

# Technical report: assessment of the impact of the coronavirus (COVID-19) pandemic on the FRS statistics, 2020 to 2021

## What you should know

This document is designed to help users of the Family Resources Survey (FRS) statistics understand and interpret the effect the coronavirus (COVID-19) pandemic had on the sample data and estimates for financial year 2020 to 2021. It should be considered alongside the [published analysis](#) and commentary of the statistics.

Previous published statistics, up to and including FRS 2019 to 2020, were not affected by the coronavirus (COVID-19) pandemic. However, fieldwork operations for 2020 to 2021 were changed in response to the coronavirus (COVID-19) pandemic and the introduction of national lockdown restrictions. In March 2020, the introduction of Government restrictions led to a compulsory halt to face-to-face interviewing in the home. This meant that from April 2020, and for the whole of the 2020 to 2021 survey year, data collection was by telephone instead of face-to-face.

This shift in mode of interview was accompanied by a substantial reduction in the number of interviews achieved: just over 10,000 interviews were achieved in 2020 to 2021, compared with 19,000 to 20,000 in a typical FRS year.

Whilst these statistics have undergone extensive quality assurance prior to publication, we recommend that users exercise additional caution when using this latest data. We especially advise caution when interpreting some of the changes observed since the previous, 2019 to 2020 release. While every effort has been made to minimise the impact of these changes on the range of statistics we produce, discontinuities and additional biases introduced by the changes to data collection during the pandemic become more evident when the statistics are disaggregated into smaller groups.

We recommend that all users consider using the caveat, "Data collection for 2020 to 2021 was affected by the coronavirus (COVID-19) pandemic. Figures for 2020 to 2021 are subject to additional uncertainty and may not be strictly comparable with previous years."

## Summary of the coronavirus (COVID-19) pandemic related changes on the 2020 to 2021 FRS statistics

Change	Detail	Description
Methodology	Change to FRS grossing regime	To address additional biases in the raw sample, additional grossing controls were introduced to: a) Weight the sample by month of interview to balance the sample size across the year. b) Weight by level of educational attainment to boost numbers with education levels below degree level in younger age groups.
Methodology	Inclusion of new coronavirus (COVID-19) related income sources	Income received through the Coronavirus Job Retention Scheme (CJRS) is fully included in the estimates of income. Income received through the Self-Employment Income Support Scheme (SEISS) is indirectly included in the estimates. Other changes to income due to the coronavirus (COVID-19) have also been included e.g. self-isolation payments and take up of mortgage holidays.

These changes, and the rationale for them, are discussed in more detail below. The decision to treat both CJRS and SEISS in this way follows our discussions with an expert user group. The [FRS Background Information and Methodology](#) document and [HBAI Quality and Methodology Information Report](#) should also be consulted for more details on changes to the grossing methodology and new income sources.

The changes are to be viewed as temporary and will be reviewed as we develop the 2021-2022 publication. At the time of writing, it is too early to confirm whether the pandemic and changes to fieldwork will have any impact on this next release.

## Main impacts of the coronavirus (COVID-19) pandemic on the 2020 to 2021 FRS sample

In 2020 to 2021, several factors impacted on FRS response rates and the distribution of characteristics among FRS survey respondents, including:

1. change in the mode of interviewing from face-to-face to telephone
2. changes in the methods used to encourage responses from survey participants as the year progressed
3. changes in people's behaviours and circumstances during the coronavirus (COVID-19) pandemic which may have made them more or less likely to respond to a household survey

While it is not possible to quantify the impact each of these factors had on the FRS statistics, summary conclusions based on our extensive quality assurance of the sample and estimates are detailed below. The [FRS Background Information and Methodology](#) should also be consulted by users wishing to understand the specifics of factors (1) and (2). This document will be referred to throughout.

## **Change in FRS survey mode**

The coronavirus (COVID-19) pandemic and imposition of national restrictions necessitated a rapid change in the established survey mode, with the established practice of face-to-face interviews in the home being replaced by telephone interviews.

Ordinarily, changes to the survey mode would not be introduced without thorough testing to examine the impact on survey and item response rates, alongside assessing impact on non-response bias and sample quality. Given that such testing was not possible, it is unclear to what extent mode changes contributed to the changes in the 2020-2021 estimates.

The change in mode could have introduced a self-selection bias, meaning respondents with certain attributes (higher civic engagement or more available time) were more likely to provide their telephone contact details. We would label such attributes as 'unobservable', meaning that they are not directly captured by the data and individuals with such attributes cannot be identified. However, we have sought to minimise their impact by adjusting for observed bias in the sample, some of which may correlate with the unobservable biases. Changes we identified in the composition of the achieved raw sample are detailed below.

## **Impact on item response accuracy**

Whilst there are some nuances, our assessment is that item response accuracy was very similar in 2020-21 compared with previous years. This is borne out by the distribution of answers to individual questions as well as evidence from the field. The focus of the FRS is the collection of factual information on incomes, which are less affected by modal change than the collection of opinions, for example. In addition, the interviewer was still able to prompt and guide the interview. Although interviewers were unable to verify visually that documents were consulted, levels of reported document checking (payslips, benefit letters, rent and council tax documents etc) were comparable to previous years. Detailed information is available in the [FRS Background Information and Methodology](#).

## **Impact on achieved sample size**

The move to telephone interviewing resulted in a reduction in the survey response rate and a smaller achieved FRS sample size of just over 10,000 households compared with 19,000-20,000 in previous years. The sample size was particularly affected in the first half of the survey year, especially April 2020, due to the challenges involved in having to adapt the FRS fieldwork approach rapidly, in response to government restrictions.

In previous survey years, the share of the FRS sample was roughly equal across all twelve months of the year. In 2020-21, additional grossing had to be introduced to balance the sample across the year. The variation of grossing by month in 2020-21, meant that additional grossing was applied to responses for earlier months, such that those who were sampled in April 2020 then

had the same resultant weight as those sampled in any other month. It was important to make this adjustment because during 2020-2021 incomes were likely to have fluctuated more in-year than in previous years.

Please note that the sample was grossed to a set target number of households per month and applied no further monthly weights to adjust the composition of the grossed sample per month. For example, the FRS grossing regime already applies weights to ensure that the sample is representative of the population in terms of age, gender and region, but it does so on an annual basis. If the raw sample for one month has a lower share of a particular age group, then it will continue to do so following grossing.

The FRS sample is drawn using household addresses. In the first half of the year there was a requirement for respondents proactively to provide interviewers with their contact details. In the second half of the year, additional changes to fieldwork approaches were introduced to improve survey response rates by engaging new methods of contacting respondents. These included initiatives such as telematching and Knock to Nudge (KtN), although not all initiatives were introduced in all parts of the UK, and the impact in stimulating response or otherwise was variable across the respondent base. Knock to Nudge was used where telephone numbers were not provided or sourced by another route. Further details are provided in the [FRS Background Information and Methodology](#).

While these initiatives were successful in boosting the sample size, it is possible they may have introduced additional biases by making it more likely that responses were elicited from households or persons sharing certain characteristics. A [fieldwork report](#) published by the Office for National Statistics (ONS) on 14 February 2022 assesses the impact similar initiatives had on sample characteristics for other household surveys such as the Survey on Living Conditions (SLC) and the Living Costs and Food Survey (LCF).

It has not been possible to conduct detailed analysis on the impact of such initiatives on the FRS sample or estimates because we do not have the detail on which household interview was conducted by which route.

## **Impact on the composition of the achieved sample**

### **Older, more affluent, and better educated participants**

The composition of the raw 2020-2021 sample was skewed towards older participants, owner occupiers and fewer households with children than in 2019-2020. This was an effect witnessed across other government household surveys conducted during the period of the pandemic, many of which also introduced telephone interviewing. The [ONS fieldwork report](#) referenced provides a useful summary for five of its surveys, but additional links to the [Labour Force Survey](#) and [English Housing Survey](#) are also provided.

The impact of the mode change on sample composition is likely to be greater for FRS than for surveys such as the Labour Force Survey, which have a longitudinal aspect. This means they are already able to recontact a proportion of their sample each quarter. In contrast, a fresh FRS sample is drawn every year, and there is no previous relationship with respondents.

Whilst the FRS weighting regime already brings the age and tenure profile in line with the UK population, closer examination of the initial weighted sample revealed it contained a disproportionate number of working-age respondents who had been educated to at least degree level. It was important to adjust for this bias because income levels are strongly correlated with the

level of education achieved. Therefore, additional grossing controls were introduced to rebalance the educational levels of those in the sample. In previous survey years, the profile of respondents according to their level of education was comparable to the levels and trends seen in the population, reported in the Annual Population Survey (APS). Therefore, it was not considered necessary to make a change to the weighting employed in previous years. More information on the grossing changes introduced in 2020-2021 can be found in the [HBAI Quality and Methodology Information Document](#).

It is difficult to provide evidence which confirms beyond doubt the reasons why the FRS sample contained these initial biases. It is likely that household circumstances may have prevented some households from taking part in the survey during the pandemic. For example, those who were home-schooling, or who had caring responsibilities may have been less inclined to take part in the survey. Likewise, those who experienced sudden change in their employment or income status may have not wished to complete a survey on household incomes during a period of uncertainty.

In 2020 to 2021, the achieved sample had a higher proportion of households in the higher Council Tax bands (band C and above) than in recent survey years. This was reflected in the accommodation mix of the achieved sample, which showed a higher proportion of owner-occupier properties (rather than rented), and also a higher proportion of detached houses (rather than flats or terraced or semi-detached houses). This aligns to the older, more affluent characteristics observed elsewhere in the sample.

However, the difference made to survey estimates has been minimised by the grossing regime applied. This habitually uses both Council Tax band and also the numbers renting (versus owning) as control totals, which will weight publication results to the real-world numbers seen of each different type of property. It should be noted that the grossing regime was more effective in enabling a representative dataset of English households, than in Scotland or Wales, where sample sizes were relatively smaller. See [Methodology Table M3](#).

## **Main impacts of the coronavirus (COVID-19) pandemic on 2020 to 2021 published material**

### **Publication of breakdowns of headline measures**

This year it has been challenging to disentangle how much of the change seen in the composition of the sample and estimates reflects genuine change and how much is due to sample bias. During the coronavirus (COVID-19) pandemic there was unprecedented change in both household circumstances and incomes which were not comparable to any previous survey period.

We would like to invite users to inform us directly of any issues they identify, in addition to those outlined here, during their in-depth analysis of the dataset so we can assess for any continuing impacts on the 2021-22 publication.

We recommend that users exercise additional caution when using the data for 2020-21, particularly when making comparisons with previous years and interpreting changes in smaller subgroups. Confidence intervals are wider than in a normal FRS year, and this needs to be borne in mind when interpreting the estimates in this publication. In broad terms, users should expect the standard errors around this year's FRS estimates to be at least 40% larger than in a typical FRS

year. The exact difference will vary from estimate to estimate. We would encourage users to refer to [published standard error tables](#) where appropriate.

For examples of other publications detailing changes in household circumstances and incomes, please see the following:

- the Office for National Statistics' [Personal and economic well-being in Great Britain: May 2021](#)
- Understanding Society's research paper [A year of COVID: the evolution of labour market and financial inequalities through the crisis](#) Understanding Society, published in November 2021

## Impact on publications which draw on the FRS data

Several other publications make use of the FRS dataset to inform their statistics and estimates which cover specific sub-groups of the population. These publications may help provide users with more useful context on changes to incomes during the coronavirus (COVID-19) pandemic.

We are content that the 2020-21 statistics are at the appropriate level of quality to allow full publication of [Pensioners' Incomes](#) (PI) Series and experimental [Separated Families Statistics](#). We are also content to use Households Below Average Income (HBAI) data in the production of the [Children in Low Income Families](#) (CILIF) local area statistics, although the release is focused on local authority and parliamentary constituency comparisons within countries and not comparisons across countries.

The devolved administrations of Scotland, Wales and Northern Ireland are content with this approach and this aligns with their approaches to publishing statistics on income in their respective parts of the UK: [Scotland](#) have published an analytical report explaining why they did not publish their poverty statistics for 2020-21; [Wales](#) did not publish their usual range of additional analysis, but did publish a report presenting poverty-related figures from HBAI data alongside confidence intervals and a description of the data quality issues.

The Department for Communities Northern Ireland published their [Poverty Bulletin](#), which uses data collected from the Family Resources Survey, with figures relating to the *whole* population in NI presented, rather than the usual breakdowns by working-age, children and pensioners. Additional narrative to inform users of the limitations is also included in this publication. The next edition of the HBAI report for Northern Ireland is due to be released in Summer 2022 and the next edition of the [Family Resources Survey for Northern Ireland](#), covering the survey year of 2020-21 is due to be released in Autumn 2022, with similar adjustments and narrative.

## Wider estimates of uncertainty around the headline estimates

Use of survey data means results in the Family Resources Survey publication are subject to uncertainty, which can affect how changes in the figures should be interpreted, particularly in the short term. The accuracy of all survey estimates, in terms of how likely they are to be representative of the true figure among the population, is related to the size of the achieved sample. As this year's FRS sample is half the normal size, users should expect that estimates are not as precise as in a normal survey year. We therefore urge users to consult our published



standard error tables, which are also available for previous years' publications and as such provide a comparison of the degree of uncertainty that the sample we have achieved is representative of the general population.

The sample in Great Britain for the FRS is selected using a stratified multi-stage design, based on addresses clustered within postcode sectors. As a result, FRS sampling error is not just dependent on the variability among units in the sample, (whether households or individuals) but is also a function of variability within and between postcode sectors. For example, if a sample characteristic is distributed differently by postcode sector (i.e. is clustered) the sampling variability is greater overall than would occur in a simple random sample of the same size. Therefore, the complex (actual) sampling error is normally greater than the standard error calculated under the assumption of simple random sampling.

Given the reduced sample size in 2020-21, confidence intervals around the main estimates are at least 40% wider than in previous years, meaning that the degree of change in the estimates needed to be larger before we could be confident it is statistically significant. See the [linked paper](#) for information on estimating variance and confidence intervals in special circumstances for example, where the occurrences of a response in the sample are very small.

Our published standard error [tables](#) provide standard errors, design factors and confidence intervals for a selection of variables from the 2020 to 2021 FRS. An example of how to interpret figures in these tables is given in the [Background Information and Methodology report](#).

In addition to sampling errors, consideration should also be given to non-sampling errors. Sampling errors arise through the process of random sampling and the influence of chance. Non-sampling errors arise from the introduction of some systematic bias in the sample compared with the population it is supposed to represent.

As well as response bias, such biases would generically include inappropriate definition of the population; misleading questions; data input errors; data handling problems; or any other factor that might lead to the survey results systematically misrepresenting the population. There is no simple control or measurement for such non-sampling errors, although the risk can be minimised through careful application of the appropriate survey techniques from the questionnaire and sample design stages through to analysis of results. We therefore recommend that the content of this technical report is considered when interpreting any changes in the estimates compared to the pre-coronavirus level.

## **Main impacts of the coronavirus (COVID-19) pandemic on the 2020 to 2021 FRS estimates**

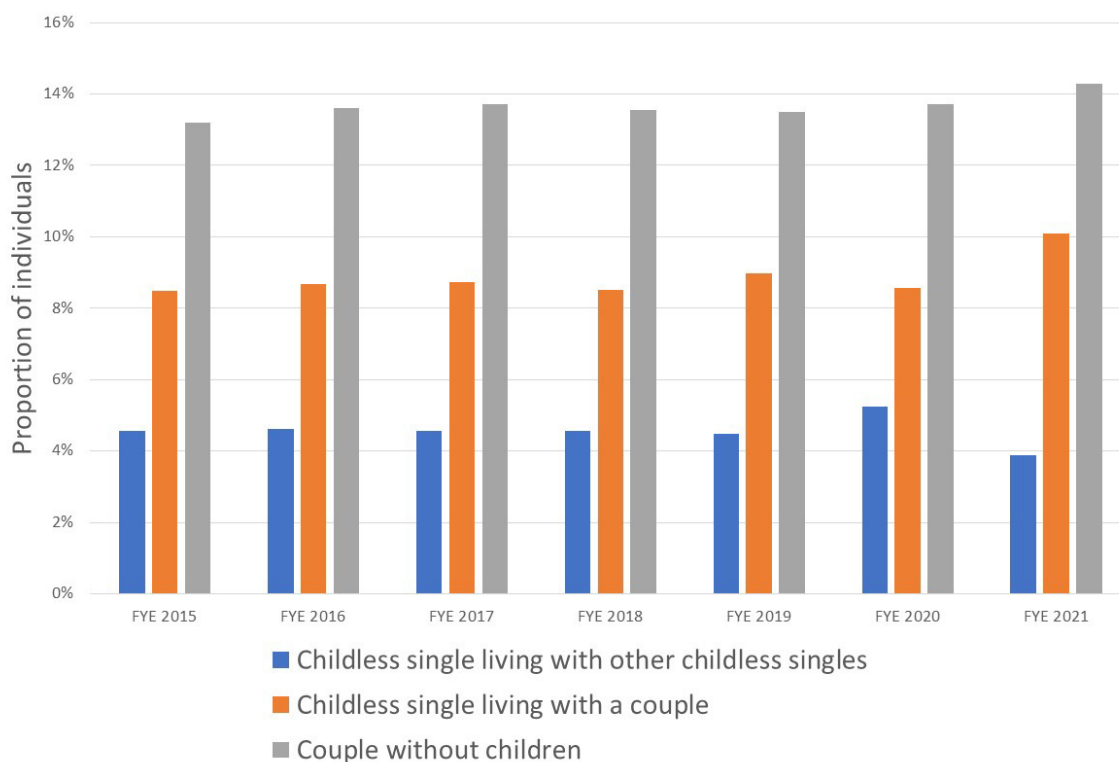
### **Changes in household composition**

Some of the internal quality assurance we have completed on the grossed sample suggested that there were changes in household composition and formation in the population during 2020-21. There was a small but notable shift in childless single adults changing from living with other childless single adults to living with a couple, see Figure 1 below. For example, this might represent a young adult who was living in a house-share with other young adults moving back into

the parental home. Our sample also contained more households containing working-age couples without children who may have chosen to form support bubbles.

Because individual estimates of income are affected by the circumstances of the entire household, changes in household formation and composition will have influenced our estimates of the numbers and types of individuals in different income [INDINC] brackets, as well as estimates of income by Benefit Unit [BUINC] and Household [HHINC]. Changes in living arrangements also affect individual housing costs.

**Figure 1: Shift in UK working-age household composition in 2020 to 2021, compared with previous survey periods**



## Changes in employment levels and benefit receipt

During 2020 to 2021, the Labour Force Survey reported a fall in the [official employment rate](#) which included a reduction in the number of self-employed workers compared to the pre-pandemic period. There was also an [increase in the numbers who claimed Universal Credit \(UC\)](#) over the period.

The FRS asks questions on employment status, so any changes in employment levels seen during 2020-21 should be reflected in FRS estimates. We have compared the levels of employment and self-employment reported in FRS with those reported by the Labour Force Survey (LFS) and have found a similar degree of change across 2020-21. The main difference was that FRS captured slightly higher levels of part time work than the LFS, but this is likely due to definitional differences between the two data sources.



The FRS asks respondents about receipt of the full range of state benefits, and amounts received, including Universal Credit. There is a known undercount for a number of these benefits, which means that when grossed to population totals, the FRS still estimates that there are fewer receiving the benefits than is reported by administrative data. This difference can be due to two factors: underreporting by the respondent and sample bias which means the FRS is not capturing those individuals and they remain underrepresented in the sample. Further information on the level of undercount can be found in [FRS table M6a](#).

[Table SE.4: Standard errors for state support receipt](#) shows the confidence intervals and standard errors for the percentage of all benefit units receiving state support in 2020-21. For example, the confidence interval for percentage of benefit units in receipt of UC has widened from 0.6 (between 3.6 to 4.2 per cent) in 2019-20, to 1.6 (between 7.1 to 8.7 per cent) in 2020-21.

The FRS estimates capture the growth in the Universal Credit caseload seen over the whole of 2020-21, but there was variation in the degree of undercount across the year.

**Table 2: FRS Universal Credit undercount in the first and second half of the survey year (grossed sample)**

Survey Year	2019-2020	2020-2021	Apr 2020 to Sept 2020	Oct 2020 to Mar 2021
FRS UC undercount	-32%	-35%	-42%	-5%

Table 2 shows the difference between the grossed number of recipients of Universal Credit (UC) estimated by the FRS, and the average count of UC recipients recorded in the DWP’s administrative data for the same period, published as [Official experimental statistics for the number of people on Universal Credit](#). It compares the percentage difference between these two figures for multiple time periods.

The table shows that during the initial months of the survey year (April to September 2020), the UC undercount was higher, but was much lower in the second half of the year to bring the annual level of undercount back to similar levels as recorded in 2019 to 2020 (i.e. an annual undercount of about a third). The in-year changes introduced to the FRS fieldwork (telematching and knock to nudge) are likely to have helped to improve the undercount in the second half of the year, but because we do not have the data on which sampled cases were contacted using which method, it is impossible to be sure.

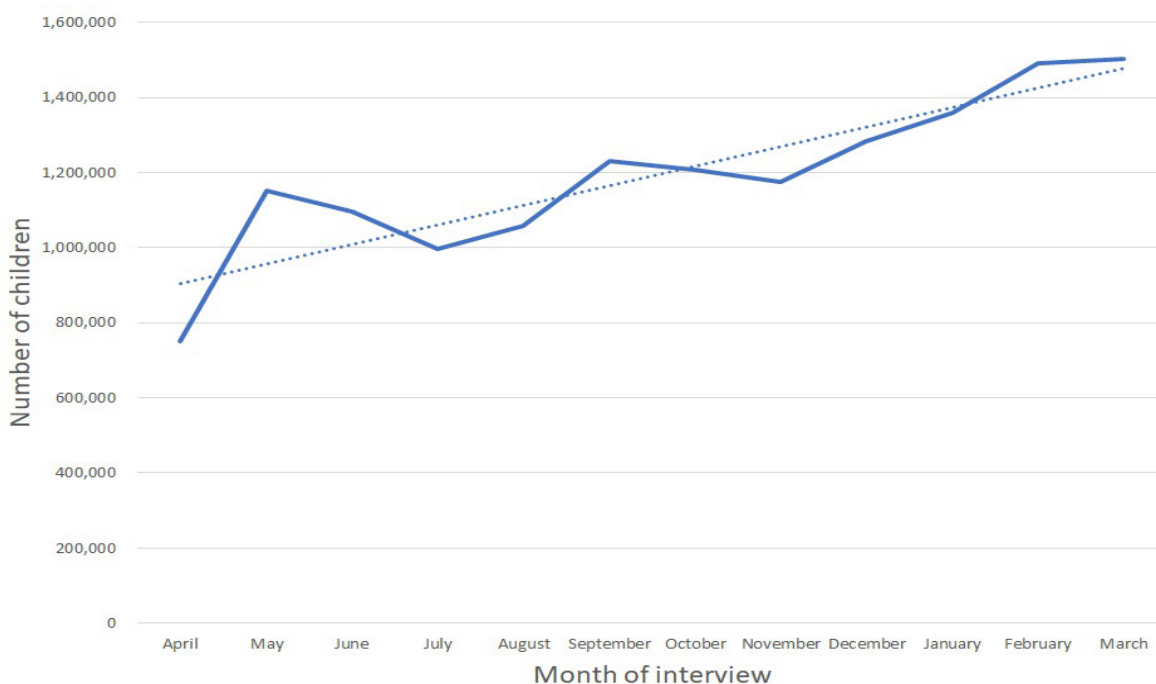
## Changes in household composition affecting benefit receipt

Our assessment was that when considering the published Table 2.5: [Households by composition and total gross weekly household income](#) at UK level, the results are reliable. However, we are more uncertain of the degree of change, and for this reason advise extra caution when interpreting

the statistics and encourage users to refer to Table SE.1: [Standard errors for household composition](#).

More detail on some of the specific affected groups is provided below. It is not exhaustive. It has not been possible for us to validate all breakdowns at all levels, so there may be wider impacts we have not identified. We invite users of the FRS dataset to inform us of any additional data insights which may be useful to us as we begin to prepare and analyse the 2021 to 2022 data.

**Figure 2: Grossed number of children in the FRS sample by month, 2020 to 2021**



## Single parent households in lower income bands [HHINCBND]

Analysis of the achieved sample suggested that single parent households on UC were most impacted by the variation in the UC undercount, with much lower-than-expected single-parent households on UC taking part in the survey in the early months, and accounting for a higher-than-expected proportion of the sample in the later months.

It is possible that single parent households were less available in the early months of the pandemic, but more responsive to the introduction of initiatives like knock to nudge. The small number of single parent households the FRS sampled in the earlier months were less likely to receive UC, and hence this may have led to lower instances of income reported in the lower bands, for those months.

Users should refer to the Standard Errors tables, as highlighted above, which demonstrate a standard error of between 0.1 and 0.2 for the estimate of the proportion of single parent households, within all UK households. For example, the confidence interval for the percentage of

single-parent households with one child has widened from 0.5 (between 2.2 and 2.7 per cent) in 2019-20 to 0.7 (between 1.8 and 2.5 per cent) in 2020-21.

## **Change in earnings from employment**

During 2020-21 many households experienced variation in their earnings within the survey year due to changes in employment and hours worked and/or receipt of support grants through schemes such as the Coronavirus Job Retention Scheme (CJRS, otherwise known as “Furlough”) or the Self-Employment Income Support Scheme (SEISS). From May 2020, the FRS questionnaire incorporated questions to specifically ask about receipt of CJRS and from June 2020, this was extended to SEISS.

Following guidance from the Office for National Statistics (ONS), for employees the receipt of CJRS and any resulting impact on levels of pay is fully reflected in the FRS income variables. Employees who are furloughed are classified as employed, but temporarily away from work. This will mean that, all things being equal, furloughed workers will not reduce the number of people in employment (or the employment rate). Likewise, as the calculation of ‘income from employment’ uses wages, income received from CJRS is also treated as wages, rather than state support.

However, the calculation of earnings uses actual pay (GRWAGE) over usual pay (UGROSS) for people on furlough. This aligns to the [Annual Survey of Household Earnings \(ASHE\)](#) employee earnings methodology, which uses actual payments made to the employee from company payrolls.

## **Change in earnings from self-employment**

For the self-employed, it is difficult to calculate current-year income, and in line with international standards, the FRS questionnaire asks for profit data for a previous tax year and/or regular self-employment income over the past twelve months. While this is less of an issue when incomes are broadly stable, it became more of a challenge in 2020-21 given the sharp income changes for some of the self-employed .

Although from June 2020 the FRS specifically asked about receipt of SEISS grants and amounts, questions were not asked about receipt of income from continued trading which was permissible under the terms of the scheme. It was therefore not possible to adapt our methodology to estimate in-year income more accurately, taking account of both SEISS and non-SEISS sources.

This means that the estimates indirectly, rather than explicitly, include information on the amount of SEISS received. This is because we seek information on last-accounting-period trading profits, upon which themselves the SEISS grants are based. For those in the sample who responded averaging their income over a twelve-month time horizon, those interviewed towards the end of 2020-21 will have a reporting period basis which takes in more of the pandemic. While there was an option to ‘add in’ the SEISS amounts received for this group, this brought a risk of double counting, as there was evidence that some respondents had already included income from SEISS in their responses. Following consultation with a panel of expert users, it was decided that the calculation of self-employed income and consequently total individual income should not include grants received from the SEISS.

It should also be appreciated that the statistics for 2020 to 2021 suggest a material decrease in the number of self-employed people when compared to recent years. This may have affected the earnings estimates being presented. Overall, the FRS estimates point to a significant reduction in real terms self-employed net earnings over the course of 2020-21. While this was in line with the limited external data sourced on changes to self-employed hours during the pandemic, there is considerable uncertainty on the degree of change. Our assessment is that there was some offsetting in the estimates, whereby we may have overestimated the incomes of those reporting profit data and underestimated it for those reporting in-year data. However, given the imperfection of the methodology, any estimates based on this group should be treated with additional caution. Our methodology will be reviewed again for the 2021 to 2022 self-employed income estimates.

## **Change in income from benefit receipt**

In 2020-21 there were several policy changes announced in response to coronavirus (COVID-19) which affected the amounts of benefit received. For example, from April 2020 both new and existing Universal Credit claimants and existing Working Tax Credit claimants received a temporary additional £20 per week on top of annual uprating, also known as the 'UC Uplift'. Resultant changes in benefit income due to the UC uplift and all other policy changes, including annual uprating, are included in the FRS estimates.

## **Changes to reported prevalence and type of disability**

Disabled people are identified in the FRS as those who report any physical or mental health condition(s) or illness(es) that last or are expected to last 12 months or more, and which limit their ability to carry out day-to-day activities, whether a little, or a lot.

### **Greater prevalence of disability among those of working age, less among pensioners**

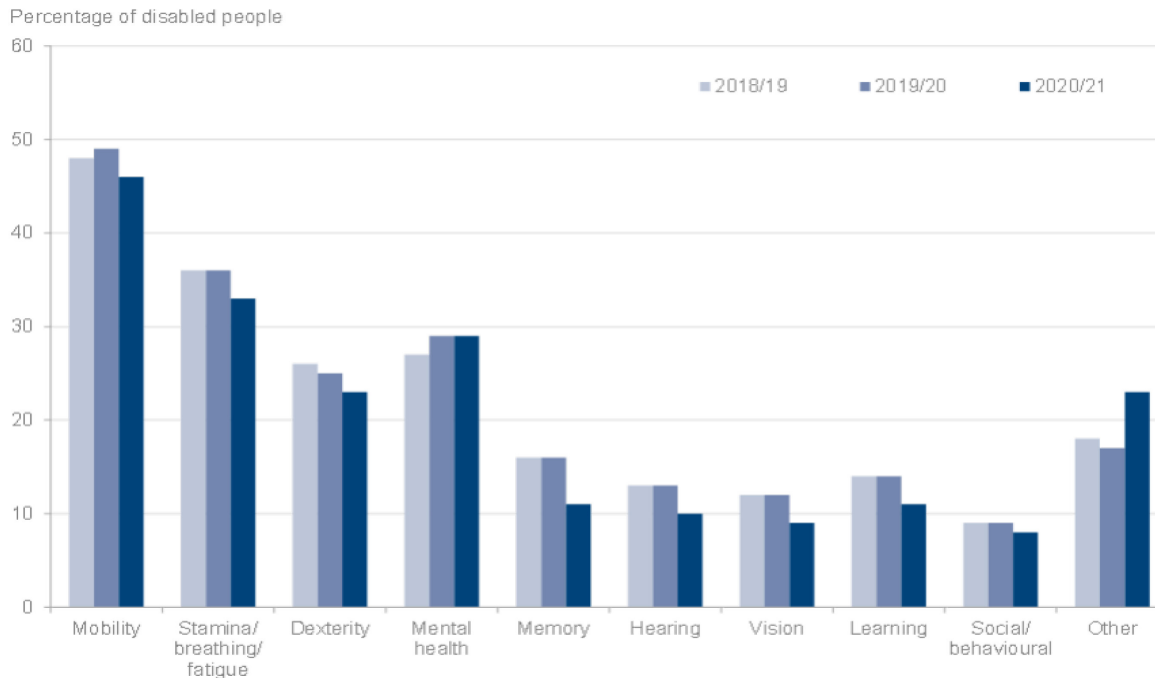
There were changes in the prevalence of disability reported in the 2020 to 2021 FRS data, with the grossed sample showing a two percentage-point increase in the proportion of working-age adults reporting a disability, and a four percentage-point decline in the proportion of pensioners reporting a disability (see FRS table 4.1). For the working-age, some of these changes may be a direct consequence of coronavirus (COVID-19) restrictions limiting movement outside of the home.

In the early months of the pandemic, those asked by the NHS to shield in the home may have been more responsive to the telephone survey. Some support for this possibility is offered in Figure 3 below which shows there was a notable increase in the proportion of disabled people who classified their impairment as 'Other'. Many of the conditions covered by the shielding guidance – e.g. conditions causing a weakened immune system - do not fit neatly into the other categories of impairment listed below.

### **Change in reported impairment types by disabled people**

We are concerned about the under-representation of those reporting certain impairments in the disabled population (memory, hearing and vision), which have previously been stable from year to year, yet have shown substantial decreases in 2020-21 (see Figure 3, below).

**Figure 3: Change in the FRS disabled population by impairment 2018-19 to 2020-21**



Closer examination of the under- and over-representation by impairment type revealed that it affected both working-age and pensioner disability groups. We also concluded that the composition of the disabled FRS population [Table 4.6] was too different in 2020-21 to make any meaningful comparisons, when examining other characteristics, with previous years. We felt that the grossed sample also contained elements of bias towards certain impairments, possibly introduced by the move to telephone interviewing. For this reason, for example the disability chapter and supporting tables were removed from the HBAI publication, as the analysis here is usually presented by income.

Our assessment is that while some of the change in disability may have been genuine, we believe a significant portion of it was due to sample bias. This is because we are unable to explain some of the changes in the sample with reference to changes in the real world. For example, although we saw an increase in the number of disabled people, particularly in the 'other' category, there were notable decreases in numbers reporting other types of impairment such as in hearing, memory or vision, compared to previous years. This was likely a consequence of the change in mode rather than a real-world reduction in prevalence. It was not possible to adapt the FRS grossing regime further to adjust for this observable bias. The impact this had on disability estimates is described later in the document.

We would strongly advise researchers using 2020-21 FRS disability estimates to exercise additional caution when interpreting any trends as the characteristics of the disabled households who responded to the survey were different to previous years and estimates may not be strictly comparable. It has been recognised that in this survey year the FRS may be reporting a wider disability employment gap when compared with other sources. The FRS should be looked at in conjunction with both the Annual Population Survey (APS) and the Labour Force Survey (LFS).

**Contact for further enquiries**  
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