on low to middle incomes are defined by the Resolution Foundation as those of working age relying primarily on earned resources but with incomes below the median in the UK. This excludes the poorest 10 per cent of households and those who receive more than one fifth of their gross household income from means-tested benefits, excluding tax credits.

To define households on low to middle incomes we follow the standard practice of 'equivalising' incomes, which means adjusting incomes for household size. This accounts for the simple fact that families have to share their incomes across more people, and so enjoy a lower standard of living compared to someone living on their own, for the same income.

In practice, the working-age population living on low to middle incomes includes couples without children living on a gross annual household income of between £13,000 and £30,000. Couples with two children fall into the group if their gross incomes are between £18,000 and £42,000. The group is overwhelmingly in work and around half of the households in the group have dependent children. In total, 5.8 million households, including 10.4 million adults and 5.1 million children – roughly a third of the UK working-age population – live on low to middle incomes.

Figure 24: Low to middle income households in the income distribution



Spikes in the price of essentials have hurt lower income households...

An unusual feature of the long downturn from 2008 to 2013 has been the way weak income growth has coincided with sharp rises in the prices of certain goods. Together, these trends mean that low to middle income households now spend 44 per cent of their income on the key categories of housing – not including mortgages – fuel, food and transport, up from 41 per cent in 2004-05, leaving many with less discretionary income. Spending on essentials would have increased further if not for families cutting back in some areas, for example transport.

The impact of particular price rises can be seen by digging beneath headline inflation (which at 2.0 per cent in December 2013 is back in line with the Bank of England's target). Over the five years from 2008 to 2013, as the post-crisis hit to incomes started to bite, average prices across the UK economy rose 20 per cent—faster than in the 1990s and early 2000s but still well below the inflation spikes of earlier decades. Yet in the same years the price of electricity, gas and other fuels rose 61 per cent, food prices 31 per cent, and transport prices 25 per cent. Other categories like education saw price spikes as government policy changed, rising by 67 per cent. Meanwhile the price of clothing fell 8 per cent and the price of audio-visual equipment plummeted 41 per cent. Technology has also become dramatically cheaper over the last decade.

The double effect of weak wages and rising prices is clear in the number of hours of work it takes to pay for essential items although these are not the full range required to meet the minimum standard of living. In 2007, a minimum wage worker required 96 hours of work to pay an average household gas bill, even assuming they earned too little to pay any direct tax. In 2013 this had jumped by 43 per cent to 138 hours. The hours needed to pay for the typical electricity bill rose 20 per cent from 68 to 82 in the same period. For a better paid, median wage worker, the hours of salary needed to pay for a gas bill rose from 50 to 73 and for an electricity bill from 36 to 44 hours, increases of 46 and 23 per cent respectively. While for some households these figures are improved by recent tax cuts, for most working families benefit and tax credit cuts outweigh these upsides.

Figure 25: Share of income spent on essentials

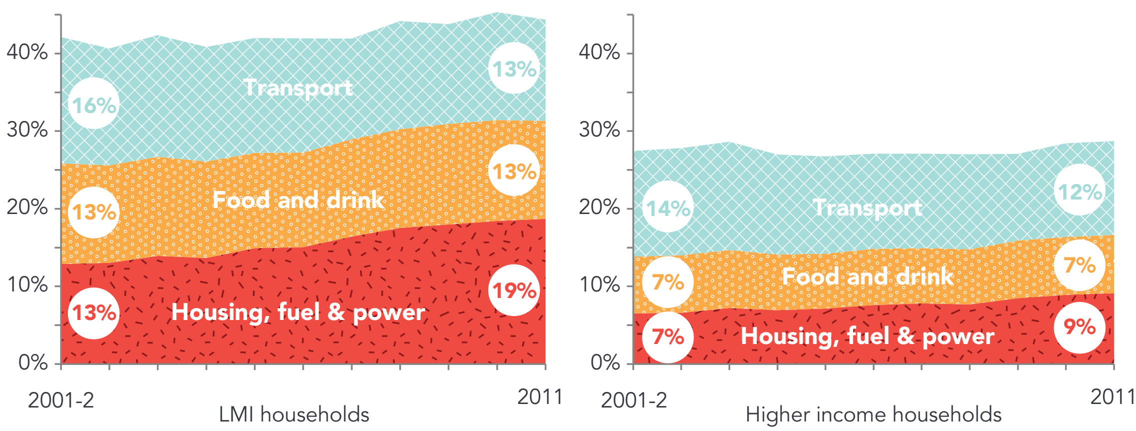
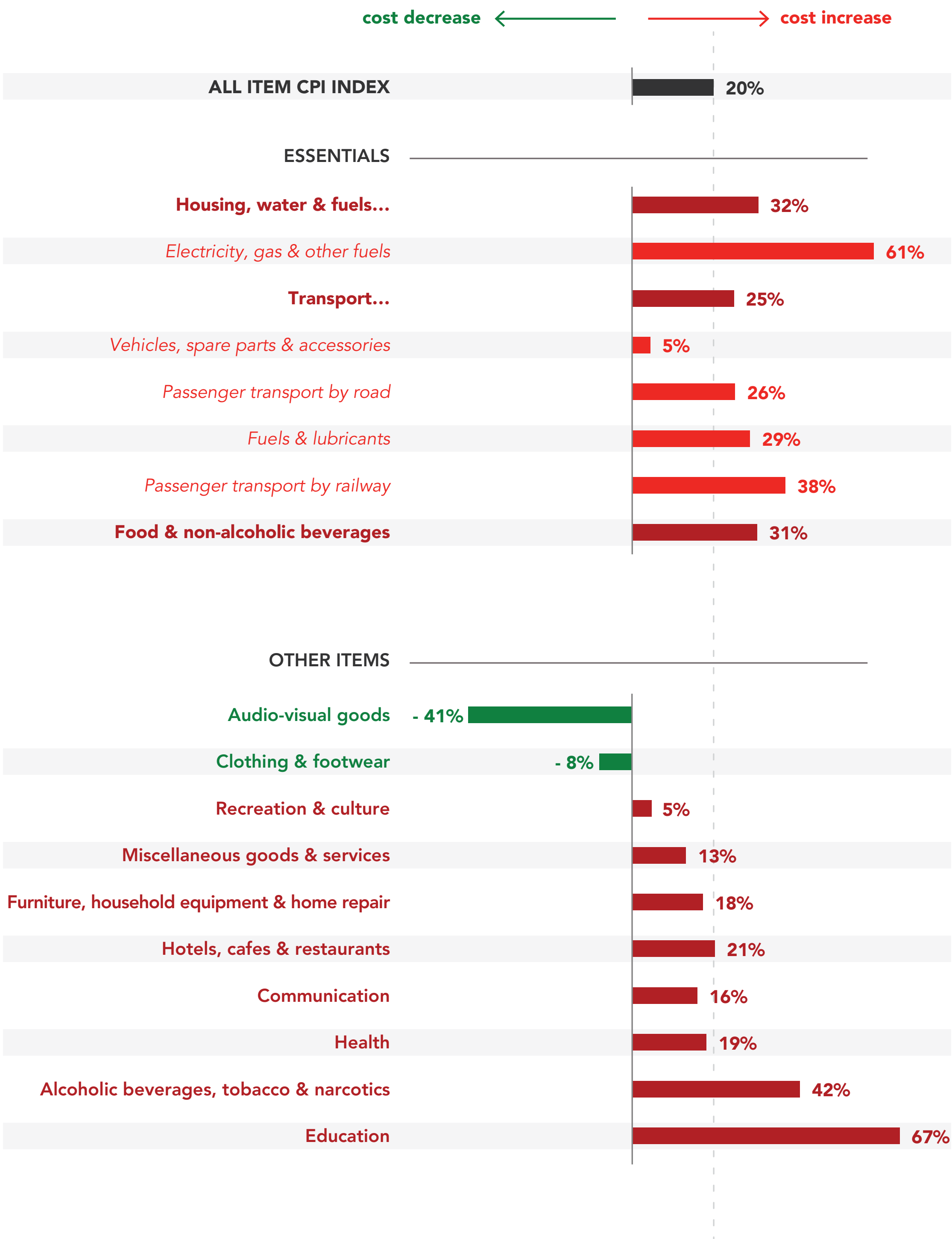


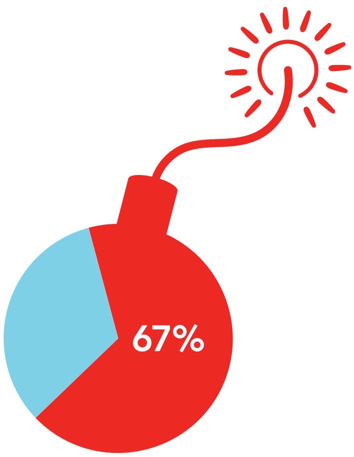
Figure 26: The changing price of key goods (2007-13)



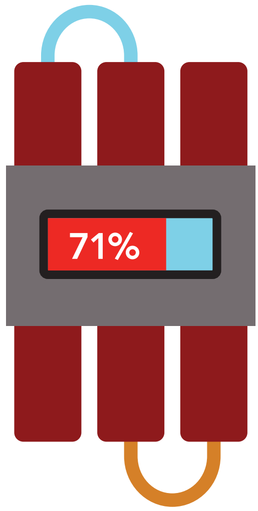
Many low to middle income households will have no assets for retirement...

The need to spend more on essentials presents all households with trade-offs but these bite harder for those already living close to the edge. Most directly, it leaves many with little each month to save or invest in a pension. Half (51 per cent) of the 7.6 million families on low to middle incomes have no savings at all. Two-thirds (67 per cent) have less than a month's income in savings, leaving them vulnerable to small shocks. And many struggle to save for the longer term. Nearly three-quarters (71 per cent) of those on low to middle incomes have no pension or a frozen pension. Combined with the trends in home-ownership set out below, many have in effect few or no assets for retirement.

Figure 27: Savings and pensions among low to middle income households



two-thirds of low-to-middle income families have less than one month's net income in savings



nearly three-quarters of low-to-middle income working-age adults who have had a job have no pension

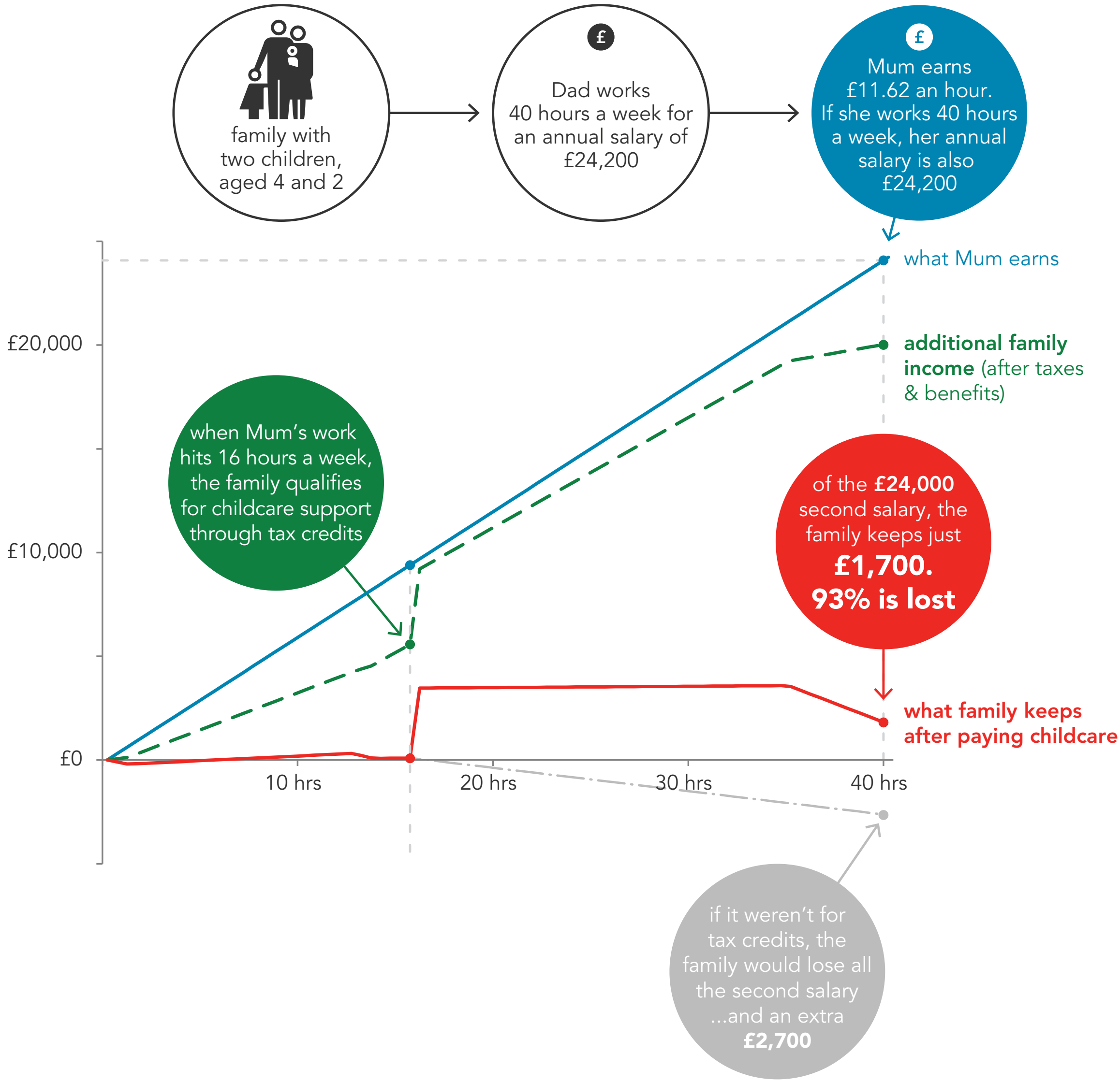
After childcare costs, many second earners barely benefit from going to work...

It is also the case that certain price rises directly erode work incentives. Nowhere is this more obvious than in the case of childcare. The price of childcare has risen 11 per cent in the last 2 years. Many second earners, overwhelmingly women, barely benefit from going to work. If a typical second earner in a middle income household with two young children takes a full-time job paying £24,000 a year, she takes home just £1,700 of that salary after childcare costs, direct taxes and reduced benefits and tax credits. That is equivalent to being paid £33 for working a 40 hour week, or 83 pence an hour. In effect, she faces an effective tax rate of 93 per cent due to a combination of taxes, withdrawn benefits and childcare costs, leaving the family almost no better off with two earners than with one.

Weak work incentives for those

with young children help explain the profile of female employment in the UK. The UK is an average performer overall but lags internationally when it comes to the employment rates of women with young children and particularly single mothers. The UK also has an unusually high share of female part-time work, with many middle and high-skilled women stepping down into lower quality roles after having children.

Figure 28: How the cost of childcare undermines work incentives



Perhaps the fastest changes to life on a modest income are taking place in relation to housing. A triple-hit of falling incomes, high prices and limited access to credit has put home ownership beyond the reach of much of Britain's working population, although this varies significantly by region. Young people have seen their prospects change at particular speed. For many, the idea of raising a deposit without parental help is now implausible. If the average low to middle income household were to save five per cent of their income a month it would take them 24 years to accrue the typical first-time buyer deposit in today's conditions. Such figures help to explain why so many young people now feel home ownership has moved out of reach – and why there is such pressure on government to restore access to high loan to value mortgages even as many economists warn of wider consequences.

Figure 29: Number of years it would take to save for a deposit

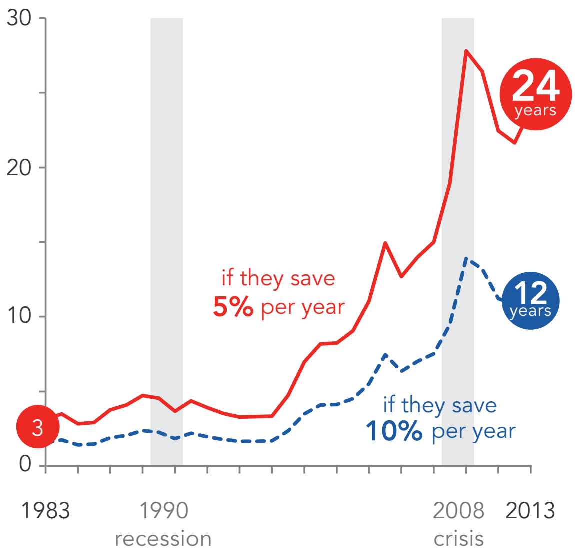
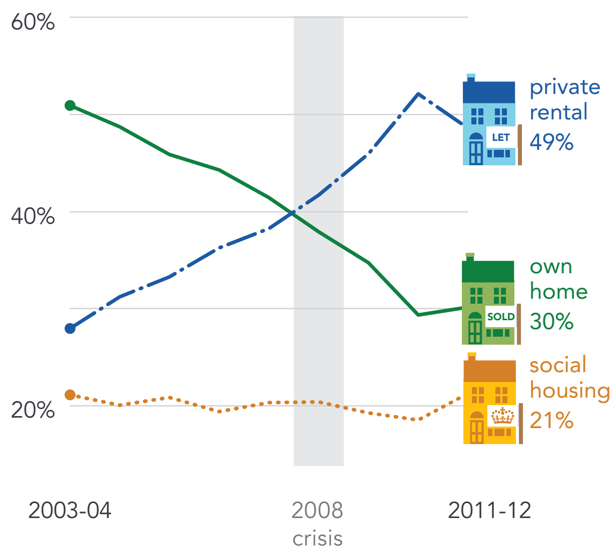


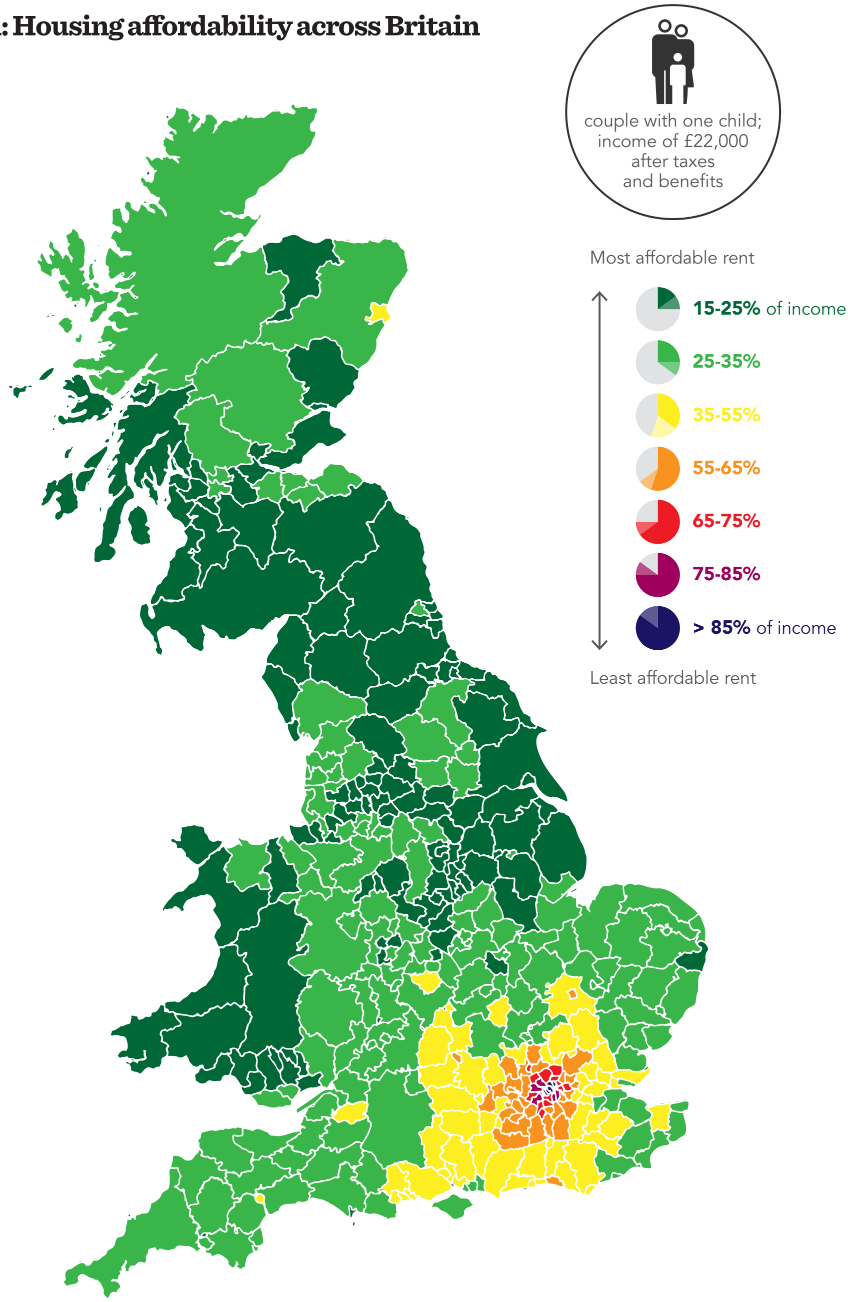
Figure 30: Housing tenure among under-35s on low to middle incomes



As a recovery has started to take hold in the housing market in recent months, regional imbalances have re-emerged. The average house in London now costs £437,000. For the same amount you could buy three average houses in the North East (£148,000). Yet despite the far lower price of housing outside London, housing affordability is changing patterns of tenure across Britain. As recently as 2003 half (51 per cent) of people under 35 living on low to middle incomes owned a home and 28 per cent rented privately. Today the figures are 30 and 49 per cent. These changes mean that many now embark on starting a family while still living in insecure privately rented accommodation.

And for many renters and buyers, the day to day pressure of housing costs is becoming hard to bear. Figure 31 shows the percentage of income that a typical low to middle income couple household with one child must spend to rent a two-bed home in local authorities across Britain. We assume they rent low cost housing. Even so, in a third of all local authorities, the couple would find themselves spending more than a third of their net income on rent – widely regarded as an unaffordable position.

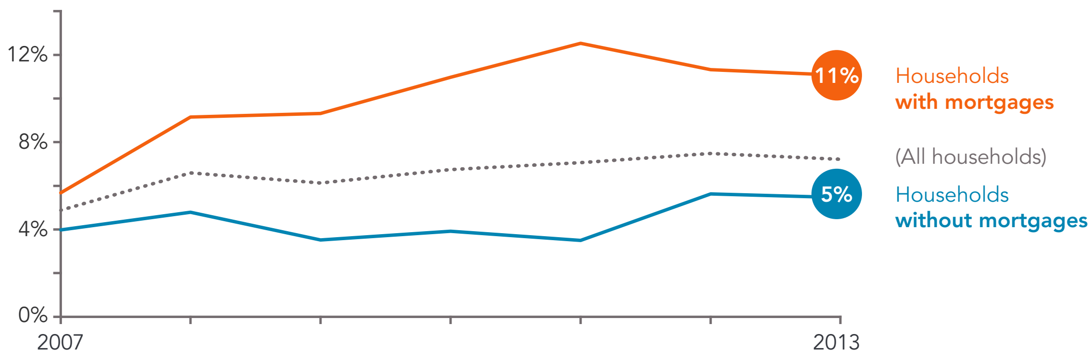
Figure 31: Housing affordability across Britain



Many households are struggling with debt despite historically low interest rates...

Yet perhaps the most worrying implication of Britain's increasingly unaffordable housing is what it means for household debt. For many of those who have bought a home, particularly in the last years of easy credit before 2008, debt repayments are high. And falling interest rates have provided only partial relief. In fact, families with mortgages appear to have been more exposed to the squeeze on living standards in recent years than others. Looking at those households that are left with less than 5 per cent of their gross income once they've paid their tax, housing and utility bills and met any debt repayments, we see that the overall proportion increased by half (from 5 per cent to 7 per cent) between 2007 and 2013. Yet the increase was sharpest among families with mortgages – nearly doubling from 6 per cent to 11 per cent. This somewhat surprising result is likely to be driven in part by the magnitude of debt held by such families and delays among lenders in passing declining rates through to customers. But it is also likely to reflect the fact that mortgage holders are disproportionately drawn from young families, who face greater exposure than others to wage falls, cuts in welfare and cost of living pressures. Given how close they are to the edge, there is a clear question about how these households will cope when interest rates start to normalise.

Figure 32: Households living on the edge after housing costs and other bills



Chapter 5
Prospects for a shared and stable recovery

This report has shown how an unprecedented squeeze on living standards is changing life across working Britain. But with growth now having returned to the UK economy, how quickly will these pressures ease? It is no exaggeration to say that this will be one of the central questions of British politics in 2014: will a recovery quickly benefit the broad majority of working households or will it prove hollow, not feeding through into household incomes, or reaching some households but not others?

Long lags in the data make this a very difficult question to answer: we will have to wait a year, in some cases more, until we know with accuracy what is happening to key measures of earnings and incomes today. This difficulty is not new. But the speed with which the economy is changing makes it particularly problematic today. In this chapter, we do the best that can be done to project trends in living standards. We apply a mix of official forecasts and the latest large scale survey data to plot the likely path of household incomes in 2014 and beyond.

What kind of recovery are we hoping for?

The starting point for any debate about the recovery is a measure of how much has been lost. As we saw in Chapter 2, the net income of a typical working-age household has fallen 6.2 per cent in real terms since 2008, equivalent to a drop of over £1,500. This represents an absolute decline – that is, it shows how far households have fallen. But it does not consider the larger gap between where households are, and where they would have been in the absence of a crisis. From 1996-97 to 2007-08, the UK economy generated growth in net working-age household incomes of 2.1 per cent a year. Had this continued, the median working-age household in Britain would now be 23 per cent better off, equivalent to £5,500 a year for a couple without children.

As this fact highlights, the debate over a recovery is not just about numbers. It is also about how a recovery is defined.

Will a recovery quickly benefit the broad majority of working households or will it prove hollow, not feeding through into household incomes?

This comes down ultimately to how much of the damage from 2008 to 2013 we accept to be permanent. Broadly speaking there are three levels of ambition:

1 One view is that a recovery for living standards simply means forward motion – that is, incomes rising again. Any growth is success. This view accepts that the years from 2008 to 2013 caused irretrievable losses to the level of people's incomes. It is also consistent with an acceptance that the UK economy is permanently damaged in terms of the pace of income growth we can expect in future. From 1996-97 to 2007-08, a period that included both strong years and weak years for incomes, the UK saw average (median) annual net income growth for all households of 2.3 per cent. To celebrate far weaker growth as we recover from an historic fall would suggest an era of diminished expectations.

2 A more ambitious view is that a recovery in living standards means restoring incomes quickly to their previous peak in 2008. This still means accepting permanent losses to the level of household income relative to what would have happened without the downturn, but it means rejecting the idea that the pace of income growth must now be lower.

One way to think of this is as a pit stop for living standards. Although some upwards progress in living standards has been irretrievably lost, households will eventually be re-joining the road where they left it, and will be resuming the speed at which they used to drive.

3 The most ambitious view is to aim for incomes to recover to the level they would have attained without a crisis. This implies chasing a moving target, catching up on all of the ground that was lost in the crash and in the gradual early recovery. As a result, it means driving faster than we used to, in terms of income growth, for a sustained period of time. Because of the scale of the losses from 2008 to 2013, this is an extremely demanding test. Few serious analysts, if any, think this can be achieved.

In this chapter we explore these scenarios by attempting to project household income growth in the UK recovery as it looks today. We do this by looking at the two main components of income: earnings and state support. We then look at the prospects for both under current official forecasts. This gives us some sense – however imperfect – of when living standards might turn the corner, when they might recover to their position in 2008, and whether – if ever – we can hope for incomes to reach where they would have been without a crisis. As in Chapter 1, in addition to our headline findings, we find that different groups will experience the recovery in different ways.

Wages may break even this year but are unlikely to recover until late in the decade...

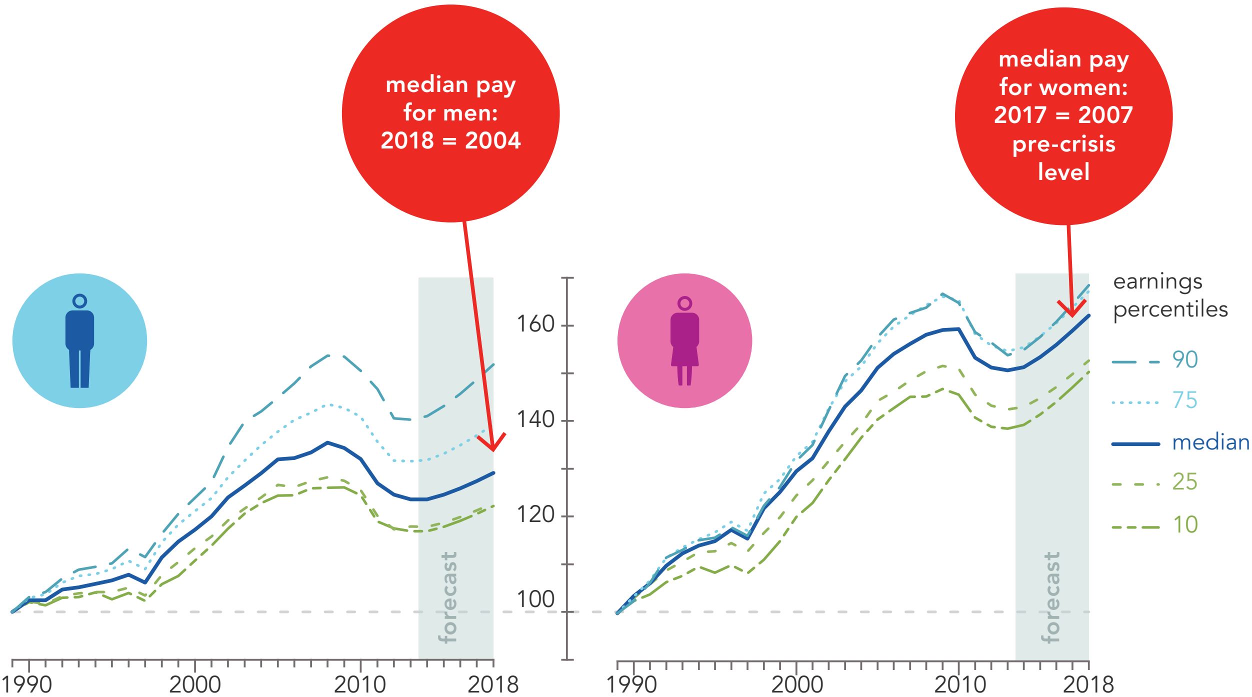
Starting with the wages of individual workers, latest OBR projections suggest that the squeeze on real earnings will ease in 2014. Wages are forecast to keep pace with inflation this year for the first time since 2009. This official forecast relates to average pay, not median pay, and masks variations by sex and across the earnings distribution. If the pattern of recent decades is repeated we would expect modest and middle earners to fare worse than average.

Even so, these forecasts project that real wages will just turn positive again in 2014. Yet it would still be some years before earnings recover to their pre-crisis level. Inferring from OBR forecasts and applying past patterns of wage growth, median full-time earnings for men would have recovered less than half (47 per cent) of their post-2008 decline by the end of the forecast period in 2018. At that rate, it would take until 2022 simply to be back at their 2008 position – a 14 year pause. Median full-time earnings for women, which typically rise slightly faster as the gender pay gap is eroded, would restore their pre-crisis level in 2017. Of course this assumes that the gender pay gap continues gradually to narrow. Once again, these figures are based on CPI inflation. They would look significantly worse for both men and women under RPI.

Any hope of closing the gap with where wages would have been without the crisis is now effectively lost

It is clear from Figure 33 that any hope of closing the gap with where wages would have been without the crisis is now effectively lost. For example, if over the next decade we wanted median full-time earnings to catch-up to where they would have been without the 2008 crisis (assuming they had instead continued their 1989-2008 average growth rate), this would require ten successive years of 3.6 per cent real terms wage growth. This has not happened at any time on record, suggesting that the last five years have almost certainly left a large permanent scar on wages in Britain.

Figure 33: Growth in weekly earnings for full-time employees



State support will fall, pulling down overall incomes...

How will these earnings forecasts feed through into overall living standards? While a resumption of real earnings growth will support household incomes, the overall path of incomes will also depend on trends in state support. If we add planned welfare cuts to planned tax cuts, overall tax-benefit policy will act as a drag on net incomes across a broad portion of working Britain in the coming years – as would be expected in a period of net fiscal consolidation. What is widely under-appreciated is the extent to which these changes will define the recovery for millions of working households across Britain.

Many working households will be running up a down escalator in the recovery...

One reason that welfare cuts will shape the recovery is the sheer number of households that now receive state support. Tax credits currently support 4.6m families, including 7.7 million children and 6.7 million adults, around half of all families in Britain with dependent children. Universal Credit will support a roughly similar number and create a large number of both winners and losers compared to the current system.

Within this there will be 3.2 million working households relying on tax credits who will find themselves running up a fast-moving down escalator in the recovery. There are several reasons for this. Earnings are forecast to rise at an average rate of 2.5 per cent for three years from 2013-14, then an average of 3.6 per cent for the subsequent two years. By contrast, most elements of working-age welfare – affecting working and non-working households alike – are set to grow by a flat 1 per cent for three years from 2013-14, producing a real terms cut, before rising in line with CPI inflation thereafter.

Second, as is typically the case with tax credit systems, claimants face high marginal tax rates (which will mostly remain under Universal Credit). This means that working families who receive tax credits must raise their earnings by roughly £4 to take home £1 of extra pay.

Third, these problems are compounded by specific recently announced cuts to Universal Credit which freeze the value of the 'work allowance – which plays a similar role to the personal tax allowance –for three years from 2013-14. This freeze means working families will keep less of their earnings before their Universal Credit entitlement is withdrawn. An eligible couple with children will have to raise their earnings by almost £1,000 by 2017 just to cancel out the loss in family income resulting from this specific change.

Finally, it is important to note that, in the next parliament, tax cuts will also be of far less value to such families since the majority of any gains will be immediately withdrawn through a lower Universal Credit entitlement.

Why our projections will be wide of the mark

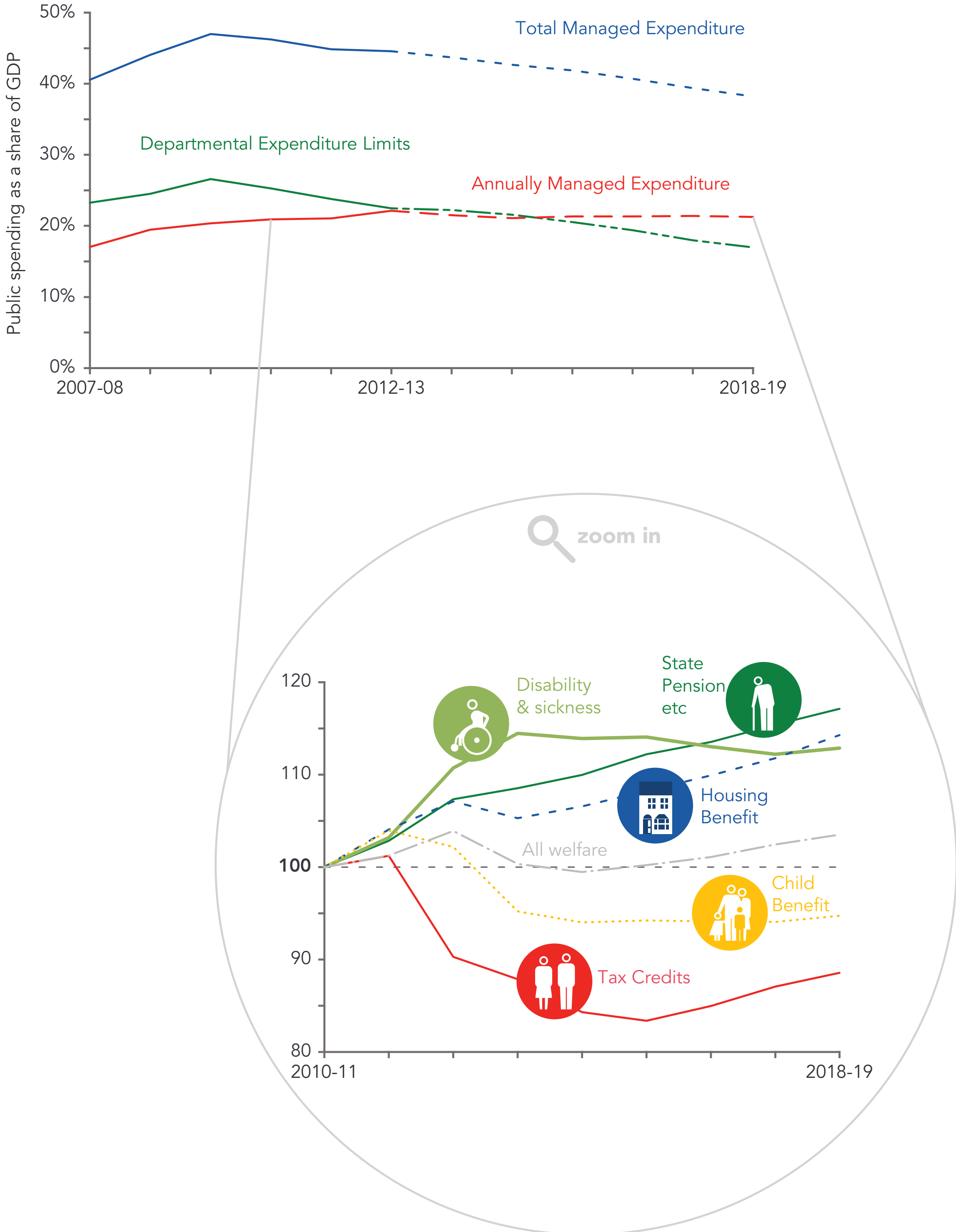
Like all such projections, ours are highly uncertain. They should be viewed as indicative of a likely direction of travel based on current knowledge rather than highly calibrated forecasts. This is not least because they are anchored on OBR forecasts for average earnings and employment growth that have themselves regularly and significantly been revised over recent years. Taking the OBR as our starting point, we then make four further assumptions. This adds further uncertainty to our final results. On the one hand, because we err toward optimism, there are grounds for thinking our forecasts overstate the prospects for income growth. On the other, forecasts in a nascent recovery are often too pessimistic.

First, we apply the OBR average earnings forecast but assume that wage growth will vary across the earnings distribution in the same way it did from 1997 to 2007. In general, this was a relatively broad-based period for earnings growth. Second, we assume that the OBR's expected increase in the employment rate benefits all working households. Third, we reduce taxes paid by middle income households in line with announced plans for above-inflation increases in the personal tax allowance. Fourth, we assume that tax credits and benefits for middle income households only fall in line with announced government policy on mean-tested working-age benefits. This means that we assume no further cuts. And it also means we apply cuts evenly, possibly under-stating cuts to middle income households as state support becomes more focused lower down.

Our assumptions regarding state support are particularly optimistic. As things stand, government forecasts show total spending falling by £25 billion in the two years after 2015. The Chancellor has said £12 billion of this decline is earmarked to come from welfare spending. Following these two years, current plans imply a further £18 billion of cuts over the subsequent two years. This would imply a further £9 billion of welfare cuts if today's split between welfare and departmental cuts were to be maintained. None of these cuts are included in our forecasts as they have not been formally allocated by HMT. If today's policy towards the state pension is maintained, the vast majority of these cuts will come from working-age welfare.

Finally, it is important to restate that we use the CPI measure of inflation. Those who favour the RPI measure of inflation, which includes elements of housing costs, will think our projections for real wages look optimistic.

Figure 34: Future trends in state support



Median incomes look likely to rise by 2015 but will remain below their 2008 level for years to come

We can bring together anticipated trends in earnings with forecast trends in state support to generate a tentative projection for household incomes. We assume no further changes in taxes and benefits measures beyond those already scored by the Treasury. We therefore include both the April 2014 and April 2015 planned increase in the personal tax allowance. We also take account of announced cuts to benefits – though far deeper reductions in support are likely, especially for those of working age (see box on p49).

Figure 35 shows the annual growth rates we forecast for median household income and Figure 36 shows the path of median incomes for all households and for those of working-age. Median household incomes now look set to be broadly flat this year and next, with incomes falling slightly in 2014-15 (-0.3 per cent) and growth turning marginally positive in 2015-16 (0.2 per cent). Median household income is then expected to start growing slowly, by 0.6 percent, 0.8 per cent and 0.7 per cent in the three years from 2016-17. After having fallen more steeply in recent years, our projections suggest slightly stronger growth for working age households compared to the aggregate figures for the whole population. This is largely because working-age households receive a larger share of their income from work, and so benefit more from rising earnings and higher employment.

Figure 35: Projected annual growth rates for median net household income

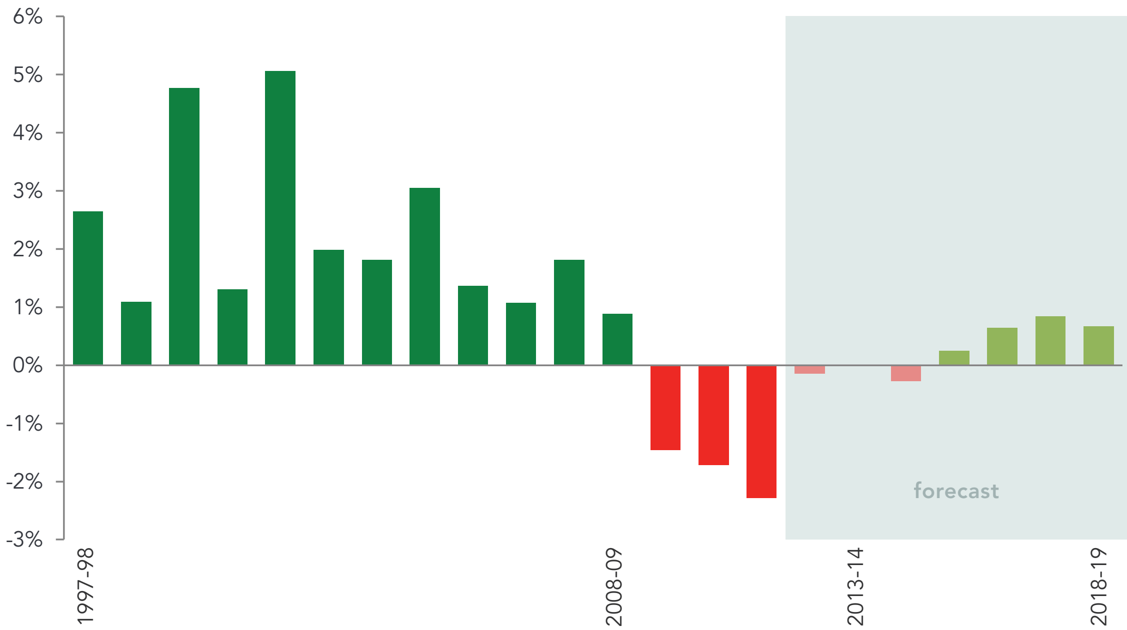
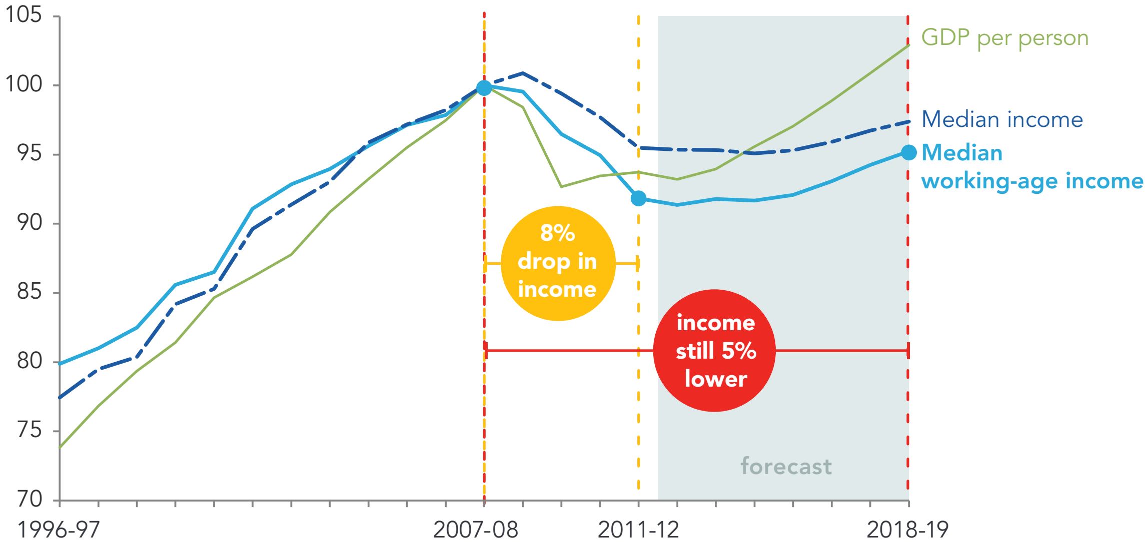


Figure 36: Projected growth of median net incomes



As noted at the start of this chapter, the way we interpret these figures depends heavily on what we expect from a recovery. Given the scale of income falls in recent years, some will say that any return to growth is a major achievement. Indeed, the expectation of positive income growth may already be feeding through into improved perceptions and consumer confidence as households start to anticipate being a bit better off than they were the year before – something that has not been true of median incomes since 2007-08.

Others, though, will be surprised and disappointed at the prospect of five more years of relatively weak real income growth. With so much ground to be made up, the implications for the path of living standards would be stark. Under the projections we present here, the median net household income in the UK would remain below its pre-crisis peak at the end of the forecast period in 2018-19. At this point median income for working-age households would still be 4.7 per cent below its level in 2007-08, leaving it around its level 14 years earlier in 2004-05. Trends for working-age low to middle income households are expected to track closely those for median working-age households.

When we look at 'all households' (including the retired) we see that the shallower drop in median incomes after 2008 means that living standards are likely to recover slightly closer to their previous peak by the end of the period. Even so, by 2018-19, we project that median incomes will still be around 3.5 per cent below their 2008-09 peak, which is equivalent to the level they were at around 2005-06.

In cash terms these losses would be large. Median income for all households would have fallen from around £23,700 a year in 2008-09 to around £22,900 in 2018-19. Had the pre-crisis growth rate continued, median income among all households (including retired households) would have been £30,300 in 2018-19, almost third (33 per cent) higher than it is now forecast to be. For working-age households, continuing the long-run average income growth would have left median income around £32,400 a year in 2018-19, roughly 31 per cent higher than these forecasts anticipate it to be.

In sum, our projections reinforce the view that households have taken a large and permanent hit to their living standards. As things stand there is little reason to expect a swift recovery to previous levels of income. However we judge success, our current path heads towards option 1: a permanent hit to the level of income and an apparently sustained period in which the pace of income growth will be slower than in the past. Of course the exact projections will doubtless prove wide of the mark and there are huge uncertainties (see box on p49). The recovery could accelerate faster than anticpated. But it is worth restating that our results assume no further cuts to state support, the lower CPI measure of inflation, and a repeat of the broad-based pattern of earnings growth that was seen from 1997 to 2007.

Without stronger wage growth or a sharp rise in investment, the recovery will be built on falling savings…

Weak income growth would undoubtedly have wider implications for the strength and shape of the UK economic recovery. When growth surprised on the upside in 2013, it was led primarily by household consumption. The OBR now forecasts that household spending growth will continue to outpace income growth, requiring the savings ratio to fall. Having previously forecast a recovery in household savings, the OBR now anticipates that the savings ratio will fall from its current rate of 5.4 per cent to a rate of 4.3 per cent by 2018. This would imply a sustained fall in the savings ratio, though not of the severity of that which occured prior to 2008.

What would it take to avoid a continued fall in the savings ratio while maintaining the OBR's path for GDP? One option is that other components of GDP, notably business investment, buck recent trends and outperform expectations. Another option would be for household consumption to be supported by stronger household income growth. With state support in decline this could come from two avenues: a pick-up in wage growth or even faster employment growth than is currently anticipated.

Households have taken a large and permanent hit to their living standards

To explore the plausibility of these options, we have developed two scenarios: a 'wage-led' recovery in which employment follows OBR projections but pay rises more quickly, and an 'employment-led' recovery in which wages follow OBR projections but employment surpasses expectations. These scenarios are indicative but are useful in giving a sense of the extra work that either wages or employment would need to do to avoid a recovery built on running down savings.

Our results suggest that in order for a wage-led recovery to protect the savings ratio, annual real-terms wage growth would need to reach 1.9 per cent a year through to 2018. This is significantly faster than the OBR's projection of 1.3 per cent a year but is broadly in line with the long-term average annual wage growth recorded from 1991 to 2008 (2 per cent). This is hardly uncharted territory. By contrast, an employment-led recovery would mean moving 900,000 more people into work than the OBR currently forecasts by 2018. The implied employment rate of 61.5

per cent would be higher than any rate recorded since the 1970s.

These numbers demonstrate the extent to which weak wage growth is an obstacle to a sustainable recovery. Without stronger, yet still plausible, levels of wage growth, we are left banking on a pickup in business investment, exceptionally high levels of employment or, instead, falling back on running down savings, in order to underpin the growth in consumption.

Figure 37a: Scenario of a wage-led recovery

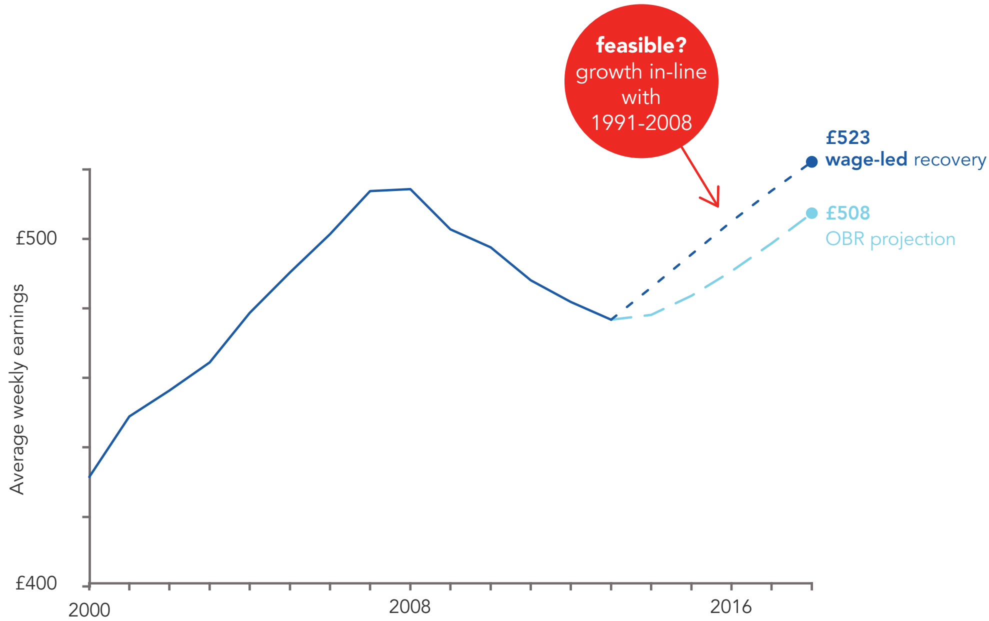
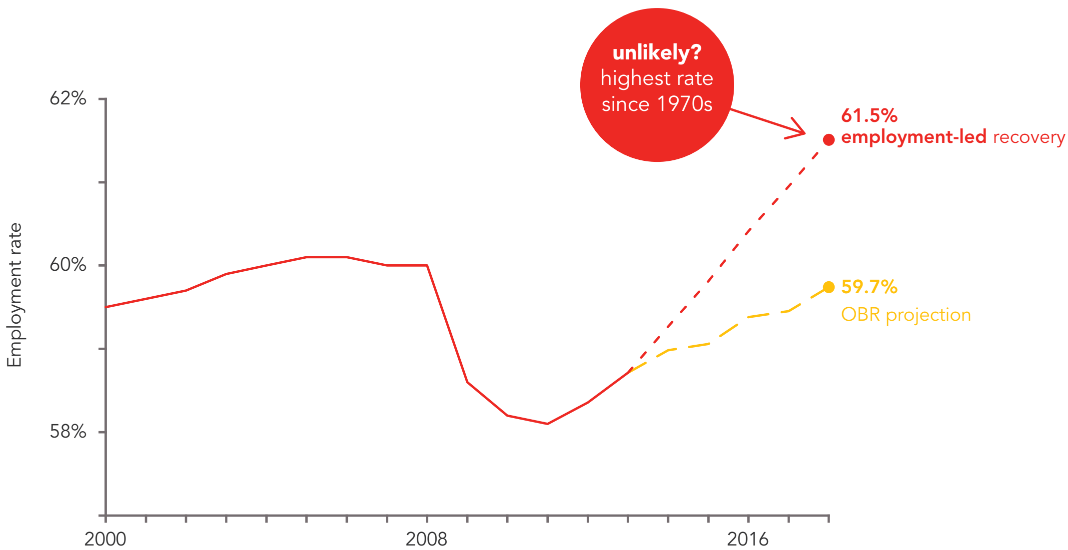


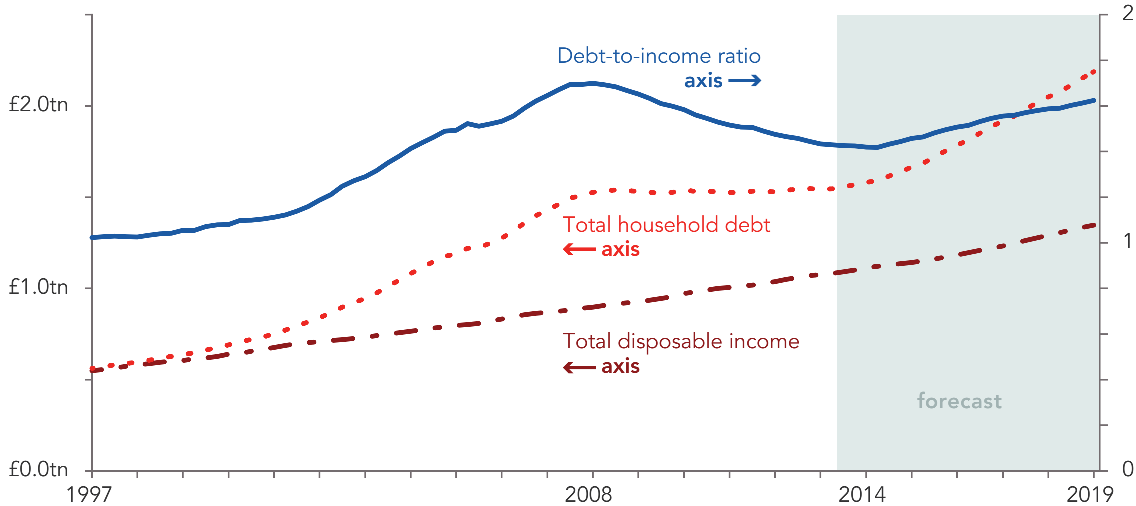
Figure 37b: Scenario of a employment-led recovery



Debt to income ratios are heading back to pre-crisis levels…

We conclude this chapter by considering the debt position of Britain's households. The option of building a recovery on a falling savings ratio becomes even less attractive when we consider the stock of household debt and the pressure from debt repayments. The stock of UK household debt plateaued at just over £1.5 trillion in the six years following 2007. But 2014 marks the end of this pause and household debt is now forecast to rise again, hitting £2.2 trillion by 2019. If household debt were to reach this level, as now forecast by the OBR, this would imply a significant reversal of the deleveraging that has taken place since the crisis. The UK household debt-to-income ratio would be restored to just over 160 per cent, where it was just prior to the 2008 collapse.

Figure 38: OBR forecasts for household debt and incomes



As a number of commentators have pointed out, these levels of debt are not per se unmanageable. And historically low interest rates mean that today's debt levels are affordable for most. It is the distribution of the UK's private debt that raises real concerns, with many borrowers highly exposed to any change in borrowing costs. A sixth of UK mortgage debt sits with households who have less than £200 left at the end of each month. Bank of England analysis suggests that one-quarter of mortgagors would need to take remedial action – cutting spending, finding more work, or changing their mortgage – if the base rate rose 1 percentage point. Half would be in this position if rates rose by 2.5 percentage points, which markets expect them to do by 2018.

As interest rates rise, many households may struggle to service their debts…

These figures produced by the Bank of England relate to an overnight increase in interest rates. But how vulnerable will households in fact be when rates eventually rise? Resolution Foundation research has shown that many households could face repayment difficulties in the coming years. 600,000 households currently spend more than half their income on debt repayments, a situation we call 'debt peril'. Even if household income growth is stronger than the OBR expects and is evenly shared across the income distribution, then the 3 per cent base rate that the market currently expects in 2018 would push this figure to 1.1 million. If the rate rose to 5 per cent, 1.7 million households would be in debt peril. If household income growth is weaker and less evenly shared (for example, due to welfare cuts) the number of households in a perilous position could rise as high as 2 million by 2018.

Conclusion

It is clear that 2014 will be a critical year for living standards, telling us much about how the link between economic growth and personal gain is evolving. For the first time in five years, it now seems that the growth side of this equation has made a decisive shift. A solid recovery in GDP is underway. On the other side, it seems likely that living standards – on average – have now stopped falling. Our projections suggest they will probably flat-line before starting to climb slowly again in 2015. It will be much longer before households make up the ground that has been lost. The consequences of this permanent change to the path of living standards will be felt economically, politically and socially for many years to come.

Annex

Figure	Data source	Notes
1	OBR; ONS	Chart compares most recent OBR projections for year-on-year growth of real GDP in 2013 and 2014, and outturn for 2013 (ONS series ABMM)
2	RF analysis of DWP, Family Resources Survey and ONS, National Accounts dataset	Reference period for GDP and RDHI measures is the calendar year. For the FRS household income measures it is the financial year (i.e. Apr-Mar). National accounts series used: ABMI, NRJR, IHXW and IHXZ. The FRS household income measures relate to equivalised net household income (S_OE_BHC), and are adjusted for inflation using RPI-J.
3	RF analysis of ONS, UK Economic Accounts dataset	Chart shows indices of real disposable income per head: 100 = level at start of recession National accounts series used: IHXZ (IHXY for 1980 recession series). Seasonally adjusted RDHI per head measure only available back to 1987 Q1, so 1980 recession series based on non-seasonally adjusted RDHI per head.
4	ONS, Economic Review Jan 2014	Chart shows Households Final Consumption Expenditure (household spending) and Gross Fixed Capital Formation (business investment), expressed in terms of standardised units. Standardised units reflect the number of standard deviations a specific value is above or below the series average. They are It is calculated by taking the specific observation, subtracting the average for a given period and dividing by the standard deviation for the same period. ONS series: NPQT, ABJR
5	RF analysis of ONS National Accounts and National Balance Sheet datasets	Chart shows indices of aggregate real household disposable income (RDHI) and aggregate real household final consumption: Q1 1987 = 100 ONS series: NRJR, ABJR, HAYO, NRJS
6	RF analysis of ONS, Annual Survey of Hours and Earnings, and OECDstat data on aggregate GVA, employee compensation and total wages	Chart shows contribution to decline in the share of Gross Value Added (GVA) flowing to workers in the bottom half of the earnings distribution between 1977 and 2012. Profit share is calculated as 'one minus' the labour share. The labour share is total employee compensation (wage and non-wage) as a fraction of total GVA. Employer costs refer to the non-wage component of total employee compensation, primarily employer NICs and pension contributions. Wage data used to determine earnings distribution is weekly and covers all employees - i.e. full-time and part-time. It is based on earnings data from ASHE, covering GB pre-1997 and the UK thereafter.
7a	RF analysis of ONS, Regional GVA release data	Nominal GVA converted into real terms using the aggregate GVA deflator (ONS series CGBV). The share of the decline relates specifically to the portion of the total decline that can be allocated to regions. A small proportion of GVA cannot be assigned to regions (2 per cent in 2008). Of the total decline in real GVA, 18% is accounted for by unassigned GVA. The figures presented therefore relate to each regions share of the remaining 82 per cent of the decline.
7b	RF analysis of ONS, Regional GVA release data	Nominal GVA converted into real terms using the aggregate GVA deflator (ONS series CGBV). The UK figures relate to GDNP per capita (ONS series IHXW)
8	RF analysis of DWP, Households Below Average Income	Original income' incorporates income from employment, self-employment, investments, occupational pensions, private benefits and other non-state sources. Households are grouped based on their position in the equivalised original income distribution.
9	RF analysis of ONS, Annual Survey of Hours and Earnings	Chart shows change in inflation-adjusted gross weekly wages at different point of the all-employees earnings distribution. RPIJ used for inflation adjustment. ASHE weekly pay reference period is April.

10	RF analysis of ONS, Annual Survey of Hours and Earnings	Chart shows change in inflation-adjusted median gross weekly pay by employee type between 2008 and 2013. RPIJ used for inflation adjustment. ASHE weekly pay reference period is April.
11	DWP, Benefit expenditure tables	Chart shows change indices for various components of welfare spending: 100 = level in 2010-11
12a	RF analysis of DWP, Family Resources Survey.	Chart shows inflation-adjusted median equivalised net household income (S_OE_BHC) for different household types. RPIJ used for inflation adjusted, with incomes expressed in 2011-12 prices. Working-age households are defined as those headed by an individual below pension age.
12b	RF analysis of DWP, Family Resources Survey.	Indexed version of chart 12a: 100 = level in 1997-98
13	RF analysis of Bank of England, NMG Survey, 2005 & 2013.	Chart compares selected percentiles of the net worth distribution in 2005 and 2013. 'Net worth' represents 'total assets' (financial assets including bank/building society saving accounts or bonds, stock and shares, ISAs, Child Trust Funds, NS&I account/bonds and premium bonds, but excluding pensions, and the value of the main family home (it does not account for second homes or property that is rented out)) minus 'total liabilities' (any mortgage and unsecured debt).
14	RF analysis of ONS, Annual Survey of Hours and Earnings	Chart shows inflation-adjusted median annual earnings for all employees. Inflation adjustment has been made using RPIJ. CPI-adjusted trend shown by dashed line. Values are expressed in 2012-13 prices.
15	RF analysis of ONS, Labour Productivity dataset	ONS series LZVB. Trend line shown for 1971 to 2007.
16a	RF analysis of OBR projections	Chart shows indices of successive OBR projections for real average earnings (CPI adjusted): 100 = level in 2008
16b	RF analysis of OBR projections	Chart shows indices of successive OBR projections for total employment rate: 100 = level in 2008
17	RF analysis of ONS, Labour Market Statistics	Chart shows decrease/increase in total jobs since 2008. The green line shows the raw change in the number of jobs since 2008. The red line shows the jobs gaps: the total number of jobs minus the number of jobs required to maintain the employment rate at its 2008 level (60.3 per cent) ONS series used: MGRZ, MGSL
18	RF analysis of ONS, Labour Market Statistics dataset	Red line (left-hand axis) shows proportion of workers (employees and self-employed) that work part-time. Blue line (right-hand axis) shows average weekly hours worked per worker (employees and self-employed). ONS series used: YCBH, MGRZ & YBUV
19	RF analysis of DWP, Family Resources Survey, and ONS, Labour Market Statistics dataset	Top chart shows proportion of all workers (employees and self-employed) that are in temporary work, involuntarily in part-time work and involuntarily in temporary work. Bottom right-hand chart shows inflation-adjusted median gross weekly earnings among the self-employed. RPIJ used for inflation adjustment, with income expressed in 2011-12 prices. Self-employed adults are defined as those whose main employment status is 'self-employed'. ONS series used: MGRZ, YCBZ, YCCF & YCCX.
20a	RF analysis of ONS, Annual Survey of Hours and Earnings	Chart shows proportion and total number of employees that were low-paid in 2012, across different groups. Employees are defined as low paid if their hourly pay is less than two-thirds of the median all-employee hourly wage (£11.15 in 2012). Data refer to all employees who have not had their pay affected by absence in the time covered. Figures relate to hourly pay recorded as at April 2012.

20b	RF analysis of ONS, Annual Survey of Hours and Earnings	Chart shows proportion and total number of employees in each sector that were low-paid in 2012. See notes for chart 20a. Industry groups correspond to official SIC 2007 categories.
21	RF analysis of ONS, New Earnings Survey Panel Dataset 1975-2012	Escapers are defined as those among the low paid who are non-low paid in the final three years of the subsequent decade. The stuck are defined as those of the low paid who only ever held low paid jobs in the subsequent decade. Cyclers are defined as those among the low paid that had a non-low paying job for at least one year in the subsequent decade. Low pay is defined as being paid less than two-thirds of the contemporary median hourly wage.
22	RF and Centre for Economic Performance analysis of ONS, Labour Force Survey	Skill percentiles are defined on the basis of mean wage in 2002. Graph shows smoothed growth in employment shares by percentile scaled relative to the average across all occupational wage percentiles—that is, a positive number shows an increased share in total employment, while a negative number implies a fall.
23	RF and Centre for Economic Performance analysis of ONS, Labour Force Survey	Change in employment relates to net change employment by industry.
T1	RF calculations based on stylised family	Employment earnings increased in line with projected growth of the 25th percentile of the earnings distribution. Tax and benefits based on rates and thresholds according to information in Budget 2011, Autumn Statement 2011, Budget 2012, Autumn Statement 2012, Budget 2013 and Autumn Statement 2013. All values expressed in 2012-13 prices (CPI adjusted).
24	RF analysis of DWP, Family Resources Survey 2011-12	Income groups based on the first two stages of the standard FRS-based RF group definition: (1) Working-age households are defined as those headed by an individual below pension age. (2) Households are grouped according to where they stand in the distribution of gross equivalised household income. Those in decile 1 are “benefit-reliant”. Those in deciles 2-5 are “low to middle income”. Those in deciles 6-10 are “higher income”. Under the third and final stage, households that get more than 20 per cent of their income from means-tested benefits (excluding tax credits), are defined as “benefit reliant”. Therefore chart 24 overstates the number of LMIs, and understates the number of benefit-reliant households.
25	RF analysis of ONS, Living Costs and Food Survey	Chart shows mean proportion of disposable household income spent on essentials. Housing expenditure excludes mortgage interest payments, capital repayment of mortgages, council tax, Northern Ireland rates, housing alterations and improvements and moving and purchase costs. Rent is net of rebates and benefits. Income groups based on standard LCFS RF group definition: (1) Working-age households are defined as those where the household reference period’s economic status is not ‘retired’, or where retirement pensions account for less than three-quarters of total income. (2) Households are grouped according to where they stand in the distribution of gross equivalised household income. Those in decile 1 are “benefit-reliant”. Those in deciles 2-5 are “low to middle income”. Those in deciles 6-10 are “higher income”. (3) Finally households reporting ‘social security’ as their main source of income are defined as “benefit reliant”.
26	RF analysis of ONS, CPI data	Chart relates to changes in prices between November 2007 and November 2013.

27	RF analysis of DWP, Family Resources Survey 2011-12	Income groups based on standard FRS-based RF group definition (see chart 24 notes). 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. ‘”Savings” cover all assets other than housing. Those with values between £1,500 and £20,000 are asked detailed questions and totals are taken at the end of the month (i.e. just before payday). Those reporting savings below £1,500 or above £20,000 have their total capital estimated from information about interest income.
28	RF childcare model	Chart relates to a specific example family: a couple with two children, aged two and four. Both main and second earners have an hourly wage of £11.62. Main earner works 40 hours per week. Family is assumed to have eligible housing costs of £100 per week and liable for £1,285 council tax. Family are assumed to use 1.2 hours of childcare for every hour worked by the second earner (47 weeks per year), which includes take up of childcare provided under the Early Years Entitlement.
29	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 OBR, Economic and fiscal outlook, December 2013 Bank of England, Inflation Report, November 2013	Chart shows hypothetical number of years it would take for the average low to middle income household to save for a deposit. House price projections for 2014-2017 are based on UK level projections from the OBR. Future deposit rates are based on Bank of England projections for the base rate.
30	RF analysis of DWP, Family Resources Survey 2011-12	Chart shows proportion of ‘under-35’ low to middle income households by housing tenure. ‘Under-35’ households are defined as those with a household head aged 16-34. Low to middle income household based on standard FRS-based RF group definition (see chart 24 notes).
31	RF analysis of Hometrack 2012-13	The affordability map relates to a couple with one child at the 35th percentile of the household net income distribution, living in a two bedroom property at the lower quartile of the local housing distribution. Affordability is measured in terms of rent as a proportion of net household income.
32	RF analysis of Bank of England, NMG Survey, 2007-2013	Chart shows proportion of households left with less than 5 per cent of their gross income once they’ve pad their tax, housing and utility bills and met any debt repayments.
33	RF calculations using ONS, Annual Survey of Hours and Earnings and OBR, Economic and fiscal outlook, December 2013	Chart shows indices of selected percentiles of the distribution of gross weekly earnings across full-time employees: 100 = level in 1989 Trends from 1989-2013 based on analysis of ASHE data. Projections for the period 2014-2018 are calculated by applying a ratio to the OBR’s projections for average earnings growth. Ratios are calculated for each point in the earnings distribution and reflect the ratio of average annual growth in full-time wages at that point in the distribution to average annual growth of mean wages among all full-time workers in the period 1997-2008. All figures are adjusted using CPI inflation.

34	RF analysis of OBR, Economic and fiscal outlook, December 2013, OBR, Public finances databank and DWP, Benefit expenditure tables	DEL and AME totals are adjusted to account for switches associated with localisation of Council Tax Benefit and retention of business rates by local authorities. TME and AME totals excludes Royal Mail and APF
35	RF modelling based on ONS, Annual Survey of Hours and Earnings, DWP, Family Resources Survey, OBR, Economic and fiscal outlook and DWP, Benefit expenditure tables	Chart shows year-on-year growth rates for inflation-adjusted median net household income. CPI (outturn and OBR projection) used for inflation adjustment. Trends from 1996-2011 are outturns. Projections for the period 2011-2018 are calculated by splitting disposable household income into its various components. Gross earnings are assumed to grow in line with projected growth in real gross annual earnings in the relevant part of the earnings distribution. A consistent adjustment is made to reflect projected improvements in the overall employment rate, and a further adjustment is made for above-inflation increases in the personal tax allowance, which mean that net earnings rise for any given level of gross pay. Benefits are projected to grow in line with the OBR's projection for real terms expenditure on relevant per household benefits, and tax credits are similarly assumed to grow in line with the OBR's projection for per household real terms expenditure in this area. All remaining income is expected to keep pace with CPI inflation.
36	RF modelling based on ONS, Annual Survey of Hours and Earnings, DWP, Family Resources Survey, OBR, Economic and fiscal outlook and DWP, Benefit expenditure tables	Chart shows indices for GDP per capita (ONS series IHXW), median net income across all households, and median net income across working-age households: 100 = level in 2007-08 See chart 35 notes.
37a	RF modelling based on ONS, National Accounts and OBR, Economic and fiscal outlook	Average weekly earnings expressed in 2013 prices (CPI adjusted)
37b	RF modelling based on ONS, National Accounts and OBR, Economic and fiscal outlook	The ONS headline employment rate is the number of people aged 16 to 64 in employment divided by the population aged 16 to 64.
38	ONS, National Accounts and OBR, Economic and fiscal outlook	Chart shows aggregate nominal household debt and aggregate nominal disposable income (left-hand axis), and the aggregate debt-to-income ratio (right-hand axis). The debt-t-income ratio is total aggregate financial liabilities (ONS series NNPP), as a percentage of total aggregate disposable household income (RPHQ annualised).