

Executive summary

The Scottish Child Payment (SCP) is a key benefit for reducing child poverty in Scotland. When SCP was first introduced in 2021, it was underreported compared to administrative data in the survey data used to measure poverty in Scotland (the Family Resources Survey, or FRS). An imputation strategy to replace the suspected missing information was implemented in 2022/23 to better capture households receiving SCP.

Several issues were found with the initial imputation; for instance, several households are recorded as receiving SCP for children who were too old to be eligible. Scottish Government analysts have now worked with the Department for Work and Pensions (DWP) to develop a new imputation strategy that accounts for these issues in the latest data (2023/24). The new method takes into account the correct age ranges and amount of SCP per week, per child, as well as take-up rates for the benefit.

Accurate statistics are particularly important for this period as the 2023/24 data shows that Scotland has not met its interim child poverty targets.

In this report, we retroactively apply the new imputation method to the 2022/23 data to ensure that SCP take-up rates, and therefore poverty statistics, will be comparable between 2022/23 and 2023/24.

We conclude that the new imputation method creates small changes in some child poverty measurements for the year 2022/23. However, the main measurement used to discuss child poverty (60% of median equivalised household income after housing costs) is not affected by the change in imputation.

The new imputation method is also reasonably consistent in capturing the expected number of children and families receiving SCP and the total cost to the government over the financial year.

We conclude that the updated imputation methodology is a marked improvement over the previous method, but that implementing this new method earlier would not have significantly changed our understanding of progress towards the interim child poverty targets.

We welcome the new methodology and a commitment from DWP to provide more explanation of the imputation methodology alongside the 2023/24 statistics. We believe these improvements will ensure that people can use the new statistics with confidence. However, there must be a robust and transparent process in place to ensure that any future changes in devolved social security systems are accurately reflected in official poverty statistics.

Introduction

The <u>Scottish Child Payment</u> (SCP) is a key benefit for reducing child poverty in Scotland that was introduced in February 2021. Initially, children under 6 living in households that received qualifying benefits (primarily Universal Credit) could receive SCP; eligibility was extended to children under 16 in November 2022.

When the first years of Family Resources Survey (FRS) data to capture households receiving the Scottish Child Payment were published in 2020/21 and 2021/22, it was apparent that SCP was likely being underreported compared to the administrative data on SCP released by Social Security Scotland (Department for Work and Pensions 2025). An imputation approach was therefore instituted in 2022/23. In addition to households reporting receipt of SCP, eligible benefit units were randomly chosen to receive SCP to meet a target take-up rate based on available evidence from Social Security Scotland.

The Family Resources Survey

The <u>Family Resources Survey</u> (FRS) is a nationally representative survey of households in the UK. It has been collected by the Department of Work and Pensions (DWP) annually since 1994/95 and forms the primary source of information about UK household incomes.

The FRS is the basis of the <u>Households Below Average Income</u> (HBAI) dataset, which in turn is used to calculate UK and Scottish poverty statistics annually. The HBAI data aggregates information from the FRS about income from different sources and includes variables for household income that are adjusted for housing costs, household composition, high incomes with information from the Survey of Personal Incomes, and inflation.

However, there are documented issues with the imputation approach taken in 2022/23. Ineligible households or children not of an eligible age were imputed to receive the benefit, and the total number of children estimated to receive SCP, as well as the total cost of SCP to government, are low compared to published Social Security Scotland statistics. Information about how the imputation was carried out was not included in the FRS methodology for 2022/23 (Department for Work and Pensions 2024a). These issues had the potential to under-estimate household incomes for households eligible to receive SCP, and ultimately to cause the mismeasurement of poverty in Scotland.

DWP has now worked with Scottish Government to improve the imputation methodology used. The new methodology has been used to produce the 2023/24 FRS and HBAI data and the Scottish child poverty statistics for 2023/24.

2023/24 is a key year of data for poverty statistics because, under the Child Poverty (Scotland) Act 2017, Scotland has interim child poverty targets due in 2023/24. It is important not only that SCP is well-measured in the data to ensure that poverty is correctly estimated, but that stakeholders understand how these methodological changes may have changed measured poverty in the past.

¹ Benefit income is notoriously misreported in survey data, and typically underestimates both the number of people receiving the benefit and the total amount paid to households nationally (see e.g., Section 5 of Corlett et al. 2018).

² Benefit units are standard units for social security payments, representing a family (where a household can have more than one family or benefit unit).

In this report, we:

- Document some of the characteristics of the previous imputation of SCP in the 2022/23 FRS data:
- Describe the new methodology developed by DWP with input from the Scottish Government and implement it for the 2022/23 FRS and HBAI data;
- Re-estimate child poverty rates for 2022/23 based on the new methodology and compare them to the official statistics; and
- Recommend steps to make this and any future methodological changes transparent to stakeholders.

Scottish Child Payment in the published 2022/23 FRS dataset

Examining households reported as receiving SCP in the 2022/23 FRS flags several issues, particularly when benefit receipt and amount information are combined with information on the ages of all children in the household. The implied number of children receiving SCP can be obtained by dividing the total weekly benefit amount reported by the weekly SCP per-child rate at the time of interview (either £20 or £25).

Some of the apparent issues include:

- Several benefit units appear to receive SCP for children not under 16 (who have never been eligible for the benefit).
- Similarly, some benefit units receive SCP for children not under 6 before eligibility was extended to under-16s in November 2022.
- Some benefit units receive less SCP than they are entitled to based on the number of children present (these seem to omit mainly children under 1).
- The amount of SCP per week, per child appears to be increased from £20 to £25 in October rather than November 2022.

The published 2022/23 FRS shows an estimated 108,000 children receiving SCP in 59,000 benefit units. The implied annual cost of SCP is £126 million. All these figures are lower than would be expected based on statistics published by Social Security Scotland, even given known underreporting of qualifying benefits in the FRS (see

Table 1).

Amounts per child generally correspond to the amount of SCP per week, per child (£20 or £25 depending on when the household was interviewed). It is not apparent that bridging payments ahead of the eligibility extension to 6-15-year-olds were added to any households' income (see page 4 for further information on bridging payments).

These issues were apparent to stakeholders analysing the data, including the Joseph Rowntree Foundation (2024), and caused concern that the impact of the Scottish Child Payment in 2022/23 could not be reliably tracked using the official poverty data. Neither the DWP nor the Scottish Government have provided a public explanation of the issues, other than saying that officials have been working to ensure the imputation methodology for 2023/24 is robust (Somerville 2024).

At the Fraser of Allander, we were concerned that adopting a new methodology for 2023/24 without correcting the methodology for 2022/23 had the potential to further damage trust in the statistics if, for example, there was a significant step change in poverty levels that was disproportionate to policy changes. As such, we approached the Scottish Government, who in turn approached DWP, to provide the detail required to re-impute the data for 2022/23.

Implementing the new imputation methodology

Overview

DWP has developed a new imputation methodology with input from Scottish Government analysts. Details of the new methodology will appear in the FRS survey documentation for 2023/24. We do not anticipate that the 2022/23 data will be revised.

The imputation follows these general steps:

- Identify households with children aged 0-5 that receive qualifying benefits,³
- Randomly choose an eligible household to receive SCP and assume that all children under 16 in the household receive the payment,
- Continue to choose households until the target take-up rate for under-6s is met,
- Identify households with children aged 6-15 that receive qualifying benefits,
- Count all the households with children aged 6-15 already imputed to be receiving SCP and calculate the take-up rate for children aged 6-15,
- Add eligible households with children aged 6-15 at random until the target take-up rate for children aged 6-15 is met.

Estimated take-up was 95% for eligible 0-5-year-olds in 2022-23 and 77% for eligible children 6-15 by March 2023 (Scottish Government 2023); these are the targets we use in our imputation of SCP for 2022/23.

After imputation, we calculate each selected household's per-week SCP payment based on the number of eligible children and when they were interviewed. The interview date affects both the number of eligible children (where children aged 6-15 are only considered eligible if interviewed in or after November 2022) and the weekly rate of SCP (£20 per week, per child from April to November 2022 and £25 thereafter).

Accounting for changes in SCP criteria

6–15-year-olds were not eligible for SCP until November 2022. Therefore, children aged 6-15 are only flagged as eligible if:

- Their benefit unit was claiming an eligible benefit, and
- Their household was interviewed between November 2022 and March 2023.

The take-up rate of 77% for 6-15-year-olds is also calculated only among older children whose households were interviewed in or after November 2022.

This choice may affect poverty estimates, since it under-measures what household income would have been at the end of 2022/23. However, it more accurately reflects the number of children receiving SCP and the cost of SCP to the Scottish Government, as well as (on average across the sample) the income received from SCP by recipient households in 2022/23.

This issue does not impact poverty estimates for 2023/24, since there was no expansion of eligibility for SCP in that year.

³ Qualifying benefits include Universal Credit, Child Tax Credit, Working Tax Credit, income-based Jobseeker's Allowance, Pension Credit, Income Support, and income-related Employment and Support Allowance.

Accounting for bridging payments

In anticipation of the eligibility extension to SCP in November 2022, households that received free school meals for children aged 6-15 received four <u>bridging payments</u> between April and December 2022. The bridging payments were worth £650 in total for every eligible child.

Bridging payments were administered separately from SCP through local councils. Eligible households with children aged 6-15 still had to apply separately for SCP (or add older children to an existing SCP application) when the eligibility changed, and received all bridging payments regardless of whether or not they applied for SCP.

We use information in the FRS to identify households with children aged 6-15 who received free school meals. We assume that all children aged 6-15 in such households are eligible to receive the bridging payments and received the maximum for the year (£650). We therefore add £12.47 per child aged 6-15 to weekly benefit income for these households. Payments were automatic for households receiving free school meals, so we do not apply any take-up adjustment among households reporting free school meal receipt.

The alternative would be to add a higher weekly amount only to qualifying households interviewed in the months when the bridging payments were administered. However, this approach would underestimate annual income for qualifying households and make them appear less well-off than they actually were.

Like the accommodation we make in this exercise for the eligibility change in November 2022, there is no need to account for bridging payments when applying the updated SCP methodology to the 2023/24 FRS data.

Reducing random variation

To reduce random variation in results from which households are chosen to receive SCP, we repeat the new imputation 1000 times and average our results.

We round reported numbers of children to the nearest thousand and report monetary amounts to the nearest £ million.

Comparing previous and updated imputation methods

The Family Resources Survey is not intended to accurately represent an accurate caseload of children and families receiving SCP. Regardless, to benchmark the previous and new methodologies, we look at how the grossed number of children and families receiving SCP and the implied cost over the year compare to administrative statistics from Social Security Scotland.

It should be noted that Universal Credit (UC) is underreported by 20-30% in the FRS (see Table M6a of the 2022/23 FRS methodology documentation), so we would not expect to see the full caseload in the survey data. The weights in the FRS are also not perfectly representative of the population at this level of granularity, so we would not expect the number of children or families in the FRS to exactly correspond even to an adjusted administrative caseload.

⁴ This is a long-standing issue with the FRS which was known at the time of the Child Poverty (Scotland) Act in 2017 and is factored into Scottish Government modelled estimates of the impact of policies on the statutory targets.

Table 1: Number of recipients and cost of SCP shows the total number of children receiving SCP, the number of clients claiming SCP,⁵ and the total cost of the payment to Social Security Scotland.

When we implement the new imputation method for 2022-23, we estimate that 152,000 children receiving SCP are represented in the survey. This is lower than Social Security Scotland's reported 303,000 child recipients at the end of 2022-23 because it does not include children aged 6-15 in qualifying households that were interviewed prior to November 2022.

Table 1: Number of recipients and cost of SCP

	2022/23 Social Security Scotland SCP statistics (2023)	2022/23 FRS with updated imputation*
Number of children in receipt (0-15) (thousands)	104 (Jun '22) 106 (Sep '22) 184 (Dec '22) 303 (Mar '22)	152
Number of benefit units/clients (thousands)	96 (Jun '22) 100 (Sep '22) 146 (Dec '22) 177 (Mar '22)	103
Total amount paid by Scottish Government/received by households (£m)	190	182

Source: Social Security Scotland and FAI calculations from FRS 2022-23

Notes: None of the figures for the updated imputation include children or benefit units receiving bridging payments unless they are also imputed to receive SCP. The total cost also excludes the cost of bridging payments, which were administered through local councils and are not included in Social Security Scotland statistics.

With the new methodology, approximately 152,000 children are represented in the FRS as receiving SCP – about 98,000 under 6 and the remaining 54,000 between 6 and 15. This is reasonably consistent with the growing caseload recorded by Social Security Scotland, particularly given the large change in eligibility in November 2022 and underreporting of qualifying benefits.

Similarly, the number of benefit units represented is reasonably consistent with the statistics, and the estimated total cost across the year is not far off what Social Security Scotland reports for 2022-23.

⁵ Each benefit unit in receipt of SCP has one SCP client (one person claiming SCP on behalf of one or more children).

Re-estimating child poverty

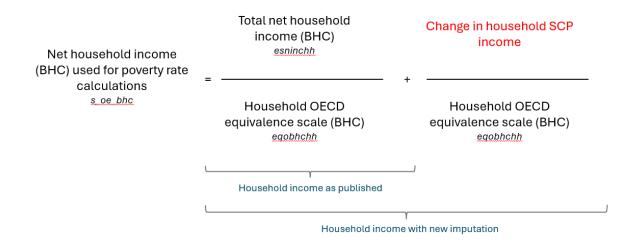
Process

We carry the new SCP imputation and income from SCP through to the income variables in the 2022/23 HBAI dataset. This requires both the removal of SCP income from households previously imputed as receiving SCP, and the addition of SCP income for households receiving SCP under the updated methodology. The added income includes bridging payments averaged over the year for each child in eligible households.

Poverty rates are calculated from net household income measured either before or after housing costs. Net household income is equivalised to account for household composition. The HBAI dataset also has net household income variables that are adjusted using the Survey of Personal Incomes (SPI) dataset to account for the low representation of high-earning households in the FRS.

Figure 1 shows how the before and after housing cost measures of household income are constructed in the HBAI data and how they are adjusted for the updated SCP imputation methodology.

Figure 1: Construction of net household income BHC



We take net household income before housing costs (BHC) that has already been adjusted with information from the SPI data and equivalised. We verify that no households receiving SCP (under either imputation methodology) are affected by the SPI adjustment. We then calculate a change in net household income from the change to the SCP methodology, equivalise that amount, and add it to equivalised net household income BHC.

We employ a similar process for updating household incomes after housing costs (AHC), where the only difference is subtraction of housing costs before equivalisation.

Note that, because the previously imputed SCP income for each household is removed, some households lose income under the new methodology. On average, across repetitions, 19 sample households lose income from the change in methodology and 100 sample households gain. The average net (unequivalised) change in income is a £25 per week loss for households that lose income and a £27 gain for households that gain income.

⁶ There is overlap between these groups, so that some households have net zero change in income between methods.

We then compare updated household incomes to the relative poverty line measured as 50%, 60%, or 70% of median UK household income. We assume that poverty lines do not change from those published in official statistics (Scottish Government 2024). We use grossing factors in HBAI to calculate population-level child poverty statistics, presented in Table 2.

Results

Table 2: Published and re-estimated relative poverty rates and rates of material deprivation

Housing costs	% of median income	Published rate (%)	Updated rate (%)	Change in rate (to nearest 1/10 pp)
Before housing costs (BHC)	50%	14	13	-1.0
	60%	24	23	-1.2
	70%	34	33	-1.3
	Material deprivation	10	9	-0.7
After housing costs (AHC)	50%	17	17	0.2
	60%	26	26	0.0
	70%	36	33	-2.8
	Material deprivation	12	11	-0.8

Source: FAI calculations from FRS and HBAI 2022-23

Notes: The definition of material deprivation is household income below 70% of median UK household income plus material deprivation based on a set of questions about 21 goods and services.

The updated methodology makes a slight difference to measured relative child poverty when rates are rounded to the nearest percentage point. Relative poverty rates before housing costs all fall by 1 percentage point, while poverty measured at 70% of median income after housing costs falls by 3 percentage points.

The most frequently reported measure of relative child poverty is measured at 60% of median income after housing costs. Notably, this measure does not change with the new methodology. However, this is true only because we account for bridging payments. When they are excluded, this measure rises by 0.7 percentage points and rounds up by 1 percentage point to 27%.

A rate of child material deprivation of 5% is also a part of the 2030/31 child poverty targets. A child is considered to be materially deprived if:

⁷ We do not recalculate poverty lines because there are very slight differences between the FRS/HBAI data available to researchers and the dataset used to calculate the official poverty statistics. Recalculating poverty lines leads to small deviations in the estimated poverty line even before the methodology change (e.g., £1 off the official statistic), causing some households unaffected by the SCP methodology change to change poverty status. Keeping the same poverty lines means that any changes to poverty are the result of the methodology change alone.

- Their household income falls below 70% of median income after housing costs, and
- They experience material deprivation, which is based on a set of questions about whether or not their household has a list of 21 goods and services.

Rates of child material deprivation fall slightly as a consequence of the change in methodology, from 12% to 11% after housing costs (and from 10% to 9% before housing costs).

We also re-estimate absolute poverty rates with the new methodology (**Table 3**).

Table 3: Published and re-estimated absolute poverty rates

Housing costs	% of median income	Published child poverty rate (%)	Updated child poverty rate (%)	Change in child poverty rate (to nearest 1/10 pp)
Before housing costs (BHC)	50%	10	10	-0.5
	60%	19	19	0.3
	70%	28	27	-0.5
After housing costs (AHC)	50%	15	14	-1.0
	60%	23	22	-0.7
	70%	30	29	-0.1

We find that all but one absolute poverty measure falls slightly, but none by more than 1 percentage point. Due to rounding, the statistics change for all three after housing cost (AHC) measures, but only in one case for the before housing cost measures (BHC).

Explaining changes in estimated poverty rates

Changes in poverty rates from the methodology change depend on:

- The distance between household income and the poverty line for affected sample households,
- The net change in household income for affected sample households, and
- The number of households in the population (the weight or grossing factor) represented by each sample household affected by the methodology change.

Ultimately, only about 130 households in the 2022/23 FRS sample are affected by the methodology change. Fewer than 10 sample households change poverty status (in either direction) as a result of the methodology change under any of the relative poverty definitions in Table 2.

Changes in poverty rates after the imputation methodology is updated are the net effect of the (grossed) number of households that fall above or below the poverty line. In the only instance of a higher relative poverty rate after the methodology change (poverty measured at 50% of median income before housing costs), an average of 4 sample households move above the poverty line and 3 move below; however, the number of children represented by these households is such that the measured poverty rate rises slightly. The rise in the absolute poverty rate measured at 60% of median income BHC has a similar cause.

Conclusion

This report applies the new DWP methodology for imputing Scottish Child Payment to the 2022/23 FRS and HBAI data. We re-estimate child poverty rates under different measures to see whether or not measured child poverty would have been different had the methodology been adopted earlier.

Our results document issues in the FRS data for 2022/23 with some of the children and households previously imputed as receiving SCP. We are confident that the new methodology addresses these issues and will more accurately reflect receipt of SCP in the survey.

While the poverty rate under some definitions of poverty would have fallen, the headline measure (where the relative poverty line is set at 60% of median UK income after housing costs) would not have changed. The measures of absolute poverty and material deprivation used to measure the child poverty targets both fall by 1 percentage point, but also remain significantly above the interim target for 2023/24.

This is a welcome finding, especially given that there will be no revision to the 2022/23 published statistics to account for the new methodology. It means that we can be confident that the published headline poverty rate in 2022/23 does not need to be discounted as unreliable, and that there should not be a large step change in poverty rates in 2023/24 attributable to the methodology change. However, analysts will need to be aware that this is not true of all poverty measures, and any household-level analysis of families that received the SCP using the 2022/23 data as published will not be robust.

We are grateful for the support we've received from the Scottish Government and the DWP to produce this analysis. We hope that lessons can be learnt to ensure that a more robust process is put in place for any future changes in devolved social security.

The new methodology will be applied in the 2023/24 FRS data, which is also the first complete financial year with full roll-out of SCP at the maximum amount to date (£26.70 per week, per child). We are confident that the methodological changes will lead to a more robust estimate of the impact of the SCP on poverty. This is particularly important given that the 2023/24 data will be used to evaluate whether or not Scotland has reached its interim child poverty target of 18%.

While the update in methodology is extremely welcome, we do not find significant evidence that mismeasurement of SCP receipt in the 2022/23 data masked a large decrease in child poverty due to SCP. Therefore, it would have been a big jump from 26% relative poverty in 2022/23 to the 18% target – and indeed, 22% is good progress but not enough to meet the interim targets.

The relative lack of visible progress towards the interim targets as SCP rolled out may point to a counterfactual rise in child poverty in the absence of SCP. Regardless, significant policy action will be needed in addition to SCP to meet the final 2030/31 child poverty targets.

abrdn Financial Fairness Trust has supported this project as part of its mission to contribute towards strategic change which improves financial well-being in the UK. The Trust funds research, policy work and campaigning activities to tackle financial problems and improve living standards for people on low-to-middle incomes in the UK. It is an independent charitable foundation registered in Scotland (SC040877).

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