2. Living standards and income inequality

Key findings

- Median (middle) household income stalled completely in 2017-18 (the latest data). This was only the fourth year in the last 30 years in which household incomes have not grown. It leaves median income only 5.6% higher than 10 years earlier in 2007–08, before the Great Recession. Prior to this year, however, the recovery had seen reasonable income growth median incomes grew at a rate of 1.6% a year from their low point in 2011–12 until 2016–17, which is higher than the pre-recession rate of 1.2% per year seen from 2002–03 to 2007–08.
- The key driver for stalling income overall has been employee earnings growth being lower than inflation in 2017–18. Real median employee earnings fell by 0.3% in 2017–18. Although nominal (cash-terms) earnings growth was similar to the previous year, inflation rose from 0.9% to 2.7% as a result of the lower sterling exchange rate following the EU referendum.
- Reductions in the reported amounts of working-age benefits pushed down incomes of poorer households in 2017–18. This depressed the net incomes of poorer families, while incomes for middle- and high-income families stagnated or slightly grew. The bottom fifth of the income distribution on average saw its income decline by 1.6% in 2017–18; conversely, the top fifth saw it grow by 0.8% and the middle fifth on average saw no movement in income over this period.
- However, overall income inequality as measured by the Gini coefficient barely changed in 2017–18. The UK Gini coefficient was 0.34 in 2017–18, the same as it was in the late 1980s. Nonetheless, income inequality is still substantially higher than it was in the 1970s.
- Since the recovery from the Great Recession began in 2011–12, the incomes of different age groups have performed similarly. The age group that has seen the strongest growth in incomes since 2011–12 is 22- to 30-year-olds, who did worst during the 2007–08 to 2011–12 period. Pensioners, who did much better than working-age families in the recession, have seen much more similar income growth to working-age households since 2012–13; if anything, their incomes have fallen back in comparison. However, as a whole since 2007–08, pensioner incomes have on average grown substantially more than non-pensioner incomes.

This chapter analyses trends in average incomes and income inequality between UK individuals. We also explore the determinants of trends in income growth and how they have evolved over time, on average and for different groups. We use the Households Below Average Income (HBAI) data, the latest version of which covers the financial year 2017–18, to document these trends in recent years. For the analysis of the labour market, we supplement our HBAI analysis with the Labour Force Survey (LFS).

To understand the pattern of income growth in recent years, we analyse how different sources of income, including earnings from employment and state benefits and tax credits, have contributed to changes in total income. We focus on changes in living standards and inequality that have (or have not) occurred over the last year (since 2016–17) as well as changes since the Great Recession (i.e. since 2007–08) and the recovery period (since 2011–12).

We conduct our analysis at the individual level, meaning that we look at inequality and differences in living standards between individuals, not between households. However, the measure of income that we focus on for each individual is household income. That is, we add up the income of all individuals within a household. There are several more points worth noting about the measures of household income we focus on throughout this chapter; a longer description of the measurement of household income can be found in Appendix A.

Unless otherwise stated, all figures in this chapter relate to 'net' income, which measures total household income after income tax, National Insurance contributions and council tax have been paid and after state benefits and tax credits have been received. Household incomes can be measured either before or after housing costs have been deducted (referred to respectively as 'BHC' and 'AHC'). Unless otherwise stated, we report incomes in this chapter on a BHC basis.

When using income as an indicator of household living standards, it is important to account for differences in household size and composition. We therefore report measures of 'equivalised' incomes (which are adjusted for household size and structure) and express all incomes as the equivalent amount for a childless couple. Throughout this report, many statistics will be presented for the whole of the UK; however, for those series looking at longer-term trends, we present statistics for Great Britain (GB) only, as Northern Ireland has only been included in the HBAI data since 2002–03.

When comparing how living standards and inequality change over time, it is important to account for inflation – because rising prices reduce the purchasing power of any given level of cash income. Following the Department for Work and Pensions (DWP), we therefore express all incomes in 2017–18 prices after adjusting for inflation using a measure based on the Consumer Prices Index (CPI) that includes mortgage interest payments. All income growth rates are reported after accounting for this measure of inflation.¹

It should also be pointed out that when analysing trends in inequality in this chapter, we only look at inequality in household incomes between those on higher and lower household incomes (rather than, say, inequality in wages or wealth, or inequalities between particular groups, such as genders or ethnicities). Furthermore, we focus on measures of 'relative' inequality. That is, rather than looking at absolute differences, we

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Further information on the adjustments that DWP makes for inflation can be found in Department for Work and Pensions (2019). A series of the deflators that we use in this analysis can be found in IFS's Living Standards, Inequality and Poverty Spreadsheet, https://www.ifs.org.uk/uploads/publications/data/Inequality%2C%20poverty%20and%20living%20standards

look at how much larger in percentage terms the incomes of high-income individuals are than those of low-income individuals. In other words, if we increased everyone's incomes by 10%, inequality would be unchanged. However, if instead we gave everyone £10 in cash, inequality would fall, as an additional £10 in income would result in a larger proportional increase in income for poorer individuals.

For the most part of our inequality trends analysis, we examine how incomes have changed at each point of the income distribution. This allows us to describe how inequality has changed in a detailed and yet transparent manner. However, when analysing longer-term trends, we use two summary measures of inequality: the Gini coefficient, which captures inequality across the whole distribution, and the top 1%'s share, which focuses on income inequality between the very top and the rest. A limitation of our analysis, which results from the choice of data set, is that we are not able to explore income inequality within the much discussed top 1%, as the HBAI data do not include detailed information for this group.

This chapter proceeds as follows. Section 2.1 summarises average incomes in the UK, how incomes vary across the income distribution and how they have evolved over the recent past. Section 2.2 explores the determinants of household incomes on average and across the distribution and their trends over recent years. Section 2.3 investigates the differences in household incomes by age as well as the recovery in living standards for individuals in pensioner and non-pensioner households. Section 2.4 discusses prospects for living standards and inequality and Section 2.5 concludes.

2.1 Changes in household incomes in the UK

Figure 2.1 shows the UK income distribution in 2017–18. It presents the number of people in the UK living in households with different levels of weekly net equivalised household income, grouped into £10 bands.² The bar for the £240–250 band (the last band belonging to the first income decile), for example, contains around 715,000 people. The rightmost bar in the figure (which groups multiple bands together) contains around 1.8 million people living in households with a weekly net income of at least £1,500.

The bars are coloured alternately green and grey to indicate income deciles. Incomes are notably concentrated at the middle of the distribution, shown by the fact that deciles are narrower around the median income, which was £507 in 2017–18. Mean income was £613 per week in 2017–18 but, because this is skewed by the presence of very high incomes, around two-thirds of the population (64%) have an income less than the mean.

² Households with negative net income – for example, due to self-employment losses – have their net income set to £0 in the HBAI.

Median: £507

Mean: £613

1.0

0.5

Figure 2.1. The UK income distribution in 2017-18

0.0

0,00

Net equivalised household income (£ per week, 2017-18 prices)

Note: Incomes have been measured before housing costs have been deducted. All incomes have been equivalised using the modified OECD equivalence scale and are expressed in terms of equivalent amounts for a childless couple. The rightmost bar represents incomes of at least £1,500 per week. Bars are coloured alternately green and grey to indicate income deciles.

Source: Authors' calculations using the Family Resources Survey, 2017–18.

Figure 2.2 shows how mean and median income in the UK have evolved (after adjusting for inflation) since 2002–03.³ Median and mean income have moved in a similar fashion over the past decade or so. Both were on a steady upwards path before the 2007–08 crisis, though they did rise at a rate lower than the historical average since the 1960s. In the immediate aftermath of the 2007–08 crisis, incomes continued to grow but they began falling sharply from 2009–10, reaching a low in 2011–12 (2012–13 for mean income) before beginning to recover.

Median income (similar to mean income) has recovered and grown by 8.1% since the post-recession low (2011–12). However, this is just 5.6% higher than it had been a decade earlier before the recession, and the recovery in median income stalled completely in 2017–18. It is worth noting, though, that median incomes grew at a rate of 1.6% a year from their low point in 2011–12 until 2016–17. This is actually slightly faster than the pre-recession rate of 1.2% a year growth seen between 2002–03 and 2007–08.

Mean household income has grown by 5.8% since 2011–12 and is now 2.8% above its precrisis (2007–08) level. However, from 2016–17 to 2017–18, it grew by just 0.6%.⁴

³ Figure 2.2 starts at 2002–03 as this is the first year for which we have data for the whole of the UK.

⁴ From 2015–16 to 2016–17, mean income fell slightly. As we noted in last year's report (Cribb, Norris Keiller and Waters, 2018), due to increases in dividend taxation in April 2016, this may have been driven by individuals shifting their dividend income forward from 2016–17 to 2015–16; thus one should be wary about drawing any conclusions regarding changes in mean income over those years. If indeed mean income in 2016–17 was low

Average net equivalised household income

2002-03

Wean income

2002-03

Wedian income

2008-09

2008-09

2009-10

2012-13

2011-12

2011-12

2011-12

2011-12

2011-12

2011-13

2011-14

2011-15

2011-15

2011-16

2011-17

Figure 2.2. Average real UK household income (measured BHC)

Note: Incomes have been measured before housing costs have been deducted and are expressed in 2017–18 prices. All incomes have been equivalised using the modified OECD equivalence scale and are expressed in terms of equivalent amounts for a childless couple.

Source: Authors' calculations using the Family Resources Survey, 2002-03 to 2017-18.

Figure 2.3 presents growth in median household income over the last 30 years. It shows that not only was 2017–18 the first year since 2011–12 in which median income did not grow, but it was only the fourth year (and second non-recession year) in the last 30 years where median income did not grow. The stalling of median income growth is not surprising given what was happening at the time: as we show in Section 2.2, the largest source of households' incomes (on average) – employee earnings – fell in real terms in 2017–18.

Figure 2.3. Growth in median household income (before housing costs) over the last 30 years

Note: Incomes have been measured net of taxes and benefits but before housing costs have been deducted and are expressed in 2017–18 prices. All incomes have been equivalised using the modified OECD equivalence scale. Years refer to calendar years up to and including 1992 and to financial years from 1993–94 onwards. Data are representative of households in Great Britain between 1990 and 2001–02 and of households in Great Britain and Northern Ireland from 2002–03 onwards.

Source: Authors' calculations using the Family Expenditure Survey and Family Resources Survey, various years.

Trends in income inequality

To look at inequality in household incomes, Figure 2.4 presents weekly net household incomes (again in cash equivalents for a childless couple) at each percentile point. To do this, we first rank people by their weekly net household incomes and divide them into 100 equal-sized groups. The figure shows that median net income at the 50th percentile (£507) is around twice as high as that at the 10th percentile (£251). Income at the 90th percentile (£998) – the amount required to have an income higher than 90% of the population – is around four times higher than that at the 10th percentile.

Appendix Figure B.1 shows that the distribution of income differs slightly for individuals of different household types. The distributions for individuals in pensioner households and for individuals in working-age households with children are fairly similar; however, pensioners are less likely to have low incomes. Conversely, individuals in working-age households without children have higher incomes on average across virtually the full income distribution.

In Figure 2.4, different deciles are marked by alternate white and green colouring. This demonstrates that not only are there large differences in income levels between the lowand high-income households, but there is also substantial inequality amongst the highest income decile. Average household income at the 99th percentile (top 1%) is 2.5 times higher than that at the 90th percentile. Moreover, the gap between the top 1% and the rest is actually understated by the HBAI (Burkhauser et al., 2018). Additionally, there is a high degree of inequality within the top 1% of the distribution, which is not shown by Figure 2.4 (nor captured by the HBAI).

3,000 Household equivalised income per week, 2017–18 prices) 2,500 90th percentile: £998 2,000 50th percentile: £507 1,500 1,000 10th percentile: £251 500 $\overline{\mathcal{F}}$ 70 90 10 20 30 40 50 60 80

Figure 2.4. Weekly net equivalised household income at each percentile point in 2017–18

Note: Incomes have been measured net of taxes and benefits but before housing costs have been deducted. Cash figures are equivalents for a childless couple.

Percentile point

Source: Authors' calculations using the Family Resources Survey, 2017–18.

As explained earlier, incomes in this report have been equivalised – i.e. they take into account the size and composition of households and we express them in cash equivalents for childless couples. Table 2.1 presents the annualised unequivalised net household incomes required for individuals in a specific type of household to be at different points of the distribution. Remember that these are post-tax-and-benefit incomes, not individuals' pre-tax annual salaries. Clearly, larger households need more income to reach a specific point in the distribution. For example, a couple with two children under 14 would require a combined net income of £37,000 to belong to the median after adjusting for household composition, while a couple without children would require £26,400 and a single individual £17,600.

In order to have an income at the 99th percentile, single individuals would require £86,700, whereas a childless couple would require £130,100 and a couple with two children under 14 would require £182,100. These numbers, even though they are net of tax, may seem low for the top 1%. However, they are what is required to get into the bottom of the top 1%. There is extremely high dispersion in incomes within the top 1%. The public debate often associates the top 1% with the so-called 'super-rich', when in fact they only make up a small fraction of the top 1%. Using tax data, Brewer (2019) shows that those at the very top of the income distribution (looking at the top 0.1% or top 0.01%) are disproportionately aged 45–54, based in London and work in financial services, insurance or real estate.

Table 2.1. Annualised net household income at different percentile points of the 2017–18 distribution

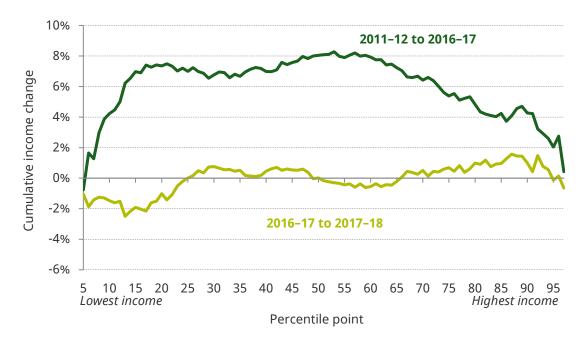
Percentile	Single individual	Couple with no children	Couple with two children under 14	
10 th	£8,700	£13,100	£18,300	
50 th	£17,600	£26,400	£37,000	
90 th	£34,700	£52,000	£72,800	
99 th	£86,700	£130,100	£182,100	

Note: Figures rounded to the nearest £100.

Source: Authors' calculations using the Family Resources Survey, 2017–18.

To look at how inequality in household incomes has changed, Figure 2.5 presents real income growth from 2016–17 to 2017–18 (the latest year of data) by percentile point, as well as the growth in incomes from 2011–12 to 2016–17. It shows that income growth was close to zero across most of the income distribution in 2017–18, though incomes did fall slightly for individuals at the bottom and rise somewhat for richer individuals. While the bottom fifth of the income distribution on average saw its income decline by 1.6% in 2017–18, the top fifth saw it grow by 0.8% and the middle fifth on average saw no movement in income over this period. However, these changes are quite small and are not statistically significantly different from zero.

Figure 2.5. Real income growth by percentile point (UK)



⁵ We do not include the bottom four or the top two percentiles in these calculations due to large statistical uncertainty.

Note: Incomes have been measured net of taxes and benefits but before housing costs have been deducted and are expressed in 2017–18 prices. All incomes have been equivalised using the modified OECD equivalence scale. Percentiles 1–4 and 98–99 are excluded because of large statistical uncertainty.

Source: Department for Work and Pensions (2019) and authors' calculations using the Family Resources Survey, various years.

The pattern seen in the latest year of data differs from that seen over the preceding recovery period (2011–12 to 2016–17), when income growth was stronger for individuals living in middle-income households than for individuals in high- or low-income households. The change in pattern is in part due to cuts in working-age benefit and tax credit entitlements that occurred in 2017–18, made more severe by the rise in inflation, as will be explored further in the next section.

We now discuss what implications the patterns we have seen have on summary inequality measures. Overall, the patterns observed imply not much change in overall inequality as movements across the distribution were relatively small and mostly insignificant.

The Gini coefficient is a broad measure of income inequality that ranges from 0 to 1. The Gini would be 0 if everyone had the same income and 1 if a single person received all of the country's income. Figure 2.6 shows that, on this measure, indeed there was little change in overall income inequality in 2017–18. The Gini remained at 0.34.

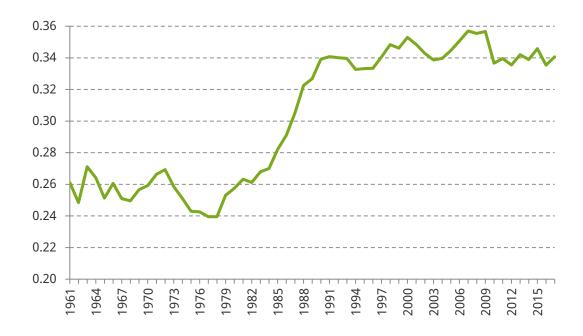


Figure 2.6. The Gini coefficient of income inequality

Note: Years refer to calendar years up to and including 1992 and to financial years from 1993–94 onwards. Figures relate to UK households from 2002–03 onwards and to GB households for earlier years.

Source: Authors' calculations using the Family Expenditure Survey and Family Resources Survey, various years.

In terms of long-run trends, Figure 2.6 shows that since the 1990s, the Gini coefficient has remained quite constant, but it is much higher than it was before the sharp increase of around 8 percentage points (ppt) that occurred during the 1980s. Belfield et al. (2017)

have shown that this lack of change in overall income inequality since the early 1990s reflects two countervailing trends: a fall in income inequality across most of the distribution (partly due to income growth for the middle) and a rise in income inequality at the very top. The latter trend can be seen in Figure 2.7.6

The Gini coefficient tries to account for inequalities across the whole distribution. Figure 2.7 presents the top 1%'s share of income – a measure that focuses on income inequality between the very top and the rest. In 2017–18, this was at 8%, nearly unchanged since the previous year. Year-to-year trends of this statistic have recently often been affected by changes in the timing of when high-income people take their income due to changes in tax rates that mostly affect those with very high income. For example, the top rate of tax increased to 50% in 2010–11 and then was reduced to 45% in 2013–14. Additionally, in 2016–17, dividend taxation increased. Therefore, it is very difficult to draw any firm conclusions about underlying trends in top incomes from recent changes in the top 1%'s income share.

The story is much clearer over a longer period though. Figure 2.7 shows that between 1961 and around 1990, the top 1%'s share moved in a similar fashion to the Gini – i.e. not much movement until 1980, followed by a sharp increase. However, in contrast to the Gini, which has changed little since 1990, the top 1%'s share of income continued to increase in almost every year between 1990 and 2009–10. It has fluctuated between 7 and 9% ever since.

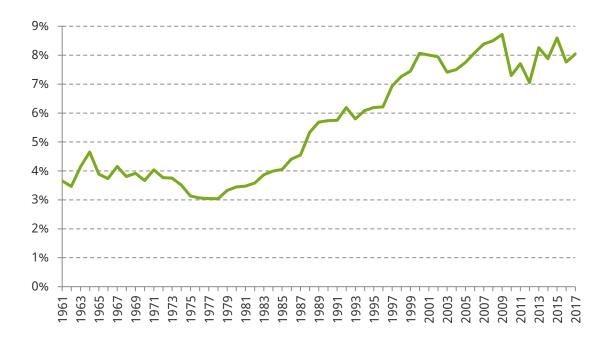


Figure 2.7. The top 1%'s share of income (GB)

Note: Years refer to calendar years up to and including 1992 and to financial years from 1993–94 onwards.

Note that Burkhauser et al. (2018) have shown that the HBAI, even though it does adjust for the under-reporting and under-representation of top incomes, actually understates the income inequality at the very top.

Source: Authors' calculations using the Family Expenditure Survey and Family Resources Survey and a 'top incomes' adjustment using administrative tax data (see Appendix A), various years.

2.2 Determinants of income growth in recent years

This section explores the determinants of income growth on average as well as for different parts of the income distribution.

An important starting point is to look at what has happened to gross earnings from employment, as these on average made up 85% of net household income in 2017–18 (net earnings made up 61% of net income) and so were the largest source of income for households on average. We therefore first show how employment and earnings of employees have changed in recent years and then examine how these trends, together with changes in other income sources, have driven income growth and inequality on average and across the distribution.

Figure 2.8 presents the employment rate from 2002–03 to 2017–18. We compare results using two different data sets: the HBAI data and the Labour Force Survey (LFS) – the data set used to create the government's headline labour market statistics. The HBAI recorded an employment rate of 74.0% for 2017–18, while the LFS recorded one of 75.2%. Both series show similar patterns in the employment rate over time, with an increase of 1ppt since 2016–17 and 4–5ppt since 2011–12, leaving the employment rate 2ppt above prerecession levels. The LFS suggests a further slight increase in the employment rate in 2018–19, to 75.7%. This is the highest rate since records began in 1971.

⁷ These numbers will differ substantially across individuals belonging to different household types. For pensioners, for example, employee earnings are much less important. On average, gross earnings made up 20% of net household income in 2017–18 for individuals in pensioner households (net earnings made up 13% of net income).

2002-03 2002-03 2003-04 2008-09 2008-09 2009-10 2012-13 2012-13 2012-13 2012-13 2012-13 2012-13 2012-13 2013-14 2011-12 2012-13 2013-14 2011-15 2011-15 2011-16 201

Figure 2.8. Employment rate (ages 16–64) in HBAI and LFS (UK)

Note: Due to data availability, the employment rate recorded by the LFS for 2018–19 does not include the last financial quarter of 2018–19.

Source: Authors' calculations using the Family Resources Survey and Labour Force Survey, 2002–03 to 2018–19.

The growth in the overall employment rate from 2011–12 to 2017–18 was highest for the poorest fifth of the population, at 5ppt; it was 2ppt for the middle fifth and 1ppt for the richest fifth (in terms of household income). However, over the last year, the increase in the employment rate slightly favoured those with higher incomes. This differs from the trends seen in recent years, when changes in the employment rate were much higher for low-income households.

A large part of the growth in the overall employment rate since 2011–12 has been driven by those aged above 50: while, for example, the employment rate for those aged 21 and under fell by 1ppt over this period (because people are staying in education for longer), it increased by 6ppt for those aged 50–64 over the same period.⁸ In terms of their impact on household living standards, the increase in the employment rate over the last year has been somewhat offset by lack of growth in real employee earnings.

Figure 2.9 presents average (median) weekly earnings of employees (once using the HBAI and once using the LFS). The two series give similar indications of the paths of real median weekly earnings. Average employee earnings in 2017–18 were £427 (£415 according to the LFS). There is essentially no growth in median employee earnings in either the HBAI or LFS data in 2017–18 (the exact figure for the HBAI data is –0.3%).

From 2011–12 to 2017–18, the employment rates for those aged 22–30 and 31–49 both increased by 3ppt. For those aged 65 and above, it increased by 2ppt. Since 2002–03, the employment rate has fallen by 17ppt for those aged 21 and below and grown by 1ppt for ages 22–30, 3ppt for 31–49, 9ppt for 50–64 and 4ppt for 64+.

The LFS data for 2018–19 imply that employee earnings rose in 2018–19, most likely catching up after two years of standstill which had not been fully mirrored in the HBAI data.



Figure 2.9. Real median weekly earnings of employees in HBAI and LFS (UK)

Note: Due to data availability, the real median employee earnings recorded by the LFS for 2018–19 do not include the last financial quarter of 2018–19.

Source: Authors' calculations using the Family Resources Survey and Labour Force Survey, 2002–03 to 2018–19.

The lack of growth in average employee earnings in 2017–18 can partly be explained by rising inflation. In 2017–18, cash-terms weekly earnings growth was actually similar to the two preceding years (and higher than the 2011–12 to 2014–15 period). However, inflation rose from 0.9% in 2016–17 to 2.7% in 2017–18, resulting in employee earnings falling on average in real terms. This is shown by Figure 2.10, which plots nominal weekly earnings growth against the HBAI inflation measure.

6% Inflation Nominal median earnings growth 5% 4% 3% 2% 1% 0% -1% -2% 2003-04 70-900 2007-08 2008-09 2009-10 2014-15 2017-18 2010-11

Figure 2.10. Nominal median earnings growth and inflation

Note: The inflation measure is CPI plus mortgage interest payments.

Source: Authors' calculations using the Family Resources Survey, 2002-03 to 2017-18.

The pattern of employee earnings did not differ much at different points in the individual earnings distribution in 2017–18. Since 2011–12, though, earnings growth has been strongest among low-earning individuals (partly due to the introduction of, and increase in, the National Living Wage). It is important to note here that many people who are in the bottom of the *earnings* distribution are in fact in the middle of the *income* distribution. This is partly because many lower-income households do not have anyone in work, so that growth in earnings for those in the bottom of the earnings distribution does not necessarily imply higher income for those in the bottom of the income distribution. Furthermore, net household earnings from employment make up a smaller share of net household income for the poorest fifth than they do for the richest and thus changes in earnings are not as indicative of trends in income growth for poorer households as they are for middle- or high-income households. So, though the trends in employment rates and average earnings are important in understanding income growth, they do not present the full story.

In order to understand these trends better, Table 2.2 presents average growth rates of all net income components that make up total net household income for three different time spans: 2016–17 to 2017–18, 2011–12 to 2017–18 and 2007–08 to 2017–18. Figures 2.11–2.13 show how these income components have contributed to overall net income growth over these different periods for all individuals on average as well as for the top, middle and bottom income quintiles. The components that we divide net household income into include employment earnings (pooling employee and self-employment earnings), benefits and tax credits (split into working-age and pensioner benefits), net income from savings, investments and private pensions, and other net income and deductions.

We exclude individuals with negative net household incomes from this analysis, as we are not able to calculate a sensible decomposition of income for this group (as the HBAI

methodology sets their household incomes to zero). We also exclude individuals whose incomes have been adjusted by the Survey of Personal Incomes (SPI)⁹ as income components have not been adjusted in a similar way. Therefore, the numbers given in the following will not exactly match those presented in previous sections.

Figure 2.11 shows the decomposition of mean net income growth for 2016–17 to 2017–18, by quintile as well as overall. The black diamonds in the figure show that, on average, total net household income grew by 0.5% for all individuals, by –1% for the bottom quintile, 0% for the middle and 1% for the top. As touched upon earlier, this pattern differs substantially from the one seen since the beginning of the recovery period (2011–12), where on average the middle has grown faster than the top and the bottom (shown by the black diamonds in Figure 2.12). Figure 2.11 shows that higher employment income pulled up income in 2017–18. As shown in Table 2.2, this was in part driven by a rise in self-employment income (which has 'bounced back' after large falls between 2007–08 and 2011–12) and also by the rise in the employment rate discussed earlier.

In contrast, falling working-age benefit incomes (down 5% in 2017–18) pushed incomes down. Total benefit receipt can vary both because of changes to the benefit system and because of changes in families' circumstances (e.g. employment, increased earnings). However, in 2017–18, benefit incomes have in fact fallen across the distribution of gross earnings (so for those out of work as well as for low- and high-earning households). Only around a quarter of the decrease in working-age benefit and tax credit income over the last year can be explained by changes in the employment rate or people at the bottom moving up the earnings ladder.

Figure 2.11 shows that the growing employment income and the falling benefit incomes have affected people differently across the income distribution. Rising employment income has benefited higher-income households, pushing up their incomes, whereas falls in benefit incomes have pushed down the incomes of low-income households. This key difference is the main explanation for why higher-income households have done better than low-income households in 2017–18.

The patterns are different when looking over the recovery period as a whole. Figure 2.12 shows that since 2011–12, income growth has been higher for the middle of the income distribution than for the bottom or the top. As is made clear in the figure, this is driven by the fact that lower- and middle-income households have benefited more from employment income growth (particularly driven by an increasing employment rate), but that lower-income households have been hit by lower benefit incomes, which have suppressed their income growth.

⁹ See Appendix A.

See Appendix Figure B.2, which shows proportional changes in mean benefit income for non-pensioners according to their total family earnings (expressed in 2017–18 prices) over the last year as well as from 2011–12 to 2016–17.

Note that the large proportional falls in benefit receipt among higher-earning families since the start of the recovery period are likely to be partly due to the removal of child benefit and the family element of child tax credit for high-earning families, which for some would have been the only benefits they were entitled to.

Finally, the pattern varies once again when looking at the last decade, from 2007–08 (precrisis) to 2017–18. Figure 2.13 shows that, over this period as a whole, lower-income households have done better than higher-income households, driven (again) by changes in employment income. This pattern is different because real earnings fell significantly between 2007–08 and 2011–12, particularly for higher earners, which pushed down their incomes.

Figure 2.11. Contributions to mean net income growth by quintile, 2016-17 to 2017-18

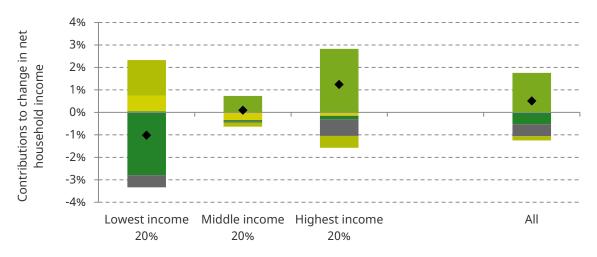


Figure 2.12. Contributions to mean net income growth by quintile, 2011–12 to 2017–18

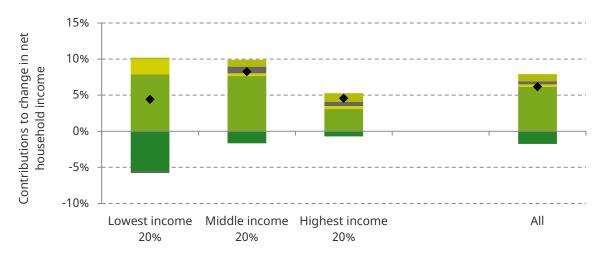


Figure 2.13. Contributions to mean net income growth, by quintile 2007-08 to 2017-18

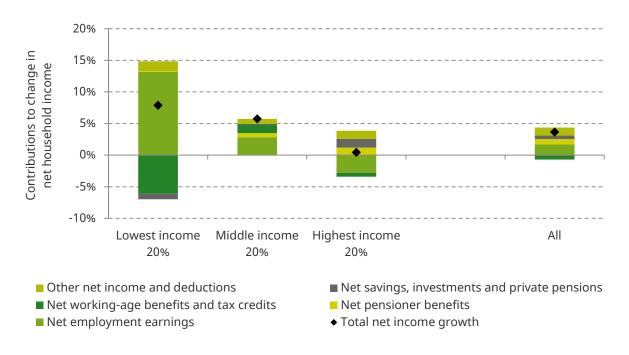


Table 2.2 Average growth in net income sources across all individuals

	Net employment earnings (employee earnings; self- employment earnings)	Benefits to pensioner families	Benefits and tax credits to working- age families	Net income from savings, investments and private pensions	Other net income and deductions	Total net income
2016–17 to 2017–18	2.5% (2.0%; 5.9%)	-0.2%	-5.1%	-5.1%	11.6%	0.5%
2011–12 to 2017–18	8.6% (6.3%;28.1%)	3.6%	-14.8%	4.6%	-34.0%	6.2%
2007-08 to 2017-18	2.3% (0.7%;14.1%)	9.9%	-6.7%	5.7%	-41.3%	3.7%

Note and Source to Figures 2.11–2.13 and Table 2.2

Note: The numbers relate to a subsample of households in HBAI that excludes those with negative incomes and excludes those whose incomes have been adjusted by the SPI. All incomes have been equivalised and are measured at the household level and before housing costs have been deducted. 'Benefits to pensioner families' are defined as benefits received by households containing at least one pensioner. This will include some benefits that can also be received by working-age people (e.g. housing benefit) and some benefits actually received by working-age individuals who live with pensioners.

Source: Authors' calculations using the Family Resources Survey, various years.

2.3 Trends in living standards by age

There is great interest in how trends in household income have differed not only across the income distribution, but for different groups in society, such as younger and older people. In this section, we examine how trends in income growth over recent years have differed by age.

Figure 2.14 shows real median income for people of various age groups, each indexed to its level in 2007–08, once measured before housing costs (solid lines) and once measured after housing costs (dashed lines). It demonstrates that while incomes for those in the youngest age category (22–30) on average were hit the hardest in the aftermath of the financial crisis, since 2012–13 they have been steadily recovering and are now just below their pre-crisis level. This is driven by a strong recovery in their labour market prospects, with strong employee earnings growth for this group in recent years.

The middle age groups (31–49 and 50–64), which also saw (to a much lesser extent) decreases in incomes in the aftermath of the recession, have also recovered since 2012–13. However, incomes for these age groups stalled or even fell slightly in 2017–18. This is most likely due to the fall in earnings. For those aged 65 and above, average income since 2007–08 has grown by nearly 15%, but this growth seems to have come to a halt in 2017–18. Overall, the pattern of income growth across the age groups has been much more similar in the last five years than it was in the aftermath of the financial crisis.

115 Real income index (2007-08 = 100)110 105 100 95 90 85 80 2007-08 2008-09 2009-10 2011-12 2017-18 2016-17 22-30 31-49 65+ **-**50-64 Solid lines: BHC Dashed lines: AHC

Figure 2.14. Real median income (BHC and AHC) by age, indexed to 2007-08 = 100

Source: Authors' calculations using the Family Resources Survey, 2007–08 to 2017–18.

While Figure 2.14 shows the differences in the growth of incomes between different groups, it does not show the different *levels*. Figure 2.15 shows median pensioner income as a percentage of median non-pensioner income, with incomes measured both before and after housing costs. The relative incomes of pensioners look higher on an AHC basis as this accounts for the fact that they have lower housing costs on average (because more of them own their own property outright, therefore having very low housing costs). However, the trends since 2002–03 for BHC and AHC median incomes for pensioners relative to those of non-pensioners have been similar for the two measures. Between 2002–03 and 2012–13, there was a remarkable catch-up of pensioners as their AHC incomes grew 24% while those of non-pensioners fell by 2%. But since 2012–13 a small amount of that has been reversed, leaving median pensioner and non-pensioner incomes almost exactly the same after housing costs.

The strong performance of median income among pensioners compared with that among non-pensioners in the pre-recovery period is largely due to sizeable increases in private pension incomes – as successive generations of pensioners tended to be entitled to higher occupational pensioners than their predecessors – alongside modest increases in pensioner benefits (especially compared with working-age benefits). Part of the reason that growth in non-pensioner median income has, however, kept up with pensioner income growth in more recent years, despite weak average earnings growth, is that growth in employee earnings has been stronger towards the bottom and middle of the distribution than at the top (except for the last year).

110% percentage of non-pensioner income **AHC** Median pensioner income as a 105% 100% 95% 90% **BHC** 85% 80% 75% 70% 2005-06 2006-07 2015-16 2002-03 2003-04 2004-05 2007-08 2008-09 2009-10 2011-12 2013-14 2016-17 2017-18

Figure 2.15. Median pensioner income as a percentage of median non-pensioner income (AHC and BHC)

Note: Pensioners are here defined as men aged 65 or over and women aged 60 or over. Non-pensioners are everyone else (including children).

Source: Authors' calculations using the Family Resources Survey, 2002-03 to 2017-18.

2.4 Prospects for living standards and inequality

As the official HBAI data are released with a lag, we are only able to analyse incomes up to 2017–18. Other, more timely data sources can give an indication of what the HBAI data might show for 2018–19 and beyond.

The LFS recorded a slight increase of 0.5ppt in the employment rate between 2017–18 and 2018–19. Furthermore, data from both the LFS and the average weekly earnings (AWE) index suggest that real earnings growth did return in 2018–19. Overall, this suggests higher median income growth than experienced in 2017–18 and a catch-up in living standards after the stall in 2017–18.

What might we expect for the path of living standards over the following years? The Office for Budget Responsibility (OBR)'s latest macroeconomic forecasts were made prior to the major parliamentary votes relating to Brexit that took place in March 2019. Those forecasts were for modest but steady growth in average earnings of around 1% per year, and a stable employment rate. But they were predicated on the UK avoiding a disorderly exit from the European Union and entering a transition period on 29 March 2019 that would have lasted until the end of 2020 (Office for Budget Responsibility, 2019). The ongoing uncertainty over what will actually happen with respect to Brexit makes speculation over what will happen to incomes extremely difficult.

There are, however, some specific planned policies about which we can say more. The earnings of low-paid employees are likely to rise more quickly as the growth in the

National Living Wage (NLW) continues to outpace growth in average earnings; in real terms, it is forecasted to grow by 11% from 2017–18 to 2022–23. However, a substantial fraction of those at the bottom of the weekly earnings distribution are there as they work a low number of hours (but have hourly wages above the minimum wage), which means their earnings will not necessarily be pushed up by increases in the NLW. Additionally, as previously emphasised, earnings make up a larger share of incomes for middle- and high-income households than they do for low-income households. Finally, even if earnings growth is skewed towards those on lower incomes, it may not be enough for them to keep up with those on higher incomes – especially if benefits are being cut back at the same time.

Most working-age benefits remained frozen in cash terms in 2018–19, a policy that has continued into 2019–20. There are still substantial cuts planned for working-age benefits in the next years, especially because of the move from the 'legacy' benefits system to the overall less generous (in entitlements) universal credit (UC) system, which is now expected only to be fully rolled out by 2023–24. ¹² In combination with cuts to tax credits, this means that benefit entitlements are likely to shrink in real terms, pushing down the incomes of poorer households.

In summary, of the factors affecting incomes in the coming years that are relatively clear – those relating to planned policy on minimum wages and benefits – it seems likely that the net impact will be to push up inequality in household incomes. Much of the rest of what happens will depend on the wider evolution of the economy, and what this means for jobs and wages – factors which have rarely been more uncertain.

One very recent development to keep an eye on is that those at the very top of the income distribution are seeing somewhat faster pay growth than the rest. The OBR's most recent report found that in April–September 2018, annual cash-terms pay growth was 5.9% for the top 0.1% of earners, compared with an average of 3.7% over the whole distribution using the same measure (Office for Budget Responsibility, 2019). This is not something that has generally been the case in recent years (broadly, since the financial crisis), and it remains to be seen whether it will be sustained.

2.5 Conclusion

After five years of recovery, real income growth ground to a halt in 2017–18. This was mainly driven by the decline in real employee earnings, resulting from higher inflation after the depreciation of sterling in light of the vote for Brexit, as well as real cuts to working-age tax credits and benefits, which were also made more severe by the rise in inflation.

Median income is just 5.6% above its level a decade earlier in 2007–08 – which is very slow growth by historical standards. Over this period, pensioners' incomes have performed

Note that the OBR actually estimated that the government's benefit spending will be around £2 billion *higher* under UC in 2023–24 than it would have been under the legacy system. This is because UC is expected to increase the take-up of benefits. Furthermore, in 2023–24, the government will be spending £1 billion on transitional protection (Office for Budget Responsibility, 2018).

better than those of any other age groups, while younger working-age people have done the least well. However, that was really the result of changes between 2007–08 and 2012–13. Since then, income growth for different age groups has been much more similar. If anything, the recovery has been strongest for those in their 20s, and weakest for pensioners, as their incomes have fallen back slightly relative to the rest of the population.

In 2017–18, income growth was close to zero across the whole distribution, resulting in income inequality among individuals remaining virtually unchanged. Although overall inequality did not change much, there is some evidence that net income growth was lower for low-income than for high-income households, as a result of falling income from benefits and tax credits. Income inequality overall is not much different – on the Gini index measure of income inequality – from what it was in the late 1980s, but is much higher than it was in the 1970s.

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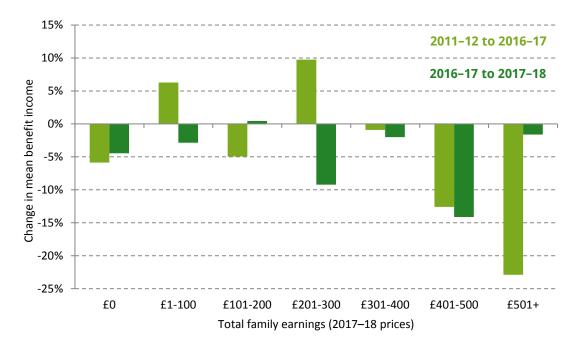
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Appendix Figure B.1. Weekly net equivalised household income at each percentile point in 2017–18 by household type



Source: Authors' calculations using the Family Resources Survey, various years.

Appendix Figure B.2. Change in mean benefit receipt among non-pensioners by family earnings, 2011–12 to 2016–17 and 2016–17 to 2017–18



Note: Each bar shows the mean level of benefit and tax credit income of non-pensioners who live in families with gross earnings in each £100 band, with the exception of the bottom band, which contains those with zero or negative family earnings, and the top band, which contains those with family earnings over £500.

Source: Authors' calculations using the Family Resources Survey, various years.