

Financial Lives 2022 survey

Technical Report

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Critical Research produced the weighted data tables that are published alongside this report. They also conducted the Financial Lives cost of living (Jan 2023) recontact survey, and they conducted the recruitment for the qualitative research.

The Stats People worked closely with NatCen and Critical Research, advising on survey design and weighting.

Ignition House has worked closely with the FCA on questionnaire design and reporting. They also conducted the qualitative research for our main report of the 2022 survey findings.

The people we worked with

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The report has been reviewed and confirmed as accurate and comprehensive by The Stats People (Gary Bennett), who act as statistical consultants for the Financial Lives survey.

1 Introduction

Overview

1.1 In this chapter, we introduce the Financial Conduct Authority (FCA)'s Financial Lives 2022 survey, summarise how to access the survey results, and provide a summary of the methodological approach used to deliver the survey.

The Financial Lives survey

- 1.2 The Financial Lives survey (FLS) is the UK's largest tracking survey of UK adults' financial behaviour and their perceptions and experiences of the UK financial services industry. The survey is nationally representative. It takes place approximately every two years and is designed to provide longer-term trend data.
- 1.3 The survey reveals a wealth of information about the financial products consumers have, their engagement with financial services firms and their attitudes to managing their money – among many other topics. It provides strong evidence on how these behaviours and attitudes change over time. We can look at findings for many different consumer groups, such as women or younger adults or the digitally excluded or adults from ethnic minorities.
- 1.4 As a consumer-focused regulator, it is vital that the FCA has the data to understand the realities of consumers' changing financial lives. The data helps the FCA to deliver its consumer protection and competition objectives through identifying harm and improving consumer outcomes. The data also provide valuable insights to the financial services industry, Government, policymakers, other regulators, consumer bodies and academics.

Ways to access the survey results

- 1.5 This Technical Report has been published alongside a <u>report of key findings from the</u> <u>Financial Lives 2022 survey</u>.
- 1.6 The wider survey results are available through our <u>Financial Lives survey online</u> resources library. This gives access to several volumes of data tables for each main Financial Lives survey, as well as to tracker data tables which compare results for the questions included in the different Financial Lives surveys.
- 1.7 The survey raw data is also made available, archived with the Consumer Data Research Centre (CDRC) at University College London – and available on application to the CDRC.
- 1.8 With this report, we are also publishing six slide-based reports to make survey results for the following sectors more accessible:
 - Consumer investments and financial advice
 - Credit and loans
 - General insurance and protection

- Mortgages
- Pensions (accumulation and decumulation)
- Retail banking, savings and payments.
- 1.9 The Financial Lives survey results are used in a wide range of FCA publications, including consultation papers, policy statements, guidance, market studies, Dear CEO letters and many speeches. It is also the source of several of FCA's topline outcome metrics.
- 1.10 If you have any questions about the Financial Lives survey, or to share how you are using the findings, please email us at <u>financiallivessurvey@fca.org.uk</u>.

The purpose of this Technical Report

- 1.11 This report details the methodological approach to the third, 2022, wave of the FCA's Financial Lives survey, undertaken between 1 February and 6 June 2022. When we talk about this survey in this Technical Report, we refer to the 2022 wave of the survey. In other reports it may be referred to as the May 2022 survey because a majority (61%) of the 19,145 survey respondents completed it in May 2022.The first, 2017, wave was conducted between December 2016 and April 2017 and the second, 2020, wave between August 2019 and February 2020. These surveys are referred to as the 2017 wave and the 2020 wave, respectively.
- 1.12 This report describes how the 2022 wave of the survey was designed and carried out. Its purpose is to provide users of the survey data with a detailed understanding of the survey design, sampling, respondent routes through the survey, and weighting. It provides the necessary technical detail that would be required to repeat the survey. As such, this report will mainly be of interest to researchers and analysts who want to understand the detail of how the survey was undertaken. Although some basic knowledge of survey methodology is assumed, the report is intended to be accessible to those unfamiliar with survey design.
- 1.13 Technical reports for the 2017 and 2020 waves are available on the FCA website.
- 1.14 The 2022 wave of survey was delivered by several organisations working together. The FCA and Ignition House produced the questionnaire. The questionnaire was checked for accuracy by NatCen Social Research (NatCen) ahead of and during programming. The survey design was based on that of the 2017 and 2020 waves, with some modifications to fieldwork delivery (the main changes and improvements made are explained in this report). The overall technical implementation, including sampling and weighting, was the responsibility of NatCen, supported by The Stats People and the FCA. The survey was carried out largely online, with the option to take part by telephone (both elements of the fieldwork were conducted by NatCen). Using the weighted survey dataset produced by NatCen, Critical Research produced weighted data tables for the FCA.
- 1.15 This introductory chapter provides a broad overview of the methods employed to carry out the survey, including sample design, fieldwork and weighting, as well as the timeline. Additional details of the survey design are provided in the Appendices. Finally, a Glossary of the key terms used is provided at the end of the report.

Methodological summary

1.16 The survey used a mixed-mode data collection approach comprising online and telephone interviews. All invited households had the option to choose whether to participate online or over the telephone. The purpose of providing this option was primarily to ensure that those without internet access, or infrequent internet users, were able to participate.

Sample design

- 1.17 As at the 2017 and 2020 waves, the survey utilised a stratified random probability-based sample design. This is the most robust approach to sampling. It is based on the principle that all units (in this case UK adults aged 18+) have a known, measurable chance of being selected for the survey. It means that margins of error around survey estimates (i.e. the range of values within which the survey value lies, with a probability of 95%) can be calculated accurately.
- 1.18 A push-to-web approach with a telephone option was used. Invitation letters were posted to addresses across the UK, which had been selected on a random basis from the Royal Mail's Small User Postcode Address File (PAF). Each letter invited up to three adults (aged 18+) at that address to complete the survey. It included a URL to the survey website and three unique log-in codes. The letters also included information on how to participate over the telephone if this was preferable.
- 1.19 The approach to sample design is described in detail in Chapter 2: Sample design.

Questionnaire development

- 1.20 The questionnaire development process comprised several different activities. This included a detailed review of the proposed 2022 questionnaire and a round of cognitive testing of new questions, or questions which had changed between the 2020 and 2022 waves. This testing sought to confirm whether participants understood and interpreted these questions as intended.
- 1.21 The questionnaire was not formally piloted in 2022, as it had been in 2020. However, there was a soft launch to fieldwork where adults at a small proportion of sampled addresses were initially invited to take part. The results were used to check for any issues with the questionnaire script, as well as to check response assumptions, before the rest of the sample was invited to take part. A few minor changes to the questionnaire were implemented after the soft launch based on the analysis of this early data.
- 1.22 Questionnaire development is described in detail in Chapter 3: Questionnaire design.

Questionnaire structure

- 1.23 The questionnaire covered a wide range of questions on different financial products and services, with some sections asked of all respondents (for example, demographics and product ownership). Other sections of the questionnaire were asked of respondents depending on their circumstances, for example the types of products they held or the services they had used.
- 1.24 Asking all respondents all the questionnaire sections for which they were eligible would have resulted in too long an interview for most respondents. For that reason,

respondents were allocated to some sections of the questionnaire for which they were eligible in a way that controlled both the overall interview length and the sample sizes for each section (ensuring sufficiently sized samples for analysis purposes). It was particularly important to ensure sufficient sample sizes for sections of the questionnaire where eligibility was low, i.e. for sections covering financial products or services held or used by a small proportion of the UK adult population.

- 1.25 Allocation to different sections of the survey also had to minimise bias in the samples of respondents that were allocated. For example, it would not have been appropriate to direct **all** respondents holding some of the very low-prevalence products or services **only** to the sections of the questionnaire covering those products or services. This would have resulted in the samples for other sections covering higher-prevalence products and services being unrepresentative (by excluding those also holding the low-prevalence ones).
- 1.26 To mitigate this risk, we did two things. Firstly, routing into some sections of the questionnaire was controlled by random allocation but with respondents having a higher chance of being asked sections for which eligibility was lower. The mechanism to achieve this is referred to as 'Relative Selection Probabilities' (RSPs), a method the FCA designed for the 2017 wave of the Financial Lives survey and have carried through into subsequent waves. Additionally, a small number of other low-eligibility sections, e.g. the section covering high-cost credit products, were made to be 'ask all eligible,' meaning that everyone with these low incidence products was asked about them.
- 1.27 Where ownership or incidence was known to be high among the sample, some sections of the questionnaire were asked of fixed proportions (e.g. one in every *N* respondents, where the number N was determined based on estimated incidence, to yield a minimum but sufficient sample size). This was also done to shorten the average length of the interview.
- 1.28 At the 2022 wave, the questionnaire was adapted for delivery over the telephone. Some adjustments were made to enable the questionnaire to be administered by a telephone interviewer, and to minimise respondent burden and overall length. For example, interviewer instructions were added directing interviewers to read out some answer options, and not to read out others. The approach for controlling allocation into different sections of the survey described above also differed slightly for telephone data collection, again to minimise the overall length of the telephone interview.
- 1.29 The approach for controlling allocations into the different sections of the survey is detailed in Chapter 4: Survey design.

Fieldwork

- 1.30 The survey was conducted in three stages, referred to in this report as batches: a soft launch and Batches 1 and 2.
- 1.31 All three fieldwork batches comprised two mailings: one initial invitation and one reminder letter. The letters provided log-in details and access codes to enable adults at that household to complete the survey. Those who completed the survey were sent a £10 e-voucher or voucher as a thank you for their time. It was identified that some telephone interviews were much longer than anticipated. Interviews that

extended beyond 90 minutes were offered an additional £10 voucher in recognition of the additional respondent effort.

- 1.32 Telephone fieldwork was conducted alongside the online fieldwork as respondents could choose whether to participate over the telephone or online. Take-up of the telephone option was lower than anticipated, so the invitation and reminder letters were adjusted slightly between each fieldwork batch to try to encourage particularly those who were unable to complete the interview online, to participate over the phone. This was done to ensure the digitally excluded population was able to take part in the research.
- 1.33 The approach to fieldwork is described in detail in Chapter 5: Fieldwork, and more detail on engaging with the digitally excluded population can be found in Chapter 8: Digital exclusion.

Data processing

- 1.34 The raw online survey data were subjected to an extensive validation (removal of cases) and cleaning (amending data within kept cases) processes.
 - Data validation comprised identifying and removing cases that were deemed invalid, either because the participant sped through the questionnaire so quickly they could not have read the questions before answering, or because the interview was completed by someone who had participated more than once
 - Data cleaning comprised preparing the data for use, for example by making household level variables consistent, ensuring the routing was correct for all cases and preparing the data labelling in preparation for use in tables.
- 1.35 From a starting number of 19,555 interviews, validation and cleaning removed 407, and 3 were removed following respondent requests for data removal, so that a total of 19,145 interviews were achieved. The online and telephone interviews were processed together as a single dataset.
- 1.36 The validation and cleaning processes are described in detail in Chapter 6: Data processing.

Weighting

- 1.37 Several different weights were produced. An 'individual weight' was created for each individual respondent to ensure the total weighted sample was representative of the UK adult population. Weights were also created for use when analysing different sections of the questionnaire or different individual questions or sets of questions which were controlled by various selection mechanisms to minimise overall survey length for respondents. To this end, four types of weighting variables were produced: individual weights, section weights, product weights and special weights.
- 1.38 Two sets of weighting variables were produced for all types of weighting variables: (a) grossing weights which sum to the (eligible) population (e.g. all UK adults, or all UK adults holding a specific product), and (b) scaled weights which sum to the corresponding sample size (e.g. all survey respondents, or all survey respondents holding a specific product). For example, the individual level grossed weights sum to 52,890,044 (all UK adults), while the individual level scaled weights sum to the sample size of 19,145 respondents.

1.39 Weighting is detailed in Chapter 7: Weighting, and Appendix A: Populations and bases sets out the populations and base descriptions for the different sections of the questionnaire. Appendix B: Weighting guide provides a detailed list of all weighting variables created for the 2022 wave of the Financial Lives survey.

Strengths and limitations

1.40 Chapter 9: Strengths and limitations provides a summary of the strengths and limitations of the survey's methodology.

Survey timeline

1.41 The survey was undertaken to the timeline detailed in *Table 1.1*.

Activity	Date
Questionnaire review	30 Sept – 12 Nov 2021
Cognitive testing of selected questions	18 – 26 Oct 2021
Questionnaire programming commenced	12 Nov 2021
Sampling for pilot (including RSPs and 1 in Ns)	5 Nov 2021 – 17 Jan 2022
Soft launch letters despatched	31 Jan 2022
Soft launch reminders despatched	7 Feb 2022
Soft launch fieldwork cut-off for analysis	21 Feb 2022
Soft launch review	21 Feb – 14 Mar 2022
Batch 1 invitation letters despatched	21 – 23 Mar 2022
Batch 1 reminder letters despatched	28 – 30 Mar 2022
Batch 1 fieldwork cut-off for analysis	7 Apr 2022
Batch 1 review	7 Apr – 5 May 2022
Batch 2 invitation letters despatched	16 – 18 May 2022
Batch 2 reminder letters despatched	23 – 25 May 2022
Fieldwork closed	6 Jun 2022
Data validation and cleaning	1 May – 16 June
Weighting	16 Jun – 19 Aug 2022

2 Sample design

Overview

- 2.1 This chapter presents the approach taken to sampling in the 2022 wave of the Financial Lives survey, including how addresses were selected for inclusion in the sample, and how these were then issued into the field. We also outline the approach taken in 2022 to achieving interviews with people who are unable to participate online, and the implications of this for comparison with previous waves.
- 2.2 The Financial Lives sampling approach needed to ensure a robust, representative sample with sufficiently large numbers of participants in each of England, Scotland, Wales and Northern Ireland for analysis. Sampling was performed separately for each country with different target sample sizes.

Principles

- 2.3 The sampling strategy used in 2022 was different from that used in the previous wave. In 2020 two separate samples were drawn one for those completing the interview face to face (referred to as 'in-home'), and another for those participating online this was intended to ensure that older and any digitally excluded adults were able to take part in the survey.
 - The 'in-home' sample was a random probability clustered sample. It was designed to invite two distinct groups to participate in the survey: UK adults aged 18-69 who had not recently (in the last 3 months) accessed the internet, or those aged 70 or over, regardless of whether or not they had recently accessed the internet. Eligible participants were identified by interviewers through in-home screening
 - The online sample was designed to invite any adults with internet access, or those supported by someone with access, to participate in the survey.
- 2.4 In the 2022 wave, however, a single sample was drawn. There was no in-home element, but sampled households were invited to participate either online, or over the telephone if they were unable to participate online.
- 2.5 The 2022 wave of the Financial Lives survey used a stratified random probability sample design, with addresses as the sampling unit this is the same as the approach used for the online sample in the 2020 wave of the survey. This is the best way to obtain a research sample which accurately represents the population of interest. It also means that the probability of address selection, and therefore selection weights, can be determined ahead of the survey to correct for any oversampling (i.e. of addresses in the devolved nations) done during the sample design process. This, in turn, means that statistical theory (e.g. significance testing) can be used during analysis (e.g. in data tables or when using raw data), and confidence intervals and weights can be calculated easily.
- 2.6 The theoretical aim was to interview all adults over the age of 18 at each sampled address. A random selection of adults for survey participation is difficult to

operationalise accurately in an online or telephone survey setting (i.e. where an interviewer is not physically present to verify who is taking part). Therefore, up to three adults at each address were invited to take part in the survey. While this means that not everyone in households with more than three adults could take part, these households make up a small percentage (4.8%¹) of households in the UK, so impact on data accuracy was minimal. This slight discrepancy was corrected for during the weighting process to ensure that people in larger households were not underrepresented within the final data. This is discussed in more detail in Chapter 7: Weighting.

Address selection

- 2.7 The sampling frame for address selection was the Royal Mail Small User Postcode Address File (PAF). This is a database that contains all known 'delivery points' and postcodes in the UK and is recognised as the most comprehensive source of addresses. A stratified random probability sample of unclustered addresses was selected. This means that addresses were not 'grouped' (or 'clustered') in any way for the purposes of this survey, as they would have been for typical in-home surveys (including the 2020 wave in-home sample) to reduce interviewer travel time. Prior to selection, all PAF addresses within each country of the UK were sorted hierarchically by:
 - a) deciles of the Indices of Multiple Deprivation $(IMD)^2$
 - b) within deciles of IMD by Local Authority Area (LAA)
 - c) within LAA alphabetically by postcode
 - d) within postcode alphabetically by address.
- 2.8 This ensures that the selected sample adequately represents the population in terms of deprivation (which is closely associated with financial outcomes) and provided a good geographical spread of addresses within each country.
- 2.9 A stratified random probability sample of 255,000 unclustered addresses was selected in the UK based on the aim of achieving around 18,500³ interviews overall, with different achieved target numbers for each country, to ensure high enough bases for analysis in Scotland, Wales and Northern Ireland. The targets were based on an assumed individual response rate of 4.22% on average across the UK, as well as accounting for deadwood⁴ addresses. The individual response rate was calculated based on an assumption of 8%⁵ deadwood and an average of 1.8 adults per sampled address. For all countries, achieved online respondents were estimated to make up 95% of all achieved responses, with the other 5% coming from telephone respondents. Illustrative sample assumptions are shown in Table 2.1. Taking England as an example:
 - Estimated number of online respondents in England: 201,321 * 0.92 * 1.8 * 0.0437 = 14,575

¹ Source: Labour Force Survey (published in Q3 2022).

² The Indices of Multiple Deprivation (IMD) are a measure of relative deprivation at a small local area level (Lower-layer Super Output Areas). They are based on seven different domains of deprivation (Income, Employment, Education, Skills and Training, Health and Disability, Crime, Barriers to Housing and Services, Living Environment).

³ The actual target was 18,763 to allow some contingency.

⁴ Non-residential properties (e.g. unoccupied, commercial).

⁵ Assumption made based on prior experience of running UK general population surveys.

- Estimated number of telephone respondents in England: 14,575 / 0.95 * 0.05 = 767
- Total estimated number of respondents in England: 14,575 + 767 = 15,342

	-			-	
	England	Scotland	Wales	Northern Ireland	Total
Issued addresses	201,321	22,317	15,427	15,935	255,000
In scope addresses (assuming 8% deadwood)	185,215	20,532	14,193	14,660	234,600
Number of adults (assuming 1.8 adults per household on average)	333,388	36,957	25,547	26,388	422,280
Estimated response rate – individuals	4.37%	3.38%	3.91%	3.79%	4.22%
Estimated online responses	14,575	1,250	1,000	1,000	17,825
Estimated telephone responses	767	66	53	53	938
Total estimated responses	15,342	1,316	1,053	1,053	18,763

 Table 2.1: Sample assumptions and estimated numbers of responses

- 2.10 In each country, the addresses were selected using systematic sampling from across the sorted list (sorted hierarchically as described in paragraph 2.7). This was done by:
 - Calculating an interval of k where k is the systematic sampling interval defined by N (the total address count in the country) divided by n (the number of sampled addresses required in the country to achieve the completion target), then
 - Calculating a random start between 1 and k, and finally
 - Selecting an address each time the interval was repeated down the sorted address list.

Systematic sampling enables a stratified random probability sample to be drawn which maintains a good geographic spread of addresses from across the sampling domain (UK households).

- 2.11 In Scotland, Wales and Northern Ireland a higher proportion of addresses was sampled compared to England due to the different completion targets for each country (see
- 2.12 *Table 2.2*). This means that higher sampling fractions⁶ were applied to Scotland, Wales and Northern Ireland than to England, which means the devolved nations are overrepresented in the unweighted sample compared to percentage of the UK adult population they make up. This is effectively the same as boosting the sample in these countries.

 $^{^{6}}$ A sampling fraction is the proportion of the total population selected for the sample: 1/k

Country	Sampled addresses	Completion targets ⁷
England	201,321	15,342
Scotland	22,317	1,316
Wales	15,427	1,053
Northern Ireland	15,935	1,053
Total	255,000	18,763

 Table 2.2: Sampled addresses by country and completion target numbers

2.13 The 255,000 addresses were selected upfront, before fieldwork began. The sampled addresses were then split into three batches as shown in *Table 2.3*: soft launch followed by two main batches. Splitting the fieldwork into batches had two core benefits. First, adjustments could be made to the expected number of respondents routed through different sections of the questionnaire.⁸ This helped to ensure enough respondents were answering questions about all financial products of interest, thus enabling reliable data analysis, while also managing survey length for each respondent. And second, the batched approach also allowed flexibility to issue fewer addresses overall in the event of a higher response rate than expected (i.e. to reduce the number of addresses sampled for the final batch).

	England	Scotland	Wales	Northern Ireland	Total
Soft launch	22,763	2,601	2,035	2,601	30,000
Batch 1	37,940	4,334	3,392	4,334	50,000
Batch 2	140,618	15,382	10,000	9,000	175,000
Total	201,321	22,317	15,427	15,935	255,000

 Table 2.3: Issued addresses by batch and by country

- 2.14 The soft launch sample was much smaller in size than the subsequent two batches, and had three overarching objectives:
 - To test response rate assumptions (both in terms of survey participation and product holding)
 - To test that the survey script was working as intended, i.e. did not contain any routing or question errors
 - To test two slightly different versions of the invitation letter one with a statement about consent to recontact the respondents for further research, and one without that statement. This is described in more detail in Chapter 5: Fieldwork.
- 2.15 Unlike a formal survey pilot, the soft launch interviews counted towards our target completion numbers, and the data from the soft launch interviews was used in analysis.
- 2.16 The remaining addresses were split into Batch 1 and Batch 2 the two main fieldwork batches. Batch 1 was used to monitor survey response rate and product holding rates. This in turn informed the final number of addresses issued at Batch 2, when the aim was to achieve the completion targets for each country.

⁷ Slight discrepancy in total completion target is due to rounding

⁸ See Chapter 4: Survey design for further detail about the questionnaire structure and how RSP and 1 in N values were used to control routing in the questionnaire.

Comparison with previous waves

- 2.17 The 2022 sampling approach introduced a theoretical difference in method compared with 2020, i.e. there is a difference in how digitally excluded people were invited to participate in the survey.
- 2.18 In 2020, two separate samples were drawn: one for in-home participants who completed a face-to-face interview (those aged 18-69 who hadn't used the internet in the three months prior to fieldwork, or who were aged 70+), and the other for participants able to participate online (adults aged 18+ with internet access, or those supported by someone with access to complete the survey). This was done to ensure that older and/or digitally excluded people were not being prevented from taking part in the survey.
- 2.19 Restrictions put in place due to the Covid-19 pandemic made face-to-face interviewing challenging during the 2022 wave fieldwork, and as such there was no in-home element in the 2022 wave. Instead, participants were offered the option to complete the interview via the telephone. To this end, a single sample was drawn, with participants making the choice themselves how they wanted to complete the survey: either online or over the telephone. There were no restrictions placed on who completed over the telephone all participants, including those with internet access, had the option to participate over the phone if they preferred that mode of completion. More detailed information about the two modes of interviewing is presented in Chapter 5: Fieldwork.
- 2.20 An invitation letter addressed from the Financial Conduct Authority was sent via post to the sampled addresses, inviting up to three adults over the age of 18 within each household to participate in the survey. The letter offered the option to take part either online, or over the telephone, if they were unable to participate online. The wording in the letters was changed slightly at each fieldwork batch to further encourage people to take part over the telephone. See Appendix C: Invitation and reminder letters for the exact wording used at each batch.
- 2.21 The single sample approach taken in 2022 simplified the sampling and weighting processes, but the lack of a targeted digitally excluded sample resulted in fewer participants who were not digitally active taking part than at previous waves of the Financial Lives survey. The full implications of this are explained in Chapter 8: Digital exclusion.
- 2.22 Furthermore, the target number of interviews was increased at the 2022 wave to around 18,500 compared to the 2020 wave (when the target was 16,000). This was done to shorten the average length of the interview/ survey, while ensuring sufficiently large numbers of respondents within each country and other sub-groups took part in the survey (for example, those with a particular financial product) to enable analysis of these sub-groups.
- 2.23 The survey length for each individual is determined by the routing mechanisms implemented in the Financial Lives questionnaire. The routing ensures that respondents were only asked sections of the questionnaire that were relevant to their specific circumstances. Additionally, by varying the target sample sizes for different questionnaire sections, participants did not need to answer every section they were eligible for. The larger overall sample size allows each participant to answer fewer sections and therefore reduces survey length for them, while ensuring sufficient

numbers answer each section overall. These mechanisms are discussed in more detail in Chapter 4: Survey design.

2.24 Despite the difference in sampling approach between the 2020 and 2022 waves, the results from each are fully comparable to each other. This is because weighting neutralises any differences resulting from the sampling approach used and delivers a representative sample of UK adults aged 18+. This is discussed in more detail in Chapter 7: Weighting.

3 Questionnaire design

Overview

- 3.1 The Financial Lives 2022 survey was available to complete online or over the telephone. A single sample was drawn and issued, and households were given the choice to participate online or over the phone, depending on their preference. Although there were in effect two separate questionnaires (one for self-completion online, the other for delivery by a telephone interviewer), a single combined instrument was scripted, with modifications for delivery over the telephone where necessary.
- 3.2 The questionnaire development process comprised several different activities. This included a detailed review of the proposed 2022 questionnaire and a round of cognitive testing.
- 3.3 The questionnaire was not formally piloted in 2022, as it had been in 2020. However, there was a soft launch to fieldwork (where a small proportion of sampled addresses were initially invited to take part), after which a few minor changes to the questionnaire were implemented, based on these early data.
- 3.4 This chapter sets out in detail the processes involved in developing the 2022 questionnaire.

Questionnaire review and development

Initial review of the draft questionnaire specification

- 3.5 The NatCen research team undertook a systematic review of the initial questionnaire specification provided by the FCA. The whole questionnaire the existing content from 2020 as well as new questions was reviewed for clarity and to ensure a smooth respondent experience.
- 3.6 Additional checks were carried out on proposed changes to the questionnaire from the 2020 wave. The review of all proposed question changes included checking the following:
 - a) Routing logic and routing descriptions (semantic expressions)
 - b) Impact on routing for other questions
 - c) Impact on interview flow and respondent experience, including whether changed questions might have an impact on tracker questions (for example by introducing a concept and changing how a subsequent question might be interpreted)
 - d) Question clarity.
- 3.7 Recommendations for potential changes, possible improvements, and any routing errors were fed back to the FCA, and final changes were jointly agreed before implementation.

Cognitive testing

- 3.8 The 2022 questionnaire was cognitively tested by Ignition House. This research focused on testing new questions to the 2022 survey, as many of the existing questions had been tested previously in 2020. A total of 149 questions were tested; of these 141 were new to the 2022 survey and 8 were existing questions, either in their original format or in a format amended for the 2022 survey. Each question was tested with a minimum of three purposely recruited participants, with the majority being tested with at least ten participants.
- 3.9 All of the tests were conducted online, in one-to-one interviews. Each interview lasted around 60 minutes, with the length depending on the volume and complexity of the question sets being tested. Across the programme, Ignition House ran tests with 34 participants, aged 22-65.
- 3.10 A broad demographic mix of participants were recruited for the purposes of this research. Specific criteria were applied to ensure participants were suitable for the questions being tested, i.e. they held investment products, held high-risk investment products, had a pension in accumulation, had applied for a mortgage deferral, or had used Buy Now, Pay Later.
- 3.11 The discussions were a mix of spontaneous feedback from the participants, as well as scripted and spontaneous probing by the interviewer. Two broad methods of testing were employed: a concurrent approach where participants were asked to answer and provide feedback on one question at a time, and a retrospective approach where participants was asked to answer a series of questions on the same topic uninterrupted and asked to provide feedback at the end. The concurrent approach was useful for providing instant and detailed feedback on a question, while the retrospective approach was more representative of the actual survey experience and highlighted any issues with questionnaire flow or consistency,
- 3.12 Ignition House kept a detailed record of the feedback, on a question-by-question basis. Where issues or improvements were identified, edits were reviewed and agreed with the FCA team.

CATIfication

- 3.13 The whole questionnaire was also adapted for delivery over the telephone. The two questionnaire versions, online and telephone, were scripted in a single instrument but with mode-specific instructions which would display depending on whether the interview was taking place online or over the telephone. This approach meant that the questionnaire only had to be scripted once, and any changes were automatically applied to both modes, ensuring consistency between the two versions of the questionnaire. As was the case in 2020, the questionnaire was scripted into Unicom Intelligence (UI).
- 3.14 The aim of the CATIfication process was to ensure consistent and straightforward delivery of the interview over the telephone, while limiting the risk of mode effects as much as possible. Mode effects occur when the mode by which someone takes part

(e.g., online, or over the phone) influences how they interpret or complete the questionnaire.

- 3.15 The CATIfication process therefore intended to ensure the telephone questionnaire remained functionally equivalent to the online questionnaire, while making question text and instructions appropriate for interviewer administration. The process ran in parallel to the questionnaire review outlined above. When reviewing the questionnaire, the NatCen research team also reviewed it from the perspective of adaptation for telephone and added the necessary instructions to the specification.
- 3.16 A significant component of the CATIfication process was to make adjustments to some of the questions with long answer lists, which are very time consuming for interviewers to ask, and can be cognitively difficult for respondents to answer. For each of these lists, a decision was made as to whether it was necessary for the interviewer to read out the full answer list (which would be functionally more equivalent to the online questionnaire, where the respondent has the ability to read through the full list of answer options rather than providing an answer unprompted). This approach attempted to balance minimising interview length and respondent burden with retaining equivalence to the online questionnaire as much as possible. An interviewer instruction was then added to the telephone script to reflect the decision as to whether answer options should be read out or not.
- 3.17 The interviewer instructions used throughout the questionnaire were tailored to the questions asked. Table *3.1* summarises the different types of interviewer instructions most commonly used in the questionnaire and gives examples of when they were typically used. The below represents the general principles applied. Given the length of the questionnaire and diversity of questions asked, the interviewer instructions used were sometimes variations of these principles.

	_	
Instruction	Description	When used
READ OUT EACH OPTION AND CODE ALL THAT APPLY	Read out multi-code	Used for multi-code questions where interviewers are to read each individual option allowing for the participant to answer yes or no after each
READ OUT	Read out answer list	Interviewer to read out the full list and invite participants to answer at the end of the list. Used for straightforward single code questions as well as some long answer list multi-codes where consideration of each option is not crucial
READ OUT	Read out information text	Used ahead of information text, as a prompt to read out
READ OUT IF NECESSARY	Read out if necessary	Used for information text or some answer codes that are only to be read out if the participant requires (e.g. answer options to a

Table 3.1: Most frequently used telephone interviewer instructions –
common applications

		question about personal circumstances such as marital status, where the respondent can provide an answer without having to reflect on the exact wording used in the questionnaire)
DO NOT READ OUT	Do not read out	Used for answer options, where reading out the codeframe is not required
INTERVIEWER, IF NECESSARY	Read out if necessary	Used where codeframes will not necessarily need to be read out but the interviewer may need to prompt the respondent with the available answer options, for example repeat scales in a set of attitudinal statements
READ OUT EACH STATEMENT AND THE ANSWER CODES. REPEAT ANSWER CODES AS REQUIRED	Grid instructions read out	Grid instructions, used where participants are asked the same question about a series of products/behaviours or similar.

Scripting and testing

- 3.18 Once scripted, the questionnaire script was fully checked in a test environment by the NatCen research team, the FCA and Critical Research. This checking involved ensuring all changes had been implemented correctly (on both the telephone and online versions of the questionnaire). This was done by systematically answering all questions and then changing answers as necessary in order to bring every possible question on route in order to check it. In other words, the tester was tasked with 'jumping around' in the script to test that the questionnaire script was able to respond to any changes in answers provided and route the respondent correctly. While doing so, any errors in question wording, question routing (either in the questionnaire specification or in the script), or any other issues were noted, and all corrections were re-tested to ensure correct implementation.
- 3.19 All aspects of all questions were comprehensively tested, including:
 - Question wording
 - Answer options
 - Instructions for participants (blue text)
 - Routing
 - Text substitutions
 - Interviewer instructions
 - Variable names and labels
 - Any 'show if' instructions
 - Any randomisation of answer options.

- 3.20 As noted, the telephone and online questionnaires were scripted within a single shared Unicom Intelligence 'UI' instrument. 'Select mode' variables were added to the test version of the questionnaire to allow the tester to swap from telephone to online mode, enabling the tester to switch between the telephone and web versions of each question to check them simultaneously.
- 3.21 The NatCen research team also utilised 'data flooding' as an additional check of question routing. Data flooding involves running dummy data through the program to simulate live respondents answering questions. Because of the size and complexity of the questionnaire, this was carried out for each questionnaire section separately. The flooded survey data (1,000 cases per section) were downloaded, and variable frequencies checked to make sure the routing for each question was working as intended.
- 3.22 Critical Research also checked flooded data by producing data tables using the flooded datasets from each section to check base sizes were as expected, raising any issues for NatCen to investigate.
- 3.23 RSPs and 1 in N routing was also thoroughly checked using flooded data, to check numbers routed to each RSP section aligned with expectations and using dummy cases to check 1 in Ns were being brought on route correctly.

Soft launch changes

- 3.24 As described in Chapter 5: Fieldwork, there was no formal pilot in the 2022 survey. However, the soft launch stage, in which adults at 30,000 sampled addresses were invited to take part in the survey, was also used as a final check of the questionnaire before the rest of the sampled addresses were issued into field.
- 3.25 Where changes to the questionnaire were made very close to the start of fieldwork, and so hadn't been fully checked using the processes outlined above, these changes were manually checked on the live soft launch data. Frequencies were used to ensure that these changes had been implemented correctly and that there were no issues with the routing into the affected questions. No errors were identified in these checks.
- 3.26 Additionally, the soft launch version of the questionnaire also included an open feedback question at the end of the interview, to give participants an opportunity to raise any issues they had had in completing the questionnaire. Answers to this question were manually reviewed by the research team to check for any recurring issues. None were found.
- 3.27 Routing into the RSP and 1 in N sections was also rechecked on live data. A minor issue was identified in the routing into one of the 1 in N sections (Access). This affected 12 cases at soft launch and was fixed before Batch 1 was issued into the field.
- 3.28 Following the soft launch, the following changes were also made to the questionnaire and the questionnaire script:

- Interview administration section changes to wording were made to encourage respondents to complete the administration section, to use the designated address fields when typing in their contact details, and to make it easier for respondents to confirm that they did not want a shopping voucher if this were the case
- Signposting information to support organisations was added to the closing screen for all respondents
- Tenure check questions were added to allow researchers to create a household tenure variable for weighting purposes. This is discussed in more detail in Chapter 6: Data processing
- Computed variable 'modulestoask' used to monitor numbers routed into RSP and 1 in N sections was not programmed correctly and was overestimating the numbers routed into these questionnaire sections. This was corrected following soft launch.

Summary of differences between the online and telephone questionnaires

- 3.29 While the CATIfication process aimed to minimise differences between the online and telephone questionnaires, some differences necessarily remain. This is partly due to the nature of the two modes, for example respondents were able to view full answer lists online, but could only hear these one by one over the telephone. It is also due to the balance between minimising respondent burden and reducing the telephone interview length for example where a decision was made not to read out certain answer options. Remaining differences between the two modes included:
 - **Respondent burden**. Attempts were made to minimise this by reducing the length of the telephone interview, and removing the requirement to read out the answer options to the respondent where possible. In some cases, the decision was made to ask interviewers not to read out answer options at all, either because it wasn't felt to be necessary for the participant to answer the question, or to minimise interview length and cognitive burden for respondents. In these cases, the two versions of those questions are functionally different. However, attempts were made to minimise the number of questions impacted in this way
 - **Interviewer effects**. There is a higher risk of social desirability bias (wanting to give a more socially acceptable answer) for some questions, when completing the interview over the telephone and providing the answer to another person when compared to self-completion
 - **Availability of full context**. When answering a question online, the question stem and full answer options, including any explanatory text, are available simultaneously to the participant. While completing over the telephone, however, each of these is presented orally in turn. This approach is likely to increase cognitive load for telephone participants (having to hold and recall more information in order to answer the question) and may have an impact on how people answer.
- 3.30 It is not possible to quantify the scale and impact of these differences on the survey results, in part because the populations responding either online or over the

telephone are likely to have had quite different profiles and characteristics. In general terms, the telephone respondents' profile contains a higher proportion of people aged over 65 (and is therefore less economically active), a higher proportion of people who live in households that own their home outright and have lower levels of internet use than the online respondents. Nevertheless, the proportion of telephone cases is small (1.34%) and because the telephone and online cases are combined for weighting purposes, this will have little impact overall. This is described in detail in Chapter 7: Weighting.

4 Survey design

Overview

- 4.1 The Financial Lives 2022 questionnaire is a complex survey instrument. It covers an extensive range of topics and aspects of financial services, incorporating factual questions as well as attitudinal measures.
- 4.2 The questionnaire can be considered as comprising two parts. The first part includes some initial demographic and attitudinal questions and a series of questions to establish which financial products respondents hold, or which financial services they have used. One objective of these early questions is to establish eligibility to be asked more detailed questions about these products or services in the second part of the questionnaire.
- 4.3 A copy of the <u>FLS 2022 questionnaire</u> can be found on the FCA's website. In 2022 the questionnaire was adapted for delivery online or over the telephone. More detail on this can be found in Chapter 3: Questionnaire design.
- 4.4 In total, the questionnaire included just under 1,300 questions. Asking every respondent all the questions for which they were eligible would have resulted in an interview that was far too long. For that reason, respondents were not asked all the questions which applied to them. A system was developed which directed respondents to some but not all sections of the questionnaire for which they were eligible. This system sought to minimise the overall length of the interview, while ensuring the number of respondents answering each section was sufficiently large for analysis purposes, while also minimising any bias in the samples of respondents asked these sections. Of all valid interviews (that is, once speeders and duplicate interviews were removed, i.e. after data validation), the mean interview length for those taking part online was 51 minutes.
- 4.5 To achieve this, the questionnaire adopted a 'modular' approach, whereby several different approaches for controlling the routing through different sections of the questionnaire were adopted. These are described in detail in this chapter.

Questionnaire structure diagram

4.6 The overall structure of the online questionnaire is shown in *Figure 4.1*. The diagram shows the different sections of the questionnaire, the order in which they were asked, and how eligibility or routing into each section was controlled using the approaches described in detail in this chapter: Ask all, Ask all eligible (low eligibility), Relative Selection Probabilities (RSPs), 1 in Ns and Dependent 1 in Ns.



Figure 4.1: Questionnaire structure diagram

- 4.7 The questionnaire started by asking a set of demographics questions, which were asked of all respondents. This was followed by a number of attitudinal questions asked of all respondents, but with a small number of questions asked of a sub-sample of respondents controlled by a 1 in N. This was followed by the product ownership section, which was asked of all but also included some questions which were subject to 1 in N routing. There were then two further sections (Assets & Debts and Advice & Guidance Incidence) which were asked of all respondents.
- 4.8 The RSP values were used to decide which of the subsequent sections in each RSP set would be asked. Whichever RSP sections were selected, they were asked in the order shown in the diagram.

Questionnaire section types

Ask all

4.9 Some questions were asked of all respondents who took part in the survey. These were questions that applied to all respondents and where a large sample size was required for analysis. They included demographic questions that were needed for weighting/ calibration and cross-analysis purposes, attitudinal questions and product ownership questions.

Ask all eligible (low eligibility)

4.10 These were questions that were only applicable to sub-groups of respondents with particular characteristics (e.g. questions about high-cost credit were only applicable to those who held such products). Asking all those eligible for these questions ensured that the samples for these lower-eligibility sections were maximised.

Relative Selection Probability (RSP)

Aims

- 4.11 To reduce survey length, respondents were not asked about every retail sector (e.g. retail banking, general insurance and protection, pensions in accumulation or decumulation) in which they held products. Some sections of the questionnaire (with each section focusing on a different retail sector or sub-sector) were grouped into 'sets', whereby respondents were only asked one of the sections in that set from among those sections in the set for which they were eligible. The section that they were asked about was chosen using a partly randomised approach (described in more detail below), although some sections (those with low incidence in the population, e.g. decumulation) had a higher probability for allocation than others.
- 4.12 If the allocation of these sections were purely random, sections with high levels of eligibility (i.e. sections asking about high incidence products, such as the Retail Banking section asking about day-to-day accounts) would be asked of most respondents more than was needed to support analysis. Sections with low eligibility would then not achieve sufficient responses to enable robust analysis.
- 4.13 To ensure sufficient sample sizes for the low-eligibility sections, one approach might have been to allocate all eligible respondents to those low incidence sections. By doing this, sections for which eligibility was low would be based on all eligible (and so would be representative); however, sections for which eligibility was high would be based on all those eligible, apart from those selected for the low-eligibility sections. So, those samples of respondents would not be representative.
- 4.14 By retaining a random element in the allocation to each section, but with a relatively greater probability of being selected to answer lower incidence sections, RSPs balanced the need to reduce survey length, achieve the required targets of response numbers at each section, and made it viable to weight the data to achieve

representativeness among each given population (e.g. those with high-risk investments).

How RSPs were implemented

4.15 Some of the relevant retail sector questionnaire sections were grouped into sets (referred to here as RSP sets). For the online survey, there were two RSP sets, one comprising six sections, and the other five sections, meaning eleven of the survey's sections were governed by RSP rules. For the telephone survey, there were seven sections in one RSP set. Four sections (High-risk Investments, Credit & Loans 1, Mortgages and Deferred Payment Credit) were governed by RSPs in the online survey but in the telephone survey they were asked of all eligible respondents instead due to low eligibility rates among those interviewed in the telephone survey. Table 4.1 provides a summary of which sections were included in which RSP sets for the online and telephone modes.

Module	Online	Telephone		
Savings	RSP set 1	RSP set		
General Insurance & Protection	RSP set 1	RSP set		
Pension Accumulation	RSP set 1	RSP set		
Pension Decumulation	RSP set 1	RSP set		
High-risk Investment	nvestmentRSP set 1Asked of all eligible due to eligibility rates among the interviewed over the phone			
Credit & Loans 1	RSP set 1	Asked of all eligible due to low eligibility rates among those interviewed over the phone		
Retail Banking	RSP set 2	RSP set		
Credit & Loans 2	RSP set 2	RSP set		
Advice & Guidance 2	RSP set 2	RSP set		
Deferred Payment Credit	RSP set 2	Asked of all eligible due to low eligibility rates among those interviewed over the phone		
Mortgages	RSP set 2	Asked of all eligible due to low eligibility rates among those interviewed over the phone		

Table 4.1: RSP sets for online and telephone survey completion modes

- 4.16 Respondents were assigned one section from each set (so no more than two were asked in the online survey, and no more than one over the telephone). The allocation followed simple rules based on respondent eligibility for none, one or more than one of the sections:
 - If they were not eligible to answer any, then they were not asked anything from that set

- If they were eligible to answer only one section in an RSP set, then they were asked that section
- If they were eligible to answer more than one section, the RSP rules determined which section they were asked.
- 4.17 Each section in an RSP set was assigned a fixed value the 'RSP value'. The RSP value gave each section a likelihood of being selected relative to the other sections in that set, and only applied if the respondent was eligible for two or more sections in an RSP set. The RSP values were calculated in advance of fieldwork based on the estimated eligibility for each question section. This was done to ensure that the sections were asked of the target sample sizes. The starting value for each RSP was calculated as one divided by the eligibility for the corresponding section; for example, eligibility for the Savings section at Batch 2 online was 70% (i.e. 70% of the sample was eligible), therefore the starting value for this RSP was 1 / 0.7 = 1.4. An excel simulator was used to experiment with and 'tweak' the starting values of each RSP section to ensure that a minimum target sample size was obtained for each section. In the case of Savings, the RSP was changed from 1.4 to 0.35 (see *Table 4.2*) to ensure that other sections in RSP Set 1 obtained their minimum target sample sizes while still meeting the target for Savings. Simulations are discussed in detail later in this chapter.
- 4.18 The RSP values are shown in Table 4.2 and

4.20 Table 4.3. For the online survey, RSP values were adjusted across the three separate mailing batches (see Chapter 5: Fieldwork, for details on the approach to fieldwork management).

	RSP section	Soft Iaunch	Batch 1	Batch 2
	1. Savings	0.35	0.35	0.35
	2. General Insurance & Protection	0.43	0.42	0.40
RSP Set 1	3. Pension Accumulation	0.90	0.82	0.97
	4. Pension Decumulation	8.00	6.70	5.00
	5. High-risk Investment	4.10	3.70	2.00
	6. Credit & Loans 1	2.70	2.88	3.40
RSP Set 2	1. Retail Banking	0.67	0.64	0.64
	2. Credit & Loans 2	0.50	0.52	0.54
	3. Advice & Guidance 2	2.20	1.87	1.87
	4. Deferred Payment Credit	1.13	1.37	1.50
	5. Mortgages	2.20	2.25	2.32

Table 4.2: Online survey RSP values

	RSP section	Soft launch	Batch 1	Batch 2
RSP Set	1. Savings	0.88	0.90	0.90
	2. General Insurance & Protection	0.91	0.91	0.91
	3. Pension Accumulation	2.68	2.50	2.50
	4. Pension Decumulation	20.00	20.00	20.00
	5. Credit & Loans 2	0.92	0.99	0.99
	6. Retail Banking	0.99	0.99	1.10
	7. Advice & Guidance 2	4.20	4.10	3.20

Table 4.3: Telephone survey RSP values

1 in N sections

- 4.21 Some sets of questions were only asked of a proportion of those who were eligible to answer them. This approach was used for questions or sections where the full eligible sample was not required to provide robust analysis. These questions were asked of a random subset of eligible respondents, i.e. 1 in every N.
- 4.22 This was implemented by adding 'flag' variables (randomly set to either 0 or 1) to all individual sample cases in advance of fieldwork that indicated whether or not each respondent should be asked the relevant set of questions. An individual level sample file was created with three rows for each of the 255,000 sampled addresses (i.e. 765,000 rows). The flags were randomly added on a 1 in N basis to the individual level sample file. For each 1 in N section the flags were evenly spread between the three log-ins over the whole sample, but not within household. For example, a third of all Consumer Duty flags set to 1 were allocated to the 1st log-in, a third to the 2nd login and a third to the 3rd login. This means that the 1 in N sections were not affected by the fact that in some households only one respondent took part and only the 1st log-in was used. This process was carried out separately for the soft launch and each subsequent batch. Routing instructions in the computerised questionnaires queried the flag variable (and any other routing specifications for those questions) to control whether each section was on route or not. For example, if it was required that one in every four respondents should be asked a set of questions, the flag variable would be set to 1 for a quarter of cases⁹ and 0 for the remaining threequarters.
- 4.23 There were a total of 11 sets of questions subject to a 1 in N selection. There were two types of 1 in N section: 1 in Ns, where all respondents were eligible, and Dependent 1 in Ns, where additional eligibility criteria were applied to the 1 in N selection. The total number of 1 in N or Dependent 1 in N question sets that any individual respondent could be asked was capped at four. This means that once a case in the individual level sample was allocated four 1 in Ns, no further 1 in Ns were allocated to that case. This was to prevent respondents being randomly allocated to answer too many 1 in N sets which would have resulted in lengthy interviews.

⁹ Cases in this instance mean individual log-ins provided for each address (three per household).

1 in N sections for which all respondents were eligible

- 4.24 Apart from the 1 in N stipulation, there were no other eligibility criteria for these sections. This means that everyone was eligible for these sets of questions. This applied to the majority of the 1 in N sections. The sets of questions, together with their 1 in N values, are shown in Table *4.4*.
- 4.25 Note that for the online survey, the 1 in N values were reviewed after each batch of mailings and revised based on actual interview data however no significant changes were needed between batches. Table 4.4 shows the value of 'N' in each case.

	Online			Telephone			
1 in N section	Soft Iaunch	Batch 1	Batch 2	Soft launch	Batch 1	Batch 2	
	Ask 1 in						
AT22INTO to AT15 (Automated decision making and Big Tech)	7.4	7.4	7.4	7.4	7.4	7.4	
A2p & A2d-e,g-k,m (Attitudes to financial advice)	4.6	4.6	4.6	4.6	4.6	4.6	
P_CC21 to P_CC80 (Credit information)	5.3	5.3	5.3	5.3	5.3	5.3	
IT1 (IT disruption)	4.6	4.6	4.6	4.6	4.6	4.6	
Responsible Investments	4.6	4.6	4.6	4.6	4.6	4.6	
Payments	9.2	9.2	9.3	9.2	9.2	9.3	
Awareness of the FCA	9.2	9.2	9.3	9.2	9.2	9.3	

Table 4.4: 1 in N values

1 in N sections for which only some respondents were eligible

- 4.26 There were four sets of questions where routing was dependent on both the 1 in N rule **and** additional eligibility criteria. For example, for questions within the Communication Problems section of the questionnaire, only UK adults who had any financial products were eligible. In this case, if a respondent was randomly assigned to be asked the Communication Problems questions, and they held any financial products, they would be asked the section. However, if someone was assigned to this section but did not have any financial products, they would not be asked the section.
- 4.27 The sets of questions, together with their 1 in N values, are shown in Table 4.5. Note that for the online survey, the Dependent 1 in N values were reviewed after each

batch of mailings and revised based on improved estimates of eligibility from interview data. Table 4.5 shows the value of 'N' in each case.

	Online			Telephone			
Dependent 1 in N section	Soft launch	Batch 1	Batch 2	Soft Iaunch	Batch 1	Batch 2	
	Ask 1 in						
Communication Problems	6.1	4.6	4.3	6.1	4.6	4.3	
RI19a to RI25 (Retail Investments – Problems and complaints)	2.2	2.5	2.7	2.2	2.5	2.7	
Buying Products Online	7.3	7.2	6.5	7.3	7.2	6.5	
Advice & Guidance 1 (ask all telephone)	1.7	1.8	2.2	-	-	-	
Access (Dependent 1 in N soft launch online only, ask all otherwise)	1.1	-	-	-	-	-	

Table 4.5: Dependent 1 in N values

- 4.28 To illustrate, the 1 in N 'flag' for the Communication Problems section was set to a value of 1 for every 6.1 individual sample cases at soft launch for the online survey, one in every 4.6 individual sample cases at Batch 1, and every 4.3 individual sample cases in the final Batch 2 because of relatively high eligibility. When logging into the survey, respondents with a 'flag' of 1 would then be asked the Communication Problems 1 in N section. In other words, most adults (and therefore respondents) have at least one financial product, therefore, fewer respondents can be asked this section to achieve a robust sample, hence the reduction in the 1 in N value.
- 4.29 The soft launch revealed that eligibility for the Access section was lower than anticipated among online respondents (12.6%). In order to achieve the target sample size for Access, this section had to be changed from a Dependent 1 in N online to ask all eligible.

Simulations

Purpose

4.30 As noted, to reduce survey length, respondents were not asked every section that their personal circumstances made them eligible to answer. Relative Selection Probabilities (RSPs) described earlier in this chapter were employed to provide a balance between managing interview length, reducing respondent burden and meeting achieved minimum targets set out by the FCA for each section. Simulations of expected sample sizes and interview length were used to determine which questionnaire sections should be in each set, and to calculate RSP values for each questionnaire section.

Overview of the methodology

- 4.31 The simulation spreadsheet used the 2020 wave data as the starting point to estimate incidence rates for all sections or sets of questions of interest. For each section, it used FCA minimum target numbers, expectations of interview length, estimates of eligibility, and selection rules¹⁰ to estimate how many respondents are expected to be allocated to, and to answer, each section.
- 4.32 Each simulation produced estimates of total interview length for each respondent by adding up the estimated average interview length assigned to each section:
 - RSP sections interview length (max. two sections online, max. one section telephone)
 - 1 in N sections interview length (capped at four sections)
 - Ask all questions
 - Ask all low eligibility questions.
- 4.33 This helped determine the most optimal RSP values for each section within each RSP set, and guide decisions on questionnaire length (e.g. capping 1 in N section at four).
- 4.34 2020 wave data were used to set the RSPs for the soft launch. The simulations were then reviewed based on the soft launch results, and some changes were made to RSPs before Batch 1. After Batch 1, the simulation spreadsheet was updated again based on Batch 1 results, to inform the RSP values for Batch 2.
- 4.35 The probability of each section being selected was equal to the RSP value for the section divided by the sum of all the RSP values for the sections in the set for which the respondent was eligible. A random decimal number between 0 and 1 was generated and assigned to the respondent. That was then used to allocate the section, applying the probabilities determined by the RSP values and eligibility. A worked example is shown below.
- 4.36 Using Set 1 in the online survey Batch 2 (see Table 4.2): if a respondent was eligible for the 1. Savings, 2. General Insurance and Protection (GI&P) and 5. High-risk Investments (HRI) sections within RSP Set 1, their probability of being asked:
 - 1. Savings was: 0.35 / (0.35 + 0.4 + 2) = 12.7%
 - 2. GI&P was: 0.4 / (0.35 + 0.4 + 2) = 14.5%
 - 5. HRI was: 2 / (0.35 + 0.4 + 2) = 72.7%.
- 4.37 A random decimal number (between 0 and 1) determined the section that was selected. In the above example:

¹⁰ I.e. RSPs, 1 in Ns/ Dependent 1 in Ns or 'ask all' and 'ask all low eligibility'. See Chapter 4: Survey design for more details on these.

- A random number greater than 0 and less than or equal to 0.127 (i.e. up to 12.7%) would have meant the respondent answered the Savings section
- A random number greater than 0.127 and less than or equal to 0.272 (i.e. between 12.7% and 27.2% the latter being sum of the first two probabilities in the list (12.7% + 14.5%)) would have meant the respondent answered the GI&P section
- And using the same principle as above, a random number greater than 0.272 and less than or equal to 1.0 would have meant answering the HRI section.
- 4.38 The simulations spreadsheet also included 11 sets of 1 in N questions (see *Table 4.4* and *Table 4.5*). The values for 1 in Ns (i.e. what proportion were eligible to be asked) were calculated using the simulations spreadsheet in advance of fieldwork based on the assumed eligibility rates and target sample sizes. 2020 wave data were also used to set the assumed eligibility rates and 1 in Ns for the soft launch. The simulations were then reviewed based on the soft launch results, and some changes were made to 1 in Ns before Batch 1. After Batch 1, the simulation spreadsheet was updated again based on Batch 1 results, to inform the 1 in N values for Batch 2. To manage interview length, the total number of 1 in N or Dependent 1 in N question sets that any individual respondent could be asked was capped at four in the simulator before survey implementation.
- 4.39 In order to be able to accurately estimate interview length, all questionnaire sections (including 'ask all' and 'ask all low eligibility') were included in the simulation spreadsheet. As was the case with RSP and 1 in N sections, 2020 wave data were used to set the 'ask all low eligibility' assumed eligibility rates for the soft launch. As above, the 'ask all low eligibility' sections were reviewed based on the soft launch results, and some changes were made before Batch 1. The simulation spreadsheet was updated again based on Batch 1 results, to inform the 'ask all low eligibility' assumed eligibility' assumed eligibility' assumed eligibility'
- 4.40 The outputs resulting from the simulations spreadsheet were final RSP and 1 in N values which were used to create flag variables for respondents in the sample files for soft launch, Batch 1 and Batch 2 fieldwork. They were important to guiding decisions related to determining questionnaire length for respondents. The flag variables determined which respondents would be answering these question sets should they choose to complete the survey, and be eligible to answer these questions based on other answers e.g. related to product holding.
5 Fieldwork

Overview

- 5.1 This chapter provides details of how the FLS 2022 wave fieldwork was carried out, including how the 2022 sample was issued, how households were encouraged to participate, available modes of completion, batching of participant invitations and the survey adjustments made between these. This chapter also details the achieved response rates and outlines the quality control procedures put in place before and during the fieldwork period, including ethical approval and safeguarding.
- 5.2 For quality control procedures carried after fieldwork closure, and information on data processing, please see Chapter 6: Data processing.
- 5.3 The 2022 wave of the FLS had a single sample (rather than two as was the case in the 2020 wave for more information on this see Chapter 2: Sample design). Up to three adults at each sampled address were invited to participate in the survey. Participants could complete the survey online or over the telephone, depending on their preference.
- 5.4 The fieldwork period was split into three distinct stages (batches)
 - **Soft launch**, in which 11% of available sample (i.e. sampled addresses) was invited to take part in the survey
 - Batch 1, in which a further 19% of available sample was invited to take part
 - **Batch 2**, in which 66% of available sample was invited to take part.
- 5.5 A batched approach made it possible to (where necessary):
 - Adjust fieldwork materials¹¹ to improve their quality and maximise their effectiveness as fieldwork progressed, and
 - Adjust the number of invitations sent out at each stage based on the response rate so far, which allowed some degree of control over total numbers of completed interviews at UK level and by country
 - At question level (for questions asked of specific groups of respondents, such as sections where response was controlled by 1 in N or RSP values – see Chapter 4: Survey design, for details on these), adjust the RSP and 1 in N values where necessary to control numbers being asked specific questionnaire sections or question sets.

Research ethics approval prior to fieldwork commencement

5.6 As is standard on all surveys carried out by NatCen, the Financial Lives survey was subject to ethical review and approval by NatCen's internal Research Ethics Committee before fieldwork began. The Committee's approval gives reassurance that the project design ensures research participants' data are protected, and that participants have a positive experience of the research, are provided with all relevant

¹¹ Fieldwork materials include all materials and documents used during fieldwork such as the questionnaire and survey script, invitation and reminder letters sent to households, interviewer briefing notes for use during the telephone interviews.

information to decide whether or not to participate and that there are strategies in place in case of any safeguarding or wellbeing concerns.

- 5.7 The research ethics application includes all aspects of project delivery including, for example, participant contact and materials, secure transfer and storage of participant information, safeguarding and signposting, potential burden on participants, appropriate incentivisation, data sharing and linkage, and informed consent.
- 5.8 The Research Ethics Committee met with the research team to discuss any queries on the research ethics application before formally approving the project to proceed.

Survey recruitment

- 5.9 At each fieldwork stage soft launch, Batch 1 and Batch 2 an invitation letter was sent via post to all addresses identified through the sample selection process described in Chapter 2: Sample design. Up to three adults (aged 18+) at each address were invited to take part in the survey, and were given the choice to take part online, or over the telephone if they were unable to take part online.
- 5.10 Allowing multiple adults per household to participate reduces the number of addresses required to achieve the target number of responses to the survey. While this means that not everyone in households with more than three adults could take part, these households make up a small proportion (4.8%)¹² of households in the UK, so impact on data accuracy was minimal. This slight discrepancy was corrected for during the weighting process to ensure that people in larger households were not underrepresented within the final data. More information on this can be found in Chapter 2: Sample design and Chapter 7: Weighting.
- 5.11 The invitation letter sent to all sampled households included an introduction to the FCA and the Financial Lives survey, the purpose of the survey, example findings from previous waves of the FLS and aimed to outline the value of taking part in the research. The letter also included reassurances about confidentiality and information about how addresses had been selected. The letter provided potential respondents with an email address and freephone telephone number for NatCen Social Research, as well as for the FCA's Contact Centre, in case a potential respondent wanted more information or to verify the bona fide nature of the research. The signatory on all letters was the Head of Consumer Research at the FCA.
- 5.12 The invitation letter provided detailed information about how the survey could be completed. For those household members who were comfortable with using the internet, there was an option to complete the survey online by going to the survey website hosted by NatCen. The letter contained three unique access codes to enable up to three adults within each invited household to complete the survey. For respondents unable to take part online, because they had no internet access or found it difficult to use, the letter contained information advising them to call a NatCen freephone number to arrange a time convenient for them to complete the survey by phone.

¹² Source: Labour Force Survey (published in Q3 2022).

The letter also highlighted that all survey respondents would receive a £10 voucher for taking part. More information on respondent incentivisation is included later in this chapter in the Respondent incentivisation section.

- 5.13 A reminder letter was sent via post one week after the initial invitation was posted out, to encourage those who had not already taken part to do so. The reminder letter was sent to all sampled addresses rather than to just those who had not yet completed the survey. This was because removing addresses where *all* eligible respondents had already completed the survey would cause a delay in mailing out the reminders and would only result in a small number of addresses being removed from the mailing (those with all three access codes used). Only one reminder letter was sent to each address invited to take part in the survey.
- 5.14 Copies of the invitation and reminder letters can be found in Appendix C: Invitation and reminder letters.
- 5.15 All invitation and reminder letters were sent via second class post. Mailings for the larger Batches 1 and 2 were staggered over three days to reduce uncertainty due to any sudden news events overshadowing a letter invitation. The dates for each of these mail-outs are summarised in Table 5.1. Please see *Table 1.1* for a more detailed project timeline.

	Soft launch	Batch 1	Batch 2
Invitation letters dispatched	31 Jan 2022	21 – 23 Mar 2022	16 - 18 May 2022
Reminder letters dispatched	7 Feb 2022	28 – 30 Mar 2022	23 – 25 May 2022

Table 5.1: Summary of invitation and reminder letter mail-out dates

Privacy and data protection

- 5.16 The initial invitation letter and reminder letter provided key information about rights and how to contact NatCen or the FCA if respondents had any questions or concerns about the research. Information required by GDPR, such as the lawful basis for processing data and survey respondents' rights, were also provided.
- 5.17 The invitation and reminder letters included a link to a full <u>privacy statement</u> on the FCA website. The privacy statement explained why and how personal data provided in the Financial Lives survey would be used, how data would be stored, details of the data controller and processors, and research participants' rights. A link to the same privacy statement was also provided upon request to telephone participants and was available in the online questionnaire and on NatCen's project information webpage.

Respondent incentivisation

5.18 Respondents were incentivised with a £10 Love2Shop voucher which they would receive following survey completion. Respondents taking part online, and who had a

valid email address, were offered an e-voucher, while telephone participants were offered a choice between an e-voucher (if they had an email address), or a physical gift card sent to them in the post. Up to three vouchers could be issued to each household, one per each unique completed survey – because up to three adults aged 18+ were invited to take part in the survey from each household.

- 5.19 Email and postal addresses were collected and confirmed by the participant at the end of the interview. Participants were asked to enter their email address twice for validation purposes, while postal addresses were displayed to the participant to confirm or amend if necessary.
- 5.20 For some telephone participants, the interview took a lot longer to complete than originally estimated. It was therefore decided to offer these participants an additional $\pounds 10$ voucher in recognition of the additional time they spent answering the survey questions. This was implemented from Batch 1 onwards. If an interview took longer than 90 minutes, the respondent would automatically be offered the additional $\pounds 10$ voucher this was programmed into the questionnaire script. Telephone interviewers were briefed on this approach so that they could use the additional incentive to encourage respondents to finish completing the survey, especially where completion was split over two sessions.
- 5.21 NatCen aimed to send e-vouchers within three days of participation, and postal vouchers within a week of the survey being completed. To achieve this, data from the interview administration section of the questionnaire (which included incentive administration) was extracted three times a week. A combination of automated and manual checks were carried out on the data to ensure cases were eligible for a voucher, and that we had the information required to process the incentive.
- 5.22 Respondents who had difficulties using their e-voucher or gift card, or had any other voucher-related queries, could contact NatCen's Freephone team by phone or email to resolve any issues.

Telephone interviewer briefings

- 5.23 All telephone interviewers and Freephone team members took part in a detailed project briefing before starting work on the Financial Lives survey. The briefing was led by the core NatCen research team and had two main aims first to ensure the team could confidently discuss the project with participants and answer any questions they may have, and second, to run through the questionnaire in detail and prepare interviewers to deliver the questions it asks. Interviewers were additionally required to do some practice interviews before their first appointments.
- 5.24 The briefing covered the background to the study, information about the sample and methodology, the importance of the telephone interviewing for collecting the views and experiences of digitally excluded respondents, and the questionnaire content specifically the different types of questions they could expect to see during the course of the interview, and the different instructions they would need to follow when completing an interview with a respondent. This was of utmost importance given the

breadth of financial products covered in the survey, and the depth of questions asked about some of them.

- 5.25 Telephone interviewers were also provided with thorough briefing notes, which were periodically updated throughout the project. These notes provided reminders on survey procedures such as the approach to incentivisation and any new information, such as details of any changes to the questionnaire and how that might impact a live interview.
- 5.26 The project-specific briefing is in addition to standard 2-day assessed training delivered to all NatCen telephone interviewers, which include procedures such as escalating safeguarding concerns, effective interviewing, minimising drop-outs and maximising response.

Quality control procedures in the telephone survey

5.27 As standard, telephone interviews were subject to quality control procedures throughout the fieldwork period. This process was managed by a dedicated Field Quality Team, and included live quality control, i.e. a supervisor listening in on an interview, either in full or in part, and providing feedback, points of improvement and support. This applied to 10% of telephone interviews carried out.

Fieldwork batches

- 5.28 Fieldwork was split into three batches. The first of these was a soft launch a small batch intended to test response rates, the mechanics of the survey script, and fieldwork processes. This was followed by a slightly larger Batch 1, and then the largest batch, Batch 2. This section outlines the objectives of each of the three batches, and any changes made between each batch to: fieldwork materials (ie the invitation or reminders letters), the survey script or the (sample) size of subsequent batches.
- 5.29 The target number of interviews overall was initially set at around 18,500. This relates to the total number of interviews available for analysis after validation and cleaning (see Chapter 6: Data processing for more information on this). An assumption was made, based on previous waves of the FLS, that circa 5% of all achieved interviews would be removed during the data validation process, and as such, the target number of interviews to achieve was 19,701.
- 5.30 An individual response rate of 4.22% was initially assumed a cautious estimate based on the final batch of the 2020 wave of the survey. However, a primary function of the soft launch was to test that assumption and provide a better estimate of the response rate to determine how many addresses would be required at Batches 1 and 2.

Objectives of the batched approach

5.31 The three stages of fieldwork, the soft launch, Batch 1 and Batch 2, were part of an iterative process to maximise the survey response rates while ensuring the survey

was a positive experience for respondents. Each stage also had its own set of objectives.

- 5.32 The soft launch was intended to test the survey response rate assumptions, including response rate by county, and the proportion of participants taking part over the telephone. This batch was also used to test two different versions of the invitation letter. The soft launch was also used as a final test to ensure that the questionnaire script was working correctly, before the bulk of invitations were sent out.
- 5.33 The batches were also used as opportunities to review numbers of participants completing the RSP and 1 in N sections of the questionnaire, and to adjust these if necessary. If too few or too many people were completing individual sections, the likelihood of being routed to a given section could be adjusted for the subsequent batch to ensure all of these sections had sufficient numbers of people completing them to provide good bases for analysis. More detail on this process is outlined in the simulations section of Chapter 4: Survey design.
- 5.34 Analysis was carried out on the soft launch data to inform decisions affecting Batch 1, as described in paragraph 5.32, and then soft launch and Batch 1 data were analysed together to inform decisions for Batch 2. We designated a cut-off point for each batch when data were extracted and analysed to inform the decisions for the next batch. The survey remained open to participants throughout the entire fieldwork period, from the point when the first letters were mailed out until close of fieldwork.
- 5.35 The objectives and results from each of these batches are discussed further in this chapter and are summarised in *Table 5.2*.

	Aims	Issued addresses	No. of interviews completed before data cleaning and validation	Outcomes	
Soft launch	Test overall response rates	30,000		No alteration to total Batch 1 issued sample size – 50,000 addresses	
	Test take-up for telephone interviews		30,000	2,570	Lower than anticipated telephone take up – letters amended
	Final check on questionnaire (question wording and routing)		2,370	No issues with questionnaire, but signposting process implemented for subsequent batches	

Table 5.2: Summary of objectives for each stage of fieldwork

	Conduct letter experiment (Letter type 1: requested consent to follow-up contact via a question in the questionnaire vs. Letter type 2: assumed consent to follow-up contact expressed on the invitation letter)			Letter type 2 adopted (assumed consent to follow-up contact)
Batch 1	Test response rates Test eligibility rates and numbers routed to RSP and 1 in N questionnaire sections	50,000	3,998	Adjustment of number of addresses at Batch 2 Adjustment of RSP and 1 in N values ahead of Batch 2
Batch 2	To achieve the remaining number of interviews required	175,000	12,987	Target interviews met

Soft launch

Testing overall response rates

- 5.36 The primary purpose of the soft launch was to test survey response rate assumptions to inform the required number of addresses to be invited to take part in the survey in the later batches to achieve the target number of interviews, as well as giving an indication of likely numbers taking part over the telephone.
- 5.37 The soft launch response was slightly higher than the initial estimate an individual response rate of 4.98% at the designated cut-off point for analysis. The individual response rate is calculated based on an assumption of an average 1.8 eligible adults per sampled address, and that 8% of all issued addresses won't have been eligible (for example, being commercial addresses or addresses that no longer exist). From other similar surveys it is known that approximately 8% of addresses listed on the Postcode Address File are not eligible.
- 5.38 Based on this response rate it was decided to still issue 50,000 at Batch 1 as originally planned. This was because while response rate was higher, it was not high

enough to warrant a reduction in the number of invitations sent out in the next batch of fieldwork.

Testing telephone response

5.39 Soft Launch take-up for the telephone interview option was much lower than our original estimations. Our working assumption was that 8% of all interviews would be carried out over the telephone. However, of the 2,474 soft launch interviewers, only 50 (2%) were carried out over the telephone. Based on this, the invitation letter was adjusted for Batch 1 to make the telephone option more prominent and to further stress the importance of participation for people who do not have access to the internet.

Testing the questionnaire

- 5.40 The soft launch was also used as a final live test for the questionnaire script to ensure it was working as expected, before the majority of sample was issued, i.e. before the rest of the invitations were sent out. This was done in a few ways:
 - Monitoring any issues raised by participants or telephone interviewers, for example in feedback emails or calls to the NatCen Freephone team
 - Routing checks on productive data for example, checking the proportions routed to each of the RSP and 1 in N sections was as expected
 - Monitoring drop-out rates identifying and checking any particular questions at which higher proportions of respondents dropped out
 - Open ended questions soft launch participants were invited to give their feedback on the questionnaire. These answers were manually reviewed for any issues.
- 5.41 No errors were found in the questionnaire program. However, a small number of changes were made between soft launch and Batch 1:
 - ON2 the wording of this question was adjusted slightly as analysis of soft launch data suggested respondents had not interpreted the question as intended
 - DPC7 this question was moved from being asked within an RSP set, to an 'Ask all' section of the questionnaire. The question itself was unchanged, but the move expanded the number of people routed to this section
 - D13DV / P_M1_DV- these questions were amended slightly, and two check questions added, to facilitate the derivation of a household tenure variable. This is discussed in more detail in Chapter 6: Data processing.
- 5.42 Review of the open-ended questions and the free text entries to some questions indicated that some participants were experiencing significant emotional difficulty in relation to their financial circumstances. As a result of this, a safeguarding and signposting process was implemented for Batches 1 and 2. This is discussed in more detail in the section on Signposting and safeguarding.

The letter experiment

- 5.43 The soft launch was also used to test two different versions of the invitation letter. The 30,000 soft launch addresses were randomly allocated into two groups of 15,000 each. The two letters reflected two different approaches to consent to potential follow-up research:
 - 1) Those who received 'letter type 1' were asked at the end of the interview whether they gave consent to be contacted for potential, optional, future research, and then to provide their contact details if they said 'yes.' We will refer to this approach as 'request consent to follow-up contact'.
 - 2) 'Letter type 2' was identical to 'letter type 1' with the exception of one additional sentence which read: 'By taking part, you are agreeing to be contacted in the future for further research. Any future research is optional.' Those who received 'letter type 2' were not asked an explicit consent question at the end of the interview but were still asked to provide their contact details for potential future research. They were reminded that this was mentioned on the letter. These participants could refuse to share their contact details. We will refer to this approach as 'assumed consent to follow-up contact.'
- 5.44 The experiment was intended to assess whether the additional statement in 'letter type 2' impacted response rates, and to compare the rates of people who left contact details for future research. Copies of each letter can be found in Appendix C: Invitation and reminder letters.
- 5.45 Response rates and contact information quality for the two groups is summarised in *Table 5.3.*

		Consent to foll	ow up contact:
		Letter type 1 - Requested	Letter type 2 - Assumed
Overall proportion of responses received during soft launch		50.7%	49.3%
Proportion of all drop-outs		51.3%	48.7%
Provided their name		58.9%	93.6%
Provided their contact number		18.2%	23.7%
Provided their email address		52.9%	75.3%
Provided all contact information	ation	16.4%	21.9%
	18-29	7.5%	7.9%
	30-49	16.8%	14.6%
Domographic profile ¹³	50-69	17.6%	18.9%
Demographic profile ¹³	70+	8.7%	8.0%
	Male	25.1%	24.8%
	Female	25.5%	24.6%

Table 5.3: Summary of the letter experiment results

¹³ Total by age exceeds 100% due to rounding.

5.46 Given the higher proportion of contact details left by those who received 'letter type 2' (assumed consent to follow-up contact), and the minimal difference in total response between the two groups, it was decided to continue with the 'letter type 2' approach (that is, including a statement of assumed consent to being contacted for potential future research) for subsequent batches of fieldwork.

Batch 1

5.47 A total of 50,000 invitations were issued in Batch 1, with the expectation of achieving 3,400 completed interviews. Batch 1 had two principal purposes – to further test the likely response rate (to inform the total sample size for the final, largest batch), and to finalise the 1 in N and RSP values for the final batch.

Testing response rates

- 5.48 Response rates by country were assessed to determine the required number of addresses in each country to achieve the required number of interviews. Calculations for the required number of addresses were undertaken separately for England, Wales, Scotland and Northern Ireland, as response rates varied slightly across countries.
- 5.49 The calculation was based on an assumed number of ineligible addresses in the sample (8%), and an assumed number of eligible adults per valid address (1.8), from which the projected number of individual interviews was calculated based on the actual individual response rate in each country. For example, at soft launch we issued 2,601 addresses in Northern Ireland. Of these, we assumed 2,393 (92%) were eligible (i.e. had a residential household). We further assumed an average 1.8 adults per eligible address, totalling 4,307 in-scope adults. We achieved 178 interviews from Northern Ireland, which is an individual response rate of 4.13%. We could then do the same calculation in reverse to establish the number of addresses required to reach the target number of interviews, based on the country-specific response rate of 4.13%. Table 2.1 in Chapter 2: Sample design sets out the sample assumptions and achieved sample estimates at total level and per country.
- 5.50 Overall individual response rate after the designated cut-off point for Batch 1 was 4.6% (calculated based on an assumption of 1.8 eligible adults per sampled address, and that 8% of all issued addresses won't have been eligible) this was higher than anticipated.

Testing eligibility rates and numbers routed to RSP and 1 in N questionnaire sections

5.51 Product and other incidence rates, and the proportions and total numbers of respondents being routed into each of the questionnaire sections governed by RSP and 1 in N values, were also investigated to ensure achieved bases were as expected. Simulations were then run to estimate the total number of cases that would be achieved in each of these sections at the end of fieldwork. The governing values (e.g. the value of `N' for 1 in Ns) were subsequently adjusted to achieve the

optimal balance between maximising the number of interviews available for analysis and minimising the questionnaire length/ respondent burden for those eligible for these sections. More detail on this process is available in the Simulations section of Chapter 4: Survey design.

Changes made after Batch 1

- 5.52 In summary, based on analysis of combined soft launch and Batch 1 data, it was decided to:
 - Adjust the RSP and 1 in N values slightly to ensure sufficient numbers of interviews achieved in each of these sections of the questionnaire
 - Adjust the number of addresses issued at Batch 2 based on the total response rate achieved at soft launch and Batch 1 up to the cut off for data analysis (4.98% at soft launch and 4.6% at Batch 1, to achieve the total target number of around 18,500 valid interviews, and sufficient numbers in each of the four nations. This was done while minimising the risk of significantly overshooting the target achieving significantly more interviews could have adversely impacted the project budget and the delivery of later stages of the project, such as analysis and reporting. Therefore, the number of invited addresses at Batch 2 was reduced from 185,323 total available addresses to 175,000. It was decided not to issue the full remaining available sample as response had been sufficiently high to guarantee the required number of interviews.

Batch 2

- 5.53 The objective of Batch 2 was to achieve the remaining number of interviews required to get to a total sample of at least 18,500 valid interviews for analysis.
- 5.54 The total number of addresses invited to take part at the final stage of fieldwork was calculated based on the response rate achieved for both the Batch 1 and soft launch mail-outs as described in paragraph 5.52 summarising the changes made after Batch 1.

Survey response rates

5.55 Overall survey response rates across fieldwork are shown in *Table 5.4*.

Table 3.4. Survey response rate by baten (online and telephone combined)				
	Soft Iaunch	Batch 1	Batch 2	Total
Issued addresses				
Total addresses	30,000	50,000	175,000	255,000
Assumed ineligible based on other surveys	8%	8%	8%	8%
Total in-scope addresses	27,600	46,000	161,000	234,600

Table 5.4: Survey response rate by batch (online and telephone combined)

Assumed number of adults (18+) per address	1.8	1.8	1.8	1.8
Assumed number of adults (18+) at in-scope addresses	49,680	82,800	289,800	422,280
Total interviews completed	2,570	3,998	12,987	19,555
Data cle	eaning and v	alidation		
Interviews removed as part of validation process (done after fieldwork close, not at each stage of fieldwork individually)	44	95	271	410
Total valid interviews	2,526	3,903	12,716	19,145
Response summary (taking o	data cleaning	n and validat	ion into acco	ount)
<i>Individual response rate</i> (total valid interviews as a proportion of the assumed number of adults at valid addresses)	5.1%	4.7%	4.4%	4.5%
Average number of interviews per household	1.23	1.24	1.19	1.21
Households with at least one response	2,097	3,228	10,900	16,225
Household response rate (total number of households with at least one valid response as a proportion of valid addresses)	7.6%	7.0%	6.8%	6.9%

5.56 The proportion of all responses achieved in each month is shown in the *Table 5.5*. Although the first interview was conducted at the beginning of February 2022, because Batch 2 was the largest of the three batches, this meant that three-fifths (61%) of interviews were conducted in May and June 2022. Of the 19,415 valid interviews achieved, 264 were carried out over the telephone (1.3% of all responses).

Table 5.5: Number of interviews achieved in each month of fieldwork (onlineand telephone combined)

Month	Total interviews achieved	Proportion of all achieved interviews (19,145)	
February	2,482	13%	
March	2,219	12%	
April	1,670	9%	
Мау	11,596	61%	
June	1,178	6%	

Drop-out rates

- 5.57 Not everyone who started the survey completed it. Survey 'paradata' were used to identify the questions at which people commonly dropped out. Paradata are data collected by the script about questionnaire completion, for example, in addition to where participants drop out of the questionnaire, paradata are used to see whether participants take part using a computer or phone / tablet, how long questions take to answer, and whether people navigate back and change their answers. Analysing the paradata was done in part to check whether certain questions presented particular issues which it might be possible to fix. High drop-out rates, questions taking a comparatively long time or with a high proportion of people going back and changing their answers would indicate a potential issue with that question. In practice, no changes were made to the questionnaire as a result of the drop-out or other paradata analysis.
- 5.58 Some top-level analysis was also carried out on the demographics of those who dropped out of the survey. Only very top-level demographic variables sex and age were analysed. Demographic information was only available for those who completed the 'opening demographics' section of the questionnaire before dropping out. This analysis was done to assess whether the proportion of participants dropping out of the questionnaire impacted the overall representativeness of the survey.
- 5.59 Analysis showed that drop-outs were spread across the questionnaire, with the highest proportion found in the first few questions and 'STINTRO', the very first information/ introduction screen shown to respondents upon clicking into the survey. This is fairly typical for online surveys, as people make the decision early on that they do not want to participate. Otherwise, very small numbers dropped out at various points later in the survey, suggesting drop-outs were more about individual preference, rather than a systematic issue with individual sections or questions.
- 5.60 The sex split among those who had dropped out of the survey was fairly close to a nationally representative profile: 48% of all drop-outs were men, and 52% women. The age distribution of those who dropped out broadly followed the age distribution of those who completed the survey so no individual age group was felt to be more likely to drop out than another.

Enquiries from respondents

- 5.61 The invitation and reminder letters included contact details for NatCen's Freephone support team (both a telephone number and email), in case participants had any queries, wanted to opt out of the research or wanted to schedule an appointment to take part by telephone. Respondents were also able to contact the FCA's Contact Centre with queries.
- 5.62 Overall, NatCen's Freephone team received 1,638 enquiries, while the FCA's Contact Centre received 156 enquiries from respondents. Overall, the main topics of enquiry from respondents were:
 - Checking that the letter they received/ the research was legitimate

- Voucher queries these ranged from asking where Love2Shop vouchers could be redeemed through to chasing vouchers after completion
- Booking telephone appointments
- Opting out of taking part in the survey
- Survey queries for example confirming the length of the interview, when fieldwork closes, reporting access issues
- Other queries confirming participation or receipt of voucher, amending postal address, confirming ineligibility of an address (for example confirming that they received a letter, but the address was non-residential).
- 5.63 All enquiries, with the exception of any complaints, were handled in-house by NatCen's Freephone Team, who responded directly to the respondent using a set of statements and processes pre-agreed with the FCA.
- 5.64 Any complaints were handled by NatCen's complaints team, in conjunction with the research team who discussed these with FCA to agree follow-up action.

Signposting and safeguarding

- 5.65 Following the soft launch, our review of the open-ended questions and some free text answers to 'other, please specify' fields in questions across the survey indicated that some participants were experiencing significant emotional or financial distress as a result of their financial situation, or other circumstances. As a result, NatCen implemented a bespoke safeguarding process for Batches 1 and 2 of fieldwork to try to offer these participants focused signposting materials, while also increasing the visibility of signposting resources for all participants.
- 5.66 After Batch 1 and Batch 2 an automated search of responses to all 'string' (free text) variables in the questionnaire was run. This looked for particular words or word fragments that might indicate distress, such as 'desperate', 'kill', 'harm', and 'suicide' common misspellings and alternate spellings were also included, as well as short fragments such as 'sui', to maximise the likelihood of picking up anybody using such terms. And cases found to have these terms were automatically pulled into a report for the research team to review and decide on the appropriate action.
- 5.67 An escalation approach was agreed between NatCen's Ethics Committee, Disclosure Board and the FCA. This approach prioritised participant confidentiality unless there was evidence of a risk of significant harm to the participant or somebody else. Any mention of suicide or self-harm was considered to fit the latter criteria, and therefore the details of any cases that used such terminology were shared with the NatCen's Disclosure Board for guidance on appropriate next steps.
- 5.68 In all instances, the Disclosure Board advised NatCen send tailored signposting materials to these participants. These materials had been previously agreed with the FCA (participant identities were not disclosed to the FCA at any point). The signposting materials provided details of a range of mental health and well-being services, financial support services, debt and gambling support services and more general advisory services such as Citizen's Advice. NatCen also left open the

possibility that the Disclosure Board might advise a senior member of the research team to contact the participant directly, but in practice this was not considered appropriate in the cases raised.

- 5.69 In addition to the measures outlined above, NatCen increased the visibility of the signposting resources for all participants. These were included on the thank you mailings sent out with the incentive vouchers. They were also added to the final screen of the online questionnaire. Telephone interviewers were briefed to offer the signposting information if they had any concerns about a respondent's wellbeing. This information was also available on the NatCen project website throughout the duration of the project.
- 5.70 The signposting resources provided to all participants can be found in Appendix D: 'Sources of support' letter.

6 Data processing

Overview

- 6.1 This chapter outlines the various processes applied to the survey data in order to prepare them for use in analysis. This includes finalising the total number of valid, unique interviews and then cleaning the data to ensure the dataset is internally consistent, and user-friendly. This chapter outlines each of these processes, in order of application. The chapter also includes information on variables added to the final dataset, and how data were transferred and stored in line with GDPR.
- 6.2 After data collection was completed, a process of thorough data checking and cleaning was undertaken to make sure that all interviews were genuine, i.e. completed by unique respondents and had not been completed so quickly as to cast doubt on the validity of the interview. This is standard on all surveys, but where the design is such that the majority of interviews are completed online, without an interviewer present, additional checks are required to ensure data quality.
- 6.3 All cases were processed through a series of consecutive stages of validation and cleaning. Validation here refers to the process of ensuring cases are unique and valid and removing those that do not meet these criteria. Cleaning refers to the subsequent tidying of data for those valid cases which nevertheless had inconsistencies in their interview, for example as a result of participants navigating back through the questionnaire and changing their previously given answers. It also includes tidying of contact information provided by respondents.
- 6.4 The data cleaning process also includes 'harmonisation' the process of making sure answers within households are consistent at key household variables such as household income and household tenure.
- 6.5 Productive cases were defined as those where interviews were either fully completed or completed fully but excluding only the final open-ended questions OE1, OE2 or OE3, and interview administration sections, i.e., those cases that completed up to and including the question 'Occupation' but no further.
- 6.6 In total, at the end of fieldwork, there were 19,555 fully productive cases, of which 3 were deleted upon request from the individuals who had completed those interviews. This meant that the new total number of fully productive cases was 19,552. Of those, 19,289 were online and 263 were telephone interviews.
- 6.7 Of these, 344 were removed as 'speeders' (see section on Removal of speeders), 24 were removed as 'grid speeders' (see section on Removal of grid speeders), and 39 were duplicates (i.e. completed by respondents who had already submitted their responses). This meant that a total 19,145 cases available for analysis.
- 6.8 More detail on each stage of data processing is in this chapter.

The order of data validation and cleaning

- 6.9 There are some interdependencies between different elements of validation and cleaning, so the order in which each stage is completed is important. It is also most efficient to finalise the number of cases through validation checks before moving on to cleaning the data, as this helps avoid additional manual checks on cases that are subsequently removed.
- 6.10 The overall order in which validation and cleaning was done on the questionnaire data is summarised in Figure 6.1:



Figure 6.1: Data validation and cleaning process summary

- 6.11 In addition to data validation and cleaning, additional processes were also applied to the data:
 - 1) Matching in additional geography variables
 - 2) Data curation (labelling of variables)

Data validation

6.12 The data validation stages of data processing are those intended to ensure that all cases are unique and have been completed correctly and to remove those cases that are identified as invalid on the basis of not meeting the above criteria. Table 6.1 summarises the number of cases removed at each stage of data validation, and each stage is described in detail below.

Data validation stage	Cases removed	Cases remaining			
Total achieved		19,555			
Respondent request to remove their data	3	19,552			
Duplicate cases removed	39	19,513			
Speeders removed	344	19,169			
Grid speeders removed	24	19,145			

Table 6.1: Number of cases removed at each stage of data validation

Removal of duplicate cases

- 6.13 The first step was to remove from the dataset any cases where respondents requested that their data is deleted. This ensures that these cases are not unnecessarily included in any further data validation or data cleaning processes. In total, 3 cases were removed for this reason.
- 6.14 A series of rules were applied to identify cases that have a higher likelihood of duplication, which were then manually reviewed and assessed for duplication. Additionally, the speeders analysis (the next stage of validation, discussed further in sections Removal of speeders and Removal of grid speeders) is also in part intended to pick up people who participate online more than once, as these participants tend to speed through the questionnaire, i.e. complete it much faster than expected.
- 6.15 Checking for duplicates was undertaken based on observing if data matched on all the following four criteria:
 - Address (i.e. within the same household)
 - Name
 - Age
 - Sex
- 6.16 To be considered duplicated, sex, address, and age (expressed as a number e.g. 27), needed to be an exact match. If the respondent didn't provide their exact age but only the age band, this was not precise enough for verifying if cases were duplicate. Age was used rather than the date of birth because this provides a wider range of cases to investigate for potential duplication, which makes for a more thorough data validation step.

- 6.17 Name matches were verified visually if all the above criteria were exact matches. Name was an optional question so if a response had not been given, duplication could not be verified.
- 6.18 There were several instances of what appeared to be twins within households with the same date of birth and sex, but with distinctly different names. If the criterion for name matching was removed, potentially valid cases could have been removed. Duplicate cases were only identified as such if all four criteria matched.
- 6.19 People within a household could share email accounts, so this was not used as a criterion to remove duplicates.
- 6.20 In total, 39 sets of cases were found to be duplicates (0.2% of all responses). In each case, the response provided first was retained in the data, and any subsequent responses identified as duplicate were removed. The assumption made is that the first completed interview is most likely to be genuine, while subsequent interviews completed by what appears to be the same individual are less likely to be genuine.

Removal of speeders

- 6.21 One concern with online surveys in particular is that if people answer questions too quickly, they may not have been reading the questions properly, and possibly chose an answer at random to get through the questionnaire as quickly as possible to claim their incentive voucher. Reviewing the time taken to answer questions can be used to assess if this is the case for any cases within the dataset.
- 6.22 When assessing the time taken to complete a questionnaire by a respondent, the time taken to complete each question was measured. In the context of a questionnaire script, this refers to what is shown to the respondent on each screen they see as they progress through the questionnaire, e.g. a grid question with multiple rows, and answer options for each row available in columns, is shown on one page and hence counts as one question when calculating questionnaire completion timings.
- 6.23 The FLS questionnaire contains routing complexities designed to provide a smooth survey experience for participants. And because participants' routes through the questionnaire depend on their experiences of financial products and services, there is naturally a lot of variation in total interview length across the Financial Lives survey sample. Some participants may genuinely complete all questions for which they are eligible in 25 minutes, for example, while others would complete the questions for which they are eligible in 45 minutes. So, to provide an objective evaluation of questionnaire completion speed, the assessment of whether the time taken to get through the interview is 'too fast' must take into consideration the route that the respondent took through the questionnaire. When filling in online surveys, respondents can take breaks mid-questionnaire, or even stop and come back to the questionnaire on a different day. This can result in some extremely long question-level timings. When calculating the total expected time taken to complete each question, we therefore cap individual question lengths to exclude such outliers as very long individual question times would have an impact on the total expected

questionnaire time. A statistical outlier is a value that is much smaller or larger than most of the values in a distribution. An accepted convention is to treat values that fall more than 1.5 times the interquartile range above the upper quartile or below the lower quartile as outliers. See *Figure 6.2* for details.

Figure 6.2: Illustration of elements used to calculate statistical outliers



- 6.24 The approach then used to identify speeders was to compare a respondent's overall questionnaire time to an estimate of how long they should have taken given their route through the questionnaire, had they been a 'median length respondent' for each of the specific questions they had answered. In other words, this was the proportional difference between the actual time each respondent took versus the expected median time given the specific questions they had answered. The median time taken for each question was used, as the mean would be distorted by high outliers (e.g. respondents taking long breaks while completing the questionnaire).
- 6.25 Having calculated the total expected time taken and the actual time taken (taking actual routing into account, and having capped individual question lengths), statistical outliers (as described in paragraph 6.23) were examined and any cases which were below the lower outlier threshold were removed on the grounds that their answers were not deemed reliable.

6.26 For example, as shown in *Figure 6.3*: Respondent A answered questions 1, 2, 3 and 5 much faster than average, but took an extremely long time to answer question 4. Their total interview length is therefore much higher than average and the speeder analysis would incorrectly classify this respondent as 'not a speeder'. Capping very long individual question timings to exclude outliers ensures that the overall questionnaire time is not distorted by their one outlier question time. This then means that this respondent would be correctly identified as a speeder.

	Respondent A	Average time taken to answer the question
Question 1	0.2 mins	0.4 mins
Question 2	0.2 mins	0.6 mins
Question 3	0.1 mins	0.7 mins
Question 4	30.0 mins	0.8 mins
Question 5	0.1 mins	0.5 mins
Total interview length	30.6 mins	3 mins

Figure 6.3: Example speeder analysis scenario

6.27 In total, 344 cases were removed from the data due to speeding through the questionnaire.

Removal of grid speeders

6.28 All grid questions (e.g. questions where the respondent had to provide an answer on a scale to multiple attitudinal statements, or multiple elements) with 5 or more rows (i.e. parts of the question) were covered in a separate speeders analysis. *Table 6.2* details the survey questions that were used in the speeder analysis.

Question	Question type	Number of rows
AT10	1-5 Agreement with attitudinal statements, Don't know	5
A2	1-5 Agreement with attitudinal statements, Don't know	8
AT14	0-10 Trust in various types of organisation, Don't know	10
P_CC20g	1-5 Agreement with attitudinal statements, Don't know	5
CM9	1-5 Agreement with attitudinal statements, Don't know	6
M77	1-5 Agreement with attitudinal statements, Don't know	5
CC26	1-5 Agreement with attitudinal statements, Don't know	5
Adv_D24	1-4 Value of regulated advice, Don't know	5
Adv_E11	1-4 Consideration of regulated advice, Don't know	5

Table 6.2: Grid questions included in speeder analysis

HRI11	1-5 Level of risk associated with investing, Don't know	8
P_ESG9	1-5 Agreement with attitudinal statements, Don't know	5
PAY3	List of payment methods used in specific circumstances	6
PAY6	List of reasons for using various payment methods	8

- 6.29 These question sets were subject to the same analysis as outlined in the Removal of speeders section. Those cases which were identified as outliers in terms of time taken to complete those grid questions to which they were routed were also removed from the dataset.
- 6.30 Given that straight-lining on any individual grid question might have been entirely legitimate (i.e. providing the same answer to each element of the grid question), only those who were 'fast', i.e. statistical outliers on *all* grids that they had completed, were removed from the data. This was irrespective of the answers given or whether or not they were also straight-liners.
- 6.31 In total, 24 interviews were removed due to participant speeding through all the grid questions to which they were routed.

Data cleaning

Ensuring consistency in household-level response

- 6.32 Household variables were used to weight the data, and it is good practice to ensure that everyone within a household receives the same household level weight, or that the household level component of an individual weight is consistent within a household. This means ensuring that everyone in the household has the same answer for questions relating to the whole household (as opposed to them individually), such as household tenure (whether the house they live in is rented, owned with a mortgage, etc.) or household income. In practice, however, a small proportion of household members give different answers to one another at these questions. Such instances therefore need to be edited to make them consistent within the household. This process is referred to as 'harmonisation'.
- 6.33 The variables that were harmonised across the household were:
 - Household composition i.e. number of adults in the household and their age: D4a, D4a70, D4a1869
 - Property type: D13
 - Household income: D38DV
- 6.34 Household tenure was also harmonised, but the process differed slightly and is described in the Household tenure section.
- 6.35 To determine which value to use for the whole household (where there were inconsistencies) the following prioritised steps were applied to all variables needing harmonisation:

- Take the most common valid answer (excluding `don't know' and `prefer not to say' answers)
- Take the answer from the oldest household respondent
- Take the answer from the person with the lowest serial number
- 6.36 The priority order of the second and third steps is arbitrary but is the conventional order when harmonising household variables in public surveys.
- 6.37 New variables with a suffix of "_harm" were created with these harmonised values. Both the original and harmonised versions of variables were included in the delivered data.
- 6.38 There were some additional benefits variables (D37, D37a) which were harmonised using a different method, by creating additional "_harm" variables as above. On the grounds that people were unlikely to know which benefits other household members were on, if a benefit had been mentioned by anyone in a household, all household members were set to be in a household where someone received that benefit.

Household tenure

- 6.39 At the 2022 wave of the survey, it was agreed that we would use household tenure as part of the weighting regime (as opposed to individual tenure). This decision and its implications are discussed in a little more detail in Chapter 7: Weighting.
- 6.40 This required the creation of a household tenure variable for all valid cases in the dataset. We did not ask all individuals their household tenure in addition to their individual tenure, so needed to derive this information from the various tenure variables available. Household tenure relates to how the whole household occupies the home, while individual tenure relates to how the individual occupies the home, which could be different from the household tenure. For example, an individual tenure, while the household tenure would be owned with a mortgage. However, at the 2022 wave, some additional check questions were added to help to categorise the household tenure in instances where this was not clear based on answers given by respondents.
- 6.41 We used this information to assign a household tenure value to all cases. This was then also harmonised for those households where individuals in the same household had been assigned a different household tenure. The harmonisation process for this variable (HHTenure_DV) differed slightly from that applied to other household variables:
 - Where there is no conflict in responses provided by members of the same household (which was true for the vast majority of households), harmonised household tenure was the same as that derived for each individual in the household already. In total, 566 individual interviews had their household tenure harmonised (3% of all interviews)
 - Where different household members have been assigned a different household tenure, the following stages occurred in the order described below:

- If two people participated, or there was no most common tenure, and someone was allocated as 'own outright', household tenure was assigned as 'own outright'
- If two people participated, or there was no most common tenure, and someone was allocated as 'own with a mortgage' (and the other person was not allocated to either 'own outright' or 'own with a mortgage') – household tenure was assigned as 'owned with a mortgage'
- If three people participated and none were allocated 'own outright' or 'own with a mortgage', the most-commonly assigned household tenure was used
- If there was no most common tenure, or two people participated, and no one was allocated 'own outright' or 'own with a mortgage', the household tenure of the person with the highest income was used
- If they had the same income or income wasn't available, the household tenure of the oldest individual was used
- If ages were the same or unknown, the answer of the lowest numeric value serial within the household was used.

Reinforcing routing - removing 'off path' data

- 6.42 It was possible for respondents (or for telephone survey interviewers) to go back in the questionnaire to change an answer they had previously selected. In those instances, this could change the subsequent questionnaire routing. For example, if a respondent said that they arranged their home insurance policy through a price comparison website (PCW), they would have been asked if they paid the exact price quoted to them by the PCW, or if the price was different for any reason. If, after answering that question, they went back to change their earlier answer to say they didn't actually use PCWs to arrange their home insurance policy, their response to whether they paid the price quoted by the PCW becomes invalid or 'off path' and needed to be cleared out of the data.
- 6.43 There were RSP and 1 in N eligibility flags that were created in the sample file, and used to control routing (see Chapter 4: Survey design for an explanation of how RSPs and 1 in Ns were used to control routing through the questionnaire). In addition, participants' final eligibility for each section is set by the questionnaire script based on their answers to earlier sections of the survey. Once all the 'off path' data had been cleaned, these derived variables needed to be re-calculated or re-derived based on the cleaned/ updated data in order to ensure they were correct. This was important as these eligibility flags were also used in the weighting, so if an "off-path" respondent gave an answer that made them eligible for a particular section and then went back and changed that answer such that they are no longer eligible, then they need to be marked as ineligible when calculating the weight for that section, rather than as a non-respondent. Similarly, their relative likelihood of being selected for a survey section would be changed if that participant was in fact only eligible for two sections in a set, not three. However, it is important to note that this is a very rare occurrence, affecting around 10 respondents per wave.

Checking contact information

- 6.44 Survey respondents were asked to provide their contact details so that they could receive the incentive for taking part in the survey, and to invite them to Financial Lives follow-up research. Respondents were asked to provide their postal address, email address and telephone number, and could refuse any of these, depending on how they preferred to be contacted.
- 6.45 Checks were undertaken on contact information. These were incorporated into the script, and participants prompted to check and re-enter their details if they were invalid.
 - The number of digits in telephone numbers was checked to ensure the numbers were valid.
 - The checks that were carried out on emails were:
 - Any spaces were removed
 - If there was more than one @, subsequent ones were removed
 - Any "." immediately after the @ or as the final character was removed
 - Any email without a "." in the middle of the text after the @ was deemed invalid
 - Any "..." were replaced with ".".
- 6.46 Please note that it was only possible to check whether details provided by respondents had a valid format, not whether the telephone number or email address existed or were the right contact details for that person.

Geography variables

- 6.47 Additional geographical variables were matched onto the survey data using the postcode for each case. These variables included country, region, local authority, Westminster parliamentary constituency, an urban/rural indicator, NUTS classifications,¹⁴ Lower Super Output Areas and the Indices of Multiple Deprivation (IMD).
- 6.48 Table 6.3 details all geography variables added to the dataset, the source of these, and the year that these were last updated.

Variable	Description	Source	Year
RGN	Region	ONS	2014
Postcode	Postcode	PAF (Postcode Address File)	2021
ur01ind	Urban/Rural classification	Census	2001
LSOA	Lower super output areas	Census	2011
NUTS1	Regions level 1	ONS	2018

Table 6.3: Geography variables appended to the final data

¹⁴ Nomenclature of territorial units, a hierarchical European geographical classification system, which in the UK identifies country, region and unitary authorities. International Territorial Level (ITL) has subsequently been introduced as the standard geographical classification system in the UK, which directly mirrors NUTS.

			1
NUTS2	Regions level 2	ONS	2019
NUTS3	Regions level 3	ONS	2019
PCON	constituencies	ONS	2010
Oslaua	Local authority district/unitary authority	ONS	2021
eimd2019_decile	English Indices of Multiple Deprivation	ONS / DLUHC	2019
eimd2019_quintile	English Indices of Multiple Deprivation	ONS / DLUHC	2019
nimd2017_decile	Northern Irish Indices of Multiple Deprivation	Northern Ireland Statistics and Research Agency	2017
nimd2017_quintile	Northern Irish Indices of Multiple Deprivation	Northern Ireland Statistics and Research Agency	2017
simd2020_decile	Scottish Indices of Multiple Deprivation	ONS / Scottish Government	2020
simd2020_quintile	Scottish Indices of Multiple Deprivation	ONS / Scottish Government	2020
wimd2019_decile	Welsh Indices of Multiple Deprivation	ONS and Welsh Government	2019
wimd2019_quintile	Welsh Indices of Multiple Deprivation	ONS and Welsh Government	2019
parea	Postcode area	PAF (Postcode Address File)	2021

Preparing data for use: data curation

6.49 Preparing the data for use by appropriately naming each variable in the data set is an important element of data processing. It enables data users to make informed decisions on which variables to use in their analysis. This is achieved though data label curation, i.e. creating user friendly labels for all variables so that data users can clearly see what each variable relates to. The changes are made in the SPSS (.sav) file and carried through to wherever the data format is used, e.g. data tables. The labels produced by the survey program are automatically generated and often hard to interpret. Therefore, these were edited, and in some cases shortened, before the data were delivered and used to generate data tables.

- 6.50 Curation applied both to variable labels (question text, such as 'to what extent do you agree or disagree with the following', and to value labels (the labels given to the answer options, for example 'strongly agree', 'somewhat agree').
- 6.51 Variable and value labels needed to comply with formatting and readability criteria. For repeat questions which were unchanged, 2020 variable curated labels were copied over to the 2022 data.
- 6.52 Labels for the remaining variables were then manually edited for clarity and length. Revised labels needed to be:
 - Shortened to within 255 characters to enable this, introductory or explanatory text from the question (for example 'on a scale from one to ten' was removed)
 - HTML formatting and all additional characters (for example <> { }) were removed
 - Spacing, case formatting, apostrophes and spelling were edited
 - Text fills were replaced with meaningful content (for example `SELECTED PRODUCT' was changed to `motor insurance policy' if this was the respondent's `selected product' with a specific section of the questionnaire).

Data security

6.53 At all stages of the survey, all personal information and respondent data was stored and managed in line with GDPR regulation. No personally identifiable information was shared outside of the survey delivery team, and all transfers of data were carried out via a Secure FTP site and were zipped and encrypted with a password.

7 Weighting

Overview of the weighting approach

- 7.1 The motivation for weighting the Financial Lives survey is to adjust the data to be representative of the UK adult population in terms of age, sex, ethnicity, government region, education, employment, marital status, internet use by age and household tenure, both at an overall population level and within financial retail sectors.
- 7.2 The weighting approach in the 2022 wave of the Financial Lives survey followed that applied at the 2020 Wave. Weights were calculated to reduce non-response bias caused by systematic differences (i) in the probability of address selection for the sample, (ii) between participating and non-participating addresses, (iii) in the number of completed surveys returned by responding households, and (iv) in the profile of respondents when compared to the UK adult population. In other words, the weighting was designed to equalise differences in selection for the sample and completion rates for the survey across different demographics of the target audience (i.e. UK adults), in order to minimise the bias associated with the sampling processes and non-response, when reporting national estimates.
- 7.3 To achieve this, several steps were taken. The weighting process involved the creation of four different types of weighting variables, in this order: individual weights, section weights, product weights and special weights these are explained in brief below, and further detail is provided later in this chapter.
- 7.4 Two sets of weighting variables were produced for all weights: (a) grossing weights which sum to the (eligible) population (e.g. all 52,890,044 UK adults, or all UK adults holding a specific product), and (b) scaled weights which sum to the corresponding sample size (e.g. all 19,145 survey respondents, or all survey respondents holding a specific product). A total of 94 weights (47 grossed and 47 scaled) were created. A list of weights by section type is provided in Table 7.1. This does not differentiate between grossed and scaled weights. A more detailed table can be found in Appendix B: Weighting guide.

Individual weight	IndvW3		
Section weights	Wt_RSP_Savings_W3		
	Wt_RSP_GIP_W3		
	Wt_RSP_PAcc_W3		
	Wt_RSP_Dec_W3		
	Wt_RSP_HRI_W3		
	Wt_RSP_CC1_W3		
	Wt_RSP_RetailBanking_W3		
	Wt_RSP_CC2_W3		

Table 7.1: Weights by section type

	Wt_RSP_Adv2_W3
	Wt_RSP_DPC_W3
	Wt_RSP_Mortgages_W3
	WT_1 in N_AT14_AT15_W3
	WT_1 in N_A2d_W3
	WT_1 in N_Cred_info_W3
	WT_1 in N_IT_disr_W3
	WT_1 in N_Rspon_inv_W3
	WT_1 in N_Payments_W3
	WT_1 in N_FCA_W3
	WT_Dep 1 in N_Cons_Duty_W3
	WT_Dep 1 in N_RetInv_PC_W3
	WT_Dep 1 in N_Buy_online_W3
	WT_Dep 1 in N_Advice1_W3
	WT_Dep 1 in N_Access_W3
	Wt_Product_CC1_CreditCard_W3
	Wt_Product_CC1_MotoFinance_W3
	Wt_Product_CC1_PersonalLoan_W3
	Wt_Product_GIP_MotorInsurance_W3
	Wt_Product_GIP_HomeCombined_W3
	Wt_Product_GIP_HomeContents_W3
	Wt_Product_GIP_TravelMulti_W3
Product weights	Wt_Product_GIP_Pet_W3
	Wt_Product_GIP_TravelSingle_W3
	Wt_Product_GIP_Life_W3
	Wt_Product_Savings_SavingsAccount_W3
	Wt_Product_Savings_CashISA_W3
	Wt_Product_HCC_CatalogueCredit_W3
	Wt_Product_HCC_Pawnbroking_W3
	Wt_Product_HCC_HomeLoan_W3
	Wt_Product_HCC_PaydayLoan_W3
	Wt_Special_CD1314_W3
	Wt_Special_D51_W3
	Wt_Special_B18_W3
Special weights	Wt_Special_P20d_W3
	Wt_Special_RB68c_W3
	Wt_Special_RB102_W3
	Wt_Special_DPC7_W3

7.5 Each of the weighting stages is introduced briefly in this section and described in detail in the following sections of this chapter.

Stage 1: Individual weights overview

7.6 The objective of the 'individual weights' was to ensure the total weighted sample was demographically representative of the UK adult population. The weighting methodology for generating the individual weights (these are referred to as IndvW3 within the data) followed the stages summarised in Table *7.2*. Each of the stages is discussed in detail further in this chapter.

Weighting stage		Correcting for
Stage 1.1	Address selection weights	Differences in sampling fractions for England and the devolved nations
Stage 1.2	Address response/ participation weights	
Stage 1.3 Within-household non-response weights		Differences in non-response
Stage 1.4	Individual calibration weights	

Table 7.2: Summary of the process to generate individual weights

Stage 2: Section weights overview

- 7.7 The second step in the weighting process was to create 'section weights'. These weights were necessary to enable analysis of specific sections or question sets within the survey. More specifically, this concerned sets of questions controlled by eligibility, i.e. RSPs, 1 in Ns, or dependent 1 in Ns as these were subject to different selection probabilities (see Chapter 4: Survey design for details on question set types). These required weighting to ensure the sub-samples of respondents answering these sections or question sets were representative of the population eligible to be asked the section or question set. In some cases, these sets of questions were a smaller set of questions within a section.
- 7.8 There were 37 sections in total in the 2022 wave of the survey, with the number of respondents allocated to each section or question set depending on the eligibility criteria for each type of question set. For example, all respondents were allocated to the demographic sections of the questionnaire, but only a selection of those eligible answered questions about their pension or savings account. More detail on questionnaire design can be found in Chapter 4: Survey design. In order to make sections representative of their respective target populations, 23 of them required section weights. These are the RSP, 1 in N and Dependent 1 in N sections.
- 7.9 The probability of being allocated to these sets of questions varied by survey mode and across the batches of the survey.¹⁵ The weights for each set of questions were calculated, for all those selected to participate, as the individual weights divided by the probability of being allocated to the selected section or set of questions.

¹⁵ The eligibility criteria were structured differently by data collection mode reflecting differences in eligibility criteria across the two sets and for practical reasons. They varied by batches due to the tweaking of eligibility criteria by batch as more data was collected from earlier batches.

Weighting was necessary for each of the following types of sections or set of questions:

- Stage 2.1: Ask-all
- Stage 2.2: Ask-all low eligibility
- Stage 2.3: Relative Selection Probability (RSP)
- Stage 2.4: 1 in N
- Stage 2.5: Dependent 1 in N.

Stage 3: Product weights overview

- 7.10 Within four of the retail sector sections of the survey, respondents were asked more detailed questions about a specific product (or in the case of the High-cost Credit section, up to two products). The product was selected at random from among all products they held within that sector (or with other conditions which may have applied, detailed in Appendix B: Weighting guide).
- 7.11 This third type of weight was created to make the results for these questions representative of the population of those holding these products in the wider population. The product weights were generated by dividing the section weights (see Stage 2: Section weights overview) by the probability of being allocated to the selected product.

Stage 4: Special weights overview

- 7.12 The fourth type of weight was created to adjust the results for questions where:
 - Samples of respondents asked the same question in different sections of the questionnaire were combined
 - Questions were added to the survey between batches of fieldwork
 - The routing into/ eligibility for the question changed during fieldwork
- 7.13 Each of the weighting stages 1-4 are described in more detail in sections which follow.

Calculation of weights

- 7.14 This section details the approach to calculating each stage of weighting.
- 7.15 To ensure the weighting has worked as intended, for each weighting stage, a baseline assessment of bias was calculated, and the reduction in the bias was assessed once the weight was applied. The bias was measured by looking at the percentage point differences between the ideal profile (the target population profile) and the weighted profile by using key profiling variables (which varied depending on the stage of weighting).
- 7.16 In most cases, trimming was applied by capping very low and very high weight values to obtain the best trade-off between reducing any bias from the ideal profile and minimising the design effects of the weight. The design effect of weighting is a measure of the effect of the weight on sampling error. More extreme weighting leads

to greater sampling error and therefore wider variance (confidence bands) around sample estimates. The goal of weighting is to balance the need to address bias, whilst at the same time minimising these confidence bands through keeping the weighting as efficient as possible.

For example, the profile of the individual weights was checked against the population estimates used for weighting. The untrimmed weights came out with 0 bias as expected and the trimmed weights had a maximum bias of -1.3%, found in the "Less often but not never/65+" category of internet use by age. The population estimates measure this at 5.2%, while the trimmed calibration weights have it at 3.9%. Having repeated this check for all categories of all calibration variables, it was concluded that the bias for these weights was acceptable. This is because the resulting weights were not overly high (because the outliers were trimmed meaning that cases were not being heavily up- or down-weighted), which in turn ensured a higher effective sample size. If the effective sample size is higher i.e. closer to the actual sample size, the average values or results from the data will be more accurate, with smaller margins of error.

Stage 1: Individual weights

Stage 1.1: Individual weights – address selection weights

- 7.17 During the sampling process, addresses were selected with equal probability within each of the four countries of the UK. In other words, within a country, e.g. Wales, any household had the same chance to be selected to participate in the survey. Similarly for Scotland, England and Northern Ireland. But the sampling fractions varied by country, in order to target a minimum number of respondents per country. Selection probability weights were therefore necessary to correct for the unequal probabilities of selection by country, and to make the issued sample of addresses representative of all UK addresses.
- 7.18 While in the previous wave of the survey separate address selection probabilities were used for the online and in-home samples, this was not the case in 2022. In this wave, a single set of country-specific address selection probabilities were applied, with respondents invited to complete by their mode of choice.
- 7.19 The address selection probability weights (wt1) for each address were calculated as the inverse of the address selection probability (p1).

wt1 = 1/p1

7.20 It is possible that a small number of sampled addresses had multiple dwellings. For example, an address in the PAF could have been a house recently split into two or more flats, with a communal entrance. It was not possible to establish which addresses were affected by this when the sample was drawn, and it was not possible to establish which dwelling at such addresses opened the invitation letter. Because a random selection of dwellings at an address was very difficult to operationalise without an interviewer present, in multiple dwelling addresses, the selection of which dwelling took part in the survey was left to chance (i.e. whichever dwelling opened

the invitation letter was able to take part in the survey). As the overall proportion of such addresses is very small (around 1% of all UK households),¹⁶ the non-random selection of dwellings to participate is unlikely to lead to any systematic bias in the responding sample.

Stage 1.2: Individual weights – address response/ participation weights

- 7.21 Non-response at the address level did not necessarily happen at random. Addresses participating in the survey (i.e. addresses for which at least one questionnaire was completed either online or over the telephone) may have been systematically different (i.e. have a different demographic profile) from those that did not participate. Therefore, address participation weights were necessary to reduce non-response bias.
- 7.22 The address participation weights were produced by first calculating the probability of an address to respond, which was estimated using logistic regression modelling.
- 7.23 An initial logistic regression model was specified for all addresses invited to take part in the survey. It was weighted by the weight from the previous stage: wt1, the country specific address selection probability weight.
- 7.24 The following address-level characteristics were used as potential independent geographic-focused variables: region, deciles or quintiles of the Indices of Multiple Deprivation (IMD), urban/ rural indicator, percentage aged 18-24 in the Lower Super Output Area (LSOA), percentage aged 70+ in the LSOA. These variables were chosen because they are known to be associated with the likelihood of responding to surveys. The variables selected for the model, based on being significantly associated with address participation, were:
 - Region
 - Deciles of the Indices of Multiple Deprivation (IMD)
 - Urban/ rural indicator
 - Percentage aged 70+ in the LSOA.

The outcome measure was whether the address participated in the survey or not.

- 7.25 From this model, the predicted propensity to participate (p2) was estimated for each responding address.
- 7.26 The weights for address participation (wt2) were calculated for all responding addresses as the inverse of the predicted propensity to participate (p2):

wt2 = 1/p2

7.27 The address participation weights therefore corrected for any biases in the sample of addresses that participated in the survey, as measured by the types of geographic variables included in the model above.

¹⁶ https://www.poweredbypaf.com/product/multiple-residence/

Stage 1.3: Individual weights – within-household response weights

- 7.28 Differential response rates among individual adults within participating households may cause bias if the differential response is related to survey measures. For example, individual response rates may be lower in larger households, or may be higher in households with high household income, once household size (i.e. the number of adults in the household) has been controlled for. Thus, this stage of the weighting aimed to reduce any bias which may have been caused by systematic differences in the number of completed surveys (i.e. the number of responding adults) per household. This additional weight was only calculated for the 11,458 participating households with more than one adult. For households with only one adult, a weight of one was assumed for this stage.
- 7.29 For participating households with multiple adults, the expected number of completed surveys was estimated via two regression models: a logistic model for households with two adults, and a multinomial model for households with three or more adults.
- 7.30 A logistic regression model was defined for all responding households with 2 adults. It was weighted by the product of the weights from the previous stages: wt1, the country specific address selection probability weight, and wt2, the address participation weight.
- 7.31 In addition to the address-level independent variables used in weighting stage 1.2 (see Stage 1.2: Individual weights address response/ participation weights for details), additional household-level variables were also considered (because of their likely association with survey response rates and survey measures):
 - Number of adults in the household aged 18 or over (question D4a please see the <u>FLS 2022 survey questionnaire</u> published separately for details on survey questions)
 - Number of adults in the household aged 18-69 (question D4a869Int)
 - Number of adults in the household aged 18-69 who had used the internet in the last three months (question D1869Int)
 - Number of adults in the household aged 70 or over (question D4a70)
 - Property type (question D13d)
 - Household tenure (question D13DV)¹⁷
 - Types of income received (question D37)
 - Annual household income (question D38DV)
 - Types of benefit received (question D37a)
 - Percentage in LSOA aged 18-24 and 70+ (quintiles)
 - Type of letter sent to the address (see Chapter 5: Fieldwork for details on the letter experiment)
 - Survey batch
 - Mode of taking part.

¹⁷ See Appendix E: Financial Lives 2020 survey – Weighting Enhancement for further information on household tenure harmonisation.

- 7.32 The variables selected in the final model based on being significantly associated with whether one or both adults from each household participated in the survey, were:
 - Number of adults in the household aged 18-69 who had used the internet in the last three months
 - Number of adults in the household aged 70 or over
 - Household tenure
 - Annual household income
 - Types of income received
 - Types of benefit received
 - Percentage in LSOA aged 18-24.
- 7.33 The outcome measure was whether one or both of the adults from that household completed the survey.
- 7.34 This model resulted in two predicted probabilities:
 - p21: probability of a two-adult household having 1 respondent
 - p22: probability of a two-adult household having 2 respondents.
- 7.35 A multinomial regression model was defined for all responding households with three or more adults. It was weighted by the product of the weights from the previous stages: wt1, the country specific address selection probability weight, and wt2, the address participation weight.
- 7.36 The independent variables considered for inclusion were the same as those considered for the logistic model (see paragraph 7.31 for the full list). The variables selected in the final model based on being significantly associated with whether 1, 2, or 3 adults from the household responded to the survey, were:
 - Number of adults in the household aged 18-69 who had used the internet in the last three months
 - Number of adults in the household aged 18+
 - Number of adults in the household aged 70 or over
 - Household tenure
 - Annual household income
 - Types of income received
 - Types of benefit received
 - Percentage in LSOA aged 18-24.
- 7.37 The outcome measure was whether the responding household returned 1, 2 or 3 questionnaires, i.e. whether 1, 2, or 3 adults from the household responded to the survey.
- 7.38 This model resulted in three predicted probabilities:
 - p31: probability of a 3+ adult household having 1 respondent
 - p32: probability of a 3+ adult household having 2 respondents
 - p33: probability of a 3+ adult household having 3 respondents.

- 7.39 From these models, the probability of a household having one respondent (p1), two respondents (p2), or 3 respondents (p3) was calculated as follows:
 - for households with one adult: p1=1, p2=0, p3=0
 - for households with two adults: p1=p21, p2=p22, p3=0
 - for households with three or more adults: p1=p31, p2=p32, p3=p33.
- 7.40 The expected number of completed surveys was estimated for every responding household as: $1 \times p1 + 2 \times p2 + 3 \times p3$.
- 7.41 The within-household non-response weight (wt3) was calculated for each responding household as the number of adults in the household divided by the expected number of completed surveys per household:

wt3 = number of adults in the household / $(1 \times p1 + 2 \times p2 + 3 \times p3)$

The number of adults in the household was capped at 4 for the purposes of the calculation, to improve the weighting efficiency. The overall proportion of UK households with 5 or more adults is negligible and unlikely to have any impact on data accuracy.

- 7.42 In multi-respondent households, each respondent received the same household-level weight (as the other respondents in that household).
- 7.43 While all adults aged 18 or over in households containing one, two or three adults could participate, in households with more than three adults, only up to three could take part for two reasons: first, random selection of adults was difficult to operationalise reliably in an online or telephone survey setting, and second, in order to minimise fraudulent survey completions. The selection of up to three adults in multi-adult households was self-administered and therefore not random. However, households with more than three adults make up a very small proportion of all UK households (4.8%¹⁸) so the impact on overall data accuracy was minimal. Therefore, ignoring the non-random selection in such households (i.e. assuming that those who self-selected to participate are a random sample of all people living in large households) is unlikely to lead to any systematic selection bias in the responding sample. See Chapter 2: Sample design for additional information on this.
- 7.44 This stage of the weighting reduces within-household non-response bias and at the same time deals with the (non-random) selection of individuals within households. It does this by using 'number of adults in the household' as a control variable in estimating the expected number of respondents per household. Using this to calculate wt3 ensures that survey respondents from a household effectively represent all adults in that household.

Stage 1.4: Individual weights – individual calibration weights

7.45 Composite weights for address/ household level participation (wt4) were calculated for each survey respondent as the product of the weights from the previous stages (wt4= wt1 x wt2 x wt3), where wt1 is the country specific address selection

¹⁸ Source: Labour Force Survey (published in Q3 2022).
probability weight, wt2 is the address participation weight, and wt3 is the withinhousehold non-response weight.

- 7.46 Stage 1.4 of the weighting aims to reduce any residual non-response bias at the individual level. The composite weights from the previous stages (wt4) were calibrated so that after calibration (i.e. after weighting was applied) the weighted sample was in line with the population of UK adults across the following variables:
 - Sex by age
 - Region
 - Employment by age
 - Education by age
 - Tenure (harmonised at household level)
 - Marital status
 - Ethnicity
 - Internet use by age.
- 7.47 In other words, this final stage sought to combine the results of the previous three stages and then 'force' the profile of the final weighted sample to be in line with the population in terms of these demographic variables.
- 7.48 Cases with missing data (due to respondents answering 'Don't know' or 'Prefer not to say') were allocated proportionately to the population distribution prior to calibration. The proportion of missing data differed between variables, ranging from 0.1% to 2.8% of respondents without a value for a particular calibration variable a relatively small and acceptable proportion of cases.
- 7.49 The calibration weights were the final individual weights (wt5 = IndvW3).
- 7.50 Population estimates for age, sex and region were obtained from mid-year population estimates published in June 2021 by the Office for National Statistics (ONS) for England, Wales and Northern Ireland, and by the National Records of Scotland (NRS) for Scotland. Mid-year population estimates are calculated by ONS/NRS using data from the 2011 Census supplemented by official statistics on births, deaths, immigration and emigration. Mid-year population estimates are the most reliable estimates available and are not subject to survey error.
- 7.51 As mid-year population estimates are only available for age, sex and region, internet use by age came from the ONS Opinions and Lifestyle Survey (OLS) published in February 2020. All other estimates were obtained from the Labour Force Survey (LFS) published in Q1 of 2022.
- 7.52 All the variables and categories considered for calibration were initially the same as those used at the 2020 wave for consistency. However, analysis of the final 2022 data indicated that it would not be sensible to separate internet use by both age and sex as it made certain groups too small, so in 2022 it was only separated by age. Internet use by age was also grouped further than in the 2020 wave due to small sample sizes.

7.53 The population estimates used in the calibration, including internet use by age, are summarised in *Table 7.3*.

	Population parameter		Population estimate
		18-24	2,886,933
		25-29	2,280,809
		30-34	2,263,511
		35-39	2,179,535
		40-44	2,032,071
	Male	45-49	2,126,397
		50-54	2,269,897
		55-59	2,216,617
		60-64	1,888,526
		65-69	1,624,419
Sex by age		70+	4,097,764
		18-24	2,713,572
		25-29	2,195,821
		30-34	2,258,464
		35-39	2,224,565
	Famala	40-44	2,059,472
	Female	45-49	2,177,570
		50-54	2,346,120
		55-59	2,294,234
		60-64	1,967,292
		65-69	1,730,962
		70+	5,055,493
		18-24	3,502,168
	Working	25-34	7,613,561
		35-44	7,317,126
		45-54	7,452,999
Employment		55-64	5,420,359
by age		65+	1,317,999
	Unemployed but economica	Ily active	1,162,649
	Economically inactive	18-24	1,781,466
		25-34	1,121,653
		35-44	976,595
		45-54	1,287,287

Table 7.3: Population estimates used in final calibration

		55-64	2,770,636
		65+	11,165,547
		18-24	1,146,347
		25-34	4,616,254
	Degree	35-44	4,140,938
		45-54	3,165,667
		55-69	3,013,374
		18-24	4,094,712
Education		25-34	4,136,466
by age	Non-Degree	35-44	3,938,038
		45-54	5,189,428
		55-69	7,216,826
		18-34	605,331
	No qualifications	35-44	416,666
	No qualifications	45-54	564,889
		55-69	1,491,850
	70+		9,153,257
Housing	Owned outright		18,018,462
tenure – at household	Owned with mortgage		17,413,578
level	Not owned (incl. part mortgage/part rent)		17,458,003
	Married/in a civil partnership		25,590,076
	Separated/divorced		5,455,788
Marital	Widowed		3,107,031
status	Cohabitating (& no prior marriage/civil partnership)		6,282,159
	No cohabitation (& no prior marriage/civil partnership)		12,454,990
	White		46,089,543
Ethnicity	Mixed race & Other		1,636,276
Etimicity	Asian		3,563,659
	Black & Black British		1,600,566
	North East		2,147,125
	North West		5,795,875
	Yorkshire and The Humber		4,351,987
Region	East Midlands		3,857,688
	West Midlands		4,655,599
	East of England		4,912,789
	London		6,954,893

	South East		7,234,655
	South West		4,546,239
	Wales		2,539,714
	Scotland		4,439,078
	Northern Ireland		1,454,402
		18-39	18,913,257
	Every day or most days	40-49	8,221,436
		50-64	11,585,578
		65-69	2,424,767
Internet		70-74	2,821,212
use by age		75-79	2,381,246
		80+	749,842
	Less often or never	18-64	1,661,134
	Less often but not never	65+	2,736,491
	Never	05+	1,395,078
Total 52,890,044		52,890,044	

- 7.54 Two weighting variables were produced:
 - Grossing weights which sum to the population of all UK adults, and
 - Scaled weights which sum to the unweighted base of those participating in the survey
- 7.55 These two separate weights can be used to produce tables where the weighted base
 - Matches the population size (grossing weights) or
 - Matches the unweighted number who answered the survey question (scaling weights)
- 7.56 Percentages in data tables produced using either weight will be the same.
- 7.57 The individual weights have an effective sample size (Neff) of 10,513 and an efficiency of 55%. Given that the individual weights are produced in four steps, they provide a good balance between adjusting the profile to match the population and maintaining efficiency.

Stage 1: Individual weights – summary

Table 7.4: Summary of individual weighting calculations

Stage	Model	Weight calculation
1.1 Country specific address selection weights	-	wt1 = 1/p1 p1: address selection probability

	D	
1.2 Address participation weights	 <u>Base</u>: all issued addresses <u>Dependent</u>: address responded (yes/no) <u>Independent</u>: address-level characteristics Model-predicted probability: p2 	wt2 = 1/p2 p2: address participation probability
1.3 Within-household non-response weights	 Logistic regression Base: all responding households with 2 adults Dependent: number of responses (one or two) Independent: address & household-level characteristics Model-predicted probabilities: p21 (probability of having 1 respondent); p22 (probability of having 2 respondents) Multinomial regression Base: all responding households with 3+ adults Dependent: number of responses (one, two, or three) Independent: address & household-level characteristics 	 p1: probability of a household with one respondent p2: probability of a household with two respondents p3: probability of a household with three respondents for households with one adult: p1=1, p2=0, p3=0 for households with two adults: p1=p21, p2=p22, p3=0 for households with three or more adults: p1=p31, p2=p32, p3=p33 wt3 = number of adults in the household / (1 x p1 + 2 x p2 + 3 x p3)
1.4 Individual calibration weights	Starting weight: wt4=wt1 x wt2 x wt3 Calibration variables: • Sex by age	IndvW3 = wt5

 Region Employment by age Education by age Tenure Marital status Ethnicity Internet use by age 	
Resulting weight: wt5	

Stage 2: Section weights

- 7.58 The questionnaire included several sections that focused on different types of products or topics. Routing into some of these sections was controlled by a combination of product holding, RSPs or 1 in Ns as described in Chapter 4: Survey design.
- 7.59 There were 37 different sections in total in the 2022 wave of the survey, 23 of which required section weights. A summary of which types of weights were applied to various questionnaire sections is provided in *Table 7.5*.

Section type	Sections of the questionnaire (changes specified in brackets)
	Demographics
	Attitudes
	Product Ownership
	Cross-sector product-related and screener questions
Ask all	Assets & Debts
ASK all	Advice & Guidance – Incidence
	Financial Concepts – Numeracy
	Closing Demographics
	Open-ended Questions
	Interview Administration
	High-cost Credit
	Pre-paid Funeral Plans
Ask all low	Non-advised Platforms
eligibility	Access (was a 'Dependent 1 in N' online at soft launch; changed to 'Ask all eligible' from Batch 1 onwards)
	Unbanked
RSP	Retail Banking
	Mortgages (treated as 'ask-all low-eligibility' sections for the telephone mode)
	Credit & Loans 2

Table 7.5: Questionnaire sections split by type of weight applied

	Advice & Guidance 2
	Deferred Payment Credit (treated as ask-all low-eligibility' sections for the telephone mode)
	Credit & Loans 1 (treated as 'ask-all low-eligibility' sections for the telephone mode)
	General Insurance & Protection
	Pension Accumulation
	Pension Decumulation
	High-risk Investments (treated as 'ask-all low-eligibility' sections for the telephone mode)
	Savings
	AT22INTO to AT15 (Automated decision making and Big Tech)
	A2p & A2d-e,g-k,m (Attitudes to financial advice)
	P_CC21 to P_CC80 (Credit Information)
1 in N	IT1 (IT Disruption)
	Responsible Investments
	Payments
	Awareness of the FCA
Dependent	Communication Problems
	RI19a to RI25 (Retail Investments – problem and complaints)
1 in N	Buying Products Online
	Advice & Guidance 1

7.60 The probability of being allocated to a section varied between mode and batches of the survey. In broad terms, (with the exception of all RSP sections where the calculation was done differently, see Stage 2.3: Section weights – RSP sections) it was calculated as follows (the specific calculation by section type is shown later):

p = n/N

where:

- n is the number of respondents allocated to a set of questions
- N is the number of respondents eligible for a set of questions.
- 7.61 Where the probability of being allocated to a set of questions varied by mode, or between batches, this was built into the calculation.
- 7.62 The section weights were calculated for all those selected to answer the questions within the relevant section by dividing the final individual weight (IndvW3) by the probability of being allocated to the selected section (p).

```
Section weight=IndvW3 / p
```

7.63 The section weights were then re-scaled so that the sum of respondents answering each section matched the sum of the (gross) individual weights for those eligible for

that section (i.e. it matched the population of UK adults eligible for that section). A version of each section weight scaled to the unweighted base of those completing each section was also produced.

- 7.64 For the Relative Selection Probability (RSP) sections, the profile of respondents weighted by the final section weights was compared with the profile of respondents eligible for each section weighted by the final individual weight (IndvW3), by looking at the variables used for the individual calibration (Stage 1.4: Individual weights individual calibration weights). The purpose of this comparison was to check that the profile (weighted) of respondents to an RSP section was in line with the profile (weighted) of all respondents eligible for that section. These profiles did not always match perfectly as there was some remaining bias.¹⁹ The section with the least bias was Consumer Credit 1 (CC1) where remaining bias was 0.8%. This means that for CC1 the weights brought the profile of respondents very close to those eligible. The section with the most bias was Pensions Decumulation where remaining bias was 2.9%. This means that for Decumulation the weights brought the profile of respondents close to those eligible, but not as close as the other RSP sections. This is understandable, however, due to the low eligibility for Pensions Decumulation meaning that this section has fewer respondents (585), it is harder to bring the respondent profile close to the profile of all those eligible to answer these questions. Any remaining bias could not be corrected further through calibration (as done for the individual weights) due to a lack of reliable population estimates for these specific populations. This comparison was limited to RSP sections only. For the other sections (1 in N, Dependent 1 in N and 'selected product' sections²⁰), selected respondents were a random sample of all eligible respondents, therefore any discrepancy in the profiles of those selected and those eligible would only be due to random error which was likely to be negligibly small.
- 7.65 Weighting was necessary for each of the following section types and was carried out in this order.
 - Stage 2.1: Ask-all
 - Stage 2.2: Ask-all low eligibility
 - Stage 2.3: RSP
 - Stage 2.4: 1 in N
 - Stage 2.5: Dependent 1 in N.
- 7.66 For questions which have moved from one section type to another between batches, appropriate weighting was applied based on the section type that applied to the question when answered by each individual respondent. For example, if a question was asked as part of an RSP section at soft launch only and was treated as an 'ask all' question for all other batches, the soft launch respondents would receive the RSP section weight, and all other respondents would receive the individual weight (IndvW3_G).

¹⁹ This bias primarily results from the fact that random allocation according to RSP probabilities does not precisely replicate the target probabilities (just as many coin tosses don't always give exactly the same numbers of heads and tails). Trimming of extreme values of the RSP weights (necessary for ensuring good weighting efficiency) also introduces small biases.

²⁰ See paragraph 7.79 for an explanation of 'selected product' sections.

Stage 2.1: Section weights – ask all sections

- 7.67 There were ten 'ask all' sections (see *Table 7.5* for details), where all survey respondents were eligible to answer the questions, and all eligible were asked the section questions (i.e. n=N); therefore, for these sections:
 - p=1
 - Section weight=IndvW3 / p = IndvW3.

Stage 2.2: Section weights – ask all low eligibility sections

- 7.68 There were five 'ask all low eligibility' sections (see *Table 7.5* for details), where only a small number of survey respondents were eligible to answer these questions, and all eligible were asked the section questions (i.e. n=N). Therefore, for these sections:
 - p=1
 - Section weight=IndvW3 / p = IndvW3.

Stage 2.3: Section weights – RSP sections

- 7.69 There were eleven RSP sections (see Table 7.5 for details), where the number of respondents that were eligible depended on the eligibility criteria for that section, and where a sub-sample of eligible respondents were selected to answer the questions within each of the sections. These were split into three sets (two sets of RSPs for the online and one set for the telephone mode). The probability of being allocated to a selected section (p) varied by section, depended on eligibility for the selected section as well as on eligibility for other RSP sections in the set (e.g. it was higher where eligibility for the section was lower to ensure an analysable sample answers the relevant questions). This was reflected in the 'RSP value' which was derived at the simulations stage for each batch (see Chapter 4: Survey design for more detail on this). The probability of selection for an RSP section was therefore calculated as follows:
 - p = RSP value for selected section / sum of RSP values for eligible sections
- 7.70 For four sections which were 'ask all low eligibility' for the telephone mode only but RSP for the online mode (Mortgages, Deferred Payment Credit, Credit & Loans 1 and High-risk Investments- see Table 7.5 for details), p=1 for the telephone cases.
- 7.71 As RSP values used to assign probability of selection were changed between batches of the survey, the relevant values by batch (i.e. depending on when the respondent completed the survey) were used in the calculations.

Stage 2.4: Section weights – 1 in N sections

7.72 There were seven '1 in N' selected questions or full sections (see *Table 7.5* for details), where all survey respondents were eligible (N) and a random sub-sample (n) was asked the section questions. Therefore: p = n/N 7.73 As the proportion of assigned `1 in N' cases changed between batches of the survey, these probabilities were calculated separately by batch (i.e. depending on when the respondent completed the survey), by using binary sample flags for n within the sample file.

Stage 2.5: Section weights – Dependent 1 in N sections

7.74 There were four 'Dependent 1 in N' sections similar to the '1 in N' sections (see *Table 7.5* for details), where a sub-sample (n) was asked the section questions, but eligibility was assumed to be <100%, i.e. additional routing was applied within each of these questionnaire sections to filter questions to relevant respondents. Therefore:

 $p = \frac{n}{\mathrm{eligible}}$, where eligible < N

7.77 As the proportion of assigned 'Dependent 1 in N' cases changed between batches of the survey, these probabilities were calculated separately by batch (i.e. depending on when the respondent completed the survey), by using binary sample flags for n within the sample file.

Stage 3: Product weights

7.78 Within four retail sector sections of the survey (three 'RSP' sections: Credit & Loans 1, General Insurance & Protection, and Savings, and one 'ask all low eligibility section': High-cost Credit), respondents were asked more detailed questions about a specific product (or in the case of the High-cost Credit section, up to two products). The product was randomly selected from among all eligible products they held within that sector. These sections are sometimes referred to as 'selected product' sections. *Table 7.6* details the selected products covered in each of the four sections. The products identified as eligible to be 'selected products' were chosen as products of interest and had sufficient incidence in the population meaning that collected data would yield meaningful results for each product (i.e. where data is more likely to be statistically significant).

Section	Selected products
	Credit card (revolver)
Credit & Loans 1	Motor finance arranged with hire purchase (HP), personal contract purchase (PCP) or conditional sale or don't know
	Personal loan
	Motor insurance
	Home insurance – contents and buildings combined
General	Home insurance – contents only
insurance &	Multi-trip (annual) travel insurance
protection	Pet insurance
	Single-trip travel insurance
	Life insurance (regardless of whether or not they know type)

Table 7.6: Selected products

Savings	Savings account with a bank or building society or NS&I
	Cash ISA
High-cost Credit	Catalogue credit and shopping accounts
	Pawnbroking
	Home-collected loan
	Payday loan (single payment) or short-term instalment loan

- 7.79 The third type of weight was created to make the results for the 'selected product' questions representative of those who hold these products in the wider population (while other criteria applied as detailed in Appendix B: Weighting guide). The purpose of the product weights was to remove the bias generated by asking each respondent about only one product (or in the case of High-cost Credit (HCC), about up to two products) when the number of products owned, used, or experienced covered in these questions (within the RSPs or HCC) differed across respondents.
- 7.80 These weights ensured the results are representative of the population of those holding each product by upweighting respondents with many products and down-weighting respondents with fewer products. If this adjustment is not made, then the data would be skewed towards the profile of those that hold fewer products.
- 7.81 For the purposes of weighting, the maximum number of eligible products for two sections was capped at a level which means that a negligible number of respondents were treated as though they had an incorrect number of eligible products (i.e. they were treated as though they had fewer products than they did in reality). This means that for the purposes of weighting, respondents that held six eligible products for General Insurance & Protection (0.1% of respondents) were combined with respondents that held five eligible products no one asked about General Insurance & Protection selected products held all seven of them. Similarly, respondents that held three eligible products for Credit & Loans 1 (0.3% of respondents) were combined with respondents that held two eligible products. The purpose of this was to reduce very high weights, thus improving the weighting efficiency. This is important as there were relatively few respondents answering questions about each selected product, so trimming the weights helped to reduce their design effect and thus reduce the confidence bands (margins of error) surrounding the estimates that come from these sections.
- 7.82 The product weights were generated by dividing the section weights (see Stage 2: Section weights) by the probability of being allocated to the selected product. This probability was equal to X divided by the number of (eligible) products the section respondent had within the section product group, where X=1 for the RSP sections, and X=2 for the HCC section.
- 7.83 The general process of calculating weights described in the Calculation of weights section of this chapter was used to calculate the product weights. The initial bias (before weighting) was assessed, for each of the four product sections, by comparing the difference between the unweighted demographic profile of respondents to each

of the product sections, and the population profile measured on key profiling variables.

7.84 Weights were created to measure the population profile for each of the four 'selected product' sections. These were calculated as the product of the relevant section weight and the number of products each respondent held within the relevant section. Applying this weight to the respondents in each of the 'selected product' sections provided the equivalent population profile associated with those holding each combination of the products in each section. For example, the population profile for Credit & Loans 1 products was calculated as:

CC1 product population = Wt_RSP_CC1_W3_N * number of eligible CC1 products per respondent

- 7.85 The final bias (after the weights were calculated) was assessed by looking at the difference between frequencies of demographic variables weighted by the respective product weights against the population measure described in paragraph 7.84.
- 7.86 The weights were then grossed separately for each of the 16 selected products (across the four sections see *Table 7.6*). The grossed weights provided for selected products sum up to the population of adults eligible for each of the selected products.
- 7.87 The product-specific population totals used in the grossing were derived from the individually-weighted questions which established product holding in the 'Product ownership' (ask all) section of the survey (see Stage 1: Individual weights overview and Stage 1: Individual weights for further information on these).
- 7.88 A version of each product weight scaled to the unweighted number of respondents answering the questions about each selected product was also produced. The scaled weights provided for selected products sum up to the number of respondents answering about each selected product.

Stage 4: Special Weights

- 7.89 Special weights were calculated for questions or groups of questions where:
 - Samples of respondents asked the same question in different sections of the questionnaire were combined
 - Questions were added to the survey between batches of fieldwork
 - The routing into/ eligibility for the question changed during fieldwork.

These weights are described in this section.

7.90 As with all previous weights, two sets were produced for all special weights: (a) grossing weights which sum to the eligible population, and (b) scaled weights which sum to the corresponding sample size.

Product ownership & Savings weight

- 7.91 A 'Savings' weight (for all UK adults who have a savings account or who use another account such as a current account or e-money account to save) was produced for analysing the combined sample of respondents who answered the savings variables found in: RB102 (RSP) and RB102NEW (ask-all).
- 7.92 The respective weights for each section were combined into one weighting variable which took the RSP weight value (Wt_RSP_Savings_W3) for RB102 respondents and the individual weight value (IndvW3) for RB102NEW respondents (with no need for re-scaling as the questions were asked of mutually exclusive groups).
- 7.93 This weight is used for analysing RB102 and RB102NEW responses together.

DPC7 (Deferred Payment Credit)

- 7.94 Question DPC7 was moved from the DPC section (RSP weighting) to the Credit & Loans portion of Product Ownership section (ask all weighting), after the soft launch. The question itself was unchanged.
- 7.95 When DPC7 was included in the DPC section (where RSP weighting applies) it was not asked of all respondents, hence the grossed weight for DPC7 was then rescaled to represent the whole eligible population, i.e. all who used a DPC service of some kind in the last 12 months.
- 7.96 This weight is used for analysing all responses to DPC7 together.

RB68c, RB20c (Retail Banking)

- 7.97 Eligibility for these questions was changed for Batch 2. At Soft Launch and Batch 1, these questions were asked only of adults who had a current account with an e-money institution, where this was their main day-to-day account (which was quite rare). From Batch 2, the eligibility was changed to all adults with a current account with an e-money institution (regardless of whether it was their main day-to-day account or not).
- 7.98 The first step was to rescale the section weight for these cases up to the correct total eligible (n=429) and compare the weighted profile of these respondents with the population of those with a current account with an e-money institution. As the profiles were not in line, responses were recalibrated using the same variables from stage 1.4. This was done so that when applying the weight, these were in line with the relevant population, i.e. all adults with a current account with an e-money institution.
- 7.99 It should be noted that as well as dropping internet use from this calibration, the age by sex, employment by age, education by age and marital status profiling variables were all re-categorised to have fewer levels to enable this calibration to work – this was needed due to the small number of respondents receiving this weight.

7.100 The grossed weights were then rescaled to match the overall total of individual weights for all UK adults with a current account with an e-money institution.

P20d (Pension Accumulation)

- 7.101 Routing for P20d was incorrectly applied at Soft Launch. The question was intended to be asked to everyone in the Pension Accumulation section who recalled receiving an annual statement. This would have been based on P20a=1-2 (asked to those with only one DC pension) or P20b=1-2 (asked to those with more than one DC pension). However, this was in error only asked of those with more than one DC pension (excluding those with only one DC pension), i.e. it was routed off P20b only.
- 7.102 This means that at soft launch 179 eligible respondents were not asked this question (out of 715 total eligible). In Batch 1 and Batch 2, all 1,749 eligible respondents were asked the question.
- 7.103 The first step was to rescale the section weight for these cases up to the correct total eligible (n=2,464) and compare the weighted profile of these respondents with the population. As the profiles were not in line, the valid responses were then recalibrated using the same variables as those used at stage 1.4. This was done so that when applying the weight, these were in line with the relevant population, i.e. all UK adults with a DC pension in accumulation who recall receiving an annual statement in the last 12 months.
- 7.104 It should be noted that age by sex, employment by age, education by age and internet use were all re-categorised to have fewer levels to enable the calibration to work.
- 7.105 The grossed weights were then rescaled to match the overall total of RSP Pension Accumulation weights for all UK adults who have one or more DC pension schemes that have not been decumulated, and who recall receiving at least one annual statement in the last 12 months.

D51-54, B18 (ask-all sections)

- 7.106 These questions were added to the questionnaire after soft launch, and therefore had a lower base than the number of total respondents.
- 7.107 The achieved cases for these questions were recalibrated using the same variables as those used at stage 1.4. This was done so that when applying the weight, these were in line with the relevant population.
- 7.108 The grossed weights for D51-54 were then rescaled to match the overall total of individual weights for all UK adults.
- 7.109 The grossed weights for B18 were then rescaled to match the overall total of individual weights for all UK adults with any consumer credit product held now or in the last 12 months including balances revolved on credit and/or store cards, excluding transactors only.

CD13-14 (Communication Problems)

- 7.110 These questions were added to the questionnaire at Batch 2 and therefore had a lower base than the total number of the Communication Problems section respondents.
- 7.111 The weighted profile of these respondents was compared with the population, and it was not in line. Therefore, the achieved cases for these questions were re-calibrated using the same variables as those used at stage 1.4 so that when applying the weights, these were in line with the eligible population, i.e. all UK adults who have any financial products.
- 7.112 The grossed weights were then rescaled to match the overall total of RSP 'Communication problems' weights for all UK adults who have any financial products.

8 Digital exclusion

Overview

- 8.1 Digital technologies are having an increasing impact and presence in financial services. This could be high street providers moving more towards online banking or FinTechs and big technology firms having an increased presence in the financial market. It is therefore of utmost importance to monitor the experiences of financial consumers who are digitally excluded. Digital exclusion is also a very important concept for FLS: as one of the characteristics of vulnerability by which the FCA monitors consumer experience.
- 8.2 This chapter sets out the definition of digital exclusion used in the Financial Lives survey (FLS), how to estimate the prevalence of digital exclusion in the wider population, the approach taken to encouraging those who are digitally excluded to participate in the survey, as well as some theoretical considerations when analysing results from this group.

Defining digital exclusion

- 8.3 The FLS defines the digitally excluded as:
 - those who have never used the internet,
 - those who have not used the internet in the last three months (or don't know when they last used it), and
 - those who have used the internet in the last three months, but less often than once a week, and who rate their ability to use the internet as poor or bad.

This definition has been employed in all previous waves of the Financial Lives survey and carried through to the latest 2022 wave.

- 8.4 A small and diminishing proportion of adults in the UK are digitally excluded, based on this definition. In 2022, 7% of adults (3.9m) were digitally excluded down from 9% (4.8m) in 2020 and 14% (6.9m) in 2017.
- 8.5 We are aware from our wider research work that the term internet user may not be well understood by all, especially by younger respondents. An additional 'check' question was added to the 2022 questionnaire, to establish whether respondents used smart devices, social media apps, broadband or virtual assistants. Where these had been used, respondents were informed that this qualifies as internet use, and were asked again when they had last used the internet.
- 8.6 The addition of these check questions (to establish whether people had used the internet) improved the accuracy of our data, i.e. led to more people being classified correctly as internet users and fewer being classified as digitally excluded. Of the 19,145 unweighted valid interviews, 331 (1.7% of all interviews) were flagged as digitally excluded. If the check questions had not been asked, this number would

have been 381 (2%), suggesting that without these additional questions 13% of the cases flagged as digitally excluded would not have been.

8.7 A derived variable was added to the script that would identify people as either digitally excluded or digitally active, based on their answers to the relevant questions on internet use. This was used in part for monitoring the achieved number of interviews with digitally excluded adults throughout fieldwork. However, at the data cleaning stage it was identified that those who sped through the questionnaire were disproportionately more likely to be identified as digitally excluded at this variable, and as such the number of genuinely digitally excluded people was being overstated in fieldwork monitoring, by roughly 25%. This is in part due to selecting 'don't know' at the relevant internet usage questions, which would also satisfy the conditions for being identified as digitally excluded. In total, 443 digitally excluded cases were reported in the fieldwork monitoring stage, and 331 valid interviews were included in the final dataset.

Estimating how many UK adults are digitally excluded – and data sources

- 8.8 A particular challenge with any definition of digital exclusion is finding reliable, recent estimates of the prevalence of non/ infrequent internet users in the wider population. At previous FLS waves we have used the Office for National Statistics (ONS) Opinions and Lifestyle Survey (OPN)²¹ published tables on internet use. The sample for OPN comes from the Labour Force Survey, which defines digital exclusion more broadly, as those who have not used the internet in the last three months.
- 8.9 However, at the time of preparing for the 2022 wave, the most recent internet use data available from ONS had been collected in February 2020. The general trend year on year sees the proportion of the population who are non/ infrequent internet users falling slightly from which it follows that the proportion who are digitally excluded also falls. It was also considered reasonable to assume that Covid restrictions in the UK starting in March 2020 may have expedited this pattern by encouraging more people to access the internet than would have done otherwise.
- 8.10 We therefore considered drawing on alternative data sources for estimating prevalence of digital exclusion in the wider population, and to use for calibration in the weighting. F One option considered was adjusting the OPN data based on some more recent internet use figures (coming from the NatCen panel or another recent survey), which might improve accuracy. However, this would present its own methodological and conceptual challenges, as we would in effect be using another survey to 'create' new population statistics. Labour Force Survey (LFS) data was considered as an alternative data source to the OPN, however the LFS question asks about when respondents 'last used the internet' and the response options do not differentiate between people who used the internet 'within the last three months' and 'every day/most days'. It was important for FLS to be able to define digital exclusion

²¹ Previously known as the ONS Omnibus survey.

in the same way in 2022 as in 2020, for comparisons between years. Therefore, it was decided not to use either the NatCen panel or the LFS data.

- 8.11 We also considered removing internet use as a measure in calibration weighting, to avoid calibrating to potentially out of date population figures. However, this would mean we would not be able to tell with certainty whether any differences in digital exclusion observed between the 2020 and 2022 waves were genuine or a result of dropping this measure from the calibration.
- 8.12 It was felt that following the same approach as previous waves, and therefore providing continuity and comparability between waves, was preferable. Although the estimates used were not the most recent, they were in line with what we had expected to see (i.e. a drop in the percentage of adults who had never used the internet and had not used the internet in the last three months, which dropped from 7.7% to 5.4% between 2019 and 2020 (based on the OPN). We therefore took the same approach at the 2022 wave, that is, using OPN estimates of internet use in the wider population to calibrate our 2022 survey data and make it representative of the UK adult population.

Engaging the digitally excluded

Methodology

- 8.13 Understanding the experiences of digitally excluded consumers is an important element of the Financial Lives survey, and as such considerable efforts are made to encourage and facilitate digitally excluded participants to take part.
- 8.14 In the 2020 wave of the FLS, one reason for providing respondents with the possibility to complete the interview in-home was to ensure those who were digitally excluded were able to participate in the survey in sufficient numbers to provide a good coverage of this population. In 2020, a total of 887 digitally excluded participants completed an interview, of which 533 took part in an in-home interview, and 354 took part online (with support from someone else).
- 8.15 The in-home element included a screening stage to ensure participants were eligible to participate face to face either by virtue of their age, or lack of recent internet use. This added complexity to the weighting process but ensured sufficient numbers of interviews with digitally excluded respondents. More detail on the 2020 wave approach can be found in the <u>FLS 2020 Technical report</u>.
- 8.16 The 2022 wave of the Financial Lives survey did not offer an in-home survey (see Chapter 2: Sample design for more details). It provided the option of completing the survey over the phone for those unable to take part online, with the expectation that some telephone respondents would be classified as digitally excluded. The invitation letters also explained that it was possible to take part online with support from a family member or friend. As set out in Chapter 5: Fieldwork, all households invited to take part in the survey were sent a letter inviting them to participate either online or over the telephone.

- 8.17 While in 2020 the in-home interview followed a screening exercise to ensure eligibility, there was no similar screening process for the telephone interviews in 2022, in other words, anyone could take part in the survey over the phone; they did not have to be digitally excluded or within a certain age group. The risk of losing respondents who were not digitally excluded as a result of any potential screening and the added complexity for sampling and weighting, were both felt to outweigh the risk of too many non-digitally excluded respondents completing the survey over the telephone. Similarly, we did not attempt to divert telephone participants who were not digitally excluded to participate online instead, due to the risk of these participants dropping out if unable to participate in their chosen mode.
- 8.18 This combined approach made it more difficult to predict, and control, the numbers of digitally excluded participants or the mode by which they would complete. The primary tool used to encourage digitally excluded participants was the fieldwork materials the survey invitation and reminder letters. These were designed to encourage those who were digitally excluded to participate over the telephone, or to take part online with support from someone they know with internet access.
- 8.19 Uptake of the telephone option was low during the soft launch. The letter wording was therefore changed slightly for Batch 1, and again for Batch 2, to further encourage those who were digitally excluded to take part in the survey. The invitation letters can be found in Appendix C: Invitation and reminder letters, and the targeted messaging is shown in Table *8.1*.

Soft launch	If you are unable to complete the survey online yourself, you can phone us for free on 0800 652 4568 to arrange to do the survey over the phone at a time that works for you. Or you could ask a family member or a friend to assist you to complete it online.
Batch 1	Need assistance? It is vital that people who cannot access the internet, or find it difficult to use, also have their voices heard. If you cannot take part online, please call for free on 0800 652 4568 to arrange to do the survey by phone at a time that works for you. Alternatively, you can ask a family member or friend to help you to do the survey online.
Batch 2	Taking part by phoneIt is vital that people who cannot access the internet, or find it difficult to use, also have their voices heard. If you cannot take part online, please call for free on 0800 652 4568 to arrange to do the survey by phone at a time that works for you.Alternatively, you can ask a family member or friend to help you to do the survey online

Table 8.1: Digital exclusion targeted messaging in survey invitation letters

Response to the survey among the digitally excluded

8.20 In total, 331 digitally excluded respondents took part in the survey in 2022. Of these, 109 took part over the telephone, and 222 took part online. Of those who participated online, the majority of individuals (79% – unweighted) said they were supported by someone to do so.

9 Strengths and limitations

Overview

9.1. This chapter outlines in brief some of the strengths and limitations of the Financial Lives 2022 survey.

Strengths

- 9.2. **Sampling approach**: This survey employed the most robust approach to sampling by using a stratified random probability sample design. This method was used because it ensures all households in the population (the UK) have an equal and known probability of being sampled. The stratification process ensures that key sample characteristics are represented in the same proportion as in the overall target population, i.e. the UK adult population. This is the best way to obtain a research sample which accurately represents the population of interest. For more detailed information about the sampling approach, please see Chapter 2: Sample design.
- 9.3. **Regional analysis**: To improve regional analysis and reporting potential, sample was boosted for Scotland, Wales and Northern Ireland. This means that disproportionately higher numbers of participants were invited to take part in the survey, and more did take part.
- 9.4. **Sample design and weighting**: In FLS 2020 two separate samples were drawn: one for the online and one for the in-home modes of survey completion offered to participants. Restrictions put in place due to the COVID-19 pandemic ahead of the 2022 fieldwork meant that face-to-face interviewing was not possible. All participants were therefore sent an invitation letter via post and offered the option to complete the survey online, or over the phone if they were unable to participate online. So unlike in the previous wave, in 2022 a single sample was drawn for both modes of survey completion. This meant that the weighting process was less complex in 2022 than in 2020, as every weighting stage could be achieved with a single model, rather than separate models for each mode.
- 9.5. **Managing survey length and maximising topic coverage**: To manage survey length for participants, FLS asks some questionnaire sections of partial samples (i.e. only some eligible respondents rather than all eligible respondents). In other words, the questionnaire is split into sections and participants are only asked a selection of the sections for which they are eligible. An overall large sample size allows each participant to answer fewer sections while ensuring sufficient numbers answer each section overall. This, in turn, ensures that the base size for each topic/ section reaches a minimum target. Section weights are used to minimise any bias created as a result of not all eligible respondents being asked about a given topic. The survey

mechanisms used to enable this are discussed in more detail in Chapter 4: Survey design.

- 9.6. **Response rate**: Overall, the individual response rate was 4.5% which was higher than previous waves. The household response rate was 6.9%. The final achieved sample size was 19,145 (after data validation and cleaning), giving a robust base for detailed analysis at a total and sub-group level.
- 9.7. **Reliable results**: The weighted gross population estimates from questions about specific products (i.e. the RSP and selected product sections) very closely matched the weighted gross population estimates obtained from the 'ask all' product ownership section, which is used to measure eligibility for each of these specific product sections. This is very encouraging and shows that the weighting works well. While the final gross estimates were calibrated to match the totals estimated from the 'ask all' section for consistency with a more exact estimate, these adjustments were very minor.

Limitations

- 9.8. **Sample frame coverage**: Initially the sampling procedures were based on address selection from the Postcode Address File (PAF). It is believed that PAF covers c.99% of UK residential addresses, but, by its very nature, at any point in time it will exclude the very latest addresses. The PAF also includes commercial addresses and in certain cases these commercial properties may include residential households. Omissions (as is the case for all big PAF-based surveys) include any communal establishments such as: prisons, permanent residential care homes and student halls of residence.
- 9.9. Selection of adults in households: while the Financial Lives survey covers UK adults (aged 18+), the sampling methodology was based on a random probability selection of households with a maximum of three adults per household being allowed to take part in the research. While there was no process used for respondent selection in households with more than three adults, this is unlikely to have had a significant impact on study results as those households represent a small proportion (4.8%²²) of UK households overall. This slight discrepancy was corrected for during the weighting process to ensure that larger households were not underrepresented. This is discussed in more detail in Chapter 7: Weighting.
- 9.10. **Sample size for small subgroups**: Although with a final sample of 19,145 respondents, the survey has a large overall base, it is unable to represent all consumer groups equally well, especially ones representing small proportions of the UK adult population. As shown in Appendix A: Populations and bases, some achieved samples were small (for example adults aged 85+), meaning that the margins of error for results for these groups were larger.
- 9.11. Sample of infrequent internet users and non-users, and the digitally excluded: survey weighting takes into account internet use by age, while the

²² Source: Labour Force Survey (published in Q3 of 2022).

digitally excluded are a very important cohort for reporting FLS results. Only 281 respondents were classified as infrequent internet users or non-users (not having used the internet in the last 3 months or never having used it), and only 331 respondents were classified as digitally excluded (see Chapter 8: Digital exclusion for more details).

The infrequent internet users and non-users group was upweighted significantly during the weighting process from 1.3% to 5.8% to bring it in line with the national figure (based on Office for National Statistics (ONS) Opinions and Lifestyle Survey (OPN) tables on internet use, dated February 2020).

The digitally excluded group was therefore indirectly upweighted from 1.7% to 7.3%. It is possible that the digitally excluded population has shrunk compared with previous waves, when 14% (FLS 2017) and 9% (FLS 2020) were classified as digitally excluded. Certainly, the proportion of digitally excluded adults in the population decreased by approximately 2pp between 2019 and 2020 from 7.6% to 5.4%, according to the OPN). There are a number of possible reasons for a reduction in the proportion of UK adults who are digitally excluded, such as the pandemic driving more people online, or more of the digitally excluded population being hard to reach or generally less likely to respond to a survey invitation (e.g. those in care homes or those with certain health conditions). Nonetheless, the low response among the digitally excluded population means that the analysis potential for this particular sub-group is limited.

- 9.12. **Weighting limitations**: Although data were weighted to control for a number of demographic variables, it is possible that the responding sample may be unrepresentative of the general population in terms of other variables, for which it was not possible to adjust through weighting.
- 9.13. **Survey length**: One of the main challenges of the FLS is managing survey length to minimise research fatique among respondents. While many steps were taken to reduce interview length (see Chapter 4: Survey design), the average interview was long compared to other surveys of this nature, especially the telephone survey. Of all valid interviews (that is, once speeders and duplicate interviews were removed, i.e. after data validation), the mean interview length for those taking part online was 51 minutes. The mean interview length for those taking part over the telephone was 91 minutes. The research was designed to ensure functional equivalence between the telephone and online questionnaires to minimise mode effects as much as is possible. This meant that most long answer lists were fully read out to ensure respondents completing the survey over the phone had a similar opportunity to select each answer option to those reading the questions online. The telephone survey therefore took more time to complete, though interviewers managed to maintain respondent interest in the questions asked and the vast majority of those who started the telephone interviews completed them.
- 9.14. **Subject matter complexity**: Despite cognitive testing of survey questions, some of the topics covered by the survey are complex to explain to the participant and/ or for the participant to answer, for example questions on the

types of pension/s or investments the respondent may have. As is the case with any survey, respondent recall may not always be completely accurate when answering questions about topics such as this in a survey setting, and there is not always opportunity for the respondent to check details of their product holding against paperwork or policy material from their provider.

9.15. **Survey complexity**: The overall complexity and length of the survey meant that the potential for errors was greater, as we can only control the sampling and weighting for a finite number of profiling variables. Considerable care has been taken to avoid mistakes in sampling, data and weighting and to weight out any bias in reported outcomes. Nonetheless, it is possible small biases may exist in the weighted data for some outcomes as a result of its not being possible to control for all relevant variables.

Abbreviations

Term	Definition
CDRC	Consumer Data Research Centre
DLUHC	Department for Levelling Up, Housing and Communities
FCA	Financial Conduct Authority
FLS	(The FCA's) Financial Lives survey
FS	Financial service(s)
GI&P	General Insurance and Protection
НСС	High-cost Credit
HRI	High-risk Investments
IMD	Indices of Multiple Deprivation
ITLs	International Territorial Levels
LAA	Local Authority Area
LSOA	Lower Layer Super Output Areas
N/A	Not applicable
NUTS	Nomenclature of Territorial Units for Statistics
ONS	Office for National Statistics
PAF	Postcode Address File
PCW	Price comparison website
рр	percentage point
RSP	Relative Selection Probability (see Glossary for a definition)
T&Cs	Terms and conditions
UK	United Kingdom
URL	Uniform Resource Locator (i.e. web address)
VS.	versus
-	

Glossary

This glossary is of terms referenced in this report.

Additional terms used within the Financial Lives survey questionnaire or report can be found in the report of <u>key findings from the Financial Lives 2022 survey</u>.

Term	Definition		
1 in N	Terminology denoting certain questions that would ordinarily be asked of all (or all eligible), but instead were asked of a fixed proportion, e.g. 1 in 3, 1 in 4.7. Selection for whether a respondent was asked or not is random. This is described in more detail in Chapter 4: Survey design.		
1 in N cap	There was a cap in place to ensure that no respondent could be asked more than four of the 1 in N question sets (how this was done, and the few exceptions, are detailed in Chapter 4: Survey design).		
1 in N Flag	Within the sample file, each unique respondent ID had a "flag" for each 1 in N question or section. If there was a flag (denoted by a "1" in the file) the respondent was asked that question or section (assuming other criteria were also met for dependent 1 in Ns). If there was no flag (denoted by "0") the question or section was not asked.		
1 in N value	Value which determines how many respondents are asked a certain section. The lower the value of N, the more respondents are asked the section.		
2017 wave	The first time the Financial Lives survey was carried out. Fieldwork took place between December 2016 and April 2017; 12,865 UK adults aged 18+ completed the survey.		
2020 wave	The second time the Financial Lives survey was carried out. Fieldwork took place between August 2019 and February 2020, with a sample of 16,190 individuals representative of the UK population aged 18+.		
2022 wave	The third time the Financial Lives survey was carried out. Fieldwork ran from 31 January 2022 to 6 June 2022, with a sample of 19,145 individuals representative of the UK population aged 18+.		
Ask All	Questions asked of all respondents, with no filtering applied.		
Ask all eligible	Questions asked of all respondents eligible to be asked them, with no additional filtering applied.		
Ask all low eligibility	Low eligibility sections which are asked of all eligible respondents in order to achieve target totals.		

Term	Definition		
Batches	Fieldwork was split into 3 stages referred to as soft launch, Batch 1 and Batch 2. This is described in more detail in Chapter 5: Fieldwork.		
Cleaning or data cleaning	The processes that bring the processed (validated) survey data up to final quality, such as routing checks.		
Data curation	Specifying and applying revised, shorter variable and value labels to the automatically generated labels to make them clear for data users, for example by removing extraneous characters or HTML text and replacing text fills with named products		
Deadwood addresses	Non-residential properties (e.g. unoccupied, commercial), and therefore not eligible to take part in the Financial Lives survey		
Dependent 1 in N	Terminology denoting sections where additional eligibility criteria was applied to the 1 in N selection. This is described in more detail in Chapter 4: Survey design.		
Derived Variable (DV)	Used throughout the script and denoted by 'DV' within their script label, ²³ derived variables are a means of categorising respondents based on earlier answers. The DV was then used both for routing within the questionnaire and for analysis. Some DVs used multi-coding, where a respondent can appear in more than one DV group; some did not. Some DVs may account for 100% of all respondents; some did not.		
Digitally	The FLS defines the digitally excluded as:		
excluded	 those who have never used the internet, 		
	 those who have not used the internet in the last three months (or don't know when they last used it), and 		
	 those who have used the internet in the last three months, but less often than once a week, and who rate their ability to use the internet as poor or bad. 		
Disclosure Board (NatCen)	A cross-project board comprised of senior research staff who advise on an appropriate course of action in instances where participants disclose harm or risk of harm.		
Duplicate survey completions	Instances where one person has completed the questionnaire more than once.		
Incidence rate	The % of respondents or of the weighted population that held a given product or used a given service, etc.		
Indices of Multiple Deprivation (IMD)	The official measure of relative deprivation, generated by the Office for National Statistics for England and Wales, SpatialData.gov.scot in Scotland and the Northern Ireland Statistics and Research Agency in Northern Ireland. All small areas (LSOAs) are ranked from the most to the least deprived		

 $^{^{23}}$ There are a few exceptions to this rule, for legacy reasons or to simplify data analysis. These are: GI1c / GI1d / GI25_FILTER / P7Na / SAVING_TS / D41b, all of which are DVs but without DV in their label.

Term	Definition		
	in each country.		
Infrequent internet users	People who use the internet infrequently, who may or may not meet the FLS definition of digital exclusion (as defined above). Infrequent internet users were those who had not used the internet in the last three months.		
Interim data	Data not based on the final set of responses.		
International Territorial Levels (ITLs)	A classification framework for referencing regional areas of the UK for statistical purposes. They replaced the Eurostat geographical classification, the Nomenclature des Unités territoriales statistiques (NUTS), and have been established as a mirror to the previous NUTS system used by the UK. The three ITLs are as follows:		
	 ITL 1: 12 regions or nations (e.g. the North West, Scotland) 		
	• ITL 2: 41 large counties and groups of smaller counties in England, and approximately similar areas in the other UK countries (e.g. Greater Manchester, Eastern Scotland)		
	• ITL 3: 179 small counties, cities or unitary authorities (e.g Greater Manchester South East, City of Edinburgh)		
LSOA (Lower Super Output Areas)	This is a geographic hierarchy designed to improve the reporting of small area statistics in England and Wales. There is a Lower Layer Super Output Area for each postcode in England and Wales. The equivalent in Scotland is 'Datazone' and in Northern Ireland is 'Super Output Area'.		
Neff	The net effective sample size. It is most commonly described as an estimate of the sample size required to achieve the same level of precision if that sample was a simple random sample. This can be thought of as the sample size after accounting for the loss of efficiency created by the sample design or weighting.		
Online survey	9% of the survey responses were conducted online. Addresses were randomly selected across the UK and sent an invitation letter, inviting up to 3 household members aged 18 or over to participate.		
Outlier	A statistical outlier is a value that is much smaller or larger than most of the values in a distribution. An accepted convention is to treat values that fall more than 1.5 times the interquartile range above the upper quartile or below the lower quartile as outliers.		
Paradata	A separate dataset containing 'data about the data' – variables relating to survey completion. These data are captured by the questionnaire software. Each record in the paradata file is a screen of the questionnaire script, and variables include timestamps and completion time data, devices, operating		

Term	Definition	
	systems and screen size used to complete the interview, sample management information (for example whether assigned an interviewer for telephone interviews) and standard information variables such as whether the case is a test case.	
Processed survey data	The interview data once cleaning and editing processes have been applied. This is the delivered data and sometimes referred to as 'clean'.	
Questionnaire section	At the 2022 wave the questionnaire was divided into 37 sections, grouped by subject matter. See <i>Figure 4.1</i> for a diagram summarising the questionnaire structure and the <u>Questionnaire reference guide</u> for a concise summary of topics covered within each section of the Financial Lives 2022 survey.	
Raw survey data	The interview data output by the questionnaire software, before any cleaning processes are applied.	
Regular internet user	For the purposes of the survey, regular internet use was defined as having used the internet in the last 3 months.	
Research Ethics Committee (NatCen)	In order to ensure that all NatCen projects are delivered to the highest ethical standards, every project must have formal ethical approval before launching. Responsibility for this lies with NatCen's internal Research Ethics Committees, made up of specialist staff from across the organisation.	
	Project teams submit a formal application for ethical approval which presents, in detail, the proposed plan for that project. This is reviewed and assessed by the committee and any feedback, concerns or queries are discussed with the research team.	
	Ethical approval may then be given, given subject to some modification of the approach, or denied. Every project must have ethical approval before launch. Similarly, if changes are made to the project approach subsequent to receiving approval, this may also need to be approved by the committee.	
RSP	Several questionnaire sections, were controlled by Relative Selection Probability (RSP) rules, described in more detail in Chapter 4: Survey design. Whilst the selection of which section a respondent is shown was determined randomly, a relative weighting value was applied to make sections with low levels of eligibility more likely to be selected. This retained the element of random selection whilst ensuring minimum base sizes for all sections.	
RSP set	Online there were 2 RSP sets, including 6 and 5 questionnaire sections respectively. For telephone, there was just one RSP set, including 7 questionnaire sections. Of those sections a respondent was eligible to answer, they could only be asked one section from each RSP set (so online respondents were	

Term	Definition		
	asked up to two sections and telephone respondents were asked up to one section). If a respondent was not eligible for any sections in a set, they were not asked any sections from that set.		
RSP structure	The online structure contained 2 sets; the in-home survey structure contained one.		
RSP value (starting)	The starting value for each section in an RSP set. Calculated as the inverse of the eligibility for each section:		
	1 / section eligibility.		
RSP value (final)	The final value ascribed to each section in an RSP set, after adjusting the starting RSP values. These values controlled the relative probability of being selected for each section, based on all the sections for which each respondent was eligible.		
Sample file	Each potential respondent had a unique ID which was linked to the unique log-in IDs in the invitation letters sent out by the fieldwork agency, three per address (household). This meant up to three household members aged 18+ could respond. Each ID was linked to a sample file, held by NatCen. As well as including information already known (e.g. address), the sample file contained RSP and 1 in N values to control the routing into the RSP and 1 in N question sets.		
Screener question	A question used, either by itself or with others, to establish eligibility for some questionnaire sections.		
Selected Product (SP)	Within certain sectors (High-cost Credit, Credit & Loans 1, General Insurance & Protection, and Savings) respondents may have had a number of relevant products; in such cases they were asked about one specific product (1 or 2 for High- cost Credit), selected randomly from those they hold or, in some cases, had held in the past 12 months or the last 3 years. If they held/had held more than one product of the type selected, they were asked to think about the one they took out most recently. For example, in the General Insurance & Protection section they may have been selected to answer about motor insurance, but may have held more than one of these, and so were asked to think about the most recent one.		
Speeders and grid speeders	Interview cases that have gone through the questionnaire at such a speed that it calls into question the validity of their interview. These are identified as statistical outliers, and question level data is used (rather than total interview time). This ensures routing and breaks from the interview are taken into account when identifying outliers. Also includes 'grid speeders' who speed through repeated question sets.		
Telephone survey	At the 2022 wave participants could choose to take part over the telephone. 1.3% of all interviews were completed over the		

Term	Definition	
	telephone. The questionnaire was the same as that delivered online, with some modifications such as interviewer instructions, and participants being eligible for fewer sections in order to keep the total length down.	
Validation or data validation	An umbrella term covering various checks for invalid interview cases which we might want to remove. The checks include those for speeders, grid speeders and duplicate survey completions	
Weighting efficiency	This provides the amount of distortion needed to arrive at the weighted figures – i.e. how much the data is manipulated by the weighting. This percentage is a measure of how much "work" the weights have to do to bring the profile of respondents in line with the relevant population.	

Appendix A: Populations and bases

The table below provides the population descriptions for each of the questionnaire sections for which results in the given section are reported. The eligibility criteria for each questionnaire section based on the online survey structure are also included. See Figure 4.1: Questionnaire structure diagram and Chapter 4: Survey design for more information on this.

Section of the questionnaire	Population represented for reporting purposes (short form in bold)	Respondents eligible for each section or discrete set of questions: based on the online survey
1 and 18 Demographics (opening and closing)	All UK adults	All respondents
2 Attitudes	All UK adults	 All respondents, except 1 in N for: AT22 Intro to AT15(Automated decision making and Big Tech) A2p & A2d-e,g-k,m (Attitudes to financial advice)

Section of the questionnaire	Population represented for reporting purposes (short form in bold)	Respondents eligible for each section or discrete set of questions: based on the online survey
3 Product Ownership	All UK adults	All respondents, except for Dependent 1 in N for RI19a to RI25 (Consumer Investment problems and complaints), 1 in N for P_CC21 to P_CC80 (Credit Information) and 1 in N for IT1 (IT Disruption) Eligibility: P_RIDV1=19 Note Section 3 is split into eight sub- sections: 3.1 Retail Banking 3.1a Payments 3.2 Consumer Investments (Dependent 1 in N for RI19a to RI25) 3.3 Mortgages 3.4 Credit & Loans (1 in N for P_CC21 to P_CC80) 3.5 General Insurance & Protection 3.6 Pension Accumulation and Decumulation 3.7 Screener questions for: Access, Fraud and Scams, and Claims Management Companies (1 in N for IT1)
4 Assets & Debts	All UK adults	All respondents
5 Advice & Guidance – Incidence	All UK adults	All respondents

Section of the questionnaire	Population represented for reporting purposes (short form in bold)	Respondents eligible for each section or discrete set of questions: based on the online survey
6 Retail Banking	All UK adults with a main day- to-day account, i.e. an account used for day-to- day payments and transactions, that is one of: a current account, a current account with an e- money institution, a savings account (with a bank, building society or NS&I), a credit union savings account or a Post Office card account	Random selection (using an RSP) of all respondents with a main day-to-day account Eligibility: RB2=1-5
7 Mortgages	All UK adults with a first charge residential mortgage on the property in which they live currently	Ask all telephone and random selection online (using an RSP) of all respondents with a first charge residential mortgage on the property in which they live currently i.e. Eligibility: P_M1_DV=1

8 Credit & Loans 2	All UK adults using (FCA- regulated) credit, i.e. who have one or more of the following forms of credit or loan now or have had these in the last 12 months in their own or, where relevant, in joint names: credit card (revolvers and transactors), store card (revolvers and transactors), catalogue credit (revolvers and transactors), catalogue credit (revolvers and transactors), personal loan (including personal loan to buy a vehicle), motor finance, retail finance hire purchase – including rent-to- own and other hire purchase, other retail finance, pavday loan short	Random selection (using an RSP) of all respondents who have one or more of following forms of FCA-regulated credit now or have had these in the last 12 months in their own or, where relevant, in joint names, i.e. Credit card (revolvers and transactors): $P_CC3_1=1$ or $P_CC4_1=1$ Store card (revolvers and transactors): $P_CC3_2=1$ or $P_CC4_2=1$ Catalogue credit and shopping accounts (revolvers and transactors): $P_CC3_5=1$ or $P_CC4_5=1$ Personal loan or personal loan to buy a vehicle: $P_CC5_DV=9$ or $P_CC6_DV=9$ or $P_CC8a=3$ Motor finance arranged with hire purchase (HP) or personal contract purchase (PCP) or conditional sale: $P_CC7=1$ Motor finance using a loan or other form of credit from a vehicle dealer or manufacturer: $P_CC8a=1$ Motor finance using a loan or other form of credit from a motor finance specialist: $P_CC8a=2$ Retail finance hire purchase – including rent-to-own and other hire purchase: $P_CC3_4_DV=1-2$ or $P_CC4_4_DV=1-2$
purchase – including rent-to- own and other hire purchase, other	purchase – including rent-to- own and other hire purchase, other retail finance, payday loan, short- term instalment loan, credit union loan, CDFI loan, home-collected loan, pawnbroking, peer-to-peer loan,	P_CC8a=2 Retail finance hire purchase – including rent-to-own and other hire purchase: P_CC3_4_DV=1-2 or P_CC4_4_DV=1-2 Other retail finance (i.e. instalment credit): P_CC3_4_DV=3 or
		P_CC4_4_DV=3 Payday loan (single payment): P_CC5_DV=7 or P_CC6_DV=7 Short-term instalment loan:
	P_CC5_DV=8 or P_CC6_DV=8 Credit union loan: P_CC5_DV=2 or P_CC6_DV=2	

Section of the questionnaire	Population represented for reporting purposes (short form in bold)	Respondents eligible for each section or discrete set of questions: based on the online survey
		Community development finance institution (CDFI) loan: P_CC5_DV=15 or P_CC6_DV=15
		Home-collected loan: P_CC5_DV=6 or P_CC6_DV=6
		Pawnbroking loan: P_CC5_DV=5 or P_CC6_DV=5
		Peer-to-peer loan: P_CC5_DV=3 or P_CC6_DV=3
		Logbook loan: P_CC5_DV=4 or P_CC6_DV=4 Eligibility alternative: CC_DV4=1-18
Section of the questionnaire	Population represented for reporting purposes (short form in bold)	Respondents eligible for each section or discrete set of questions: based on the online survey
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9 High-cost Credit	All UK adults [with a pawnbroking loan/ with a home-collected loan/ with a payday loan or short-term instalment loan/ revolving a catalogue credit or shopping account balance] now (or have held in the last 12 months) in their own or, where relevant, in joint names and have taken out that product in the last 12 months (or last 3 years for catalogue credit) Reporting is on a product-by-product basis only.	All respondents who hold now (or in the last 12 months) in their own or, where relevant, in joint names at least one of these high-cost credit products taken out in the given period, i.e. Pawnbroking loan: P_CC18>0 or DK Home-collected loan: P_CC16>0 or DK Payday loan (single payment) or short- term instalment loan: (P_CC22a>0 or DK) or (P_CC22b>0 or DK) Catalogue credit and shopping accounts (revolvers): CC1b=3 Alternative: HCC_DV1=1-4

Section of the questionnaire	Population represented for reporting purposes (short form in bold)	Respondents eligible for each section or discrete set of questions: based on the online survey
10 Credit & Loans 1	All UK adults [revolving a credit card balance/ with motor finance/ with a personal loan or a personal loan to buy a vehicle] now (or have held in the last 12 months) in their own or, where relevant, in joint names and have taken out that product in the last 12 months (or last 3 years for credit cards) Reporting is on a product-by-product basis only.	Ask all telephone and random selection online (using an RSP) of all respondents who hold now (or in the last 12 months) in their own or, where relevant, in joint names at least one of these credit products taken out in the given period, i.e. Credit card (revolvers): CCRev1=1 Motor finance arranged with hire purchase (HP), personal contract purchase (PCP) or conditional sale: CC1=1 Personal loan or personal loan to buy a vehicle: (P_CC22c>0 or DK) or CC1=7

Section of the questionnaire	Population represented for reporting purposes (short form in bold)	Respondents eligible for each section or discrete set of questions: based on the online survey
	insurance, mobile phone insurance, pet insurance, extended warranty, gadget insurance, credit card protection, Guaranteed Asset Protection insurance (GAP), high value items insurance (and non-standard items not covered by another policy), ID theft insurance, life insurance, private medical insurance (PMI), healthcare cash plans (including dental), critical illness cover, personal accident insurance, income protection insurance, pre-paid funeral plan, payment protection insurance (PPI), Mortgage Protection Insurance (MPPI), unemployment/ redundancy insurance, long- term care insurance plan, immediate needs annuity	Private medical insurance (PMI): P_GI9DV=1 Healthcare cash plans (including dental): P_GI9DV=2 Critical illness cover: P_GI9DV=5 Personal accident insurance: P_GI9DV=3 Income protection insurance: P_GI9DV=6 Pre-paid funeral plan: P_GI9DV=10 Payment protection insurance (PPI): P_GI6_DV=5 Mortgage protection insurance (MPPI): P_GI6_DV=6 Unemployment/ redundancy insurance: P_GI6_DV=7 Long-term care insurance: P_GI9DV=7 Over 50s insurance plan: P_GI9DV=9 Immediate needs annuity: P_GI9DV=8 Alternative: P_GI1d=1-30

Section of the questionnaire	Population represented for reporting purposes (short form in bold)	Respondents eligible for each section or discrete set of questions: based on the online survey
12 Pension Accumulation	All UK adults with a DC pension in accumulation, i.e. one or more defined contribution (DC) pension(s) that have not yet been accessed (These adults may also have had other DC pensions that they have accessed)	Random selection (using an RSP) of all respondents with at least one DC pension scheme that has not been decumulated at all i.e. Eligibility: P_ACDV7=3 If a respondent does not know whether a pension scheme to which they are currently contributing is a DB (final salary) scheme or a DC (money purchase) scheme and the scheme is arranged by an employer, providing they are not contributing to a large well- known DB scheme, we make the assumption that their pension is a DC scheme. See P_AC8_DV where we make the following allocation: P_AC8check=9,10 or (P_AC8=3 and P_AC4>1 or DK BUT >1). We make the same assumption for schemes to which no contributions are being made. See P_AC8a_DV where we make the following allocation: P_AC8acheck=9,10 or (P_AC8a=3 and P_AC4>1 or DK BUT >1).
		These assumptions are incorporated into P_ACDV7.

Section of the questionnaire	Population represented for reporting purposes (short form in bold)	Respondents eligible for each section or discrete set of questions: based on the online survey
14 Pension Decumulation	All UK adults aged 50 or over who have accessed a DC pension in the last 4 years, i.e. have bought an annuity, entered into income drawdown or UFPLS (i.e. taken cash out of their pension and left the remainder invested), or fully encashed one or more defined contribution (DC) pensions, or accessed a DC pension but not sure how.	Random selection (using an RSP) of all respondents aged 50+ who decumulated a DC pension in the last 4 years in one of these ways (by buying an annuity, taking cash out of their pension and leaving the remainder invested, taking it all as cash or accessing their pension but not sure how) i.e. Eligibility: P_DEC5=1,2,4 OR 5

Section of the questionnaire	Population represented for reporting purposes (short form in bold)	Respondents eligible for each section or discrete set of questions: based on the online survey
15 Advice & Guidance - which contains 2 elements I Suppo Guidance - which contains 2 elements I Suppo Need i have ii assets or mor at leas a DC p a plan	Advice 1: All UK adults who have had regulated financial advice in last 12 months related to investments, saving into a pension and/ or retirement planning	Advice 1: All respondents (telephone) and 1 in N (online) who have had financial advice in the last 12 months i.e. Eligibility: DV1=1
	Advice 2: All UK adults who have not had regulated financial advice in last 12 months related to investments, saving into a pension and/ or retirement planning, but might need support Need is defined as:	Advice 2: Random selection (using an RSP) of all respondents who have not had regulated financial advice in last 12 months related to investments, saving into a pension and/ or retirement planning, but might need support i.e.
		Eligibility: DV1=2 We do not count 'free advice' as regulated financial advice – only advice that is given by a regulated adviser that is paid for. Respondents claiming to have had free advice from a regulated financial adviser in the last 12 months were not eligible for the Advice 2
	have investible assets of £10,000 or more; or have at least £10,000 in a DC pension, <u>and</u> a plan to retire or to access a DC pension in the next 2 years	section.

Section of the questionnaire	Population represented for reporting purposes (short form in bold)	Respondents eligible for each section or discrete set of questions: based on the online survey
16 Financial Concepts – Numeracy	All UK adults	All respondents
17.1 Non-advised Platforms	All UK adults using a D2C investment platform, i.e. they have a retail investment product, a DC pension in accumulation, or are aged 50 or over with a DC pension in income drawdown – on a D2C platform (that is a platform they manage themselves – not via a financial adviser)	All respondents who have at least one of the following on a D2C platform), i.e.: Retail investment product: P_RI8A=1 DC pension in accumulation: P_AC15A=1 DC pension in income drawdown (and aged 50+): P_DEC6A=1 Eligibility: P_RI8A=1 OR P_AC15A=1 OR P_DEC6A=1

Section of the questionnaire	Population represented for reporting purposes (short form in bold)	Respondents eligible for each section or discrete set of questions: based on the online survey
17.9 Access	All UK adults who have been declined a financial product or service in the last 2 years OR All UK adults who have been offered a financial product or service in the last 2 years at a price or with terms and conditions, felt to be completely unreasonable	Ask all (telephone) and 1 in N (online) of all respondents who have answered as follows at the screener questions Eligibility: AC1NEW=1-20 OR AC7=1-20 (BEEN DECLINED A PRODUCT OR OFFERED A PRODUCT AT UNFAIR TERMS OR CONDITIONS (which are in Section 3.7): While 17.2 is only answered by a random selection of these respondents, the screener questions asked of all give us our starting population of all UK adults

Section of the questionnaire	Population represented for reporting purposes (short form in bold)	Respondents eligible for each section or discrete set of questions: based on the online survey
17.4 Unbanked	All UK adults who are unbanked, i.e. they do not have a personal current account (or don't know if they have a personal current account) or an e-money alternative account Under current account we include accounts from a bank or building society, a Post Office current account, or a credit union current account	All respondents who are unbanked, i.e. P_RB1=2 and P_RBDV1 NE 7 Eligibility: P_RB1DV=2 AND P_RBDV1 NE 7

Section of the questionnaire	Population represented for reporting purposes (short form in bold)	Respondents eligible for each section or discrete set of questions: based on the online survey
17.5 Savings	Some questions are asked about each of the products in blue – reporting for these questions is on a product-by-product basis only. Otherwise, the population is: All UK adults with a savings account with a bank or building society or with National Savings and Investments (NS&I), a credit union savings account, an NS&I bond, or a cash ISA	A random selection (using an RSP) of all respondents with a savings account, i.e. Savings account with a bank or building society or with National Savings and Investments (NS&I): P_RBDV1=2 National Savings and Investment (NS&I) bond: P_RBDV1=5 Credit union savings account: P_RBDV1=6 Cash ISA: P_RB3=1
17.12 Awareness of the FCA	All UK adults	Random selection (1 in N) of all respondents
17.7 Pre-paid Funeral Plans	All UK adults with a pre-paid funeral plan	All respondents that hold a pre- paid funeral plan Eligibility: P_GI8_DV=10

Section of the questionnaire	Population represented for reporting purposes (short form in bold)	Respondents eligible for each section or discrete set of questions: based on the online survey
17.2 High-risk Investments	 All UK adults who hold one or more high risk investment products. This includes: Shares in an unlisted company or companies Investment-based crowdfunding Peer-to-peer lending SHOW Innovative Finance ISA (IFISA) Cryptocurrencies or cryptoassets, e.g. Bitcoin, Ether and NFTs Mini bond (also known as high interest returning bond) Contract for Difference 	Ask all telephone and random selection online (using an RSP) of all respondents who qualify Eligibility: P_RIDV1=24
17.6 Payments	All UK adults	Random selection (1 in N) of all respondents

Section of the questionnaire	Population represented for reporting purposes (short form in bold)	Respondents eligible for each section or discrete set of questions: based on the online survey
17.11 Buying products online	All UK adults who have any financial products and used the internet before today or don't know when last used internet or get support using the internet	Random selection (1 in N) of respondents who qualify Eligibility: SEE CODES 1-8 ²⁴ AT ON2 AND D16aDV NE 4 OR D20a NE 1
17.3 Responsible investments	All UK adults	Random selection (1 in N) of all respondents
17.8 Deferred Payment Credit	All UK adults who used any buy now, pay later payment service, where they never pay any interest but defer or split payments, in the last 12 months	Ask all telephone and random selection online (using an RSP) of all respondents who qualify Eligibility: P_CC70=1
17.10 Communication problems	All UK adults who have any financial products	Random selection (1 in N) of all respondents who qualify Eligibility: SEE CODES 1-8 ²²

- 4. P_DEC1=1 OR P_ACDV7=2,3
- 5. P_M1_DV=1,2 OR P_M1c=1 OR P_M2=1-3

²⁴ Buying products online eligibility – codes 1-8 at ON2

^{1.} P_RBDV1=1,7

^{2.} P_RBDV1=2,4-6 OR P_RB3=1,4 OR P_RB3b=1,3

^{3.} P_RIDV1=19

 ^{6.} P_CC3_2=1 OR P_CC4_2=1 OR P_CC3_1=1 OR P_CC4_1=1 OR P_CC1=1 OR P_CC1a=1 OR ((P_CC3_4_DV=1 OR P_CC4_4_DV=1) AND P_CC7 NE 1) OR P_CC3_4_2=1 OR P_CC4_4_2=1 OR P_CC8a=3 OR P_CC5_DV=9 OR P_CC6_DV=9 OR P_CC7=1 OR P_CC8a=1, 2 OR P_CC3_5=1 or P_CC4_5=1 OR P_CC3_4_DV=3 or P_CC4_4_DV=3 OR P_CC5_DV=4 or P_CC6_DV=4 OR P_CC5_DV=8 or P_CC6_DV=8 OR P_CC5_DV=2 or P_CC6_DV=2 OR P_CC5_DV=15 or P_CC6_DV=15 OR P_CC5_DV=6 or P_CC6_DV=6 OR P_CC5_DV=5 or P_CC6_DV=5 OR P_CC5_DV=3 or P_CC6_DV=3 OR IF P_CC5_DV=7 OR P_CC6_DV=7

^{7.} P_GI1d=1-14,18,19,23

^{8.} P_GI1d=15-17,20-22,24-30

Appendix B: Weighting guide

Description	Grossed weight name	Gross weight application	Scaled weight name	Scaled weight application	Base for grossed weights (base for scaled weights are those completing the relevant section of the questionnaire)
Individual level grossed weight	IndvW3_G	For use with Ask All sections (gross weights)	IndvW3_N	For use with Ask All sections (profile weights)	All UK adults
RSP Weight: Savings	Wt_RSP_Savings_W3_G	RSP Weights grossed to population of those eligible for: Savings	Wt_RSP_Savings_W3_N	RSP Weights scaled to those completing RSP: Savings	All UK adults with a savings account with a bank or building society or with National Savings and Investments (NS&I), a credit union savings account, an NS&I bond, or a cash ISA
RSP Weight: General Insurance & Protection	Wt_RSP_GIP_W3_G	RSP Weights grossed to population of those eligible for: General Insurance & Protection	Wt_RSP_GIP_W3_N	RSP Weights scaled to those completing RSP: General Insurance & Protection	All UK adults with general insurance or protection products

RSP Weight: Pension Accumulation	Wt_RSP_PAcc_W3_G	RSP Weights grossed to population of those eligible for: Pension Accumulation	Wt_RSP_PAcc_W3_N	RSP Weights scaled to those completing RSP: Pension Accumulation	All UK adults with a DC pension in accumulation
RSP Weight: Pension Decumulation	Wt_RSP_Dec_W3_G	RSP Weights grossed to population of those eligible for: Pension Decumulation	Wt_RSP_Dec_W3_N	RSP Weights scaled to those completing RSP: Pension Decumulation	All UK adults who have accessed a DC pension in the last 4 years
RSP Weight: High- risk Investments	Wt_RSP_HRI_W3_G	RSP Weights grossed to population of those eligible for: High-risk Investments	Wt_RSP_HRI_W3_N	RSP Weights scaled to those completing RSP: High-risk Investments	All UK adults who hold one or more of the following investment products: shares in an unlisted company or companies, investment-based crowdfunding, peer-to-peer lending, Innovative Finance ISA (IFISA), Cryptocurrencies or crypto assets, mini bonds, Contract for Difference (CFD)
RSP Weight: Credit & Loans 1	Wt_RSP_CC1_W3_G	RSP Weights grossed to population of those eligible for: Credit & Loans 1	Wt_RSP_CC1_W3_N	RSP Weights scaled to those completing RSP: Credit & Loans 1	All UK adults revolving a credit card balance or with motor finance or with a

					personal loan or a personal loan to buy a vehicle now (or have held in the last 12 months) who have taken out that product in the last 12 months (or last 3 years for credit cards).
RSP Weight: Retail Banking	Wt_RSP_RetailBanking_W3_G	RSP Weights grossed to population of those eligible for: Retail Banking	Wt_RSP_RetailBanking_W3_N	RSP Weights scaled to those completing RSP: Retail Banking	All UK adults with a day-to-day account
RSP Weight: Credit & Loans 2	Wt_RSP_CC2_W3_G	RSP Weights grossed to population of those eligible for: Credit & Loans 2	Wt_RSP_CC2_W3_N	RSP Weights scaled to those completing RSP: Credit & Loans 2	All UK adults using credit
RSP Weight: Advice & Guidance 2	Wt_RSP_Adv2_W3_G	RSP Weights grossed to population of those eligible for: Advice & Guidance 2	Wt_RSP_Adv2_W3_N	RSP Weights scaled to those completing RSP: Advice & Guidance 2	All UK adults who have not had financial advice in last 12 months, but might need support
RSP Weight: Deferred Payment Credit	Wt_RSP_DPC_W3_G	RSP Weights grossed to population of those eligible for: Deferred Payment Credit	Wt_RSP_DPC_W3_N	RSP Weights scaled to those completing RSP: Deferred Payment Credit	All UK adults who used any buy now, pay later payment service, where they never pay any interest but defer or split payments, in the last 12 months

RSP Weight: Mortgages	Wt_RSP_Mortgages_W3_G	RSP Weights grossed to population of those eligible for: Mortgages	Wt_RSP_Mortgages_W3_N	RSP Weights scaled to those completing RSP: Mortgages	All UK adults with a mortgage
1 in N Weight: AT14, AT15, AT22INTO, AT23, AT22	WT_1inN_AT14_AT15_W3_G		WT_ 1inN_AT14_AT15_W3_N		
1 in N Weight: A2d-e, g-k, m, A2p	WT_1inN_A2d_W3_G]	WT_ 1inN_A2d_W3_N]	
1 in N Weight: Credit Information	WT_1inN_Cred_info_W3_G		WT_ 1inN_Cred_info_W3_N		
1 in N Weight: IT Disruption	WT_1inN_IT_disr_W3_G	1 in N Weight grossed to total UK population	WT_ 1inN_IT_disr_W3_N		All UK adults
1 in N Weight: Responsible Investments	WT_1inN_Rspon_inv_W3_G		WT_ 1inN_Rspon_inv_W3_N		
1 in N Weight: Payments	WT_1inN_Payments_W3_G		WT_ 1inN_Payments_W3_N		
1 in N Weight: Awareness of the FCA	WT_1inN_FCA_W3_G		WT_ 1inN_FCA_W3_N		
Product Weight: Credit & Loans 1: Credit Card	Wt_Product_CC1_CreditCard_W3_G	Product Weights: Grossed to population of those who hold that product	Wt_Product_CC1_CreditCard_W3_N	Product Weights: Scaled to those answering that product section	All UK adults who have or have had a credit card in the last 12 months for which a balance is revolved, and have taken out a credit card in the last 3 years that they revolve a balance on

Product Weight: Credit & Loans 1:Motor Finance	Wt_Product_CC1_MotoFinance_W3_G	Wt_Product_CC1_MotoFinance_W3_N	All UK adults who hold motor finance (now or in the last 12 months) arranged with hire purchase (hp), personal contract purchase (pcp), or conditional sale, and took out the finance in the last 12 months
Product Weight: Credit & Loans 1:Personal Loan	Wt_Product_CC1_PersonalLoan_W3_G	Wt_Product_CC1_PersonalLoan_W3_N	All UK adults who hold a personal loan (now or in the last 12 months) and took out one or more in the last 12 months (or don't know how many they took out in the last 12 months); or those who hold a personal loan to buy a motor vehicle and took out that loan in the last 12 months
Product Weight: General Insurance & Protection: Motor Insurance	Wt_Product_GIP_MotorInsurance_W3_G	Wt_Product_GIP_MotorInsurance_W3_N	All UK adults who hold motor insurance

Product Weight: General Insurance & Protection: Home Contents & Buildings Insurance	Wt_Product_GIP_HomeCombined_W3_G	Wt_Product_GIP_HomeCombined_W3_N	All UK adults who hold home contents and buildings insurance (combined)
Product Weight: General Insurance & Protection Home Contents only	Wt_Product_GIP_HomeContents_W3_G	Wt_Product_GIP_HomeContents_W3_N	All UK adults who hold home contents insurance
Product Weight: General Insurance & Protection: Multi- trip travel	Wt_Product_GIP_TravelMulti_W3_G	Wt_Product_GIP_TravelMulti_W3_N	All UK adults who hold multi-trip travel insurance
Product Weight: General Insurance & Protection: Pet insurance	Wt_Product_GIP_Pet_W3_G	Wt_Product_GIP_Pet_W3_N	All UK adults who hold pet insurance
Product Weight: General Insurance & Protection: Single-trip travel	Wt_Product_GIP_TravelSingle_W3_G	Wt_Product_GIP_TravelSingle_W3_N	All UK adults who have taken out a single trip travel insurance policy in the last 12 months
Product Weight: General Insurance & Protection: Life insurance	Wt_Product_GIP_Life_W3_G	Wt_Product_GIP_Life_W3_N	All UK adults who hold life insurance
Product Weight: Savings: Savings Account	Wt_Product_Savings_SavingsAccount_W3_G	Wt_Product_Savings_SavingsAccount_W3_N	All UK adults who have a savings account
Product Weight: Savings: Cash ISA	Wt_Product_Savings_CashISA_W3_G	Wt_Product_Savings_CashISA_W3_N	All UK adults who have a cash ISA
Product Weight: High-cost Credit: Catalogue Credit	Wt_Product_HCC_CatalogueCredit_W3_G	Wt_Product_HCC_CatalogueCredit_W3_N	All UK adults who hold (now or in the last 12

and shopping accounts			months) catalogue credit for which a balance is revolved and took out a catalogue credit account in the last 3 years
Product Weight: High-cost Credit: Pawnbroking	Wt_Product_HCC_Pawnbroking_W3_G	Wt_Product_HCC_Pawnbroking_W3_N	All UK adults who hold (now or in the last 12 months) pawnbroking loan and taken out one or more pawnbroking loans in the last 12 months or don't know how many taken out
Product Weight: High-cost Credit: Home-collected Loan	Wt_Product_HCC_HomeLoan_W3_G	Wt_Product_HCC_HomeLoan_W3_N	All UK adults who hold (now or in the last 12 months) home- collected loan and taken out one or more home- collected loans in the last 12 months or don't know how many taken out
Product Weight: High-cost Credit: Payday Loan	Wt_Product_HCC_PaydayLoan_W3_G	Wt_Product_HCC_PaydayLoan_W3_N	All UK adults who hold (now or in the last 12 months) a payday loan or short-term

					instalment loan and taken out one or more of these loans in the last 12 months or don't know how many taken out
Dependent 1 in N Weight: Communication Problems	WT_Dep1inN_Cons_Duty_W3_G		WT_Dep 1inN_Cons_Duty_W3_N		All UK adults who have any financial products
Dependent 1 in N Weight: Retail Investments Problems and Complaints	WT_Dep1inN_RetInv_PC_W3_G	Dependent 1 in N Weights: Grossed to the relevant	WT_Dep 1inN_RetInv_PC_W3_N	Dependent 1 in N Weight scaled to	All UK adults who hold any investment product, excluding those who only hold investment property and other real investments
Dependent 1 in N Weight: Buying Products Online	WT_Dep1inN_Buy_online_W3_G	eligible population	WT_Dep 1inN_Buy_online_W3_N	those answering the relevant section	All UK adults who have any financial products and use the internet
Dependent 1 in N Weight: Advice & Guidance 1	WT_Dep1inN_Advice1_W3_G		WT_Dep 1inN_Advice1_W3_N		All UK adults who have had regulated financial advice in last 12 months
Dependent 1 in N Weight: Access	WT_Dep1inN_Access_W3_G		WT_Dep 1inN_Access_W3_N		All UK adults who have been declined a financial product or service in the last 2 years

					OR All UK adults who have been offered a financial product or service in the last 2 years at a price or with terms and conditions, they felt to be completely unreasonable
Special Weight: CD13-14	wt_Special_CD1314_W3_G		wt_Special_CD1314_W3_N		All UK adults who have any financial products
Special Weight: D51-D54	wt_Special_D51_W3_G		wt_Special_D51_W3_N		All UK adults
Special Weight: B18	wt_Special_B18_W3_G	Special Weight: Grossed to the relevant eligible population	wt_Special_B18_W3_N	Special Weight: Scaled to those answering the relevant question/s	All UK adults with any consumer credit product held now or in the last 12 months including balances revolved on credit and/or store cards, excluding transactors only
Special Weight: P20d	wt_Special_P20d_W3_G		wt_Special_P20d_W3_N		All UK adults who have one or more DC pension scheme that has not been decumulated and recall receiving at least one annual statement in the last 12 months

Special Weight: RB68c, RB20c	wt_Special_RB68c_W3_G	wt_Spe	cial_RB68c_W3_N	All UK adults who have a current account with an e-money account provider
Special Weight: RB102, RB102NEW	wt_Special_RB102_W3_G	wt_Spe	cial_RB102_W3_N	All UK adults who save
Special Weight: DPC7	wt_Special_DPC7_W3_G	wt_Spe	cial_DPC7_W3_N	All UK adults who used any buy now, pay later payment service, where they never pay any interest but defer or split payments, in the last 12 months

Appendix C: Invitation and reminder letters

Invitation letters

Soft launch: Letter type 1 0 Ι__ CA CONDUCT The Residents <add1> <add2> <add3> <Dates <add4> Your reference <hhidserial><ChkLet_hh><LExp> <add5> <postcode> The Financial Lives survey: Your views are important to us Dear Sir/Madam. I would like to invite up to three adults (aged 18 or over) in your household to take part in the Financial Lives survey. This is an important national survey for the Financial Conduct Authority, which is here to protect people who use services like bank accounts, pensions, loans and insurance, or who are not able to get these. We are interested in your attitudes towards money and your experience of different financial services. Your answers are hugely valuable in helping the FCA to protect consumers. So, it's important we hear from a wide range of people, including those who do not have any financial products or any experience of financial services. By taking part, you can help to ensure that we focus on the issues important to you. 0 0 Each person who completes the survey will receive a £10 gift voucher as a thank you. It's easy to have your say. Please go to survey.natcen.ac.uk/finlives and log in using one of the access codes provided below. If you are unable to complete the survey online yourself, you can phone us for free on 0800 652 4568 to arrange to do the survey over the phone at a time that works for you. Or you could ask a family member or a friend to assist you to complete it online. Person 3 Person 1 Person 2 ccessCode3> AccessCode1> ccessCode2> Please complete the survey by <advance_date>. Thank you in advance for your help. Yours faithfully, 41 Charlie Gluckman Head of Consumer Research, Financial Conduct Authority This survey is being carried out on behalf of the FCA by NatCen Social Research, an independent organisation. If you would like to talk to someone about the survey, please contact NatCen by email or telephone. financiallives.survey@natcen.ac.uk | Freephone: 0800 652 4568 If you have any queries, you can also call the FCA's Contact Centre on 0800 111 6768. Please see overleaf for Frequently Asked Questions. 0

Soft launch: Letter type 2



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Batch 1
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<text><text><text><text><complex-block><complex-block><text><text><text><text><text></text></text></text></text></text></complex-block></complex-block></text></text></text></text>	I would like to invite up to t survey. This is an important	t national survey for the Financial Conduct	Authority, which is here to protect people
provided below. Person 1 AccessCode1> Person 2 AccessCode2> Person 3 AccessCode3> Person 4 AccessCode3> Person 4 AccessCode3> Person 4 AccessCode3> Person 4 AccessCode3> Person 4 AccessCode3> Person 4 AccessCode3> Person 4 AccessCode3>	We are interested in your att are hugely valuable in helpin including those who do not can help to ensure that we	Itudes towards money and your experience of g the FCA to protect consumers. So, it's importance of the format and the second sec	of different financial services. Your answers what we hear from a wide range of people, ice of financial services. By taking part, you
AccessCode1> AccessCode2> AccessCode2> AccessCode2> AccessCode3> AccessCode3 AccessCode3>		lease go to survey.natcen.ac.uk/finlives a	and log in using one of the access codes
It is vital that people who cannot access the internet, or find it difficult to use, also have their voices heard. If you cannot take part online, please call for free on 0800 652 4568 to arrange to do the survey by phone at a time that works for you. Alternatively, you can ask a family member or friend to help you to do the survey online. Please complete the survey by cadvance_dates. Thank you in advance for your help. Yours faithfully. Yours faithfully. Thank you in advance for your help. Yours faithfully. Thank you is advance for your help. Yours faithfully. The fourth of Consumer Research, Financial Conduct Authority. This survey is being carried out on behalf of the FCA by NatCen Social Research, an independent organisation. If you would like to talk to someone about the survey, please contact NatCen by email or telephone. financiallives.survey@natcen.ac.uk Freephone: 0800 652 4568			
cannot take part online, please call for free on 0800 652 4568 to arrange to do the survey by phone at a time that works for you. Alternatively, you can ask a family member or friend to help you to do the survey online. Please complete the survey by advance_dates.com . Thank you in advance for your help. Yours faithfully. Yours faithfully. This survey is being carried out on behalf of the FCA by NatCen Social Research, an independent organisation. If you would like to talk to someone about the survey, please contact NatCen by email or telephone. financiallives.survey@natcen.ac.uk Freephone: 0800 652 4568	Need assistance?		
Thank you in advance for your help. Yours faithfully, Charlie Gluckman Head of Consumer Research, Financial Conduct Authority This survey is being carried out on behalf of the FCA by NatCen Social Research, an independent organisation. If you would like to talk to someone about the survey, please contact NatCen by email or telephone. financiallives.survey@natcen.ac.uk Freephone: 0800 652 4568	cannot take part online, ple	ase call for free on 0800 652 4568 to arrar	ige to do the survey by phone at a time
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If you have any queries, you can also call the FCA's Contact Centre on 0800 111 6768, or see overleaf for FAQs.	If you have any queries, you	can also call the FCA's Contact Centre on I	0800 111 6768, or see overleaf for FAQs.

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	FINANCIAL LIVES 2022					
	The Residents <add1> <add2></add2></add1>					
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	The Financial Lives survey: Your views are important to us					
	Dear Sir/Madam, I would like to invite up to three adults (aged 18 or over) in your household to take part in the Financial Lives survey. This is an important national survey for the Financial Conduct Authority, which is here to protect people who use services like bank accounts, pensions, loans and insurance, or who are not able to get these.					
	We are interested in your attitudes toky, patiently and your experience of different financial services. Your answers are hugely valuable in helping the FCA to protect consumers. So, it's important we hear from a wide range of people, including those who do not have any financial products or any experience of financial services. By taking part, you can help to ensure that we focus on the issues important to you.					
	Each person who completes the survey will receive a £10 gift voucher as a thank you. It's easy to have your say. Please go to survey.natcen.ac.uk/finlives and log in using one of the access codes provided below.					
	Person 1 Person 2 Person 3 <accesscode1> AccessCode2></accesscode1>					
	Taking part by phone It is vital that people who cannot access the internet, or find it difficult to use, also have their voices heard. If you cannot take part online, please call for free on 0800 652 4568 to arrange to do the survey by phone at a time that works for you.					
	That works for you. Alternatively, you can ask a family member or friend to help you to do the survey online.					
	Please complete the survey by <advance_date>. Thank you in advance for your help. Yours faithfully,</advance_date>					
	C. G.					
	Charlie Gluckman Head of Consumer Research, Financial Conduct Authority					
	This survey is being carried out on behalf of the FCA by NatCen Social Research, an independent organisation. If you would like to talk to someone about the survey, please contact NatCen by email or telephone.					
	financiallives.survey@natcen.ac.uk Freephone: 0800 652 4568 If you have any queries, you can also call the FCA's Contact Centre on 0800 111 6768, or see overleaf for FAQs.					
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Reminder letters

Soft launch

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	The Residents				
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	The Financial Lives survey: Your views are important to us				
	Dear Sir/Madam,				
	I recently invited up to three adults (aged 18 or over) in your household to take part in the Financial Lives survey. This is an important national survey for the Financial Conduct Authority, which is here to protect people when it comes to money and when using services like bank accounts, pensions, loans and insurance.				
	It would help us greatly, if up to 3 adults in your household who haven't yet taken part in the survey could do so.				
	We are interested in your attitudes towards money and your experience of different financial services. Your answers are hugely valuable in helping the FCA to protect consumers. By sharing your views with us, you will be helping us to make sure we focus on the issues important to you.				
	Each person who completes the survey will receive a £10 gift voucher as a thank you.				
	To fill in the questionnaire online please go to survey.natcen.ac.uk/finlives and log in using one of the access codes provided below.				
	Person 1 Person 2 Person 3 <accesscode2> Person 3 <accesscode3></accesscode3></accesscode2>				
	If you are unable to complete the survey online yourself, you can ask a family member or a friend to assist you. Alternatively, you can phone us for free on 0800 652 4568 to arrange to do the survey over the phone at a time that works for you.				
	Please complete the survey by <reminder_date>. Thank you in advance for your help. Yours faithfully.</reminder_date>				
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	Charlie Gluckman Head of Consumer Research, Financial Conduct Authority				
This survey is being carried out on behalf of the FCA by NatCen Social Research, an independent organisation. If you would like to talk to someone about the survey, please contact NatCen by email or telephone. financiallives.survey@natcen.ac.uk Freephone: 0800 652 4568					
	If you have any queries, you can also call the FCA's Contact Centre on 0800 111 6768.				
	Please see overleaf for Frequently Asked Questions.				

Batch 1



Batch 2



Appendix D: 'Sources of support' letter

NatCen

Social Research that works for society

The Resident



Your reference: P15919/00000000

Financial Lives survey: Thank You

Dear Participant,

Many thanks for taking the time to take part in the Financial Lives survey. Your responses will help to ensure that the FCA is able to protect people when it comes to money and when using services like bank accounts, pensions, loans and insurance.

Given the nature of the questionnaire, sometimes sensitive issues and topics are included. If you feel you've been affected by any of the issues covered in the questionnaire or would like further information or advice you may find some of the following resources helpful. You can find other helpful organisations listed on our website, here: https://natcen.ac.uk/taking-part/studies-in-field/financial-lives-survey/help-and-support/

For emotional support: Samaritans

Phone (English language): 116123 Phone (Welsh language): 0808 164 0123 Website: <u>samaritans.org</u>

SupportLine Phone (English language): 01708 765200 Website: supportline.org.uk

For financial queries: Debt advice

StepChange Debt Charity Phone: 0800 138 1111 Website: stepchange.org

Useful contacts

MoneyHelper (formerly Money Advice Service)

Money guidance

For money advice (English): 0800 138 7777 For money advice (Welsh): 0800 138 0555 For pension guidance: 0800 011 3797 Website: <u>moneyhelper.org.uk</u> Email: <u>contact@moneyhelper.org.uk</u>

For advice about welfare and benefits: Tum2Us (website): <u>tum2us.org.uk</u>

If you have any questions about the Financial Lives Survey, visit <u>www.natcen.ac.uk/taking-</u> part/studies-in-field/financial-lives-survey/, email us at <u>financiallives.survey@natcen.ac.uk</u> or phone us free on 0800 652 4568.

Many thanks again for your help with this important study.

Yours sincerely,

The Financial Lives Research Team

P15919 March 2022

Appendix E: Financial Lives 2020 survey – Weighting Enhancement

Individual and household tenure

The 2020 survey questionnaire did not include a question about the tenure of the household. An unharmonised individual tenure variable (respondents in the same household could have different tenure values) was used in the calibration weighting to bring the profile of respondents in line with the UK adult population, using tenure figures from the Labour Force Survey (LFS). The LFS tenure figures are measured at the household level. The LFS tenure question is asked only of the household reference person (HRP) and relates to "accommodation tenure," i.e. the tenure of the accommodation in which the household resides. The question in the 2020 wave of FLS was asked to everyone in the household and related to their "individual tenure" rather than "accommodation tenure".

Given the differences between individual and household tenure profiles (the % of households that are rented tends to be smaller than the % of people who live in rented households), renters were under-represented in the 2020 survey and those with a mortgage or owning outright were over-estimated. Weighting was done in good faith at the time, but it emerged later that there had been a misunderstanding around the LFS statistics.

In 2022 a new set of 'check' questions were introduced allowing us to derive household (i.e. accommodation) tenure for each individual:

- P_MCHECK2
- P_MHtenChk
- P_RHtenChk.

The individual tenure variable (D13) was then harmonised within household to ensure tenure was consistent at the household level. This harmonised household tenure variable (respondents in the same household had the same tenure value) was then used in the 2022 calibration. This approach can be seen as a 'weighting enhancement' as it had the benefit of bringing the 2022 weighted sample profile closely in line with LFS, thus providing the best possible tenure estimates in the final weighted data. This also allowed us to consider household tenure (after harmonisation) as a predictor for the within-household non-response model. But note that the 2022 wave soft launch cases (making up about 13% of total cases) were not asked about their household tenure – they were only asked about their individual tenure. For this reason, these cases were treated in the same way as the 2020 cases, with individual tenure harmonised at the household level. Soft launch cases only made up a minority of all cases and shouldn't have any noticeable impact on the overall data.

2020 re-weighting

If household tenure data had been available for 2020, the correct solution would have been available to address the under-representation of renters, i.e. to re-run the entire 2020 survey weighting calibration process following the 2022 approach. However, these data do not exist, as only individual tenure was asked in 2020. Therefore, this correction cannot be made.

Instead, adjustments were devised by FLS statisticians to correct the underrepresentation of renters and over-representation of owners at the 2020 wave. The steps taken to do this are described below.

First, both the 2020 and 2022 surveys were re-calibrated using individual tenure harmonised at the household level, in order to create a comparable measure of weighted tenure between the two waves. New individual weights resulted for each wave: IndvW2_recalib for 2020 and IndvW3_recalib for 2022.

The adjustments are based on determining the ratio between:

- a) The 2022 results weighted correctly (when harmonised household tenure is one of the variables used in the calibration weighting to create the individual weight)
 – using IndvW3
- b) These results weighted incorrectly (when harmonised individual tenure is again weighted to the LFS target derived from harmonised household tenure) – using IndvW3_recalib.

This ratio is then applied to:

c) The 2020 individual tenure results weighted incorrectly (when harmonised individual tenure is again weighted to the LFS target derived from harmonised household tenure) – using IndvW2_recalib.

From the a)/b) ratio applied to c), we get d), which is an approximation of the correctly weighted results for individual tenure in 2020.

The 2020 survey was then re-calibrated to bring the weighted tenure profile in line with these results. Following this, RSP, 1 in N, Dependent 1 in N, Product and Special weights were also re-run, to reflect the correct individual tenure profile in the population.

Appendix F: Financial Lives cost of living (January 2023) recontact survey – Technical Note

Introduction

Financial Lives, the FCA's flagship survey of adults aged 18 and over across the UK, provides a wealth of information about the financial products consumers hold, their experiences with financial services providers, and their financial situation and resilience.

Between December 2022 and January 2023 an additional short survey was conducted which focused on the rising cost of living. The <u>data tables for this survey</u> can be accessed on the FCA website.

This survey was conducted by Critical Research. The implementation of weighting was the responsibility of The Stats People. This annex describes the methodology used for sampling, fieldwork, data processing and weighting.

Sampling

Participants were drawn from those agreeing to be recontacted after the May 2022 survey.

Status following May 2022 survey	Count
Total participants in the May 2022 survey	19,145
Total contacts available who gave permission to be recontacted ('contacts')	18,621
Contacts who provided valid email addresses	15,632
Contacts who provided valid telephone numbers	5,382
Contacts who provided both telephone numbers and email addresses	5,104
Contacts only contactable by post (gave neither telephone nor email)	2,711

As the questionnaire for this survey was only made available online for selfcompletion, only those with a valid email address were selected for participation: 15,632 contacts were available and were approached to participate in the Cost of Living survey. Each contact was sent a bespoke email inviting them to survey. An FCA branded email was used, with wording designed specifically to describe the short and relevant nature of the questions.

Sample batches

The 'contacts' database was divided into groups as shown in *Figure F2*.

Sample batch	Date	Size	Surveys	Response Rate
Soft launch	06 Dec 2022	500	147	29.4%
Batch 1a	13 Dec 2022	2,500	807	32.3%
Batch 1b	19 Dec 2022	2,500	903	36.1%
Batch 2	03 Jan 2023	10,132	3,429	33.8%
Total		15,632	5,286	33.8%

Figure F2: Invitation batches and response rates

The purpose of issuing survey invitations in batches was to:

- Allow a small soft launch to establish that both the processes and the questionnaire were working as intended, specifically to timetable a short break to check
 - The email invitation was working as intended (replies were monitored)
 - The questionnaire was programmed correctly (pilot data were checked)
 - The survey was working as intended (an optional `comments' space for respondents was reviewed)
- To review regular feedback on the questionnaire whilst retaining the opportunity to add or adjust questions
- To control the number of participants at any one time, to ensure servers could cope with response without any diminished survey experience
- To test differing invitation wording and contact methods
- To ensure email invitations could be sent slowly to avoid spam filters
- To provide an opportunity to not invite all participants and still ensure the sample invited was as representative as possible, by adjusting the stratification with a disproportionate approach (see section 0).

Batch 1a was further split into two parts to test the effectiveness of specific wording and layout of the email invitation for those under 30 versus those over 30. Additionally, Batch 1a received an additional reminder via SMS text message. The change in approach did not influence response rates very much. From Batch 1b onwards an updated invitation was used, bringing the link to access the survey much higher up the email, and the email text was made more succinct.

Stratified sampling

It was inevitable that weighting would be required to ensure those completing the Cost of Living survey would be representative of all UK adults, because the 15,632 contacts available were not a perfect match of all UK adults.

The negative impact (on effective sample size) of weighting the data was reduced using stratification which ensured the selected sample profile reflected the contacts database (and weighted FLS profile). An unstratified random sample risks being skewed, but a stratified one ensures key sub-groups are always represented at the right level.

The sample was stratified using information available from the May 2022 survey, which showed that the variables which impacted the weighted model the most were age, sex and IMD. In particular, IMD correlates with other measures associated with high and low deprivation areas such as income, ethnicity, social exclusion and tenure. This systematic sampling scheme is summarised in *Figure F3*.

Figure F3: Stages of the systematic stratified sampling

#	Description of stratification (sorting) stage	Variable
1	Set targets for each Country (England, Wales, Scotland, NI) based on the number of achieved interviews required in each nation, using a 20% response rate estimation	Nation
2	Analysis of contacts database shows a skew towards less deprived IMD deciles and correspondingly fewer respondents from more deprived IMD deciles hence primary strata is set to be IMD	IMD
3	Within IMD quintiles: group by Local Authority Area (LAA)	LAA
4	Within LAA: group by Sex groups (male/female)	Sex
5	Within Sex: sort cases by age	Age
6	Within Age: sort alphabetically by postcode then address (then respondent ID if tied within address)	Postcode

A 1 in k approach (where k=available sample divided by number of invitations required) was used to make selections for each sample batch. For example, for the 500 soft launch invitations, the database was sorted according to the variables in Table 3 and k was set to be $15,632 \div 500 = 31.3$. A random start point was chosen between the 1st and kth case to select the first case to be a sampled and further contacts were put forward to be sampled every 31 records until the sample was exhausted.

This generated a random sample representative of all of those available for recontact, by deprivation (correlating with income and digital exclusion), geography at LAA level, and age within sex which will correlate with tenure, education, and many other demographics. This selection process did not compensate for the differences seen in those available for recontacting vs the full FLS 2022 sample, or

the likely additional skew that comes from only a proportion of those invited going on to participate, which are both addressed by weighting at the analysis stage.

Stratification helped ensure an equal distribution across each of the sample batches.

Consideration for disproportionate stratified random sampling

If the response rate for certain combinations of demographic groups was either particularly bad or particularly good, it could be argued that different sampling fractions should be used to select sample for the Cost of Living survey. In this scenario, disproportionate stratified random sampling would have been considered for the sample batches. This would help ensure the final achieved sample was representative of all UK adults by correcting skews seen:

- Towards less deprived households in the `contacts' sample compared to the participants in the May 2022 survey
- Towards older people seen in participants of the May 2022 compared to all UK adults (which was overcome with weighting of the May 2022 dataset)
- Towards both older and less deprived households likely to occur by differential completion rates of the wholly online Cost of Living survey.

As 15,632 contacts were invited to participate, disproportionate random sampling was not required.

Fieldwork

Fieldwork was conducting from 6 December 2022 to 16 January 2023. However, the survey remained open until 31 January 2023 and all completing by the closing date were eligible for the prize draw.

Each batch of contacts received 3 invitation emails: an initial email and 2 reminders up to one week apart. Emails were sent on different days of the week and at different times of the day to maximise the chances of being read. Progress is shown in *Figure F4*.



Figure F4: Distribution of completed surveys across the fieldwork period

The majority of participants to the survey were invited and completed their survey in early January 2023.

Incentivisation

To encourage response, the email invitation included explanations of how the FCA use the results, including extracts from articles which have been published in 2022 using the information participants had provided in the May 2022 survey. Additionally, completing the survey precipitated an entry into a prize draw to win one of 11 shopping vouchers, from £50 to £250.

Questionnaire

Please see the <u>full questionnaire</u> for questions asked in this recontact survey.

The average time to complete the questionnaire was fractionally over 10 minutes. Those completing from the Batch 2 invite averaged 10 minutes and 30 seconds, because some additional questions were added about particularly good or bad experiences received from financial services providers (see section Q22 and Q24).

Data processing and quality control

At the cut-off date for analysis, 5,286 cases were put forward to the weighting regime. A number of data processing steps were taken to ensure the cases were valid and considered survey responses:

- The quality of answers to open ended questions. If the quality of typed in responses was rated as poor (one or more answers were nonsense characters, in no way an answer to the question, or pejorative), one point was scored
- The levels of don't know and non-response. If the levels of DK or non-response were high (6 or more from the 9 questions with non-response options), one point was scored
- The time taken to complete the entire questionnaire. If the time taken to complete the question was less than 25% of the median time, 2 points were scored. If the time taken was greater than 25% but less than 40% of the median time, 1 point was scored.

Following points allocation, 11 responses received a quality control score of 2 or more and were removed from the final total. The quality of response was remarkably good and shows clearly how keen the vast majority of participants were able to carefully convey their concerns about the problems they face related to the increase in cost of living.

Updating respondent age

Age is an important analysis break, in particular around retirement age, when certain age thresholds allow access to pensions (for example). Age of respondent was captured using date of birth in the May 2022. Using a simple equation of date of recontact survey less date of birth, it was possible to establish the age of each respondent at the time of the recontact survey. In other words, it was possible to increase age by 1 year, if the respondent had had a birthday since the May 2022 survey.

This age has been used on the data tables and labelled as 'Age (at recontact survey)'. Note that for 18 cases, date of birth was not available, and the original age has been used.

From a statistical point of view this is a perfectly valid step to take provided the population the survey is representing is described as 'UK adults aged 18+ in May 2022'.

Weighting

Results from the recontact survey needed to be representative of the population of UK Adults aged 18+ interviewed in the FLS 2022 main survey. This was achieved by weighting the final dataset of 5,286 cases, taking into account differences between the proportions in key demographic sub-groups in the main FLS 2022 sample and :

- Those available to sample for the Cost of Living Survey (not all participants in May 2022 were available to be invited)
- Those completing in the Cost of Living survey (the survey was available and appealed to sub-groups at differing rates)

A new weight was calculated which addresses these differences so that a new composite weight could be created (from the existing and additional weight), as described below.

A regression approach to weighting was adopted, which mirrors the methods used in the May 2022 survey for the various stages of non-response weighting. A singlestage logistic regression model was used which ensured the difference (bias) in the profile between the full, individually weighted May 2022 data (19,145 cases) and the Cost of Living survey was neutralised, using all the demographic weighting variables used in May 2022.

The stages of the weighting process were as follows:

- Revisited the May 2022 survey data and appended the weighting variables used for calibrating the individual weight (stage 1.4 of the mainstage weighting)
- Created a flag for those completing the recontact survey using list of respondent serial numbers to create the dependent variable in the regression modelling
- Interpolated any missing values (DK and PNTS) for the weighting variables, mirroring the method used at stage 1.5 of the May 2022 survey weighting, ready for regression modelling
- Collapsed categories of (missing value interpolated) weighting variables to ensure a minimum cell size of 50 among those completing recontact survey. The collapsing needed was minimal due to having more than 5,000 cases
- Crosstabulation was used to establish whether an association existed between each weighting variable and whether a sample member completed the recontact survey.²⁵ A Chi-squared test of independence was performed for each crosstabulation to assess the statistical significance of the association for each variable. Associations were statistically significant for all variables
- Regression models, using forward and backward selection process, were used to select which variables to enter into the non-response model because they showed a statistically significant impact on the dependent variable (whether a respondent had participated in the Cost of Living survey or not). All weighting variables had a p-value below 0.05 (i.e. they were having a statistically significant impact on the dependent variable) and therefore were included in the non-response weighting model
- Calculated the additional non-response weight (one divided by probability of completing recontact survey vs not, under the model)
 - Calculated the composite weight: new weight multiplied by the FLS individual weight
- Investigated alternative trimmed versions of the weight, with extreme outliers removed from the composite weight, in order to improve effective sample size
- A final stage was to compare the bias and sampling efficiency of the recontact sample vs the full FLS weighted sample, weighted by the untrimmed non-

²⁵ For example the test established whether one group within a particular demographic variable under or over-represented in those that respond to the survey vs those that do not.

response weight, and finally weighted by two alternative trimmed non-response weights.

The resulting profiles, measures of bias and sampling efficiency are shown in *Figure F5*.

	Description	Min	Max	Efficiency	Neff
Weight baseline	Individual weight from May 2022, if no further weighting was required and response to Cost of Living survey was either 100% or a perfect match	-8.5	5.6	60%	3,181
Weight zero (untrimmed)	Best solution from regression model without any non-response weight trimming or reducing any extreme weights (capping) of the composite weight	-1.0	0.8	29%	1,555
Weight A	0.5% of the highest and lowest non-response weights were trimmed (set to a maximum value) and cases with extreme weights were capped	-1.0	0.8	35%	1,875
Weight B	1% of the highest and lowest non-response weights were trimmed (set to a maximum value) and cases with extreme weights were capped	-0.6	0.7	36%	1,907

Figure F5: Weighting schemes considered

Based on the trade-off between minimising bias and maximising sampling efficiency and net effective sample size (Neff), Weight B was adopted: 1% of the non-response weights were trimmed at each end, then extreme values in the composite weight were capped (see *Figure F5*).

Efficiency and effective sample size

The adopted scheme has an efficiency of 36% and Neff of 1,907.

The weighting was performed by the Stats People who confirmed that in their judgement the weighted sample for the Cost of Living Survey is a well-structured sample, representative of UK adults aged 18+ in May 2022.

Q22 and Q24

These questions were added part way through fieldwork to assist with follow-up qualitative work. No additional weighting calculations were conducted to compensate for the possibility that the profile of respondents completing these questions may differ from all respondents, hence the weighted results have been excluded from the weighted data tables.

Q21

It should be noted that 79 of 5286 respondents (1.5% of total sample) were not routed to Q21, because this question was added after the soft launch. Assuming that the 79 'skipped' cases were a relatively random sample of the population (checks confirm that they are very similar to the overall surveyed population), it can be assumed that the effect on survey statistics from this question is statistically negligible. As a result, no special weighting has been applied to this question.

Survey materials

Invitation email



ID: [SERIAL]

Dear [NAME]

Thank you very much for participating in the **Financial Lives** survey in the first half of 2022. We are now conducting a short 10 minute follow-up survey about the impacts of the rising cost of living. There are 11 prizes to win, including a \pounds 250 shopping voucher.

Click here to start the survey

The **cost of living** has continued to increase, driven by higher energy and food prices. We want to hear from everyone, so that we gain a good, reliable picture of the impact the rising cost of living is having on consumers across the UK. **Every response really does make a difference**.

We are asking for your help now – so that we can continue to raise important issues and work to support all consumers of financial services. Take a look, below, at what

we have been doing – and how Financial Lives is in the news, bringing attention to important consumer issues.

As a 'thank you' for taking part, you will have the option to be entered into a prize draw run by our independent research provider, Critical Research. There is one prize of £250, five prizes of £100 and five prizes of £50 (as online vouchers). Winners will be selected randomly from those completing the survey. <u>Terms apply</u>.

It's easy to have your say. Just <u>click here</u> to start the survey – and please complete the survey by 23 June 2023.

Thank you in advance for your help.

David Raw Director, Financial Conduct Authority

This survey is being carried out on behalf of the FCA by Critical Research. To talk to someone about the survey, please contact Critical Research on <u>FinancialLives@critical-surveys.co.uk</u> or on 0208 189 7829.

To get in touch with the FCA's Contact Centre, visit our webpage: <u>http://www.fca.org.uk/contact</u>. Also see our <u>FAQs</u>. To unsubscribe and not receive any more emails about this survey click here: <u>Unsubscribe</u>. Prize draw terms and conditions are available here: <u>Terms</u>.

Financial Lives is the FCA's major survey of UK consumers. Insights from it highlight a wide range of issues for consumers.

Using some of the findings from the Financial Lives survey, in October we highlighted how <u>people up and down the country are struggling to keep up with their bills</u>. These results gained wide media attention (please see press cuttings below), highlighting the detrimental impact on consumers of the rising cost of living *and* the FCA's work to support consumers, e.g.

- We have <u>told lenders</u> to work with customers in financial difficulty to solve any problems with payment and have taken action with more than 30 firms to make sure customers get the help they need
- We have <u>engaged with Buy Now, Pay Later firms</u> to get customers' terms and conditions improved
- We have <u>warned insurers</u> to protect customers' wellbeing during the cost of living squeeze – and to protect them from unnecessary add-ons and unfair penalties.

Based on your help, the Financial Lives 2022 survey is in the news - raising important consumer issues



Reminder email



ID: [SERIAL]

Thank you very much for participating in the **Financial Lives** survey in the first half of 2022. Just a **quick reminder** that we are now conducting a short 10 minute follow-up

survey about the impacts of the rising cost of living. There are 11 prizes to win, including a £250 shopping voucher.

Click here to start the survey

The **cost of living** has continued to increase, driven by higher energy and food prices. We want to hear from everyone, so that we gain a good, reliable picture of the impact the rising cost of living is having on consumers across the UK. **Every response really does make a difference**.

We are asking for your help now – so that we can continue to raise important issues and work to support all consumers of financial services. Take a look, below, at what we have been doing – and how Financial Lives is in the news, bringing attention to important consumer issues.

As a 'thank you' for taking part, you will have the option to be entered into a prize draw run by our independent research provider, Critical Research. There is one prize of $\pounds 250$, five prizes of $\pounds 100$ and five prizes of $\pounds 50$ (as online vouchers). Winners will be selected randomly from those completing the survey. <u>Terms apply</u>.

It's easy to have your say. Just <u>click here</u> to start the survey – and please complete the survey by Wednesday 18 January.

Thank you in advance for your help.

David Raw Director, Financial Conduct Authority

This survey is being carried out on behalf of the FCA by Critical Research. To talk to someone about the survey, please contact Critical Research on <u>FinancialLives@critical-surveys.co.uk</u> or on 0208 189 7829.

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- We have <u>warned insurers</u> to protect customers' wellbeing during the cost of living squeeze – and to protect them from unnecessary add-ons and unfair penalties.

Based on your help, the Financial Lives 2022 survey is in the news – raising important consumer issues



Almost 8m people in UK struggling to pay bills, says City watchdog

The FCA found that about 7.8 million people were finding it a heavy burden to keep up with their bills, an increase of about 2.5 million people since 2020 B B C NEWS

Inflation: Warning eight million struggling to keep up with bills

This is just the first taste of what's to come from this survey when the full report is published pext year, but it's significant for a couple of reasons



COST OF LIVING CRISIS SIX IN TEN STRUGGLING TO PAY BILLS

Daily & Mail

32m are now struggling to

pay their bills

Rocketing cost of living

pushes families to brink

FT FINANCIAL TIMES

FCA finds over 30mn struggle to keep up with bills Pad texts
 ""
 "
 "
 "
 "
 PhefCA finds 1 in 4 adults are in financial difficulty
 or could quickly be in difficulty if they suffered a
 financial shock, and 4.2 m people have missed bills or
 loan payments in at least 3 of the 6 months before the
 Feb-June survey took place, says