Institute for Fiscal Studies

Living standards, poverty and inequality in the UK: 2017–18 to 2021–22

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The Institute for Fiscal Studies

Preface

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Contents

Executive summary

Debates over living standards, poverty and inequality in the UK are often hampered by the fact that official data on household incomes are available only with a significant lag. Currently, the latest statistics are for 2015–16. In this report, we attempt to fill this gap by estimating what has happened since 2015–16 to household incomes and poverty rates. We also look at how they might evolve up to 2021–22 if current tax and benefit policy plans are kept to and if the macroeconomic forecasts from the Office for Budget Responsibility (OBR) – for things such as earnings and employment – were correct. There is, of course, significant uncertainty around any macroeconomic forecasts, and hence around any projection of future trends in household incomes based on those forecasts. Notably, the OBR has already indicated that it will downgrade its forecast for productivity – the key driver of earnings – at the Budget later this month. Such a downgrade would leave our projections for median income (based on the OBR's March forecast) looking optimistic. However, our poverty projections, and those for relative poverty in particular, are less sensitive to forecast earnings growth.

We also report projections at a regional level and indicate what characteristics of those regions drive different projected trends in poverty rates. Further, we project how the government's planned direct tax and benefit reforms are likely to affect poverty rates across the country.

Key findings

Real median income is projected to grow by around 5% between 2015–16 and 2021–22 – but this is highly sensitive to future earnings growth.

Real median income in 2015–16 (latest data) stood 3.7% above its pre-recession level. We project that median income has grown by around 1% in total over the past two years and will grow by around 4% in total over the next four years. This is very slow growth by historical standards, and would leave real median income in 2021–22 around 20% lower than if growth since 2007–08 had continued in line with the long-run trend. But these projections depend upon what happens to pay: our previous report showed that for every percentage point (ppt) that earnings growth differs from the OBR expectation, median income growth differs by 0.6ppts per year.

While income inequality has fallen since the recession, it is projected to rise over the next four years.

Between 2007–08 and 2015–16, real incomes rose by 7.7% at the 10th percentile but fell at the 90th percentile. However, this trend is projected to be reversed over the next four years, as real earnings growth boosts the incomes of high-income households and working-age benefits are cut. This is especially true if incomes are measured after housing costs have been deducted: we project that AHC incomes below the 20th percentile will fall in real terms between 2015–16 and 2021–22. However, the future path of inequality is highly dependent upon the distribution of growth in workers' earnings, which is itself highly uncertain.

The official rate of relative AHC poverty is projected to rise by over 2ppts between 2015–16 and 2021–22.

All of the projected increase in relative poverty is driven by relative child poverty, which is projected to increase by almost 7ppts. The relative poverty rates among pensioners and working-age non-parents are projected to remain fairly constant. Planned tax and benefit reforms account for about a third of the projected increase in relative poverty.

With real incomes of poor households stagnant or falling, the official rate of absolute AHC poverty is projected to remain roughly unchanged between 2015–16 and 2021–22, but to increase for children.

These projections are somewhat sensitive to the path and distribution of future earnings growth, but tax and benefit policies also matter: planned reforms are projected to increase absolute poverty by about 1ppt. Absolute child poverty is projected to rise by around 4ppts, primarily due to the impact of planned reforms. Absolute pensioner poverty is projected to fall by over 2ppts, due in large part to the fact that beyond 2018 the basic state pension and pension credit are projected to rise in line with earnings.

Different regions face differing prospects for overall absolute poverty, but all are projected to see absolute child poverty rise between 2013–2015 and 2019–2021.

Absolute poverty is projected to fall in southern regions, the East, Yorkshire & the Humber and Scotland, but rise in the North East, the North West, Wales, Northern Ireland and the Midlands. Although absolute child poverty is projected to increase in each nation and English region, the largest projected rises are in the North East, East Midlands and Wales, which see increases of at least 5ppts. With the exception of London, poverty is generally projected to rise more in areas where it is already higher. The relative fortunes of different regions could be different from our projections if there is significant geographical variation in future growth in rent or pay.

Differences in projected poverty trends across the country are partly driven by the share of income that low-income families get from earnings.

Working-age families in poverty or just above the poverty line in regions such as London and the South East get over half of their income from earnings, whereas those in the North East get only about a third (with most of the rest of their income coming from benefits). Families that are more dependent on benefits are more exposed to benefit cuts, and gain less when real earnings rise.

The projected impact of upcoming tax and benefit reforms on poverty varies across regions, partly due to the differing effects of limiting the child element in tax credits and universal credit to the first two children in a family.

This 'two-child limit' is projected to increase overall absolute poverty by a little under 1ppt and absolute child poverty by over 2ppts. Some regions are affected much more heavily than others: Northern Ireland and the West Midlands, with twice as many large poor families as Scotland and the South West, are projected to see a larger increase in poverty as a result of the policy.

1. Introduction

Since the Great Recession, growth in household incomes has been weak. Between 2007–08 and 2015–16 (the latest data available), real median equivalised household income grew by just 3.7%. This poor performance is largely due to the sharp falls and limited recovery of real earnings, which remain below their pre-recession peak. As is well documented,[1] this period of weakness in real earnings has coincided with meagre productivity growth, with the latter no doubt being a key cause of the former.

However, not all groups of households have seen the same changes in their income. While real incomes at the 10th percentile of the distribution have increased by 7.7% since 2007–08, they have fallen slightly at the 90th percentile. Inequality has therefore decreased over the period – though this fall is considerably smaller if one measures incomes after deducting housing costs.

As the incomes of low-income households have risen faster than median income, relative poverty – defined as the proportion of those with an income of less than 60% of the median – has fallen slightly. Absolute poverty – defined using a fixed real poverty line – has also declined over the period, although by a relatively small amount by historical standards.

A challenge in assessing trends in living standards, poverty and inequality in the UK is that official data on household incomes are released with a significant time lag. At the time of writing, the latest available data cover the financial year 2015–16. In this report, we project changes in household incomes up to the present, based on what we know about changes in earnings and other sources of income from other data and on changes to the direct tax and benefit system. We then provide projections of future trends up to 2021–22. Since we do not produce our own forecasts for key determinants of incomes such as earnings and employment, these projections are our estimates of what would happen to incomes under current policy plans if the latest macroeconomic forecasts (March 2017) from the Office for Budget Responsibility (OBR) were correct. We discuss in the main body of the report which aspects of our projections are more or less sensitive to deviations from these forecasts.

There have not been substantial changes in the macroeconomic or policy environment since our last report in March of this year.[2] The OBR made only small changes to its macroeconomic forecast between its November 2016 and March 2017 reports,[3] and the government has announced little in terms of further direct tax and benefit policy reforms. As these are the major inputs to our projection, our headline projections for UK median income, inequality and poverty are little changed. Our focus in this report is therefore looking beneath the national picture to examine the prospects for different regions, particularly in terms of poverty rates.[4]

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[1] For example, see Haldane (2017).

[2] Hood and Waters, 2017a.

[3] Office for Budget Responsibility, 2016 and 2017a.

[4] We therefore focus less on projections for median income and inequality at the national level. Interested readers can consult our previous report (Hood and Waters, 2017a), where the projections are broadly similar to those in this report but the commentary has a greater emphasis on median income and inequality at the national level.

Projecting regional incomes and poverty rates raises particular challenges. First, the sample sizes for particular regions in the data we use can be small. We deal with this by projecting each future year using three years of base data (as opposed to just one) and then averaging the results. This is discussed in more detail in Appendix A. Second, since we lack official regional forecasts for the key macroeconomic variables our model uses (earnings, employment, rents, etc.), we need to make an assumption about what will happen to these variables in each region. Our approach is to assume that the growth rate in each region is the same as the national growth rate forecast by the OBR. Naturally, the real world is unlikely to follow such a simple path. But the historical data in the Family Resources Survey (FRS) indicate that, while there are certainly substantial differences in the *levels* of these variables across regions (for example, rents are higher in London), there is little evidence of systematic differences in the *growth rates*. As a result, we take uniform growth rates to be a neutral assumption. It is interesting that even with uniform growth rates in these key variables, we project significant differences in poverty trends in different regions, driven by their different levels of exposure to earnings growth and various benefit cuts.

In addition to the uncertainty around regional differences, there are also several sources of uncertainty in the national projections. The OBR's macroeconomic forecasts are a key input to our model, and – as with any such forecasts – these come with a high degree of uncertainty attached. Government policy may deviate from its current plans, or benefit changes may be rolled out at a different rate from that expected. Year-to-year sampling variation in the official household income data could also cause the out-turn results to differ from our projections. Hence, this report should be used as a guide to the broad trends we might expect, rather than being interpreted as a precise projection.[5]

Throughout our analysis, we measure income in the same way as the official Households Below Average Income (HBAI) statistics: at the household level, after deducting taxes and adding on state benefits and tax credits, and rescaled ('equivalised') to take into account the fact that households of different sizes and compositions have different needs. We consider incomes measured both before and after housing costs are deducted (BHC and AHC). All cash figures are given in 2017–18 prices.

The rest of this report proceeds as follows. Chapter 2 presents our projections for UK living standards and inequality through to 2021–22, as well as our projections for poverty at both the national and regional levels. In Chapter 3, we turn to consider the effects of this government's planned direct tax and benefit reforms on regional poverty. Chapter 4 concludes.

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[5]   For a more detailed discussion of the uncertainties around our projections, see section 2.5 in Hood and Waters (2017a).

2. Central projection

In this chapter, we provide our projections for UK median income, inequality and poverty under the government's current policy plans. We then describe our projections for poverty at the regional level and analyse how the concentration of poverty by local deprivation level might evolve over the next four years.

For the sake of brevity, in the rest of the report we refer to fiscal years by their first calendar year – for example, 2017–18 is referred to as 2017.

2.1 Median income and inequality

Our projection for median income is highly dependent upon the OBR's forecast for the future of earnings growth. In Hood and Waters (2017a), we show that for every percentage point (ppt) that earnings growth differs from the OBR expectation, our projection for median income growth per year differs by about 0.6ppts. Thus, uncertainty about the future of earnings translates to uncertainty about the future of median income growth. Notably, in its latest *Forecast Evaluation Report*,[6] the OBR stated that it is likely to reduce its expectations for productivity – the key driver of earnings – in its next forecast. Should earnings turn out to be weaker than the OBR previously expected, our projections for median income growth would be weaker too.

Figure 2.1 shows real household median income in the UK since 1961 (indexed to 100 in 2007), together with our projections through to 2021. It also shows the path median income would have taken had it grown in line with the average annual growth between 1961 (the first year in our consistent series of income data) and 2007.

Figure 2.1. Index of real median BHC income (2007 = 100)
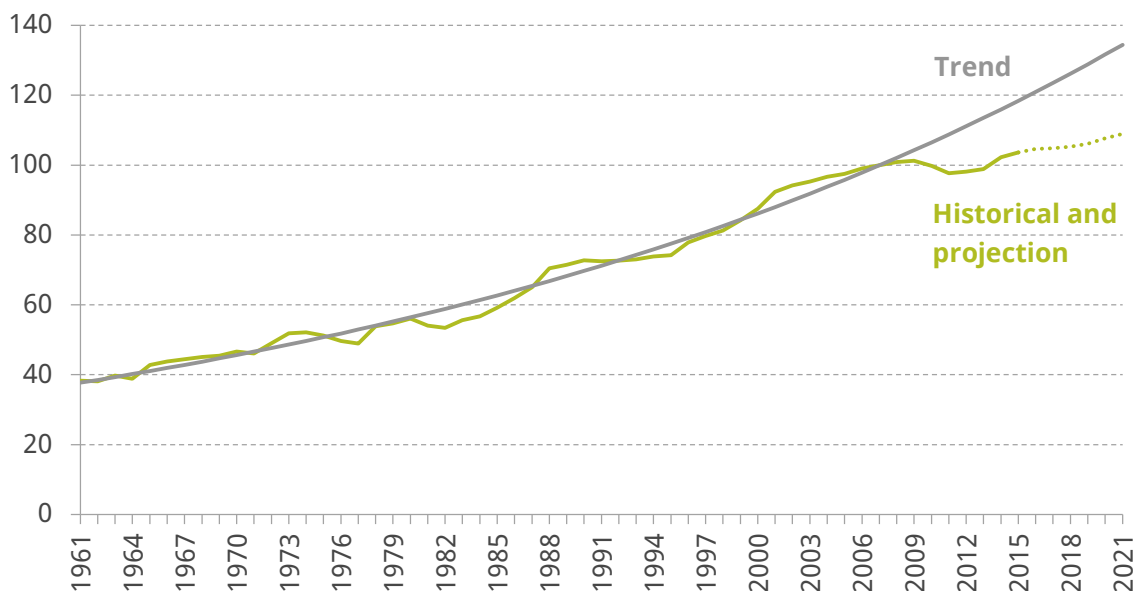
Source: Authors' calculations using Family Resources Survey and Family Expenditure Survey, various years, and projections for 2016 to 2021 using TAXBEN and assumptions specified in the text.

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6   Office for Budget Responsibility, 2017b.

Focusing first on the period since 2007, the figure shows that the weakness in income growth since the recession is without recent historical precedent: between 2007 and 2015, median income grew by an average of 0.5% per year, compared with the historical average of around 2% per year. This weakness was driven by sharp falls in real earnings seen during and following the recession, and a slow recovery in the years since.

The figure also shows that the divergence between actual and trend median income is projected to continue to widen, with incomes growing by just 5.1% between 2015 and 2021, or 0.8% per year. This weakness is primarily explained by the OBR's labour market forecast, a key driver of our projections. In its latest *Economic and Fiscal Outlook*,[7] the OBR forecasts slow earnings growth, as it expects uncertainty created by the vote to leave the EU to reduce firm investment, which will in turn reduce workers' productivity. At the same time, the OBR expects inflation to remain above the Bank of England's 2% target until the middle of 2019, thanks both to the depreciation of sterling feeding through to higher prices for UK consumers and to rises in the price of crude oil boosting petrol prices. Furthermore, the OBR forecasts a small decline in the employment rate, mainly due to the ageing of the population. Taken together, these factors imply slow growth in total real earnings and thus in median income.

Finally, the figure also provides the long-run context of these income changes. While income growth has been, and is projected to continue to be, weak relative to historical standards, the level of real median income in 2021 is nonetheless set to be higher than ever before – twice as high as in 1979 and nearly three times as high as in 1961.

We now turn to our projections for inequality, which show how these changes to average incomes are spread across the distribution. In these projections, we assume that all workers earning above the National Living Wage see an equal proportional rise in earnings (though we make an adjustment for public sector workers). If instead future earnings growth is concentrated among high- or low-income households, the picture for inequality could differ substantially from our projections.

Figure 2.2 shows historical and projected trends in the '90:10 ratio' – a measure of inequality that is calculated as the ratio between net equivalised household income at the 90th and 10th percentiles of the distribution – on both a before- and after-housing-costs basis (BHC and AHC). The figure shows that income inequality on this measure has fallen since the beginning of the recession. On an AHC basis it fell by 0.1 to 5.2 between 2007 and 2015, while on a BHC basis it fell by 0.3 to 3.9. Two factors explain this trend. First, as real earnings make up a larger proportion of income for higher-income households, the falls in real earnings in the wake of the recession tended to affect high-income households more than low-income ones. Second, while cuts to benefits have reduced incomes at the bottom end of the income distribution to some degree, average working-age benefit receipt was essentially unchanged in real terms between 2007 and 2015.[8] This is partly attributable to several policies that tended to increase benefit awards in real terms: most benefits were linked to the higher RPI inflation rate rather than the CPI one until 2010; the child element of child tax credits was overindexed during the recession and in 2011; and the real value of many benefits rose substantially in 2012 as inflation fell rapidly.

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[7]   Office for Budget Responsibility, 2017a.

[8]   Cribb et al., 2017.

Figure 2.2. 90:10 ratios, AHC and BHC
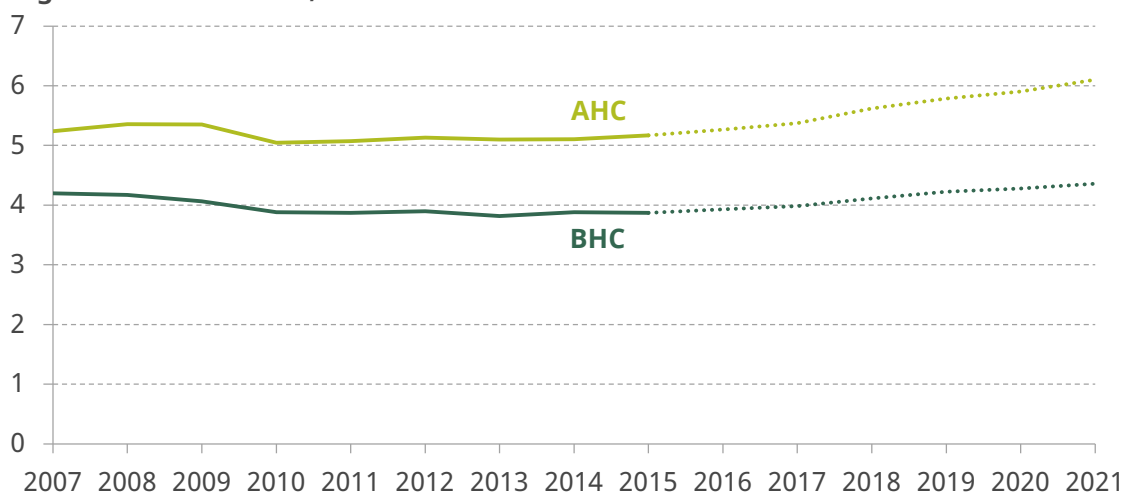
Source: Authors' calculations using Family Resources Survey and Family Expenditure Survey, various years, and projections for 2016 to 2021 using TAXBEN and assumptions specified in the text.

Looking forward, we project an increase in income inequality. Similar factors to those that explained the fall in inequality in recent years explain the projected rise in future years. First, the OBR forecasts that real earnings will increase – albeit slowly – something that tends to increase inequality since earnings make up a larger share of income for higher-income households. Second, planned benefit cuts will affect low-income households more than high-income ones.

The figure also shows that our projection is for the rise in inequality to be sharper on an AHC basis, with the 90:10 ratio increasing by 0.9 on an AHC basis and by 0.5 on a BHC basis. This reflects different trends in housing costs across the income distribution. The OBR expects real housing costs to rise between 2015 and 2021, with rents up 1.4% and mortgage interest payments up 5%. Since housing costs make up a larger share of incomes for low-income households, their AHC incomes are affected to a greater degree by any rise in real housing costs.

The result of these trends is that, when measured on an AHC basis, income is projected to increase by 10% at the 90th percentile in real terms between 2015 and 2021, but fall by 7% at the 10th percentile – and in fact fall for the bottom fifth of the income distribution.

2.2   UK poverty

We now focus on the implications of these projections for national poverty rates. Throughout, we measure and project poverty as measured in the official HBAI statistics. We define an individual as being in relative poverty if their equivalised household income is less than 60% of the median income in that year. This is termed relative poverty because the poverty line varies from year to year as median income changes – if median income goes up, then so does the poverty line. Essentially, changes in the relative poverty rate are informative about whether poorer households are keeping up with those in the middle of the distribution. We define an individual as being in absolute poverty if their household income is less than 60% of real median income in 2010 (the absolute poverty line used by the government). Changes in the absolute poverty rate are informative of changes in the

real incomes of low-income households, irrespective of trends in the incomes of other households. In this section, we focus on the rates of relative and absolute poverty; projections for the numbers of individuals of different types in poverty can be found in the online appendix.[9]

In Hood and Waters (2017a), we showed that relative poverty is very insensitive to average earnings growth rates, as higher earnings growth raises the relative poverty line as well as the income of low-income households. Absolute poverty is somewhat more sensitive, but low-income households are also substantially affected by changes in benefit policy. The future path of policy therefore represents a key uncertainty in these projections: changing policies, and the speed at which benefit claimants are transitioned to universal credit differing from current forecasts, are major reasons why actual future poverty rates might diverge from our projections.

Income poverty can be measured both before and after housing costs have been deducted. In the following analysis, we focus on changes in poverty measured on an AHC basis, for reasons explained in Box 2.1. Tables showing equivalent statistics to those in this section on a BHC basis are available in the online appendix – though, for the statistics reported, trends in both measures are similar.

Box 2.1. Income measurement for poverty statistics

In this report, we focus on AHC income poverty for three main reasons.

First, while to some extent the cost of housing is a choice and it reflects the quality of housing enjoyed, for some relatively poor groups (particularly social housing tenants) this is less likely to be a reliable rule of thumb.

Second, for many of those on housing benefit (HB), their HB receipt rises and falls in line with their rent.[a] For these households, a rise in rent would increase their BHC income by increasing their HB, but without their standard of living changing – a fact captured by the AHC measure, which nets off the increase in rent. This issue is of particular importance in the period we are projecting: at Summer Budget 2015, the government announced that for each year between 2016–17 and 2019–20, English social rents would fall by 1% in nominal terms. Since this will also reduce claimants' HB entitlement, their incomes measured on a BHC basis will fall, leading to an increase in measured poverty. AHC income measures avoid this undesirable effect by netting out the fall in rents and the fall in HB.

Third, more recently, housing cost trends have been very different for low- and high-income groups, so the distinction between BHC and AHC measures has become particularly important.

[a] A complication here is that local housing allowance (LHA) rates cap HB receipt for private renters (and, from 2019, some social renters). For households caught by the cap, an increase in rent will not be met with an offsetting increase in HB.

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[9] Available at https://www.ifs.org.uk/publications/10030.

Figure 2.3. Relative poverty rates, AHC incomes
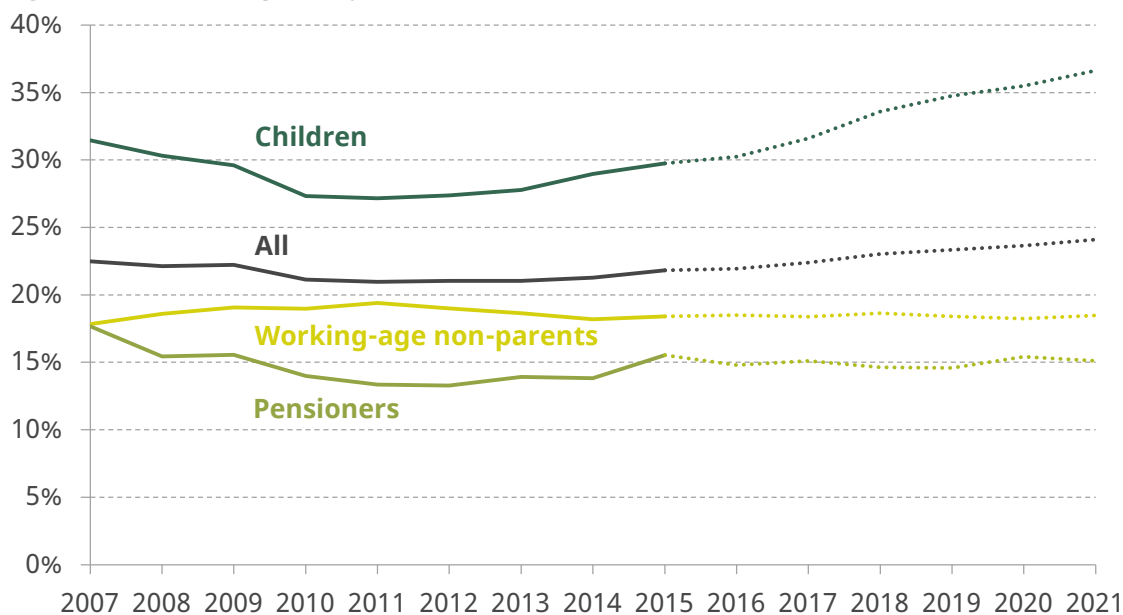
Note: Poverty line is 60% of contemporaneous median income. Pensioners are those aged 65 or over.

Source: Authors' calculations using Family Resources Survey, various years, and projections for 2016 to 2021 using TAXBEN and assumptions specified in the text.

Figure 2.3 shows historical and projected poverty rates for the population as a whole as well as for selected subgroups, from 2007 to 2021. The figure shows a decline in relative poverty between 2007 and 2011, from 22.5% to 21.0%, driven by reductions in child and pensioner poverty. This is explained by some of the factors discussed in Section 2.1: in the aftermath of the recession, real earnings fell while real benefit receipt increased, leading to the incomes of poorer households increasing faster than median income. This fall in relative poverty was partially undone between 2013 and 2015, thanks to somewhat stronger growth in median income and a fall of 3.8% in working-age benefit receipt.[10]

In our projection, relative poverty increases by 2.3ppts between 2015 and 2021, about a third of which is explained by planned tax and benefit reforms. This overall increase masks substantial differences in the prospects for each group.

Relative poverty among pensioners and working-age adults without dependent children (henceforth 'working-age non-parents') is projected to remain roughly unchanged. In both cases, this is because their incomes are closely linked to earnings growth. Working-age non-parents get a large share of their income from earnings, and so as real earnings grow – pushing up median income and therefore the relative poverty line – their incomes broadly increase in line (though note that this result is sensitive to our assumption that the rate of earnings growth is the same across the earnings distribution). Similarly, pensioners receive much of their income from the state pension and pension credit. The former is 'triple-locked' to increase by the highest of earnings growth, CPI inflation or 2.5%, and the latter is uprated with earnings – and so when earnings growth is strong, pensioners benefit too.

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[10] Belfield et al., 2016; Cribb et al., 2017.

However, relative child poverty is projected to increase substantially over the period, rising from 29.7% to 36.6%. There are two main reasons for this projected rise. First, poorer families with children get a relatively small share of their income from earnings – Belfield et al. (2016) show that households in the bottom quintile of the child income distribution received 42% of their income from earnings in 2014–15. This means that when earnings rise, median income tends to increase faster than the incomes of poor households with children. Second, the incomes of these households are particularly sensitive to planned benefit cuts: both because benefits make up a large share of their income and because the limiting of the child element of tax credits and universal credit to two children (henceforth described as 'the two-child limit') will lead to significant income losses for poor households with three or more children. The impact of this particular benefit cut on poverty is discussed in greater detail in Chapter 3.

Figure 2.4 shows historical and projected absolute poverty rates. As seen in the figure, there was a modest decline in absolute poverty between 2007 and 2015, from 22.1% to 20.0%. As with relative poverty, this was largely driven by declines in pensioner and child poverty, thanks mainly to increases in benefits for these groups.

Looking forward, we project significant differences in absolute poverty trends for different groups. Pensioner and working-age non-parent poverty rates are projected to decline slightly, by 2.5ppts and 1.0ppt respectively. As described above, these groups generally see their incomes go up when real earnings rise and they are not particularly exposed to planned benefit cuts. Child poverty is projected to rise by 4.1ppts, which, as is shown in Chapter 3, is primarily explained by planned tax and benefit reforms. The two-child limit alone contributes 2ppts to the rise in child poverty.
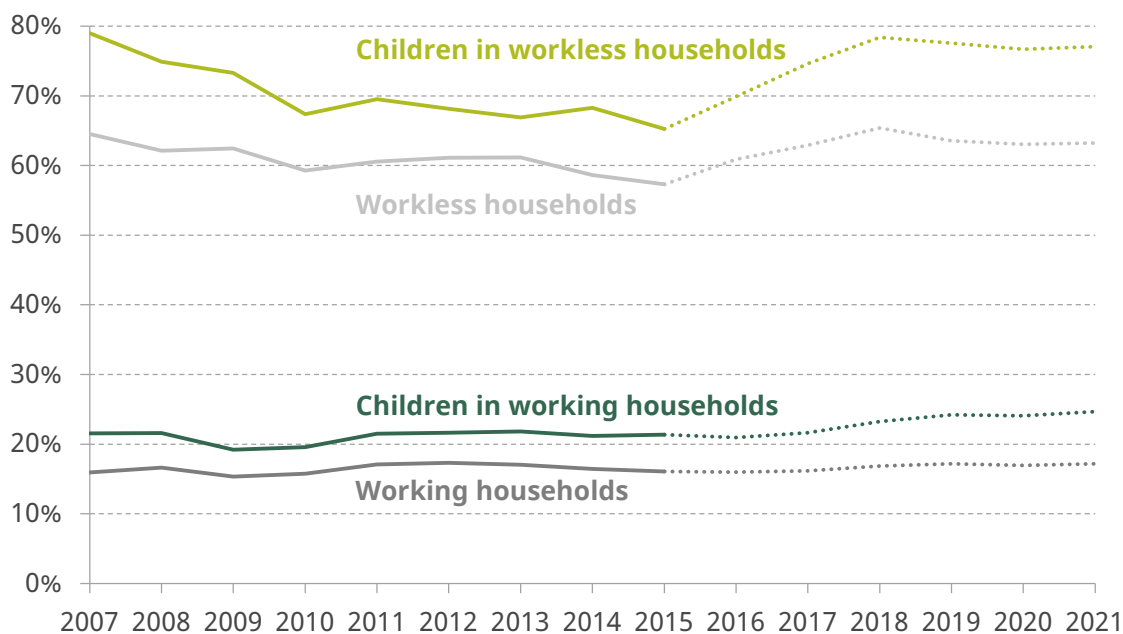
Figure 2.4. Absolute poverty rates, AHC incomes
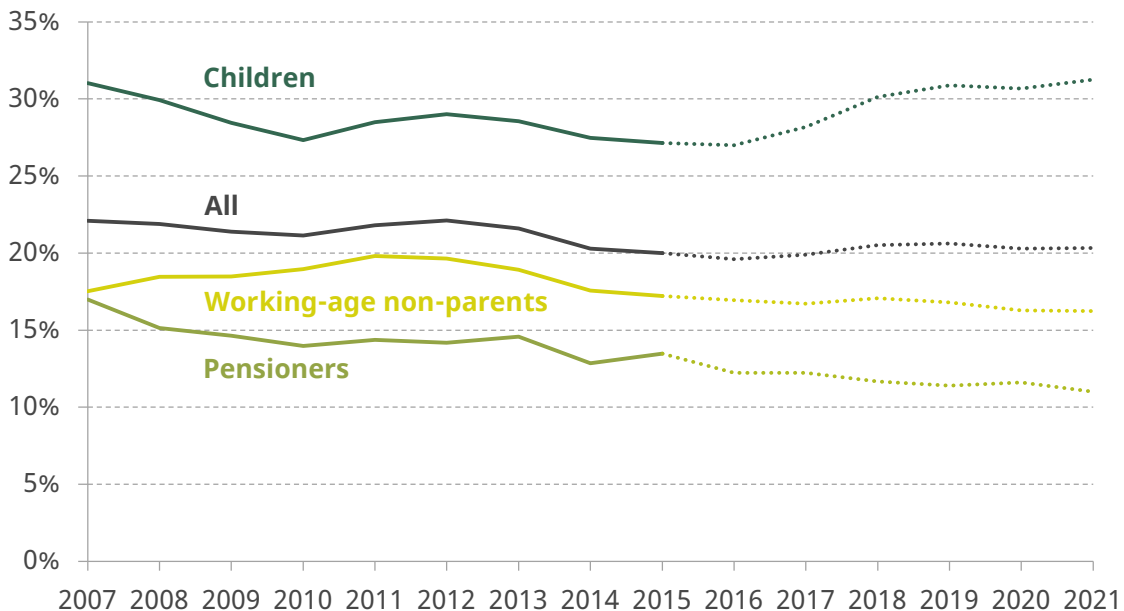
Note: Poverty line is 60% of median income in 2010, adjusted by CPI excluding rent. Pensioners are those aged 65 or over.

Source: Authors' calculations using Family Resources Survey, various years, and projections for 2016 to 2021 using TAXBEN and assumptions specified in the text.

Figure 2.5. Absolute poverty rates, working-age only, AHC incomes

Note: Poverty line is 60% of median income in 2010, adjusted by CPI excluding rent. Working-age households are those where all members are under 65.

Source: Authors' calculations using Family Resources Survey, various years, and projections for 2016 to 2021 using TAXBEN and assumptions specified in the text.

These trends are roughly offsetting, leaving absolute poverty in 2021 essentially unchanged from 2015. If absolute poverty does take this path, it would have fallen by 1.8ppts in 14 years. This is a very slow fall by historical standards: in the 14 years between 1993 and 2007, the absolute poverty rate fell by 19ppts.

As has already been indicated, the extent to which families rely on earnings or benefits has important implications for their future income prospects, since, over the projection period, real earnings are forecast to rise while the real value of benefits is to be cut. This fact can be seen in Figure 2.5, which shows historical and projected absolute poverty rates for workless and working households (excluding pensioners). There are two things to note from this figure. First, as expected, workless households – which are heavily reliant on benefits – are projected to see a much larger increase in their poverty rate between 2015 and 2021 than working households (6.0ppts and 1.1ppts respectively). Second, even in working households, child poverty increases by 3.3ppts over the period in our projection – reflecting the high exposure that families with children – even those in work – have to planned benefit reforms. Not surprisingly, children in workless households fare worse still, with a projected rise in their poverty rate over the period of nearly 12ppts.

2.3   Regional poverty

The previous section showed our projections for poverty at the UK level. But this masks considerable differences across regions, so in this section we examine our projections for poverty at the regional level. Since the previous section showed that the driver of projected changes in poverty is child poverty, in this section we focus on trends in overall and child poverty in each region.

To ensure sufficient sample sizes for the analysis to be robust, this section reports three-year averages for poverty rates (see Appendix A for more details), which means they are not directly comparable to the single-year statistics reported in the previous section. Further, as noted in Chapter 1, these projections are based upon uniform earnings and rent growth across regions – an assumption we consider highly uncertain, but a broadly central expectation on the basis of recent historical patterns.

One factor complicating this exercise is that Northern Ireland has passed 'mitigation measures' to limit the impacts of certain benefit reforms. Appendix C discusses these measures in detail. The only mitigation measure we account for is the non-implementation of the so-called 'bedroom tax', but the big picture is that, because many of the other concrete 'mitigation measures' are temporary, they are likely to have little effect by the end of our projection period, though their impacts on the precise path of poverty in Northern Ireland in the interim may be more material.

Figures 2.6 to 2.9 show historical and projected relative and absolute poverty, overall and for children, in every UK region in 2006–2008, 2013–2015 and 2019–2021. The 'UK' bars are the three-year averages of the corresponding statistics in Figures 2.3 and 2.4.

There are several broad themes that emerge from these figures. First, across almost all regions, in all four figures (absolute and relative, overall and child poverty), poverty decreased between 2006–2008 and 2013–2015. However, overall relative poverty and both measures of child poverty are expected to increase across all regions between 2013–2015 and 2019–2021.

Second, across all four figures, the same sets of regions are generally projected to fare the best and worst in terms of changes in poverty between 2013–2015 and 2019–2021. The North East, Wales and Northern Ireland are usually the three regions with the largest projected increases. Similarly, the South East, London, and either Scotland or the South West are always the three regions with the smallest increases (or largest decreases) in poverty.

Third, the projected increase in poverty tends to be larger for those regions that already have higher poverty rates, with one major exception – London has the highest poverty rate on all four measures, but sees some of the smallest increases and largest falls. Nonetheless, overall, our projections suggest that the regional concentration of poverty will increase between 2013–2015 and 2019–2021.

There are also several details to note from each figure, which we now discuss in turn. Overall relative poverty (Figure 2.6) is projected to increase modestly – by 1.3–1.9ppts – for the southern regions and Scotland, but by at least 3ppts for the northern regions, the West Midlands, Wales and Northern Ireland. With the exception of London, every region is left with a higher relative poverty rate in 2019–2021 than it had in 2006–2008.

We project increases in overall absolute poverty (Figure 2.7) for the North East, the North West, the Midlands, Wales and Northern Ireland, but declines in the southern regions, the East, Yorkshire & the Humber and Scotland. None of the changes is particularly large – ranging from a fall of 0.8ppts (London and South East) to a rise of 0.8ppts (Wales) – and, in all regions except Wales and Northern Ireland, overall absolute poverty is projected to be lower in 2019–2021 than it was before the recession.

Figure 2.6. Relative overall poverty rates, selected years, AHC incomes
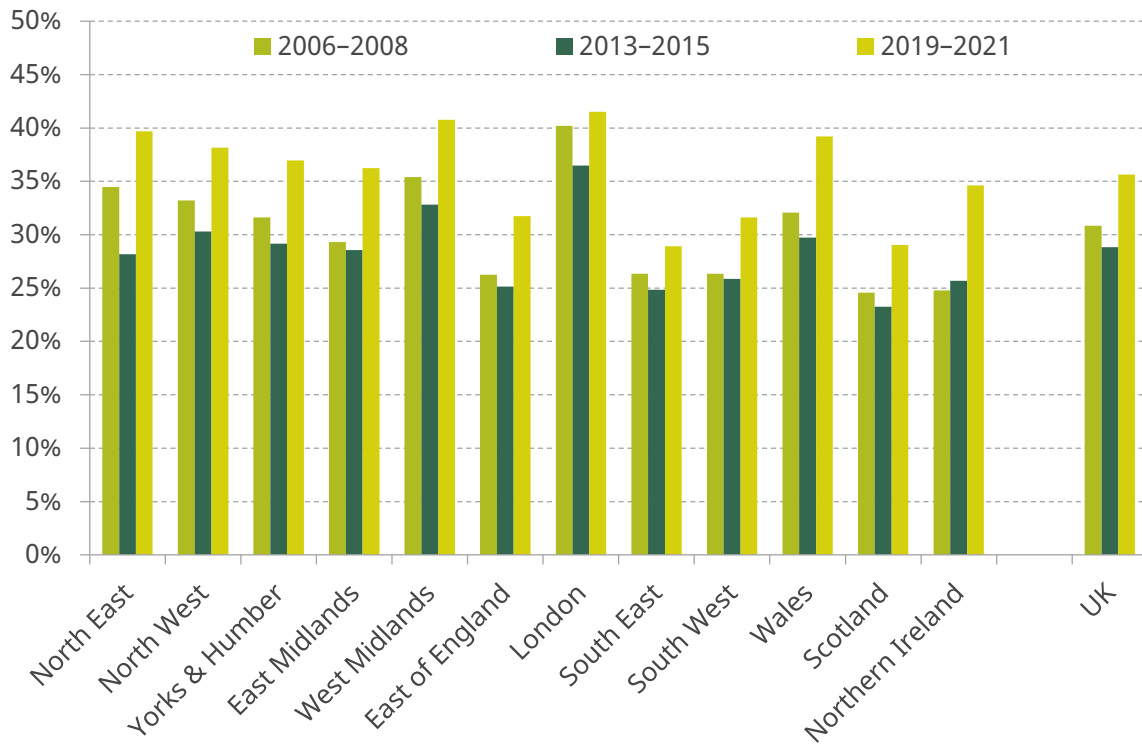

Note & source: See Figure 2.3.

Figure 2.7. Absolute overall poverty rates, selected years, AHC incomes

Note & source: See Figure 2.4.

Figure 2.8. Relative child poverty rates, selected years, AHC incomes

Note & source: See Figure 2.3.

Figure 2.9. Absolute child poverty rates, selected years, AHC incomes


Note & source: See Figure 2.4.

Across all regions, relative child poverty (Figure 2.8) is projected to increase markedly. The smallest increases are in the south, but even there relative child poverty is projected to rise by at least 4ppts. The northern regions, the Midlands, Wales and Northern Ireland are projected to see increases of at least 8ppts. Relative child poverty in 2019–2021 is higher than pre-recession in every region.

Absolute child poverty (Figure 2.9) is projected to rise across all regions, with increases ranging from modest to fairly large. The three southern regions, together with Yorkshire & the Humber and Scotland, see increases of 1.4–2.7ppts in our projection, while the North East, East Midlands and Wales are projected to see increases of at least 5ppts. In half of the 12 regions, absolute child poverty in 2019–2021 is higher than pre-recession (East Midlands, East of England, South West, Wales, Scotland and Northern Ireland), but it is projected to be lower in the North East, London and the South East.

What explains the regional patterns in poverty changes seen in Figures 2.6 to 2.9? As discussed above, the OBR forecast is for earnings to grow in real terms, albeit slowly, and for working-age benefits to be cut. Thus, a household that receives little of its income from earnings and a large portion from benefits is heavily exposed to benefit cuts, but will only see a small income boost from rises in real earnings – and so may see its income fall over the next few years.

Figure 2.10. Projected change in absolute poverty against earnings share of income among poor working-age households
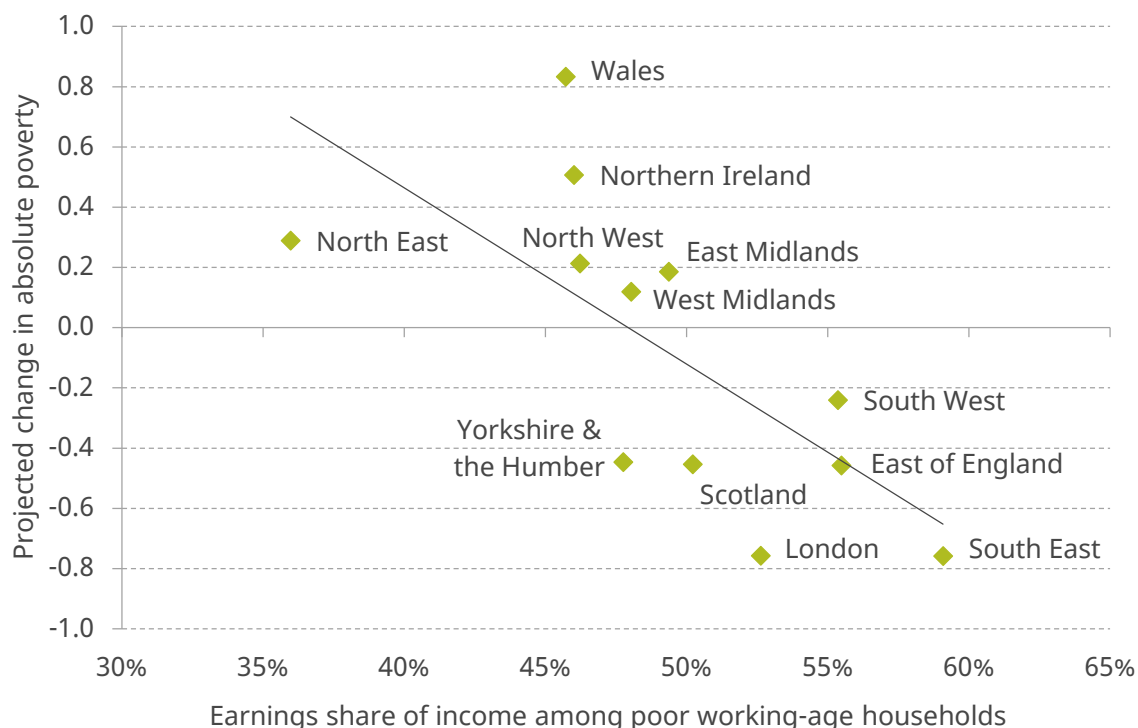

Note: 'Poor households' are those with real income below 70% of median income in 2010, adjusted by CPI excluding rent. Working-age households are those where all members are under 65.

Source: Authors' calculations using Family Resources Survey, various years, and projections for 2016 to 2021 using TAXBEN and assumptions specified in the text.

This pattern also plays out at the regional level, and helps explain much of the variation in projected poverty changes. Figure 2.10 shows the projected change in absolute poverty between 2013–2015 and 2019–2021, against the share of income made up by earnings in 2013–2015 among working-age households below or just above the absolute poverty line, for each region. There is a clear relationship between the two: those regions where poorer households get much of their income from earnings are more likely to see a fall in poverty than those where they get less from earnings (and so more from benefits).[11] Note that, as discussed in Chapter 1 and Appendix A, these projections are made on the assumption that labour market trends will be the same across regions.[12] If they differ – for example, if earnings growth is faster in some regions than others – then this relationship could look rather different. Nonetheless, it is clear from the figure how the earnings share observed in the data drives a substantial amount of the variation in projected poverty change.

We now look at projected poverty rates by local authority deprivation. In Figure 2.11, we use an adjusted Index of Multiple Deprivation (IMD)[13] – a comprehensive measure of local deprivation – to split local authorities into deciles of deprivation, from the least deprived tenth to the most deprived tenth.[14] We then calculate historical and projected poverty rates within these deciles. This gives an indication of the geographical concentration of poverty, and how income poverty relates to other measures of living standards.

Figure 2.11. Absolute poverty rates by local authority Index of Multiple Deprivation decile
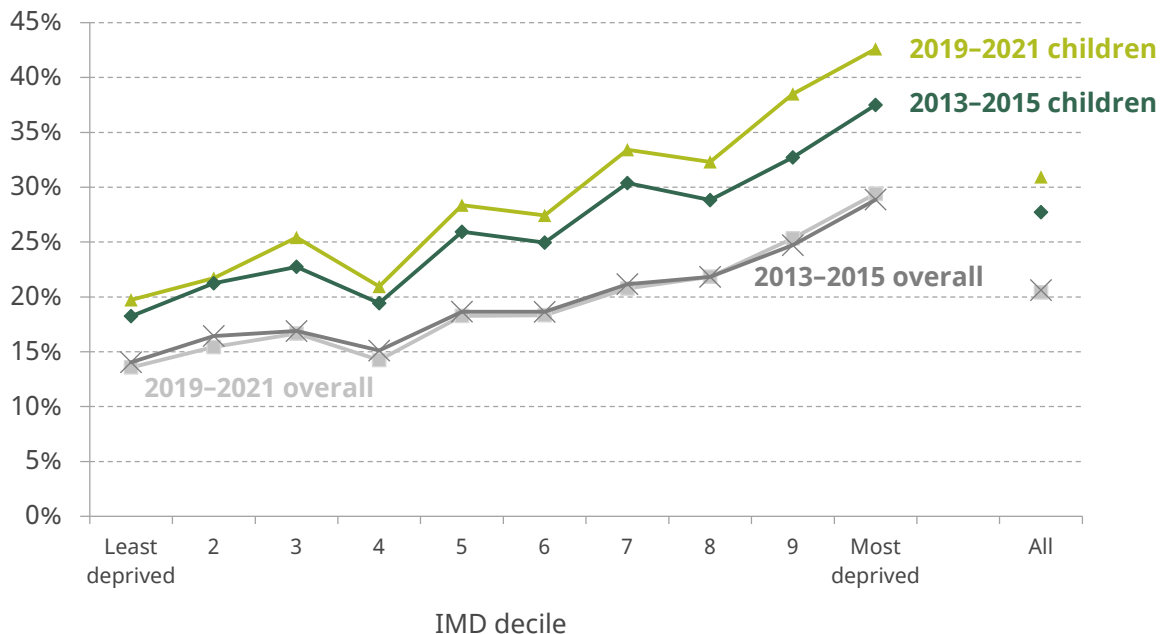
Note: Poverty line is 60% of median income in 2010, adjusted by CPI excluding rent.

Source: Authors' calculations using Family Resources Survey, various years, and projections for 2016 to 2021 using TAXBEN and assumptions specified in the text.

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[11] Similar relationships exist for the projected change in relative poverty and for both measures of child poverty.

[12] Since some regions have more workers in the public sector or affected by the National Living Wage, average earnings growth in our projection varies from one region to another. However, similar workers across regions see the same growth in their earnings in our projection.

[13] The IMD used here is adjusted to be consistent across the UK nations.

[14] For more on the relationship between IMD and poverty rates, see Cribb et al. (2017).

There are several things to note from the figure. Not surprisingly, the poverty rate is higher in more deprived local authorities: the poverty rate in the least deprived 10% of local authorities in 2013–2015 was around half that in the most deprived 10%. In our projection, this concentration of overall poverty increases only fractionally, with slight falls in poverty for the least deprived 70% of the country and slight rises for the most deprived 20%. However, there is a more marked increase in the concentration of child poverty. Although every IMD decile is projected to see an increase in child poverty between 2013–2015 and 2019–2021, the increases are larger among more deprived local authorities. Of the total increase in child poverty over the period, around 40% is in the most deprived fifth of the country.

3. The effect of direct tax and benefit reforms

We now turn to the impact of planned direct tax and benefit reforms on poverty. The reforms that we model are listed in Appendix B. Of these, by far the most important are:

- *Two further years of the benefit freeze*. Most working-age benefits are frozen in cash terms between April 2015 and March 2020. Low inflation in 2015 and 2016 meant that this freeze has so far only reduced the value of benefits by 1% relative to the default of CPI uprating. However, the OBR forecast for inflation implies that the next two years of freezes will represent around a 5% cut relative to CPI uprating.[15] This is expected to save the government over £3 billion per year.[16] Excluding households that only lose out from the freeze of child benefit, the four-year benefit freeze represents a reduction in benefit entitlements of over £500 for the 7.5 million affected households.[17]

- *The transition to universal credit (UC)*. Working-age housing benefit, child and working tax credits, income support, and income-related job seeker's allowance and employment & support allowance are being replaced by a single benefit, universal credit. The impact of the transition to UC on benefit receipt is complex and is discussed further in Box 3.1; in our model, it represents an increase in benefit receipt of around £3 billion, but this figure is highly uncertain. The extent to which UC is in place by 2021 is also uncertain: the OBR expects around 90% of claimants to be on UC by 2021,[18] but historically the OBR has overestimated the pace at which UC is rolled out.[19]

Box 3.1. The impact of universal credit on benefit receipt in our projection

There are three key factors that determine how the transition to UC will affect benefit receipt and hence household incomes (all cash figures in this box are in 2021 prices):

1. **Benefit entitlement** – the amount that a family would be entitled to if it claimed benefits. Although some families will see greater benefit entitlement under UC than they do under the existing ('legacy') benefit system, overall our projection suggests that entitlements will fall by about £5.5 billion in 2021 as a result of moving from the legacy system to UC.

2. **Benefit take-up** – the proportion of the total amount of benefits families are entitled to that is actually claimed. Perhaps the most important effect of UC on take-up is that it makes 'partial take-up' impossible. Under the legacy system, it is possible for a family to claim some of the benefits it is entitled to but not others. For example, a family could be entitled to housing benefit and child tax credit, but only claim housing benefit. Because UC is an integrated benefit, a family can either claim its whole entitlement or nothing.

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[15] Joseph Rowntree Foundation (2017) estimates that ending the benefits freeze for all benefits except child benefit would result in 380,000 fewer people in relative poverty.

[16] Hood and Waters, 2017b.

[17] Hood and Waters, 2017b.

[18] Office for Budget Responsibility, 2017a.

[19] Office for Budget Responsibility, 2016.

When a family is transitioned from legacy benefits to UC in our model, we need to make an assumption about whether it will claim UC or not. There are three categories of claimant. First, we assume that those who claimed all the legacy benefits to which they were entitled also claim UC. Second, we assume that recipients that claimed some but not all of their legacy benefit entitlement will claim UC. Both of these assumptions might overestimate take-up, as in-work conditionality, and perhaps greater stigma, may result in some legacy benefit claimants not claiming UC in reality. Third, we assume that those who were entitled to some legacy benefits but did not claim any will not claim UC. This assumption may underestimate take-up: UC is both a simpler and more transparent system than its predecessors, and so some who did not claim under the legacy system might choose to claim under UC.

Taken together, these assumptions result in a significant increase in benefit take-up in our model. Projected benefit receipt in 2021 is around £8.5 billion higher than it would have been in the scenario where universal credit is rolled out as planned but the total proportion of entitlements claimed remains the same as under the legacy system.

3. **Transitional protection**, which ensures those claimants who are moved from the legacy system to UC (rather than being new claimants) cannot, in the short run, lose out in cash terms. When the recipient family has a significant change of circumstances, such as moving out of work, or temporarily stopping its UC claim, it will no longer be protected in cash terms. It is difficult to know the speed at which transitional protection will 'expire' in this way, but we have to make an assumption, which is that it expires at a rate of 25% per year. Transitional protection has a relatively small impact in our model, increasing benefit receipt in 2021 by around £0.5 billion. One reason for this small impact is that only around 1.8 million of the 7.3 million on UC in 2021 are assumed to have been moved over to UC, and so are potentially eligible for transitional protection.

The combination of these three effects is that the transition to UC *increases* benefit receipt in our model in 2021, by around £3.4 billion. This may seem surprising, though the OBR also forecasts that, of the aspects of UC incorporated in our model, the transition to UC will increase benefit receipt, albeit by a smaller amount (£1 billion) in 2021.[a]

Many of the parameters that will determine the impact of UC are highly uncertain, and so this result, based on our assumption about those parameters, is highly uncertain too. Further, our model only aims to capture the effects on income from the transition to UC: factors such as payments being monthly rather than weekly, or being given to the recipient rather than paying the landlord for rent, are not included here.

[a] Office for Budget Responsibility, 2017a.

- *Cuts to child tax credits and the equivalent elements in UC*. Since April 2017, the child element in tax credits and UC is limited to the first two children in a family. However, for all child tax credit claimants, and for those migrated from tax credits to UC (rather than being new claimants), any children born before April 2017 are exempt, and so implicitly this policy will be rolled out very slowly (with the full effect not being felt until well beyond the period that our projection covers). In addition, the family element of child tax credits and UC will only be available to families with a child born before April 2017. In the long run (when no claimants are receiving the family element or entitled to the child element for more than two children), these two policies are expected to save the government around £5 billion.[20]

Figures 3.1 and 3.2 show our projections for overall and child absolute poverty rates in 2019–2021, with and without planned reforms, as well as the impact of those reforms on poverty. There are two things to note from these figures. First, there is a considerable amount of variation in the extent to which planned reforms affect poverty rates, especially overall poverty. For example, the impact of reforms on overall poverty in Scotland is only 0.4ppts, whereas in Northern Ireland it is 1.7ppts. Second, the impact of policy on child poverty rates is substantially higher than the impact on overall poverty. At the UK level, overall poverty is projected to be around 0.9ppts higher because of planned reforms, whereas child poverty is projected to be 3.0ppts higher.

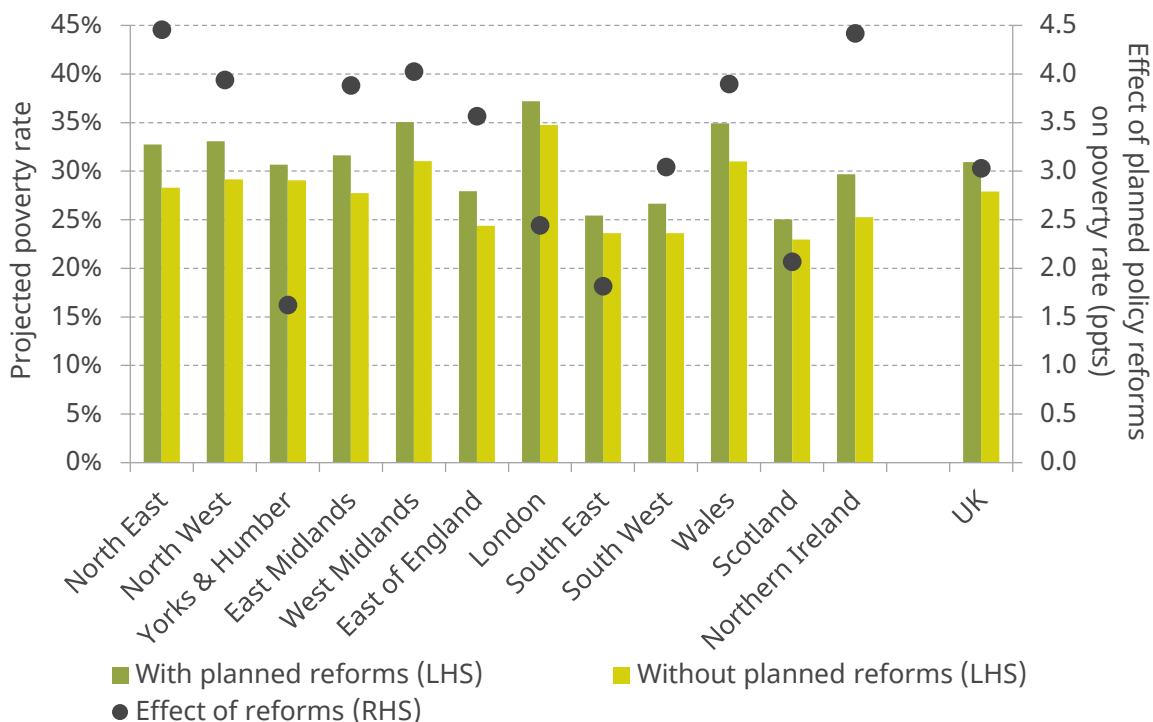**Figure 3.1. Overall absolute poverty rates, 2019–2021, with and without planned reforms**

Legend:
- With planned reforms (LHS)
- Without planned reforms (LHS)
- Effect of reforms (RHS)
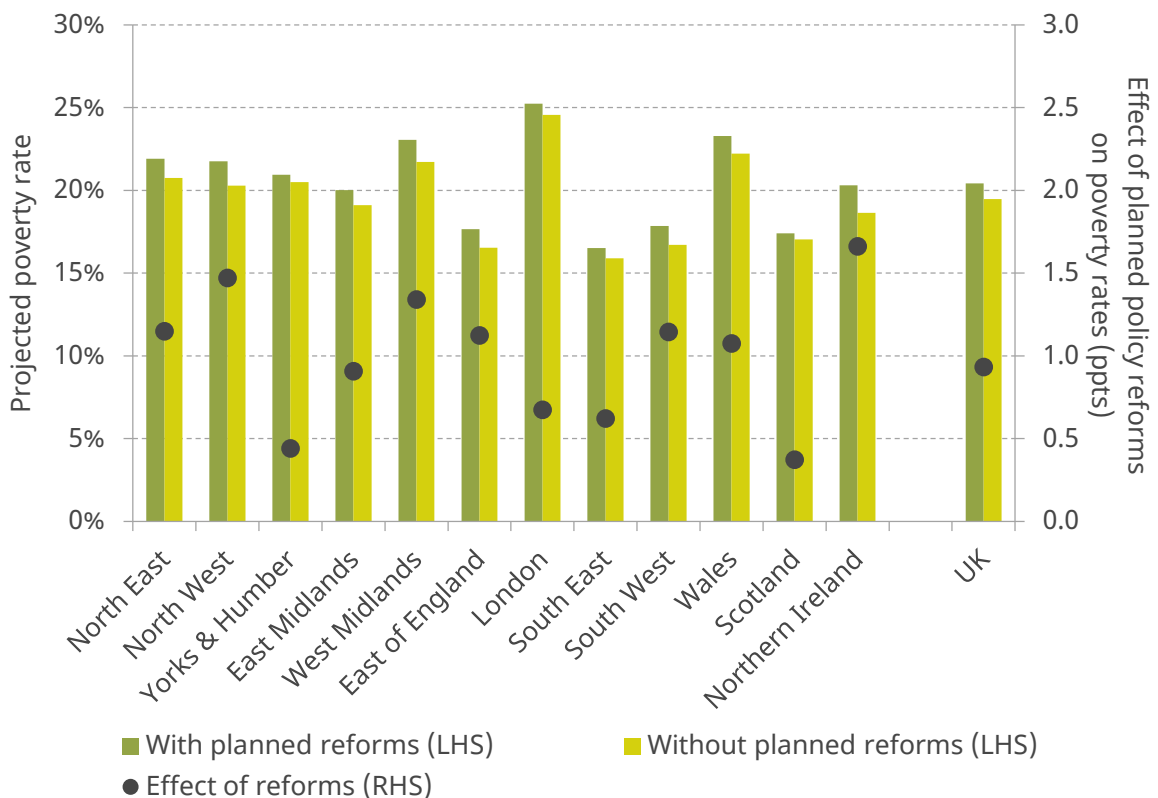
Note & source: See Figure 2.4.

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[20] Hood and Waters, 2017b.

Figure 3.2. Child absolute poverty rates, 2019–2021, with and without planned reforms


Note & source: See Figure 2.4.

Figure 3.3 decomposes planned policy reforms into the two-child limit, UC, and 'other reforms', the most significant of which are two more years of the benefit freeze and the removal of the family element from tax credits and UC for new births. The figure shows that UC is projected to reduce poverty – a result that may be surprising. The reason for this is that, as noted in Box 3.1, in our model UC is a giveaway, because it is likely to increase take-up. The expected increase in take-up is the sole reason for UC acting to reduce poverty in our projection: if everyone took up all the benefits they were entitled to (under the legacy benefit system and UC), the transition to UC would *increase* poverty by 0.7ppts (from 17.2% to 17.9%). The rise in take-up in our model – the reasons for which are discussed in detail in Box 3.1 – is highly uncertain, though we do consider the risks around it to be balanced.

The figure also helps explain the two points noted above: that there is considerable variation in the policy impact on poverty across regions and that the impact of policy on child poverty rates is substantially higher than on overall poverty. Both of these observations can be at least partly explained by the impact of the two-child limit in tax credits. As is clear from the figure, even though the two-child limit only affects a minority of benefit claimants (unlike the benefit freeze or the transition to UC, which both affect nearly all working-age recipients), it represents a substantial share of the effect of policy reforms on poverty. The policy has a large impact on poverty for three reasons. First, those families affected can lose a considerable amount of income – most affected families with more than two children lose £2,780 per year for every child beyond their second. Second, larger families are more likely to be in poverty or near the poverty line, and so reducing their incomes has a substantial effect on the poverty rate. Third, since the two-child limit affects families with lots of children, if it pushes one household into poverty it means a substantial extra number of *people* in poverty.

Figure 3.3. Decomposition of effect of planned policy reforms on overall absolute poverty in 2019–2021
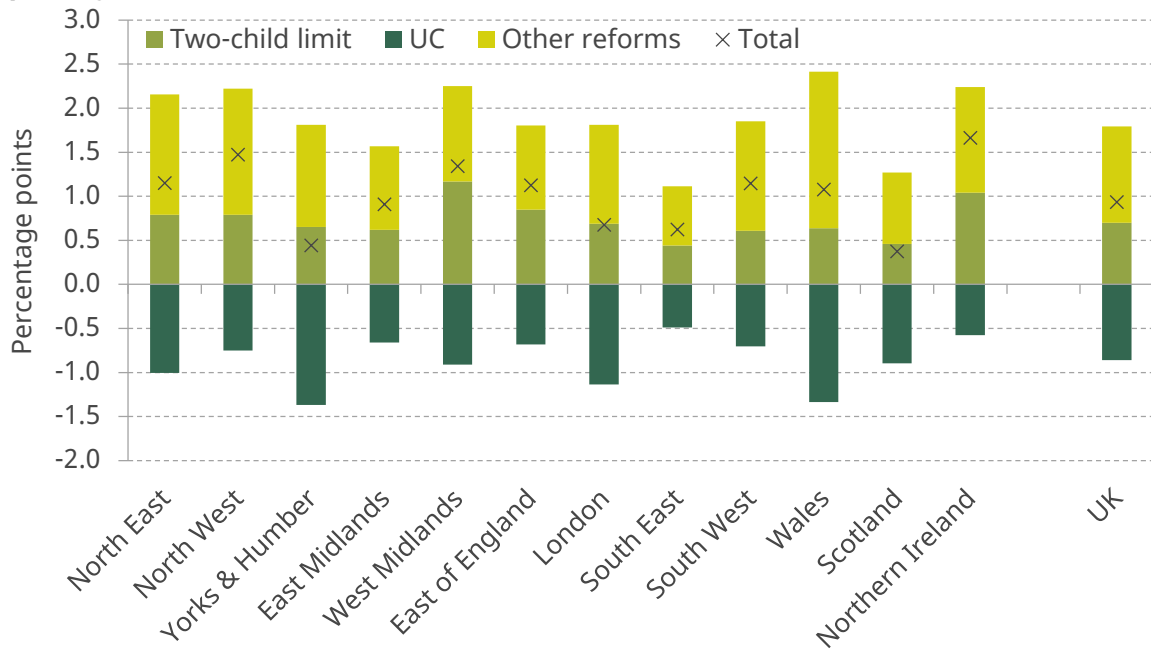
Note: Poverty line is 60% of median income in 2010, adjusted by CPI excluding rent.

Source: Authors' calculations using Family Resources Survey, various years, and projections for 2016 to 2021 using TAXBEN and assumptions specified in the text.

Figure 3.4. Effect of two-child limit on overall absolute poverty against share of people in poor households with at least three children
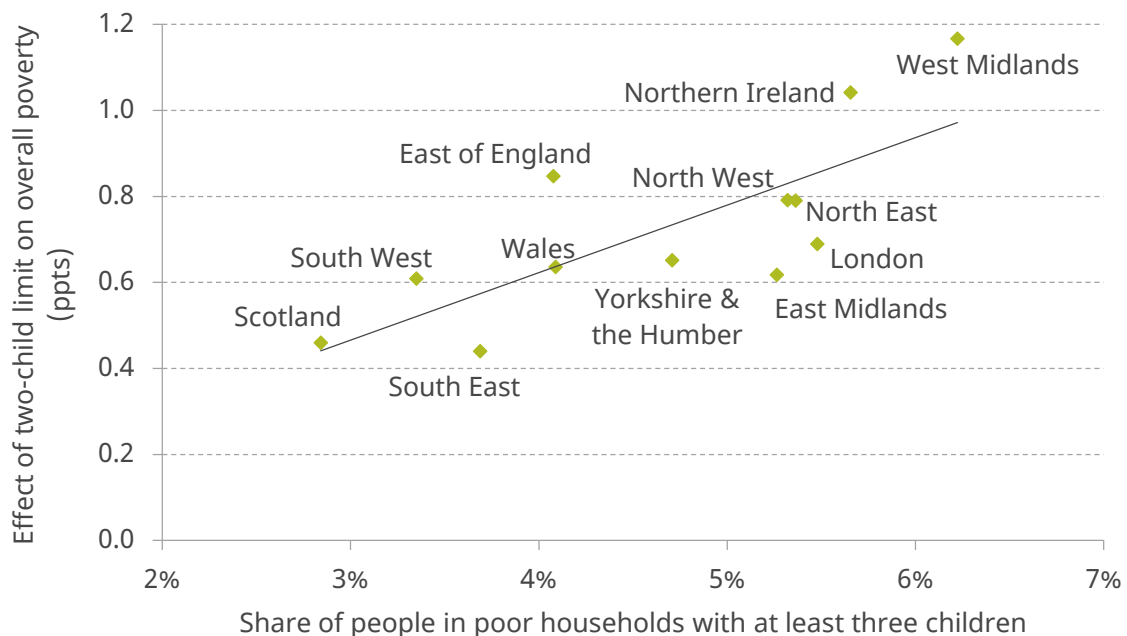
Note: 'Poor households' are those with real income below 70% of median income in 2010, adjusted by CPI excluding rent.

Source: Authors' calculations using Family Resources Survey, various years, and projections for 2016 to 2021 using TAXBEN and assumptions specified in the text.

Figure 3.3 also shows that the two-child limit is part of the reason why the policy impact on absolute poverty varies by region. Whereas it is projected to only increase poverty by 0.4ppts and 0.5ppts in the South East and Scotland, it is projected to increase poverty by 1.0ppt and 1.2ppts in Northern Ireland and the West Midlands respectively.

Figure 3.4 investigates why the two-child limit has such different effects on poverty across regions. It plots the impact of the two-child limit on poverty (the light green bars from Figure 3.3) against the share of people in each region who live in poor households with at least three children. There are two key things to note from this figure. First, there is considerable variation across regions in the proportion of people who live in poor large households. In Northern Ireland and the West Midlands, around 6% live in such households – almost double the proportion seen in Scotland, the South West and the South East. Second, this proportion is strongly correlated with the impact of the two-child limit on poverty, as expected.

Thus, part of the regional variation in the impact of policy reforms on poverty is related to the proportion of people who live in poor households with at least three children: this share drives the effect of the two-child limit on poverty, which in turn explains part of the regional variation in the total policy effect on poverty.

4. Conclusion

Since the recession, real median incomes have largely stagnated, falling below where we might have expected given historical growth rates to an extent unprecedented in at least the last 50 years. Not all households have fared similarly, though, with notably faster growth at the bottom of the income distribution than at the top – although growth rates have been more similar when measured after housing costs have been deducted.

Looking forward, our projections, based on the OBR's macroeconomic forecasts and planned tax and benefit policy, suggest that while median income growth will perform better over the next few years than it has since the recession thus far, the gap between real median incomes and the long-run trend will continue to widen. Our projections also suggest that the falls in inequality seen since the recession will be reversed over the next few years, with real earnings growth boosting the incomes of those at the top of the distribution more, while benefit cuts fall largely on those nearer the bottom.

Given this path for inequality, it is not surprising that these projections indicate an increase in relative poverty of around 2 percentage points – of which about one-third is due to direct tax and benefit reforms, and the other two-thirds is due to earnings growth and other changes in the economy. This rise in relative poverty is entirely driven by child poverty, which is projected to rise by 7ppts. We project little change in absolute poverty over the period – the consequence of rises in absolute child poverty being offset by falls in pensioner and working-age non-parent poverty. If this projection proves to be correct, absolute poverty will have fallen by just 2ppts between 2007 and 2021 – a very small fall by recent historical standards.

These projections for national poverty rates mask substantial differences at the regional level, with the North East, Wales and Northern Ireland generally projected to see the largest increases in poverty, and London, the South East, the South West and Scotland the smallest rises (or largest falls). Nonetheless, our projections indicate a rise in relative poverty and child poverty across all regions, although six regions are projected to see a fall in overall absolute poverty. These trends broadly correlate with current levels of poverty: with the notable exception of London, poverty is set to increase by more in those regions that already have a high poverty rate. Further, while the concentration of overall poverty in more deprived areas is projected to stay roughly the same, it is projected to rise for child poverty, with 40% of the projected increase concentrated in the most deprived 20% of local areas.

Part of these differential regional poverty trends relate to the extent to which poor households in those regions rely on earnings or benefits for much of their income. Those regions in which low-income households rely more on earnings tend to see smaller rises (or larger falls) in poverty, as those households there share in the gains of increases in real earnings, while those regions in which low-income households rely more on benefits have a greater exposure to planned benefit cuts.

The net impact of those benefit cuts and other direct tax and benefit reforms is to raise overall absolute poverty by around 1ppt and child absolute poverty by around 3ppts. The effect of these reforms varies across regions. Both the overall policy impact on poverty and its variation across regions are partly driven by the effect of the two-child limit, which

is in turn largely dependent upon the number of poor households with at least three children in the region.

Thus, the prospects for the income of poor families over the next four years are, to a significant extent, driven by their labour market status and family size: those in work with few children will likely fare better than others. This same story plays out at the regional level. Nonetheless, in every region, benefit cuts and limited growth in real earnings mean that absolute poverty is unlikely to fall by much, and poorer families with children are likely to see significant falls in their real incomes.

Appendix A

This appendix gives an overview of our methodology for producing the projections. For full details of our methodology, see section 2.4 of Hood and Waters (2017a) and section 2 and appendix A of Browne and Hood (2016).

In broad terms, we take the latest data used to produce official income and poverty statistics and adjust these data for relevant known and forecast changes – for example, demographic and labour market trends, and changes to direct tax and benefit policy – to create a projected distribution of household incomes in each year up to 2021–22. Our approach is similar to that used by IFS researchers for a number of years to project the path of household incomes in the UK, and more recently others have conducted similar exercises using similar methods (Rastrigina et al., 2016; Office for National Statistics, 2017; Corlett and Clarke, 2017).

The base data we use are taken from the 2013, 2014 and 2015 Family Resources Survey, an annual survey of around 20,000 households carried out in the UK that contains information about income sources and household characteristics. The data are supplied with 'weights' that ensure sample totals (for example, number of men in the sample or number of people aged 25) match the actual population in the relevant year. For projecting future years, we change these weights such that sample totals match the forecast demographic characteristics of the future population, including age, sex, region, employment rates and household type.[21] Most financial variables (such as gross earnings) are increased in line with the average earnings and minimum wage forecasts from the Office for Budget Responsibility. An important exception is income from private pensions, which rises in line with projections from IFS's RetSim model.[22]

To simulate future tax liabilities and benefit entitlements, we use the IFS tax and benefit microsimulation model, TAXBEN. We assume that the direct tax and benefit system of future years reflects the government's existing announcements. Where policies are only partially rolled out, we use OBR and HM Treasury forecasts to apply them to the appropriate proportion of our simulated population. Once we have calculated benefit and tax credit entitlements, we adjust for the fact that not everyone who is entitled to benefits and tax credits claims their entitlements.

Finally, to project housing costs for households in different housing tenures, we use announced policy (for social rents) and OBR forecasts (for private rents and mortgage interest payments). This allows us to simulate the distribution of AHC incomes and calculate the associated projections for poverty and inequality statistics.

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[21] We use the household projections from the Department for Communities and Local Government and the national statistical agencies: see Department for Communities and Local Government (2011 and 2014), StatsWales (2014), National Records of Scotland (2014) and Northern Ireland Statistics and Research Agency (2012).

[22] See Browne et al. (2014). The model suggests that private pension income will continue to rise faster than earnings throughout the period we consider in this report.

Regions

Unlike previous reports, in this report we give our projections at the regional level. There are two main issues with regional projections. First, since we lack regional forecasts for the key macroeconomic inputs to our model (earnings, employment, rents, etc.), we need to make an assumption about how the available national forecasts relate to regions. This is discussed in further detail in Chapter 1.

Second, in some regions, the FRS sample in a single year is too small to be statistically robust. Our approach to this issue is to use three years of FRS base data for our projections: 2013, 2014 and 2015. With each of these base data years, we repeat the same methodology described above. This gives us three projections for each year from 2016 to 2021 – one based on each base-data year. We pool together these three projections to create our final projection for that year.

In the historical series for regions, we use three-year averages – again because of sample size concerns. This is in line with the government's methodology for computing regional poverty rates. Thus, to be consistent with the historical series, we use three-year averages for our projections too. This means that, for example, our figures for 2019–2021 represent an average of nine projections: three projections for each of 2019, 2020 and 2021, based upon 2013, 2014 and 2015 base data.

Appendix B

Policies directly modelled:

- Local housing allowance (LHA) rate freeze

- Applying LHA rates to some social claimants from 2019

- Transitioning from disability living allowance (DLA) to personal independence payment (PIP)

- Single-tier pension*

- Freeze on most working-age benefits

- Abolition of the work-related activity group premium

- Council tax precept increase in 2018 in England

- Abolition of Class 2 National Insurance contributions (NICs)

- Transition from the legacy system to universal credit (UC)

- The two-child limit in tax credits and UC

- Removal of the family element in tax credits and UC, and the family premium in housing benefit

- Switch of support for mortgage interest from a benefit to a loan

- Transitional protection from moving to UC

- National living wage*

- 1% nominal cuts to social rent in England each year from 2016–17 to 2019–20*

* These policies are implemented both in our main projections and in our counterfactual without direct tax and benefit reforms, either because they are not a direct tax and benefit reform or because they are nearly fully in place already.

Appendix C

This appendix details how we account for Northern Ireland's mitigation measures to limit the impacts of benefit reforms.

These measures include protecting people affected by various cuts to disability benefits for up to one year, protecting some families with children from the impact of the benefit cap up to March 2020, extending discretionary support (particularly for those transitioning to universal credit) and not implementing the so-called 'bedroom tax'.

Of these measures, we only include the last in our projections. The measures relating to disability benefits would be unlikely to make large differences to our projections as we focus on the impacts in 2019–2021, by which time many of these temporary protections will have ended. Similarly, the benefit cap measure would not likely make substantial differences as only around 0.75% of Northern Irish households are even potentially affected by it, and within that many will have had their protection 'expire' by 2019–2021. It is more difficult to say what the effect of the money earmarked for discretionary payments might be, as by their very nature we do not know precisely how they will be used and which households will benefit from them.

The projections in this report for Northern Ireland should therefore be interpreted as our assessment of what might happen to poverty in Northern Ireland if there were no mitigation measures other than the one relating to the so-called 'bedroom tax'.

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