Health Inequalities in Scotland

Trends in the socio-economic determinants of health in Scotland

Chapter 3: Household financial circumstances and living standards

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3. Household financial circumstances and living standards

Household financial circumstances can affect health in a variety of ways: an inadequate income is stressful, and can make it more difficult to adopt healthy behaviours. This chapter examines how financial circumstances and living standards have evolved in Scotland since 1999, and earlier in some circumstances. It considers household incomes, inequality of income, poverty, subjective measures of financial wellbeing, and wealth.

Key points

- From a low base in the 1960s and 1970s, household income inequality in Scotland, as in the UK, increased substantially throughout the 1980s and early 1990s. Since the early 1990s it has not increased further, but it remains high in the context of most western European countries.
- Despite the fact that overall household income inequality in Scotland has not increased since 1999, the first decade of devolution saw the very highest income households pull away from the rest, and the lowest income households lose ground to the median, reflecting a similar trend in the UK as a whole.
- The key trend of the second decade of devolution has not been a change in the distribution, but an unprecedented stagnation in the growth of household incomes across the whole distribution.
- There is huge variation in the typical household income of different groups within Scotland – for example between those in different housing tenures, with different educational qualifications, and of different ethnicities. There has been surprisingly little change in the incomes of these groups relative to each other over the past 20 years. A key exception to this statement is the difference between typical pensioner incomes relative to the incomes of working age households. Median pensioner household incomes were 17% lower than the population as a whole in 1999, but only 5% lower by 2019.
- Many households in Scotland experience regular fluctuation in their position in the income distribution from one year to the next, and some households experience significant movement across the income distribution over a 10-year period. But a minority of households experience substantial persistence in their relative income position over prolonged periods.
- The prevalence of problem debt is much higher amongst low-income households than amongst typical households. Levels of food insecurity are also higher amongst those with low incomes, and are particularly high amongst lone parents.
- The poverty rate in Scotland increased substantially during the 1980s, before a prolonged fall in the rate until 2011. By 2019/20, the poverty rate of 19% was significantly below its early 1990s peak of 25%, but above the pre-1980s rate of around 15%. Relative poverty in Scotland is on a par with the European average, but has been on an upward trend since the mid-2010s
- Household wealth in Scotland is extremely unevenly distributed relative to income. 45% of household wealth is held by the top 10% of households ranked by wealth, and 92% of wealth is held in the top half of households. The period from 2006/8 to 2018/20 saw the

value of household wealth in Scotland grow by over £400bn. But this increase merely maintained existing inequalities, rather than being more equally shared.

Incomes, living standards and health

There is a strong association between financial security and health. Financial security is normally measured by considering income (typically at a household or family level), often in combination with information on other factors that influence financial security (or its converse, financial stress), including the level of unavoidable expenses, household debt, and wealth.

Anecdotally, there is a strong association between household income and self-reported health in Scotland. Around 15% of women living in the lowest income fifth of households in Scotland rated their health as bad or very bad, compared to less than 2% of women living in the highest income fifth of households. For men, the association between household income and self-reported health is even stronger.

The fact that there is an association between household income and health does not necessarily mean that all of the variation in health is caused by differences in income. But income is undoubtedly an important determinant of health status.

Why might higher income be associated with improved health? The Health Foundation notes that: 'An adequate income can help people to avoid stress and feel in control, to access experiences and material resources, to adopt and maintain healthy behaviours, and to feel supported by a financial safety net' (Lawson, 2018). Having more limited resources, particularly where that results in financial strain or insecurity, can lead to stress and anxiety, increasing the risks of mental health problems, and again potentially encouraging less healthy behaviours as part of a coping mechanism.

Indeed, a UK-wide survey in May 2022 found that half of people in the UK think that their health has deteriorated as a result of the cost-of-living crisis (Royal College of Physicians, 2022). Increased costs associated with heating, food and transport in particular have led people to feel more stressed about their financial circumstances.

The causative impact of income on health is more difficult to identify (Thomson et al. 2022). Debates also continue as to whether it is absolute income or relative income that matters most. There are certainly theoretical grounds to believe that relative income (i.e. inequality) will matter – partly because one's perspective of one's standard of living relative to others may be a source of stress and anxiety, but partly too from a macro-perspective because higher inequality might enable the better-off to 'capture' the political system to their advantage, and to the detriment of the least well off. In practice the empirical evidence is mixed (Monheit, 2022).

Increased financial strain at household level is associated with increased risk of unhealthy outcomes in children (McKenna et al. 2017). Being in poverty is also associated with worse health outcomes (Cooper and Stewart, 2017). There are generally thought to be two reasons why poverty and/or financial strain more generally may affect child outcomes (Cooper and Stewart, 2017):

- One is 'investment': money affects children's outcomes via parents' ability to invest in goods and services that contribute to healthy child development
- One is 'family stress': emotional pathways through which money can affect outcomes. Living with limited resources is stressful, and that stress can manifest itself in a stressful home environment, that in turn can affect children's health and emotions.

Household income is largely determined by earnings from work, pensions and benefits. Policy directly relating to these elements is largely determined at UK level. Household incomes are often measured after housing costs however, and some aspects of housing policy are determined directly by the Scottish government (discussed further in section on housing).

Inequality of household income is high but has not increased since 1999; the notable feature of the last decade has been an unprecedented stagnation in income for all

In order to provide context for discussions about how household incomes have evolved since 1999, it is useful to consider the evolution of household income over a longer period. Chart 3.1 shows how disposable household income for Scottish households has evolved since the 1960s, in different parts of the distribution.

The measure of household income we use here is 'net, equivalised, after housing costs'. Income is 'net' because it is measured after direct taxation (income tax, national insurance contributions and council tax). It is 'equivalised' in the sense that it has been adjusted to reflect the composition of a household. Equivalisation recognises that an income of say £300 per week goes further – and allows a higher standard of living – for a single adult than it does for a couple with children for example. We measure income after housing costs (rents, mortgage interest payments, service charges, etc.) since these costs are often significant, and are difficult for households to change, at least in the short term.

In brief, Chart 3.1 shows that:

- The 1960s were a period of robust household income growth that was, if anything, somewhat inequality reducing – incomes grew relatively more quickly for the bottom fifth of the population compared to the top fifth.
- In the 1970s, incomes grew fairly slowly in real terms but with little change in the distribution – income growth was similar across all quintiles.
- The 1980s witnessed a prenominal rise in the dispersion of household income. The incomes of the bottom fifth of the population were actually lower in real terms by the end of the decade than at the beginning. In contrast the incomes of the top fifth grew by over 3 per cent per annum in real terms. The top pulled away from the median, and the bottom lost ground to the median.
- The 1990s were a decade of relatively robust growth, although with a continued increase in inequality; the 2000s was also a decade of robust growth, and this was in general more equally distributed.
- The standout feature of the 2010s has been the remarkably slow growth of income. Annual income growth for the median household was less than one per cent per annum, slower than it was in any previous decade for which data exists. Income growth was particularly sluggish for the top decile, implying some reduction in inequality.

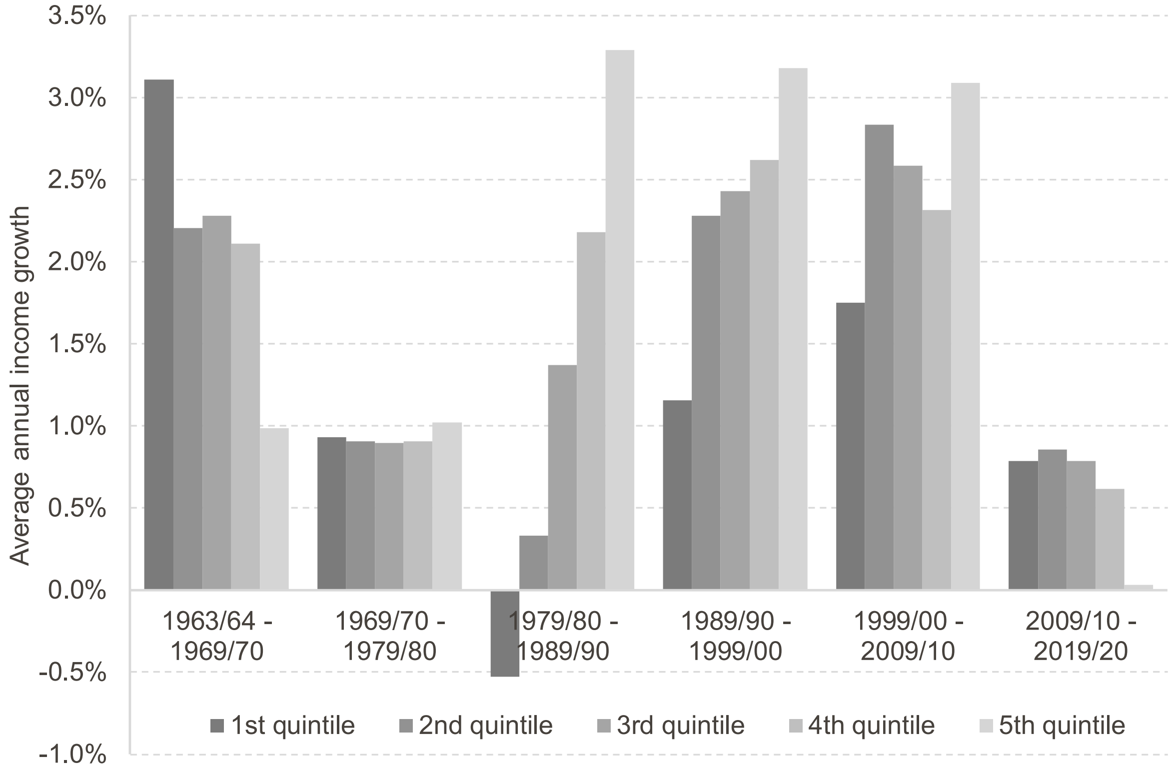
The stagnation of household income growth since 2010 is shown more starkly in Chart 3.2. This shows that throughout the 1980s, 1990s and 2000s, median household income growth remained relatively robust, but stagnated during the 2010s. By 2019/20, median household income was some £70 per week lower than it would have been had the pre 2010/11 trend continued.

Chart 3.3 show what these trends mean for inequality in household income in Scotland over time, here measured by the Gini coefficient. From a low base in the 1960s and 1970s, inequality in household income (whether measured before or after housing costs), increased throughout the 1980s and early 1990s. Since then it has fluctuated somewhat, but remains high.

Scotland's Gini coefficient for net equivalised income *after housing costs* in 2019 of 0.32 is lower than in the UK as a whole, which measures 0.35 (Chart 3.4). This gap has been broadly consistent over the period since devolution. Others have documented that the difference between Scotland and the UK is driven largely by the special case of London, which includes a large number of high income households which skews the distribution (Bell and Eiser, 2015). Excluding London and the south east, income inequality in the UK is not notably different from Scotland.

Chart 3.1: The pattern of household income growth across the income distribution has varied markedly during the past six decades

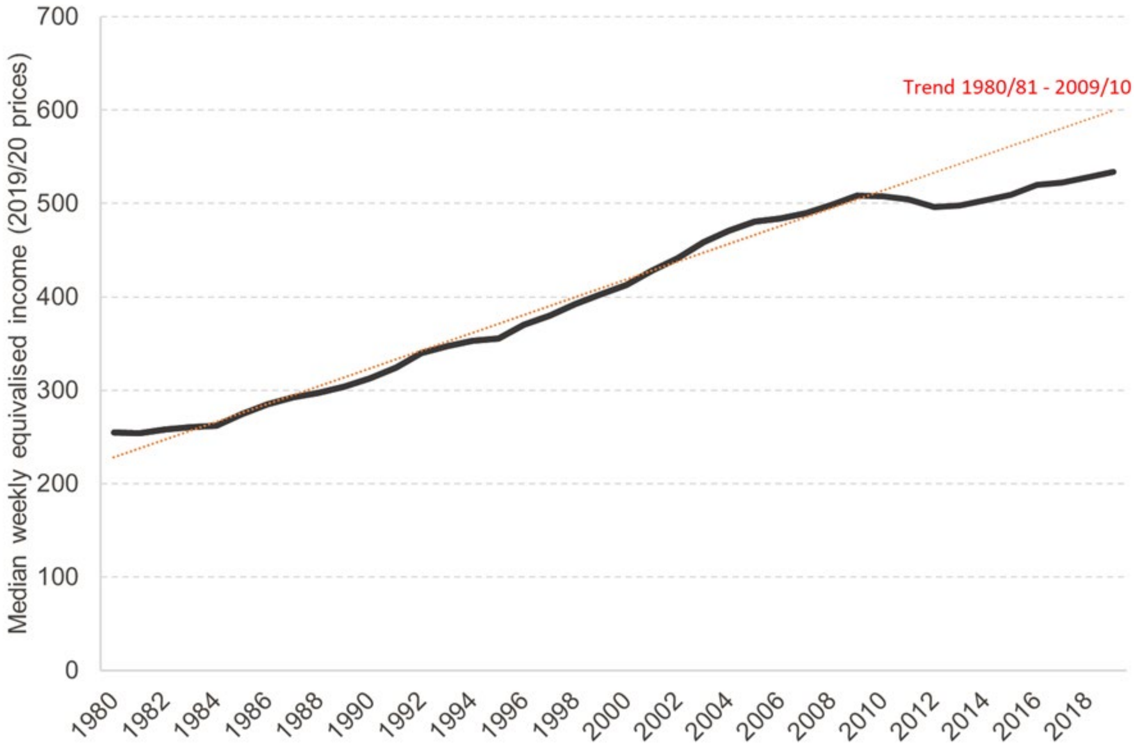
Average annual growth in real After Housing Cost household income in Scotland, by decade



Source: FAI analysis of the Family Resources Survey (Historic Dataset) and Households Below Average Income datasets, various years. Note: data is presented on basis of three year rolling averages for the three years up to the date shown on the x-axis. N = 206,582

Chart 3.2: The longrun growth of household incomes has stalled since 2010

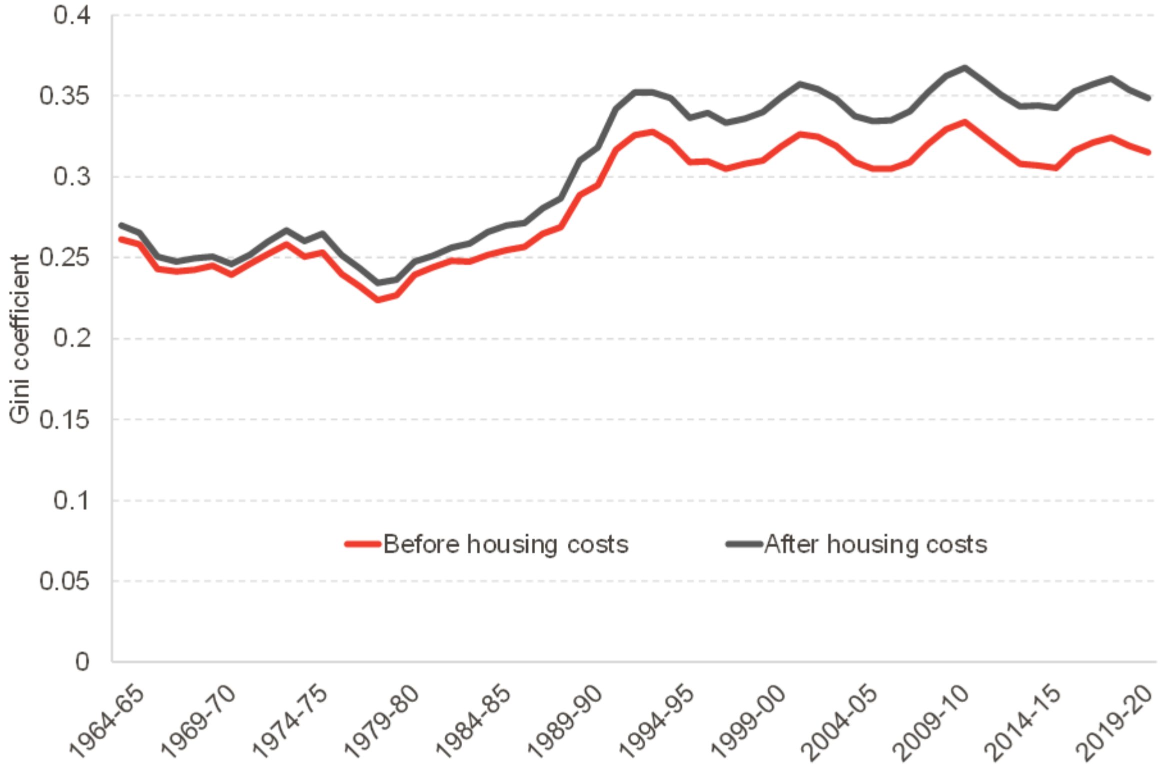
Median household income, before housing costs, Scotland (2019/20 prices)



Source: FAI analysis of the Family Resources Survey (Historic Dataset) and Households Below Average Income datasets, various years. Note: data is presented on basis of three year rolling averages for the three years up to the date shown on the x-axis.

Chart 3.3: Household income inequality rose significantly during the 1980s, and has remained high since then

Gini coefficient of household equivalised income in Scotland, before and after housing costs



Source: FAI analysis of Households Below Average Income datasets. Note: data is presented on basis of three year rolling averages for the three years up to the date shown on the x-axis. N = 206,582

The explanations for the broad trends set out above – which are mirrored for the UK as a whole – are typically described along these lines (e.g. Atkinson, 2015):

- Inequality was relatively low in the 1960s and 1970s because of a combination of: the relatively narrow pay dispersion in the industrial sector which accounted for a high proportion of employment; the role of trade unions and pay boards in regulating pay structures and awards and; a redistributive tax and benefits system.
- The substantial increase in inequality during the 1980s resulted from a multitude of factors. Inequality in earned income increased because of the growth in financial and business services sectors, in which pay is less evenly distributed. This was accentuated by an erosion in the influence of trade unions in regulating pay. In addition to this there were some big increases in unemployment (reaching 11% in the 1980s and again in the early 1990s recession). When combined with real terms reductions in the value of unemployment benefit, the result was an increase in the difference between the average incomes of households in work and those not in work. There were also reductions in the real value of pension benefits (widening the gap between pension and working age households). There was also a substantial reduction in the progressivity of personal taxation. Top income tax rates were reduced from 80% in the 1970s to 40% by the end of the 1980s, boosting the disposable incomes of those with the highest earnings.

- The second half of the 1990s and 2000s saw rising employment. There was some further increase in inequality of employment income, but at household level this was kept in check by an increase in dual earner households and changes to the welfare system. Notably these included the introduction of Working Tax Credits, which raised the incomes of low-income families, particularly those with children. Increases in the generosity of the State Pension and Pension Credit, plus the fact that those retiring tended to have better occupational pensions than predecessors, resulted in a sustained increase in relative position of pensioners, who were previously a relatively poor group.
- During the 2010s, the lowest income fifth suffered substantially through real terms cuts to welfare (although there were big differences between the treatment of working age and pension-age benefits). But those in work suffered just as much through unprecedented wage stagnation, and this, combined with employment growth, meant that the widely anticipated impact of benefit cuts on inequality did not materialise as might have been expected. Tax increases and benefit cuts for those at the top of the distribution (income tax, child benefit and council tax) also kept inequality in check.

Household income inequality in Scotland and the UK is high in an international context

Household income inequality may not have increased substantially in Scotland in recent years, but inequality is high relative to many comparator countries.

Chart 3.4 shows the Gini coefficient of net before housing cost equivalised income in a variety of OECD countries. Household income inequality in the UK is particularly high in an international context. Previous research has shown that this is partly accounted for by the very high disparities of income in London; UK regions and nations outside of London typically have lower levels of income inequality.

Nonetheless, inequality in Scotland, whilst not as high as in the UK as a whole, is high in an international context. This is largely due to the large increases in inequality that occurred during the 1980s and early 1990s, rather than more recent trends.

One might ask what accounts for Scotland's relatively high levels of net income inequality – is it because inequality of pre-tax and benefit income is high, or is it because the UK tax and benefit system redistributes relatively less than tax and benefit systems in other countries?

The answer to this question is 'a bit of both'. The Gini coefficient of pre tax and benefit income in the UK is 0.51, the same as in the US (0.51), slightly above Germany (0.49) and slightly below France (0.52).

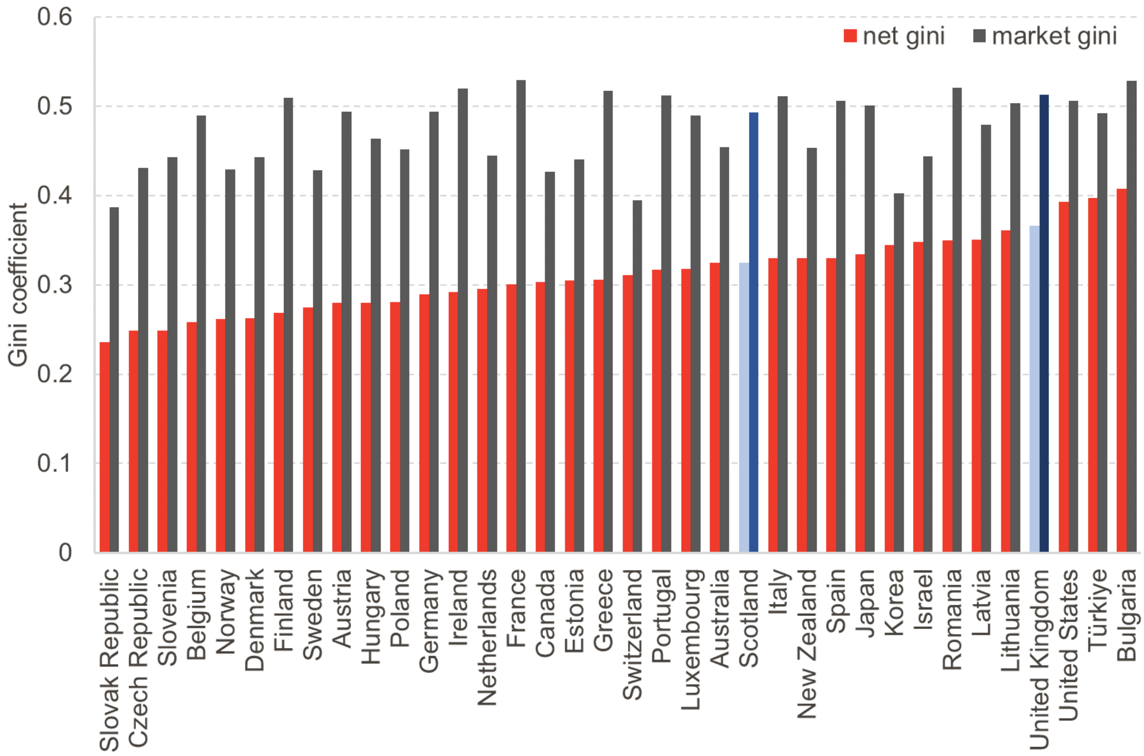
But taxes and benefits reduce the Gini coefficient by only 11% in the US, compared to 14% in the UK, 21% in Germany and 23% in France.

Some countries however have lower levels of income inequality because they have lower pre-tax and benefit income inequality, including Australia, the Netherlands, and the Nordic countries.

Scotland's inequality of pre-tax and benefit income is 0.49, so slightly (two percentage points) lower than it is for the UK as a whole. Scotland's inequality of net household income, at 0.31, is just over two percentage points lower than it is in the UK. The fact that taxes and benefits have a very similar effect on redistribution in Scotland as in the UK is not surprising given that the structure of taxes and benefits was very similar in 2018, the year for which the comparative data is available.

Chart 3.4: Household income inequality in Scotland and the UK is high in an international context

Gini coefficient of household equivalised income in selected OECD countries, 2018



Source: OECD income distribution database and FAI analysis. Household income is measured net of taxes and benefits before housing costs and is equivalised.

Incomes have compressed across much of the distribution, but the top has pulled away and the bottom has fallen behind

The analysis so far as considered income inequality in a broad sense. But it is important to consider how inequality has evolved at a finer level of detail.

Chart 3.5 shows the average annual growth in net equivalised household income for each percentile of the income distribution in Scotland. It divides the analysis into two periods, broadly corresponding to the first and the second decades of devolution.

The first decade showed robust annual growth for most households. Across much of the income distribution, the distribution of income compressed – income growth at the 20th percentile was almost 3.5% per annum, whereas at the 80th percentile it was 2.5%.

But there is a different story at the tails of the distribution. The lowest income tenth of the population saw much slower growth than the rest. On the other hand, the top couple of percent pulled away from the rest. So the story is complex – compression across most of the distribution, combined with polarisation at the tails. This story is very similar in the UK as a whole.

The contrast with the second decade is remarkable. Since 2009/10 disposable income growth has been completely sluggish across the entire distribution (albeit slightly inequality-reducing). The picture here for Scotland is very similar to the picture for the UK as a whole.

The companion report on health inequalities in Scotland from the University of Glasgow (Miall et al. 2022) finds evidence that, for some measures of health inequality, the health of people living in the most deprived quintile of neighbourhoods in Scotland has, over time, deteriorated relative to the health of people in less deprived neighbourhoods. This widening has in some cases been brought about not simply by a widening of the gap between those from the most deprived relative to the least deprived areas, but also a widening of the gap between the most deprived and second most deprived quintile of neighbourhood deprivation. This is particularly the case for drugs deaths, and to a lesser extent avoidable mortality. The authors hypothesise that this may reflect a worsening of social deprivation among particular neighbourhoods and groups.

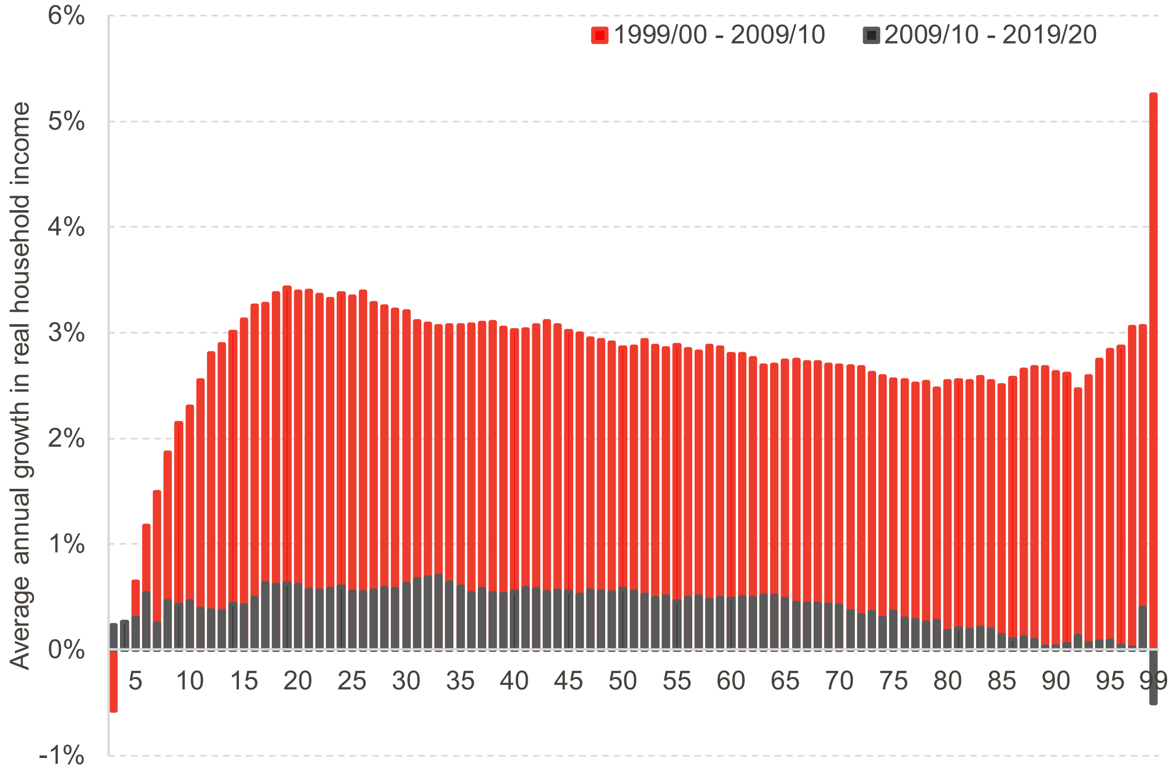
Chart 3.5 provides indicative evidence of a worsening of the social position of those with the lowest incomes, relative to those with incomes slightly further up the distribution. We can formalise this by expressing the average income of households in the bottom quintile of the distribution, to the average income of households in the second-bottom quintile of the income distribution, or to the average income of households in the middle fifth of the distribution.

What this reveals is that the average income of the second lowest quintile of the income distribution was around 1.8 times the income of the lowest quintile in 1999, and this had widened to a gap of 2 times by 2019. Similarly, the gap between the middle quintile and the bottom quintile increased from 2.5 times to 2.7 times.

On this measure of After Housing Cost income there therefore does seem to be some evidence that the lowest income households have become slightly detached from those with slightly higher income over time. However, we do not find the same widening of the gap in relation to Before Housing Cost income. This implies that unequal effects of changes in housing costs have been important in influencing this pattern. We discuss housing costs further in Chapter 5.

Chart 3.5: The first decade of devolution saw strong income growth for most coupled with an increase in inequality; the second decade of devolution saw weak growth across the whole distribution

Average annual growth in After Housing Cost equivalised income in Scotland at different points in the income distribution



Source: FAI analysis of Households Below Average Income datasets. Note: data is presented on basis of three year rolling averages for the three years up to the date shown on the x-axis. N = 58,775

Some groups have much lower incomes than others; but there has been relatively little change over time in groups' income relative to each other

There is substantial variation in the typical level of weekly AHC income across various subgroups in Scotland (Chart 3.6). For example:

- By family type: Chart 3.6 shows that the median weekly equivalised income of people living in couples without children is over £600 per week, almost double the equivalent figure of just over £300 per week for single parents. The median equivalised household incomes of pensioners, single adults and couples with children is broadly similar.
- By tenure: The median weekly household income of those occupying their own home vastly outstrips the typical income of those living in social rented accommodation or private rented accommodation.
- By ethnicity: The median income of ethnic minority groups is substantially lower than that of the population as a whole (limited sample size precludes us being able to look at specific ethnic groups other than 'Asian/ British Asian', even when we aggregated over three years).

- By education status: Households where at least one adult has a degree have substantially higher incomes (£630) than households where nobody has a degree (£420)[1].
- By disability: Households containing at least one person with a disability have a typical household income of £423 per week, compared to £524 for households with no person with a disability – remember too that these figures include the value of any benefits received by households to help address the additional costs associated with disability.

One might be interested to know how the relative fortunes of these different groups have fared over time. If there is a pattern here however, it is how little the income gaps between groups have evolved. For example, the differences in median income by tenure are little changed in 2019/20 than they were 20 years previously. By degree status, there was some closing of the income gap between households with and without a degree in the early to mid-2000s, but the gap has remained unchanged for the last 15 years, with households where at least one person has a degree having an income over 50% higher than those without a degree.

If there is one area where there has been some convergence in the household income gaps over time it is in relation to family type. Over the past 20 years, household incomes have grown relatively faster for the two groups that had the lowest household income in 1999: pensioners, and single parent families:

- Median household income for pensioners was around 17% below the population median in 1999, and was around 5% lower by 2019/20. This reflected more generous uprating of the State Pension and other pensioner benefits than working age benefits, combined with an improving generosity of occupational pensions.
- Median household income for single parents was almost 50% below the population median in 1999, but had risen to 'only' 35% below the population median by 2019/20. This reflected an increased generosity of state benefits for single parents in the 2000s, together with increased employment throughout the whole period.

There are relatively small differences in average, or median, household incomes in different parts of Scotland. Following an approach developed by the Scottish Government's RESAS (Rural and Environmental Science and Analytical Services) division, we identified seven different area types in Scotland, exploiting both the characteristics of local authorities and the urban/rural nature of settlements within those local authorities. The seven areas are:

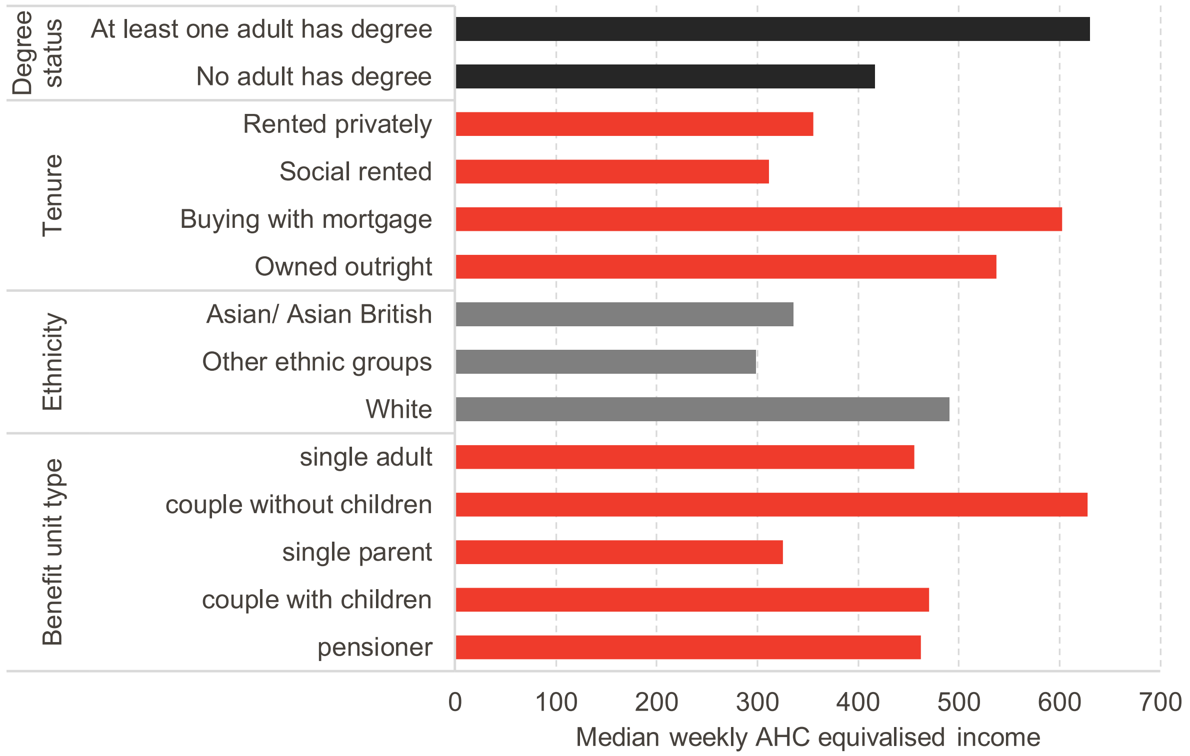
- Major urban centres (Glasgow, Edinburgh, Aberdeen, Dundee)
- Urban areas in mainly urban local authorities (North Lanarkshire, South Lanarkshire, Fife, West Lothian, Renfrewshire, Falkirk, East Renfrewshire, Inverclyde, West Dunbartonshire, Midlothian, North Ayrshire, East Dunbartonshire, Stirling)
- Rural areas in the above 'mainly urban' local authorities
- Urban settlements in mainly rural local authorities (East Ayrshire, Aberdeenshire, Clackmannanshire, East Lothian, South Ayrshire, Moray, Angus, Perth and Kinross, Highland, Dumfries and Galloway, Scottish Borders)
- Rural areas in the above 'mainly rural' local authorities
- Urban settlements in remoter and island authorities (Argyll and Bute, Shetland Islands, Orkney Islands, Na h-Eileanan Siar)

[1] This result is virtually identical if we exclude pensioners and focus on working age households only. In other words, the difference in household income between those with and without a degree is not simply the result of pensioner households being less likely to have a degree than working age households.

- Rural areas in the above remoter and island authorities.

We find that mean equivalised annual net income is around £27,000 in urban areas in more rural local authorities; around £28,000 in major cities and remoter local authorities, and around £29,000 in rural parts of both urban and rural local authority areas. The income variation within these geographical areas is far more significant than the variation between them.

Chart 3.6: There is huge variation in median income across various sub-groups
Median weekly equivalised after housing cost income for a variety of sub-groups, Scotland, 2017/18 – 2019/20



Source: FAI analysis of Households Below Average Income datasets. Note: income measured at household level, weighted by individual. Unweighted N = 17,113

There is a relatively high degree of income mobility across households over time; but a minority of households experience long periods of persistence at the top or bottom of the income distribution

The analysis we have considered so far is based on people's position in the income distribution at a snapshot in time. But it is important to consider how much mobility people have over the income distribution over time. For example, are the households in the bottom decile of the income distribution very likely to remain in the bottom of the distribution in subsequent years? Or is there a lot of mobility from one year to the next in households' position in the income distribution?

Shedding light on these questions requires longitudinal data that tracks the same households over time. We make use of the Understanding Society dataset, a longitudinal dataset that has been operational since 2009/10.

As an initial analysis, we compare the position of Scottish households in the income distribution at two points in time: 2010/11 and 2019/20. Specifically, we map which decile of the income distribution a household was in in 2010/11, and compare that to the decile that the same household was in in 2019/20.

To make the analysis more tractable, we group deciles in a particular way. We consider the lowest and highest income deciles individually. We then combine deciles 2 and 3 into one category, and deciles 8 and 9 into one category. Finally, we combined deciles 3, 5, 6 and 7 into one category. The rationale for this is that the deciles in the middle of the distribution are relatively close together in income terms. Assessing the extent to which households move from one specific decile to another therefore risks creating a somewhat spurious sense that there is a lot of income mobility, when in fact that 'mobility' is not material to people's lives.

The results are shown in Table 3.1. This tells us that:

- Of the households which were in the bottom decile of the income distribution in 2010/11, one quarter of those remained in the first decile of the income distribution nine years later. A further 39% had moved out of the bottom decile into deciles two and three, one quarter had moved into the middle of the distribution, and 10 per cent had moved into the upper third of the distribution.
- There is slightly less mobility at the top of the distribution. 40% of the households who were in the top income decile in 2010/11 were also in the top decile of the distribution nine years later. But a quarter of those in the top income decile in 2010/11 were in the middle of the distribution nine years later, and over ten per cent were in the bottom third of the distribution.

Table 3.1: There is a large degree of income mobility over a 10-year period, but income persistence for a minority

Households' position in income distribution in 2010/11, v. position of same household in income distribution in 2019/20, Scotland

		Decile Band in 2019/20				
Decile band in 2010-11		***Lowest decile***	***Deciles 2-3***	***Median deciles***	***Deciles 8-9***	***Highest decile***
	Lowest decile	**26%**	**39%**	**25%**	**7%**	**3%**
	Deciles 2-3	**16%**	**32%**	**41%**	**10%**	**2%**
	Median deciles	**7%**	**17%**	**52%**	**20%**	**4%**
	Deciles 8-9	**4%**	**11%**	**30%**	**35%**	**19%**
	Highest decile	**6%**	**7%**	**25%**	**24%**	**39%**

Source: FAI analysis of Understanding Society. Note: income measured after housing costs, equivalised. Unweighted N = 1,846

The degree of income mobility may be surprising. One explanation is that the income measure is equivalised, after housing costs. There is therefore a lot that can change a households' income circumstances – not only income from work and other sources, but also housing costs and the composition of the household (the fact that incomes are equivalised means that people could experience quite abrupt changes when additional children enter the household, or when older children leave the home).

As well as comparing mobility between two distinct periods of time, its also useful to consider how mobile households are across the income distribution from one year to the next, over a prolonged period.

Chart 3.7 covers the whole ten year period from 2010/11 to 2019/20. For each decile cluster, where those decile clusters are defined as above, it asks: for households that spent at least one of the ten years in this decile cluster, how many years did those households spend in that decile cluster?

What the data shows for example is that, of all households that spent at least one year in decile 1, 67% spent one or two years in that decile, 21% spent three or four years in that decile, and 13% spent seven or more years in that decile. The conclusion from Chart 3.6 is that most households who spend some time in the top or bottom decile of the income distribution over a ten year period spend less than half of that period in the top or bottom decile, and a majority of time closer towards the middle of the distribution. Nonetheless, a minority of households do find that their position at the either tail of the income distribution is fairly persistent.

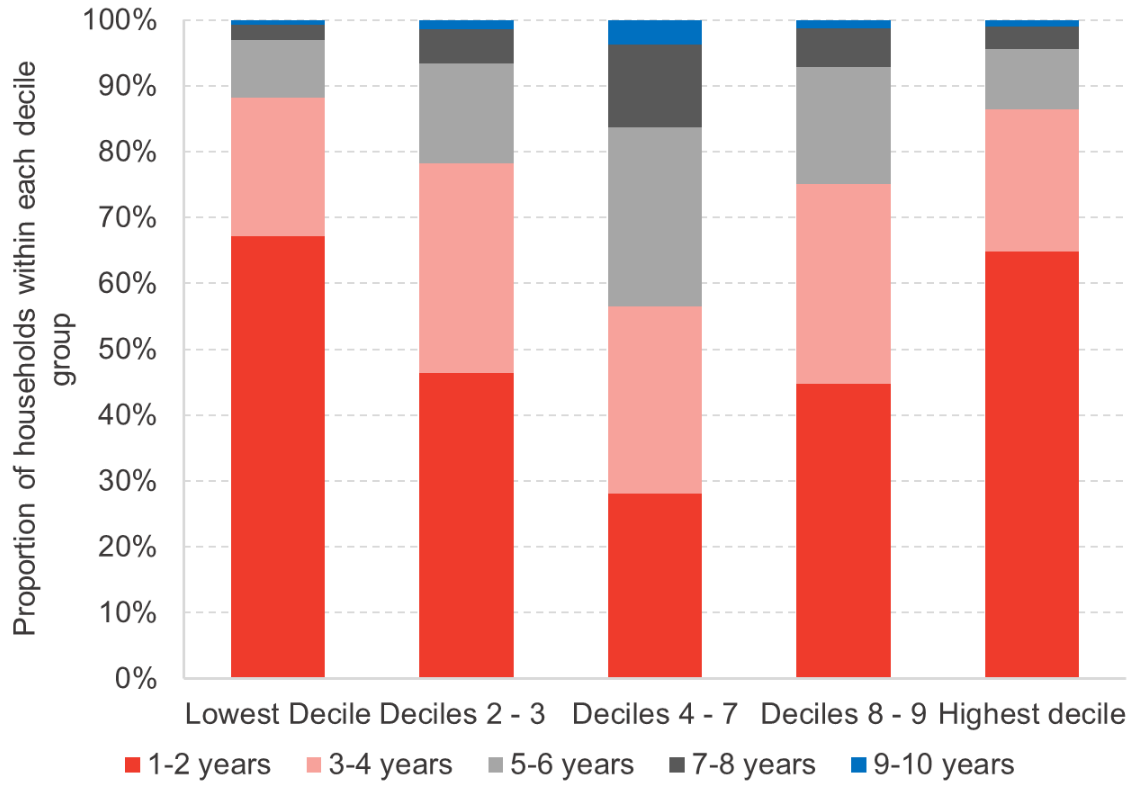
A slightly different way of considering this question is to look at the percentage of the whole population that spends different amounts of time in each decile. Chart 3.8 does this for a shorter, four year period from 2016/17 to 2019/20.

What this tells us is that 17% of the population spent at least one year of the four in the bottom decile of the income distribution, 5% spend 2 or more years in the bottom decile, and one per cent were in the bottom income decile in all four years. Similarly 13% of the population spent at least one year in the top decile and 2% spent all four years in the top decile.

Taken all together, what does this analysis tell us? It shows that on one level there is a lot of mobility around the income distribution, and a reasonable proportion of households move a long way up or down the distribution over a nine year period. But at the same time, the analysis also reveals that the income circumstances of some households – at the bottom and the top of the distribution – are deeply persistent over time.

Chart 3.7: There is a large degree of income mobility over a 10-year period, but income persistence for a minority

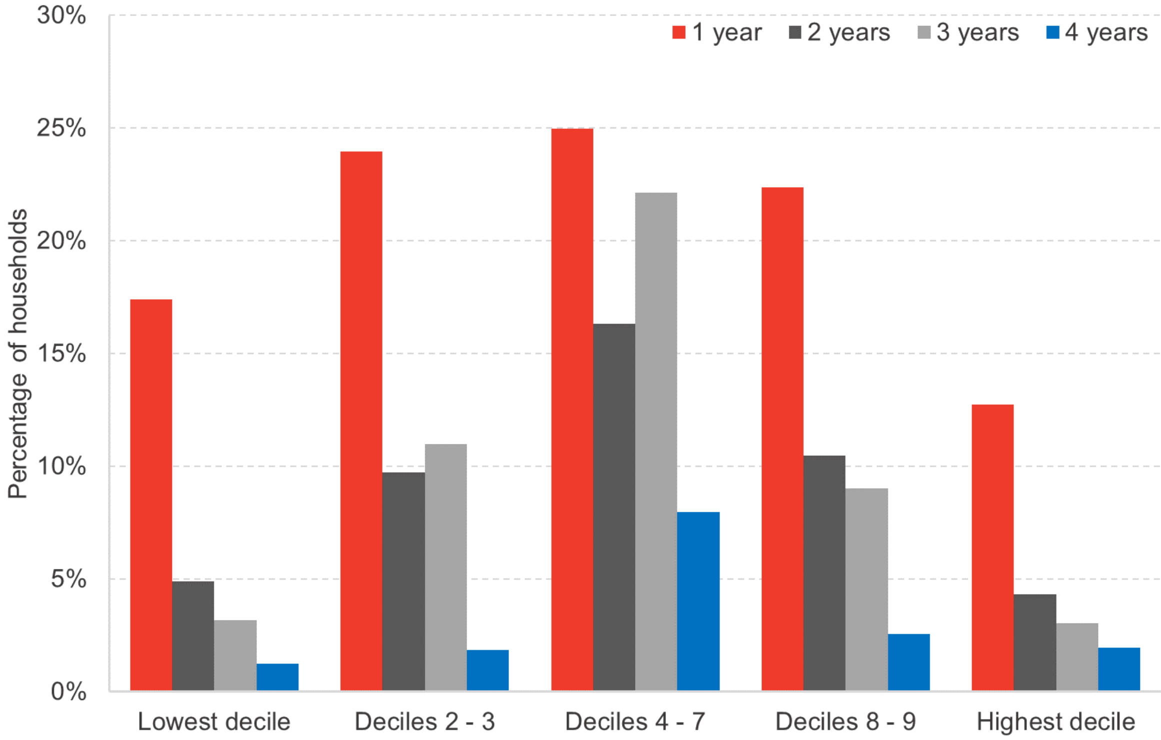
Number of years spent in each decile, for each household that spends at least some time in that decile



Source: FAI analysis of Understanding Society. Note: income measured after housing costs, equivalised. Unweighted N = 1,846

Chart 3.8: There is a large degree of income mobility over a 4-year period, but income persistence for a minority

Percentage of Scottish population spending given number of years in each decile cluster of the income distribution



Source: FAI analysis of Understanding Society. Note: income measured after housing costs, equivalised. Unweighted N = 2,193

The proportion of households who are struggling financially has declined significantly during the past 20 years

So far in this chapter we have considered household income. Household income is likely to be a fairly good proxy for a household's financial security more generally (especially when the income measure is after housing costs and equivalised). But the extent to which a household feels financially secure is likely to depend on other factors too. These might include for example how variable or uncertain a household's income is from week to week; the level of savings the household has (since these provide a buffer against unexpected expenses, or a temporary shortfall in income); the extent of unpaid bills and other problem debts; and other unavoidable expenses (such as for childcare or disability for example).

It is difficult to design a single measure which encapsulates all these elements of financial security. This is partly because no survey contains robust information on all elements, and partly because it is very difficult to know how to weight the different dimensions against one another.

One way to get at the broader question of financial security therefore is simply to ask households how well they manage financially. The Scottish Household Survey has asked this question since its inception in 1999.

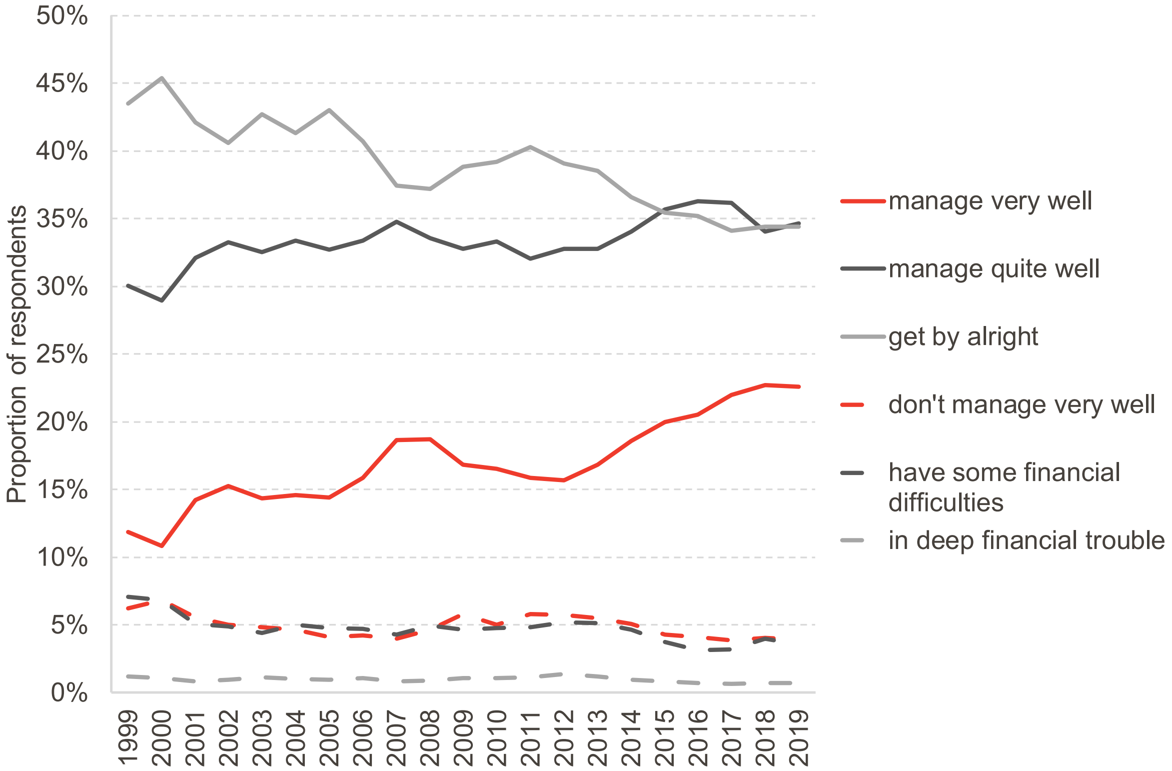
Chart 3.9 shows the distribution of responses to this question from 1999 – 2019. We can distinguish three periods in the chart: two periods of improving financial security before and after the financial crisis and its aftermath, and a period of heightened financial insecurity for the five-year period in the middle:

- Between 1999 and the onset of the financial crisis in 2007 the proportion of households saying that they manage either 'very well' or 'quite well' increased. This was offset by a fall in the proportion saying that they 'get by alright' as well as falls in the proportion saying that they 'don't manage very well' or have 'financial difficulties'.
- This strong improvement in financial security partially reversed between 2007 and 2012, coinciding with the financial crisis and the prolonged period of income stagnation in the years afterwards.
- A subsequent strong period of improving financial security from 2012 to 2018.

Over the 20-year period from 1999 to 2018, the proportion of households who say they manage well or very well has improved from 42% to 57%, whilst the proportion saying that they do not manage very well, have financial difficulties or are in deep financial trouble has declined from 15% to 9%.

Chart 3.9: The proportion of households saying that they struggle financially has declined since 1999

Proportion of Scottish households agreeing with various statements about how well they manage financially



Source: FAI analysis of Scottish Household Survey. Unweighted N = 231,547

Unsurprisingly, the proportion of households who struggle financially is much higher amongst low income households than high income households; and is higher amongst households in the bottom quintile of households ranked by neighbourhood deprivation than those in the top quintile.

Chart 3.10 looks more closely at the trend in our financial security indicator for various different groups: those in urban and rural areas; those in the lowest fifth of the distribution of net equivalised household income; and those in the bottom fifth of neighbourhoods ranked by deprivation. The measure we focus on here is the proportion of households saying that they either do not manage very well, have financial difficulties, or are in deep trouble.

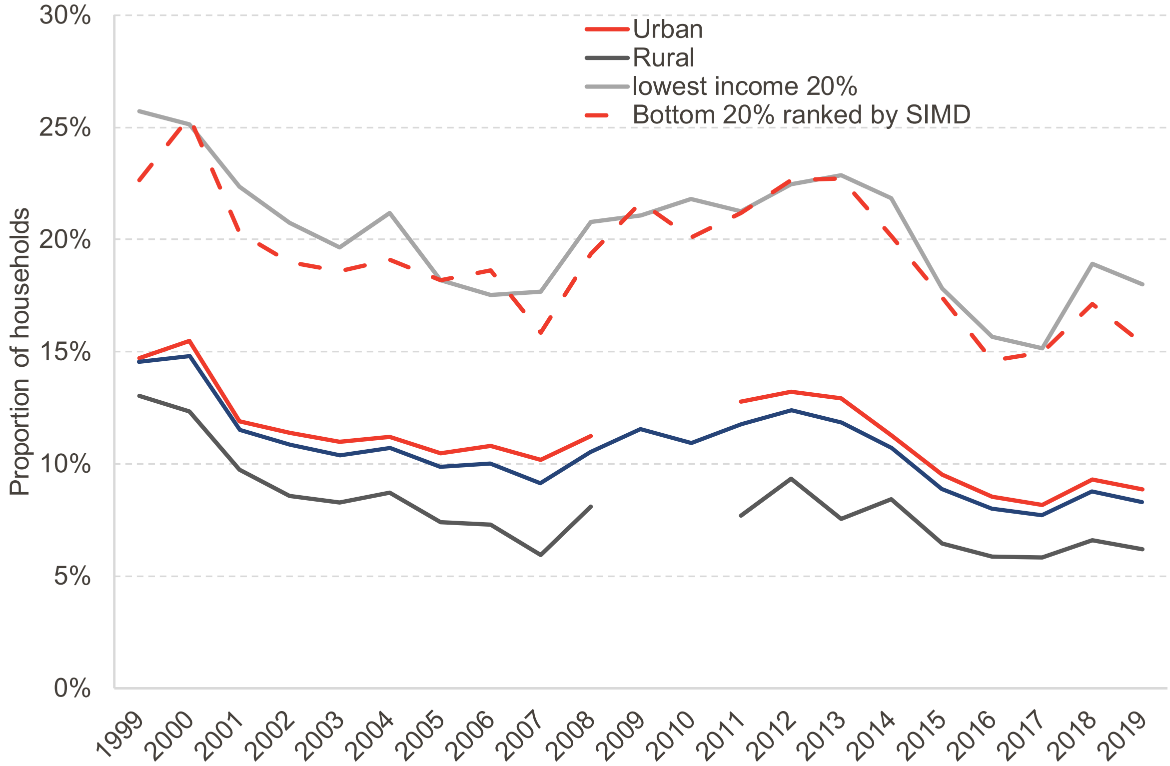
The general trend of a fall in financial insecurity until 2007, a subsequent rise, and then a fall again after about 2012 or 2013 is seen across all subgroups. Comparing 2019 with 1999 there clearly has been a decline in financial insecurity. But most of this decline can be attributed to the early part of the period. The falls in the second part of the 2010s merely offset the rise following the financial crisis. If we compare 2019 with 2007, there has been little if any improvement in this measure.

The decline in financial insecurity between 2012/13 and 2017/18 is somewhat surprising given that this was a period of ongoing sluggishness in earnings growth, and especially given that working age benefits were frozen in cash terms from 2015 -2019. It might simply reflect the fact that, although this was not objectively a 'good' period of household income growth, it was better than the years that had immediately preceded it, potentially combined with a more positive media narrative about the economic outlook. Or it might disguise subtler differences between those who may have benefited from (small) interest rate falls versus those who were reliant on working age benefits.

Chart 3.10 also shows that the proportion of households who say they struggle financially is consistently slightly lower in rural areas than in urban areas.

Chart 3.10: The proportion of households saying that they struggle financially has declined since 1999

Proportion of Scottish households agreeing with various statements about how well they manage financially



Source: FAI analysis of Scottish Household Survey. Unweighted N = 231,547

Relative poverty fell markedly between the mid-1990s and mid-2010s, but it fell much more for some groups than others

What is poverty? In broad terms, it is not having enough income or resources to meet some notion of 'basic needs', and when these circumstances exclude people from taking part in activities which are an accepted part of daily life in that society.

The Joseph Rowntree Foundation says of poverty: "*Poverty means not being able to heat your home, pay your rent, or buy the essentials for your children. It means waking up every day facing insecurity, uncertainty, and impossible decisions about money. It means facing marginalisation – and even discrimination – because of your financial circumstances. The constant stress it causes can lead to problems that deprive people of the chance to play a full part in society.*"

The British Medical Association (BMA) notes that poverty can affect the health of people at all ages. It notes that: 'In infancy, it [poverty] is associated with a low birth weight, shorter life expectancy and a higher risk of death in the first year of life. Children living in poverty are more likely to suffer from chronic diseases and diet-related problems. Poverty can affect children's cognitive development, and those living in poverty are over three times more likely to suffer from mental health problems. Poverty has long term implications on children's 'life chances' and health in adulthood.' (BMA, 2017).

The extent of poverty in a society can be measured in a number of ways. Most commonly, those whose household income is below 60% of the median are deemed to be the most 'at risk' of poverty. The size of this 'at risk' population relative to total population is often used as a proxy for the population living in poverty.

Some people object to using relative measures of poverty. The argument that is used is that absolute income matters more than relative income, since it is income in absolute terms that determines how far the household's income goes, and what they can buy with it. But this argument misunderstands the notion of poverty, as set out above, about what can be afforded in relation to societal norms. Adam Smith understood this in 1776, when he described poverty as the inability to afford, 'not only the commodities which are indispensably necessary for the support of life, but whatever the custom of the country renders it indecent for creditable people, even of the lowest order, to be without' (Smith, 1776). We should not expect poverty today to look like the sort of poverty described in a Charles Dickens novel; as societies' norms and expectations have moved on, so has the notion of what poverty entails. This is why the frequent focus on the relative poverty measure makes sense.

When thinking about how relative poverty has changed in Scotland, it makes sense to provide context for this by looking at the data over as long a period as possible, as we did when considering income inequality more broadly.

Chart 3.11 shows that relative poverty in Scotland hovered around 15% throughout the 1960s and 1970s. The 1980s and early 1990s witnessed a substantial increase in poverty, up to as much as 25%. Relative poverty then fell during the 2000s to around 17% by the aftermath of the financial crisis. But in recent years it seems to have begun to increase again.

The explanations for the large rise in poverty during the 1980s and 1990s are very similar to those for the big rise in household income inequality that took place during the same period. Earnings inequality increased as a result of economic structural change - the dominance of industries with relative flat pay structures giving way to a growth in sectors with greater variance in pay – combined with a weakening of labour market institutions that regulated pay. This increase in earnings inequality was accentuated by an increase in unemployment in the early 1990s combined with the effects of the previous decade's cuts to unemployment benefit. Pensioner poverty was high too, as a result of a decades long squeeze on the state pension.

The subsequent fall in child poverty over the period to the early 2010s is typically attributed to a combination of the introduction of more generous benefits for families with children on low-incomes, and an increase in employment amongst lone parents and second earners within a household. Parental employment increases have been enabled both to the introduction of Working Tax Credits which aimed to improve the financial incentives to work for those on low incomes, and to improvements in the provision of childcare (Brewer et al. 2020).

The large falls in pensioner poverty from 2000 are particularly striking, and reflect policy decisions to reverse cuts made to the state pension during the 1980s and the more recent emphasis on the 'triple lock'. But it also reflects increased retirement of the cohort who benefitted from particularly generous defined benefit occupational pension schemes.

Since the mid-2010s poverty shows signs of beginning to increase again. In the case of working age families this likely reflects the four-year freeze in working age benefits introduced in 2015, together with policies including the benefit cap and the two-child limit. Why pensioner poverty rates should increase is somewhat more puzzling.

The trends over time described here mirror trends observed for the UK as a whole. But measured after housing costs, the poverty rate in Scotland has typically remained around three percentage points lower than in the UK. This is generally attributed to Scotland's lower costs of housing, particularly social housing. This is not just driven by a London effect – even if London is excluded, the AHC poverty rate is typically around two percentage points lower in Scotland than other parts of the UK.

The fact that poverty rates have changed so much over time suggests that some cohorts may have had a higher risk of ever experiencing poverty, or a risk of spending longer in poverty. Both of these factors could have significant implications for health.

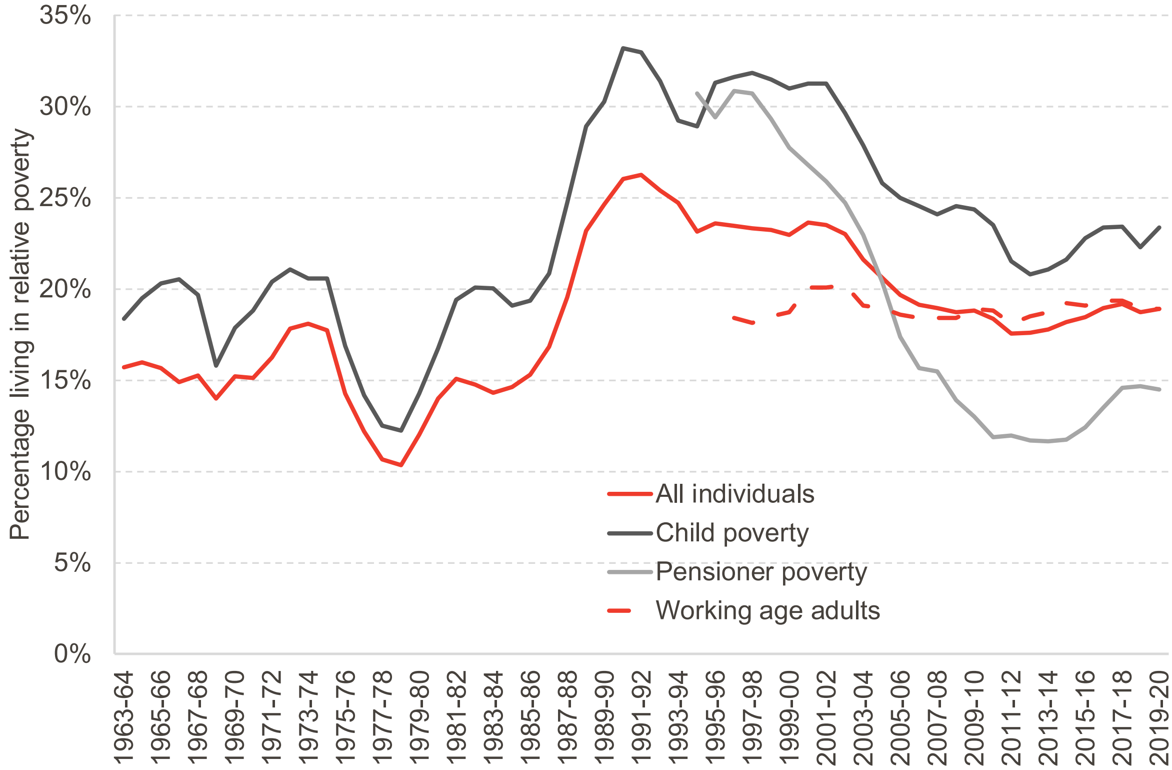
Poverty rates differ substantially between various sub-groups. Scottish Government analysis for example shows that, compared to a Scotland-wide poverty rate of 19% in 2017-20, the poverty rate was:

- 41% for Asian or Asian British people and 43% for people in black and other ethnic groups; compared to 19% for the population as a whole.
- 52% amongst Muslim adults compared to 18% for the adult population as a whole (some but by no means all of this can be attributed to the lower age profile of Muslim households compared to the average)
- 23% amongst people living in households with a disabled person, compared to 17% for people living in a household without a disabled person. The disabled poverty gap has not changed significantly over time.

These figures are similar to those for the UK as a whole. For example, recent research for the UK shows that black and minority ethnic minorities are significantly more likely to be in poverty and deep poverty than white people (Edmiston, 2022).

Chart 3.11: After falling significantly until the mid-2010s, poverty has begun to increase again

Relative poverty rates in Scotland



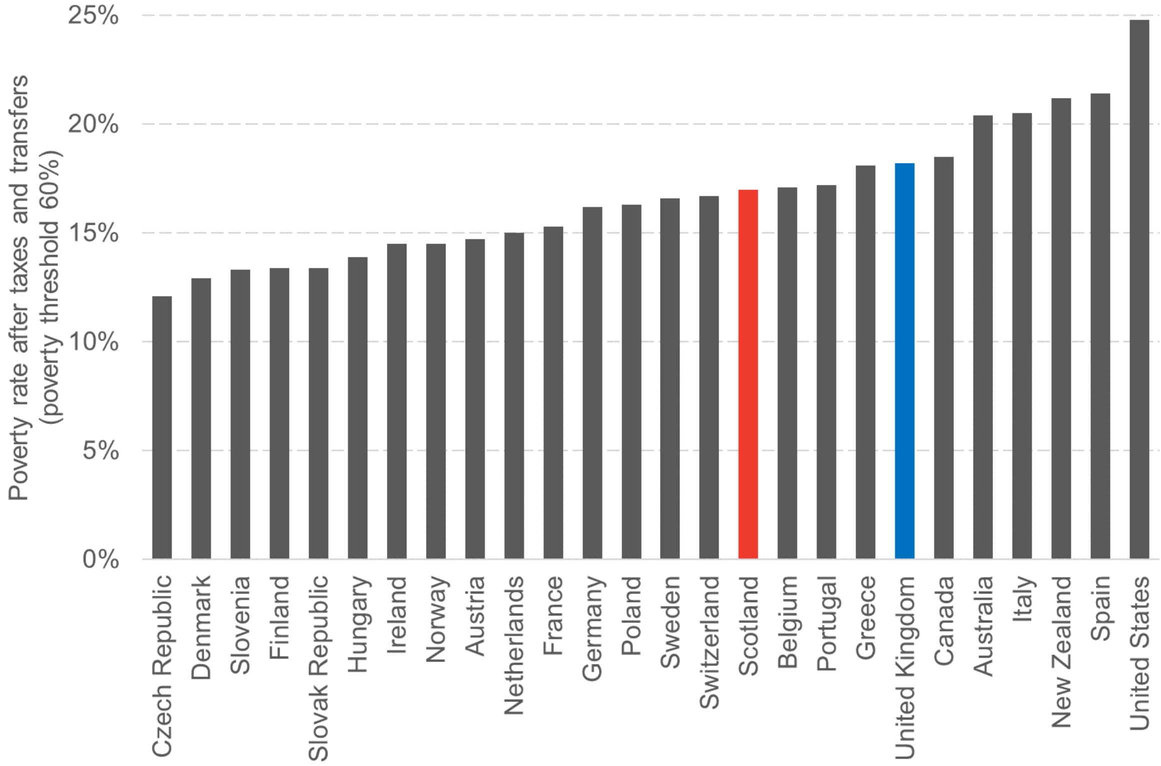
Source: FAI analysis of Households Below Average Income datasets. Note: data is presented as three year rolling averages for the three years up to the date shown on the x-axis. N = 206,582

The poverty rate in Scotland is broadly average in a European context

It is possible to compare *before housing cost* poverty rates in Scotland with those in OECD countries (Chart 3.12). The poverty rate of 17% in Scotland in 2018 was in line with the average for EU countries (which, including the Baltic countries not included in Chart 3.11, was 16.7%). Poverty rates are lowest in some of the former planned economies of Eastern Europe, and some of the Nordics.

Chart 3.12: Scotland's before housing cost poverty rate is in line with the average of EU countries

Before housing cost poverty rate, selected OECD countries and Scotland, 2018



Source: OECD Income Distribution statistics, and FAI analysis of Households Below Average Income datasets.

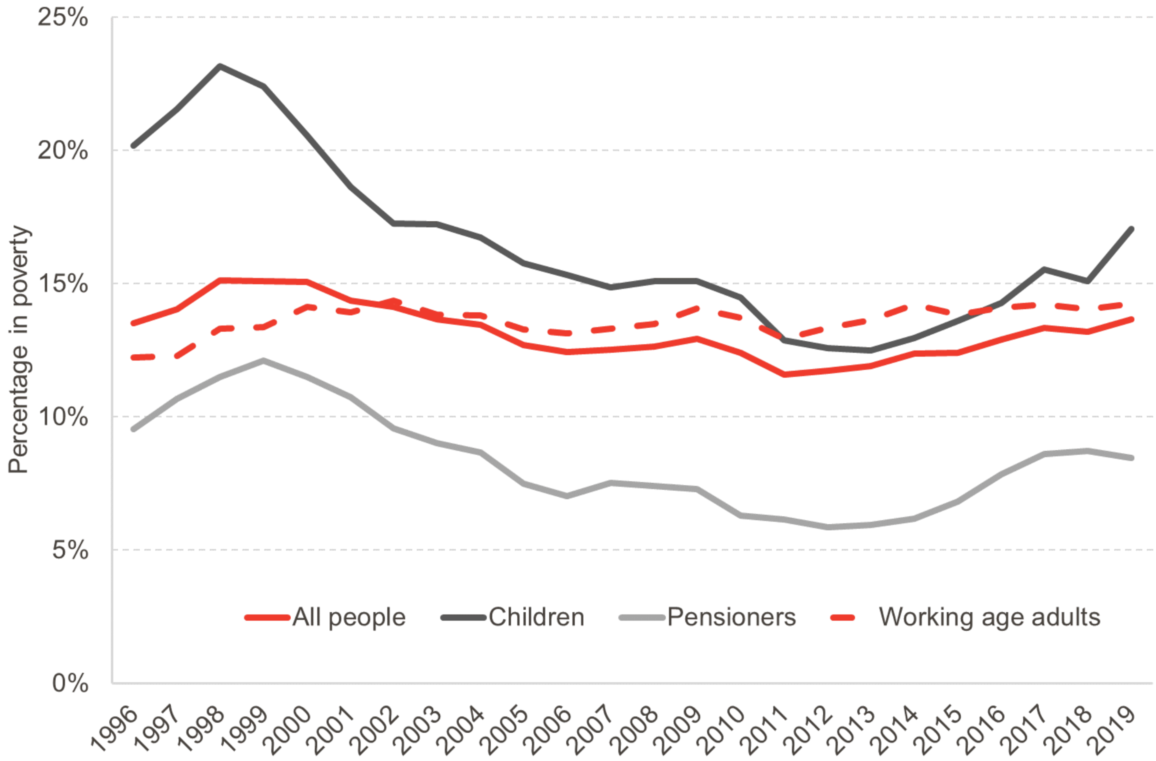
Extreme poverty is on the rise

We can also look at a measure of 'extreme poverty' – this is defined as households whose income is below 50% of the median, rather than below 60% of the median.

This shows a similar overall trend as for the 60% of median measure of poverty, with extreme poverty tending to decline during the 2000s and early 2010s, but beginning to increase from 2012 onwards (Chart 3.13). The increase in the extreme poverty rate for children seems particularly stark, and is likely to reflect the introduction of policies such as the benefit cap and two-child limit that have had the most impact on large families.

The proportion of pensioner households living in extreme poverty is substantially lower than the proportion of working age adults or children living in extreme poverty.

Chart 3.13: Extreme poverty was on the rise in the lead-up to the pandemic
'Extreme' poverty rates in Scotland



Source: FAI analysis of Households Below Average Income datasets. N = 181,558

Food security is lowest amongst single parents and those with the lowest incomes

Food insecurity or 'Food poverty' – an inability to afford a diet of sufficient nutritional value – has a range of adverse effects on health. Poor diet is associated with a range of adverse outcomes including obesity, diabetes and cardiovascular disease. It can also affect social and emotional wellbeing, and can have negative developmental consequences for children.

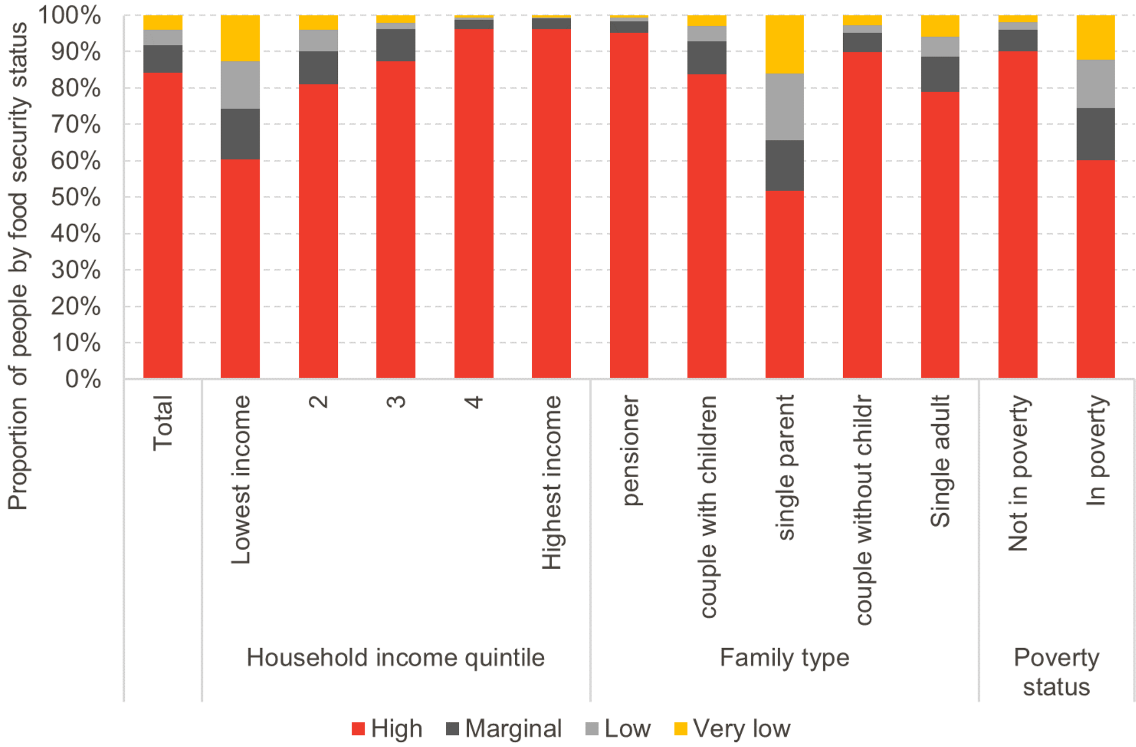
The Family Resources Survey recently began collecting data on households' food security. To identify food security, the survey asks households a number of questions about how often the householder does not have enough of the right types of food, goes hungry, or has to skip meals or reduce portion sizes because of a lack of resources. The responses to these questions are used to allocate households to one of four categories: high food security, marginal food security, low food security, or very low food security.

For Scotland as a whole, 84% of people live in households that have high food security (in 2019/20) and 16% live in households with marginal, low, or very low food security. 4% live in households with very low food security. The figures are not dissimilar from the UK as a whole, where 86% have high food security, and 4% have very low food security.

Single parent families are far less likely to experience food security than other family types, and pensioners are the most likely to experience food security (Chart 3.14). Unsurprisingly, the likelihood of experiencing food security is strongly associated with household income; only 60% of households in the lowest income quintile have high food security, compared to 96% in the top two quintiles.

Chart 3.14: Single parents and those on low incomes are least likely to experience food security

Rates of food security in Scotland, 2019/20



Source: FAI analysis of Households Below Average Income datasets. N = 5,525

Problem-debt is concentrated amongst low-income households

Household financial security is not just about income. Financial security might also be affected by factors such as the regularity and predictability of income, as well as the level of savings (which can help buffer unexpected expenditures) and wealth.

A pertinent indicator of financial situation is problem debt. An individual is said to be in problem debt if they live in a household which has liquidity problems (it is struggling to pay bills now), solvency problems (it is at risk of future problems due to current levels of debt) or both.

It is important to distinguish problem debt from debt more generally. Better-off households are likely to have higher levels of debt than low-income households, but this largely reflects the ability of high-income households to leverage their income to borrow to support purchases of housing and other assets. Debt in this sense is unlikely to be associated with higher levels of financial stress or insecurity.

In contrast, the Health Foundation notes that 'Being in problem debt can harm people's physical and mental health by acting as a source of strain and stress, reducing income available for health-promoting goods and services or increasing health-harming behaviours such as problem smoking'[2]. People with problem debt are more than twice as likely to self-report their health as being bad or

[2] https://www.health.org.uk/evidence-hub/money-and-resources/debt/relationship-between-self-rated-health-and-problem-debt

very bad compared to those without problem debt. Research in Glasgow has found that financially vulnerable individuals often rely on informal lending to avoid short-term illiquidity, but that informal loans can strain relationships and prevent people from building up a formal credit footprint (Biosca et al. 2020).

The Wealth and Assets Survey has collected information on households' problem debt since 2014. The latest data covers the period from 2018 to 2020, and shows that 4% of Scottish households had 'problem debt', not dissimilar to the 5% of households across Great Britain who reported having problem debt.

Unsurprisingly, low income households are much more likely to report having problem debt. 11% of households in the lowest fifth of households ranked by income reported having problem debt in Scotland, compared to 4% in the second quintile, 3% in the third quintile, 2% in the fourth quintile and just 1% in the top quintile ranked by income. The figures for GB as a whole are essentially the same.

There is no obvious sign that the proportion of households with problem debt was either increasing or decreasing over the period from 2014, and unfortunately consistent data is not available for periods before this.

Household wealth is extremely unequally distributed

A household's wealth and assets is another financial factor that is likely to influence health. Having wealth and savings helps to address short-term cost pressures facing a household, making it less likely that unexpected events cause stress and anxiety. Wealth, whether in the form of financial wealth, housing or pensions, also conveys a sense of financial security more generally. And holding wealth in the form of housing is likely to make it more likely that one feels secure in one's home, and that the home is of a decent standard.

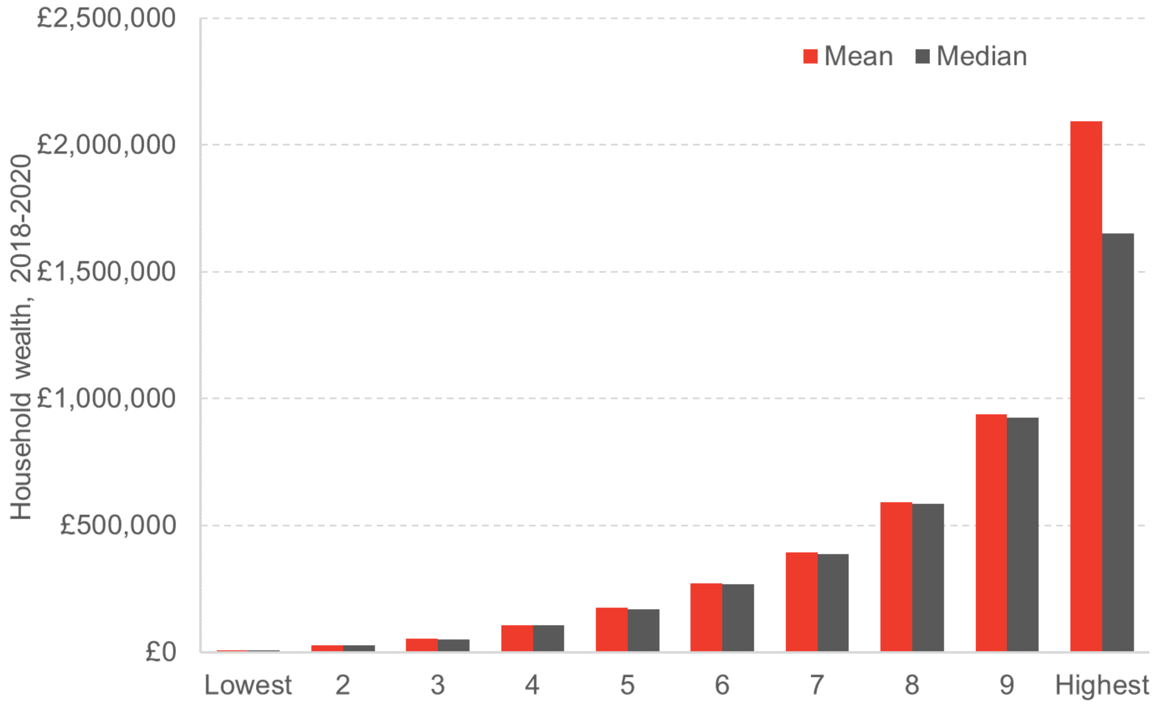
The Wealth and Assets Survey, which has been running since 2006, provides the most comprehensive source of wealth data in Great Britain. The survey collects self-reported data on wealth from households over periods of two year 'waves'. The Scottish sample includes around 1,500 households per wave and is designed to be representative of Scottish households (although no households north of the Caledonian canal are surveyed). Wealth surveys are likely to suffer from two main sources of bias. The first is non-response from the very wealthiest households; the second is under-reporting of some assets by households, and the third is biased valuations of assets by households (not necessarily deliberately, but simply reflecting the fact that many assets do not have an observable price). For these reasons, the WAS is likely to underestimate the extent of wealth inequality.

Household wealth is typically defined to encompass four elements: net property wealth, physical wealth, private pension wealth, and net financial wealth. Net property wealth consists of self-valuations of any property owned by the household, net of any loans or mortgages secured on the property. Physical wealth includes the estimated value of all household contents, including antiques, artwork, and vehicles. Private pension wealth is the value of all occupational and personal pensions. Financial wealth includes the value of formal investments such as bank or building society current or savings accounts, ISAs, endowments, stocks and shares, informal savings, and children's assets, less financial liabilities.

The stock of wealth owned by Scottish households is large – around £1.4 trillion in 2018-20. It is also distributed extremely unevenly (Chart 3.15). The top 10% of households in Scotland ranked by wealth had an average wealth of over £2 million (although the median wealth of the top decile is £1.65 million, indicating substantial inequality of wealth within the top decile). The median wealth of Scottish households was £214,000, whilst those in the bottom decile had wealth of £7,600 on average. This distribution corresponds to a Gini coefficient of 0.64, much higher than the Gini coefficient for net household income in Scotland of 0.35. Scotland's Gini coefficient for total wealth inequality in 2018-20, at 0.64, is actually slightly higher than the UK equivalent of 0.61. Subsequent analysis could ascertain the reasons for this difference.

Chart 3.15: Household wealth is distributed extremely unevenly

Mean and median wealth for each decile of the household wealth distribution, Scotland, 2018-20



Source: FAI analysis of Wealth and Assets Survey. Unweighted N = 1,514

Of course part of the reason that wealth inequality is much higher than income inequality is that wealth is a stock that typically accumulates over people's working lifetimes. It is arguably more instructive to compare the distribution of wealth within a cohort than across the population as a whole. Nonetheless, even if we just consider wealth inequality for households in which the 'household reference person' is aged 45-54, the Gini coefficient is 0.54. This still corresponds to a very unequal distribution: the average wealth of the top decile, at £973,000 is 130 times higher than the average wealth of the bottom decile, at £7,450.

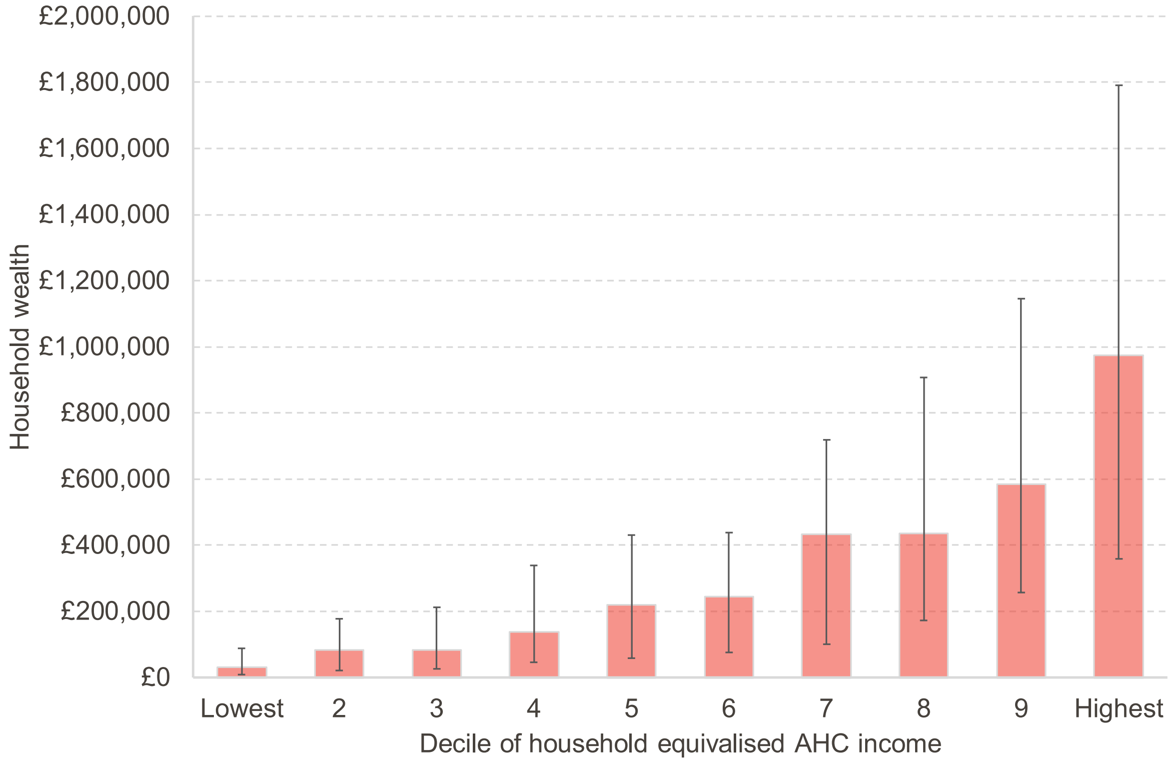
Is a household's wealth correlated with its income? As might be expected, higher income households tend to have higher levels of wealth on average. But there is also significant variation around this relationship. Chart 3.16 shows the median level of wealth for each household in the distribution of household net income; higher income households tend to have higher levels of wealth. The error bars in Chart 3.14 show the 25th and 75th percentile of wealth for each decile of household income.

The interpretation of these is as follows. Median wealth of a household in the fifth income decile is around £200,000. But the 25% of households in this decile have wealth below £60,000, and 25% have wealth above £430,000. Chart 3.15 thus reveals that one quarter of households in the fifth income decile have higher wealth than one quarter of households in the top income decile.

The data we have access to does not allow us to examine wealth across many other dimensions of inequality. But Advani et al. (2020) show, using a special data licence, that across the UK as a whole, ethnic minority groups are typically much less likely to have relatively high levels of wealth than average.

Chart 3.16: Household wealth is positively correlated with household income, but very imperfectly

The distribution of wealth by decile of the net income distribution, Scotland, 2018-20



Source: FAI analysis of Wealth and Assets Survey. Note: the top and bottom of each bar denotes the 75th and 25th percentile of household wealth for each income decile. Unweighted N = 1,514

Household wealth has grown substantially since 2006/8, but there has been little change in its distribution

How have things changed over time? We only have data since 2006/8. The total stock of household wealth in Scotland has expanded hugely in that time: from £667 billion in 2006/8 to £1.1 trillion in 2018/20. The vast majority of this increase – 70% - is accounted for by increases in pension wealth (which itself arises in part because of the fall in interest rates over this period, which raises the current value of a pension pot). The value of property wealth increased by £56 billion, financial wealth (e.g. current and savings accounts) by £48 billion, and physical wealth (e.g. household contents) by £41 billion.

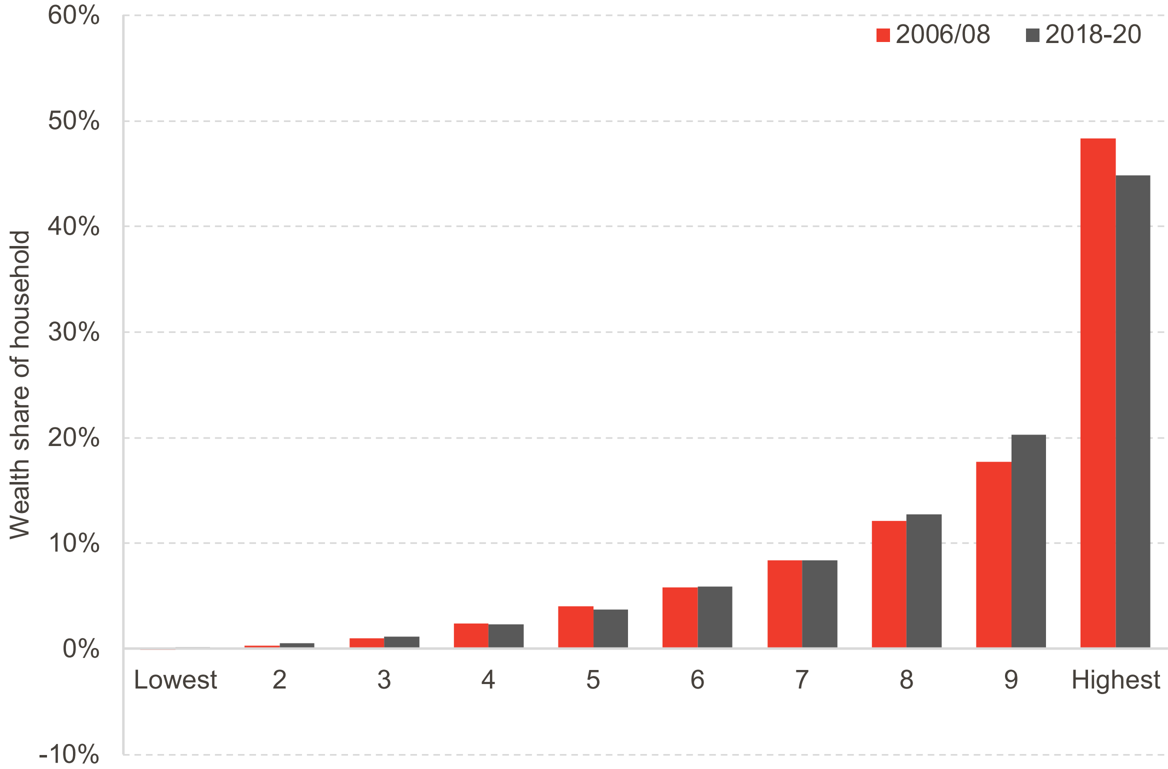
Perhaps surprisingly, there has been very little change in the inequality of household wealth in this time. The share of total wealth held by the top 10% did fall slightly, offset by a small increase in the shares held by the 8th and 9th deciles (Chart 3.17). But the share of total wealth held by the top half of households remained unchanged, at 92%. As a result, the Gini coefficient of household wealth fell fractionally, from 0.65 to 0.64.

We can conclude that, despite a substantial increase in the stock of household wealth between 2006/8 and 2018/20, that increase did nothing to share the stock of wealth more evenly across the distribution. The increase in wealth by decile was proportionate to the existing very unequal pattern of wealth stocks by decile.

Looking at housing wealth specifically over a slightly longer timeframe, Bangham and Judge (2019) conclude that inequality of housing wealth in Scotland has increased between 2006 and 2016, after having fallen during the 12-year period prior to that. The explanation for the fall in household wealth inequality between 1994-2006 and the rise in inequality in the decade afterwards relates mainly to patterns of home ownership. Between 1994-2006, home ownership in Scotland increased, thanks to the right to buy initiative (the scheme that enabled council house tenants to purchase their property from the local authority) and relatively easy access to credit. The subsequent decade saw a fall in the proportion of people who own their own home, but a rise in the proportion of people who own two or more properties. This concentration of residential properties across fewer households, combined with some increases in property values, drove the increase in housing wealth inequality.

Chart 3.17: Despite a substantial increase in the value of household wealth, there has been little change in how it is distributed

Share of wealth held by each decile of household wealth distribution in Scotland, 2006/8 – 2018/20



Source: FAI analysis of Wealth and Assets Survey. Unweighted N = 4,347

Conclusions

Greater financial security is associated with better health. The channels include the way that financial security helps to avoid stress and feel in control, and the importance of financial security in enabling households to access experiences and material resources, to adopt and maintain healthy behaviours.

The period since devolution is one of two distinct halves when it comes to household incomes. The first decade was a period of relatively buoyant income growth that was broadly shared across most of the distribution, apart from at the tails – the top one or two per cent pulled away, and the bottom tenth fell behind. The second decade, from 2010, was not one of increasing inequality, but of a dramatic slowdown in living standards.

Scotland's rate of income inequality remains relatively high in the context of most western European countries, this being the historical result of policy and institutional change in the 1980s. As well as having a relatively high overall rate of inequality internationally, income inequalities in Scotland are also high between groups. Income differences between households by ethnicity, disability and education status are high, and have remained persistently so over the period since 1999.

There is quite a high degree of income mobility in Scotland. Over a ten year period, a majority of households will move at least one quintile up or down the distribution, and some will experience large moves up or down the income distribution. But for a minority of households at the top and bottom of the income distribution, their position in the income distribution can remain persistent for long periods.

The poverty rate fell quite substantially during the first decade of devolution, largely the result of increases in the generosity of benefits paid to families with children, and pensioners. The relative poverty rate in Scotland is not significantly above the European average. But the more worrying trend is that the poverty rate has begun increasing since the late 2010s. This largely reflects the below inflationary increases in social security rates for the working age population.

Wealth inequality is also high in Scotland, and has remained unchanged over the period since 2006-08 for which we have comparable data. This is despite large increases in the stock of wealth over the period, which have served mainly to maintain existing wealth gaps, rather then having resulted in a more equal sharing.

Fraser of Allander Institute
University of Strathclyde
199 Cathedral Street
Glasgow G4 0QU
Scotland, UK

Telephone: 0141 548 3958
Email: fraser@strath.ac.uk
Website: fraserofallander.org
Follow us on Twitter: @Strath_FAI
Follow us on LinkedIn: FAI LinkedIn
Listen to the Podcast: FAI Apple Podcasts

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