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The FCA's Financial Lives Survey 2017

Technical Report

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1. Introduction

1.1 Purpose of this report

This chapter provides a brief introduction to the survey's aims and design, timings for the survey from development through to data processing and the production of survey weights. It also introduces the 'soft launch' of the online survey that was a key part of the timeline, and directs the reader to the parts of this report that summarise the outcomes of the different tests the soft launch provided.

The raw survey data was produced by Kantar Public and the data file and weights were passed to Critical Research to produce weighted data tables and to support the FCA in its data analysis. Kantar Public then acted as a consultant, responding to queries about the data, but were not involved in data analysis.

This report does not cover any data analysis and reporting issues.

We acknowledge that questionnaire programming errors (of which some are inevitable on the first outing of a survey of this size) occurred.¹

The report includes as appendices several key research materials.²

1.2 Objectives of the Financial Lives Survey

The FCA (Financial Conduct Authority) commissioned Kantar Public (formerly TNS BMRB), to develop and conduct a general population online and face-to-face survey of approximately 13,000 adults to provide robust evidence on financial product ownership, and to provide baseline data that allow changes, in product ownership and in consumer attitudes, behaviour and experiences, to be measured when the survey is repeated.

The Financial Lives Survey supports the work of the FCA in putting the consumer at the heart of its decision-making. It is intended to:

- Become a primary source of consumer insight for the FCA, providing robust and insightful intelligence and enabling delivery of relevant and revealing analysis that builds on FCA knowledge
- Provide accurate market-sizing information, namely the proportion and profile of UK adults holding particular products and who have used certain services, such as regulated advice on investments, advice from a mortgage broker, and debt advice
- Provide a holistic view of consumers' overall product holdings in the context of their financial assets and debts, and facilitate analysis at cross-product and cross-sector level
- Generate insights into consumer attitudes towards financial products and services, and towards providers, and into what can drive and influence their behaviour

¹ See Chapter 8 on the survey's strengths and limitations.

² Summarised in Section 1.7.

1.3 The Financial Lives Survey – a methodological short summary

The Financial Lives Survey used mixed-mode data collection, whereby the majority of interviews were achieved via an online survey, with a smaller face-to-face survey used to ensure that the views of non-Internet users were represented.

Overall 12,865 interviews were completed: 11,970 via the online survey and 895 via in-home interviews utilising the online survey. In this report all interview numbers cited refer to interviews achieved after quality control and data cleaning procedures had taken place, unless otherwise stated.

The online survey used an address-based online surveying (ABOS) design, whereby addresses were randomly selected across the UK. An invitation letter was sent to each selected address inviting up to three adults (aged 18 or over) to go online and complete the survey. A maximum of two reminders was sent to each address.

The face-to-face survey consisted of in-home interviews across England, Wales and Scotland. Northern Ireland was not included in the face-to-face survey. Screening was used to identify those eligible for the survey: those who were either aged 18-69 and had not used the internet in the last 12 months, or were 70 or over (whether or not they had used the Internet in the last 12 months). Up to one person per household was selected for a face-to-face interview.

The questionnaires for both the online and face-to-face surveys were the same, with the exception that interviewer instructions were added to the online survey for use in face-to-face interviews, and the interviewees were able to read answer options, especially longer lists of answer codes, on show cards.

1.4 The Financial Lives Survey – random probability sampling and sample frame

The methodological approach offers two main advantages:

It is optimal for sizing the holding of financial products and tracking movement in this over time, as it is based on a random probability sampling design.

A random probability sample design (i.e. a sample design whereby the selection probability of a sampling unit, the unit to be measured - in this instance the individual invited to complete the survey - is quantifiable) allows for producing unbiased estimates of features of the UK population, such as the incidence of holders of a particular financial product such as motor insurance. In other words, the design ensures that all units (i.e. adults) in the population have a known probability of being invited to participate.

In addition, a random probability sampling design allows for estimating accurately the margins of error around survey estimates (i.e. the range of values within which the survey value lies, with a probability of 95%).

This information helps to understand how the holding of financial products, for example, changes over time, since it will allow us to distinguish (a) observed changes in estimates that represent genuine market shifts from (b) observed changes that are a mere side-effect of the fact that estimates are based on a sample of consumers (rather than a census of consumers).

It ensures the near universal coverage of the target population and better sample profiles compared to methodological alternatives.

The approach is based on a sample frame with near universal coverage of the UK (i.e. the Royal Mail's Residential Postcode Address File (PAF)) and a mix of online and offline data-collection modes. These features limit the risk of systematic sampling and non-response bias in the survey data and are crucial for sizing accurately financial product holdership or consumers' use of online banking services, for example.

³ The screener for the face-to-face interviews is included in this report as Appendix E.

By sampling postal addresses for the online survey, inviting (and incentivising) the participation of all resident adults at a sampled address (up to a practical maximum of three per address) and conducting a parallel face-to-face survey ensures that the hard-to-reach population segments (non-Internet users and those over 70) are not systematically excluded.

1.5 Survey timeline

The Financial Lives Survey 2017 development and delivery consisted of the following stages of work:

Table 1.1 Stages of survey development and data delivery

Survey Stage	Timing
Questionnaire development	April to November 2016
Cognitive testing	27 th and 28 th June 2016
Pilot/ usability testing	27 th October to 9 th November 2016
Soft launch fieldwork (online): 784 interviews	13 th December 2016 to 15 th January 2017
Main stage fieldwork (online): 11,186 interviews	27 th January to 6 th March 2017
Main stage fieldwork (face-to-face): 895 interviews	27 th January to 3 rd April 2017
Data processing and provision of survey weights	April to May 2017
Data queries consultancy/ provision of technical report	May to July 2017

1.6 Purpose of the soft launch

The online survey was launched on a 'soft' basis (i.e. only a limited amount of sample was issued with the aim of achieving 1,500 to 2,000 interviews), so that this initial launch could be used to test a number of important aspects of the survey, ahead of committing to the main stage and to completion of the online survey. The number of soft launch interviews was 784 (after cleaning) and 787 (before cleaning).

The soft launch had five objectives:

- To check that the product module allocation rules were applied correctly, and to check whether assumptions made around product ownership levels (which drive the algorithm for module selection) needed to be amended
- To check overall interview length (median and range) and, accordingly, to consider final changes to the questionnaire, including any changes to the rules applied to filtered question sets
- To test response rate, including alternative approaches to respondent incentivisation, and to decide on the best approach to use for the main stage
- To check that the questionnaire had been programmed correctly including a review of filtering within the questionnaire, and, accordingly, to make corrections and to decide if any changes were needed to the questionnaire
- To check if respondents were, as far as it is possible to tell from an online survey, stumbling over any
 questions, as indicated by survey drop-out at particular questions, unexpectedly high levels of 'don't
 know' answers and/ or obvious inconsistencies between answers

In Section 4.3 we report on questionnaire changes following the soft launch. In Chapter 5 we report on the module allocation and filtered questions sets rules used in the survey, both for the soft launch and as amended for the main stage of the survey. In Section 6.1.3 we report on the results of the incentivisation testing.

1.7 Appendices to this report

Appendix	Description	
Α	Advance letter used during the online fieldwork	
В	First reminder used during the online fieldwork	
С	Second reminder used during the online fieldwork	
D	Reassurance letter used during the face-to-face fieldwork	
E	Face-to-face interview screener	

2. Sample design

The Financial Lives Survey used two different approaches to sampling: one for the online survey and one for the face-to-face survey. The two approaches are described in more detail in Sections 2.1 and 2.2. ⁴ The data from the two surveys were combined using weights that reflected respondents' *joint* sampling and response probability, given the two survey designs. See Chapter 7 on weighting.

2.1 Online survey

We used a method Kantar Public refers to as ABOS: address-based online surveying. In terms of sample, this means that a UK-wide address sample was drawn from the Royal Mail's Residential Postcode Address File (PAF) which includes more than 99% of all residential addresses in the UK.⁵ For the purposes of this survey, the PAF was edited to exclude obviously commercial addresses. After this stage, the PAF was *stratified* (i.e. every address was allocated to a stratum, and a random sample drawn from each stratum). This guarantees that *any* sample drawn will be balanced with respect to the strata.

The strata were defined slightly differently in each country of the UK due to different data availability; the basic principles followed were the same, however. The first level of stratification used the Index of Multiple Deprivation (IMD) which has been constructed at a neighbourhood level and is a statistical representation of the degree of poverty and service deprivation in each neighbourhood. This variable correlates strongly with both individual-level personal finance variables and response probability for this type of online survey. Consequently, it is ideal for sample stratification for the Financial Lives Survey. The better a stratification variable correlates with these two things, the more precise the survey estimates.

Neighbourhoods (lower level super output areas in England and Wales; data zones in Scotland; and super output areas in Northern Ireland) were ranked by the IMD measure and divided by decile to form ten (IMD) strata. Within each of these strata, addresses were then sorted by local authority and then by postcode and by alphanumeric first line of address. Sorting the addresses in this way means that *any* stratum-level systematic sample (effectively selecting 1-in-*n* addresses from a random starting position within the PAF) will have maximum geographic dispersion. This tends to increase precision relative to unsorted sampling, as well as providing the 'geographical representativeness that most people expect from a sample.

Each address was sampled with equal probability and, at each address, *up to three* adults aged 18 or over were invited to participate in the survey. Allowing more than one individual from the same household to complete the survey avoids a problematic within-household sampling stage (problematic because sampling instructions tend to be ignored by respondents when self-completing surveys).

The address sample was drawn in two phases, firstly for the soft launch (a smaller scale launch of the survey) and secondly for the main stage of fieldwork. For the soft launch a sample was drawn based on an assumption that a 12% individual response rate would be achieved, a rate we estimated as likely for a survey of around 30 minutes on personal finances.⁸ An incentive experiment was run during the soft launch

⁴ More detail on how much sample was drawn/ used and on response rates is available in Chapter 6.

⁵ See http://www.royalmail.com/business/services/marketing/data-optimisation/paf for more details.

⁶ See, for example, https://www.gov.uk/government/statistics/english-indices-of-deprivation-2015 for England.

⁷ We have evidence to support this statement, but it is based on our work for other clients and is confidential.

⁸ The estimate was based on our experience of running similar ABOS surveys, albeit on different subjects.

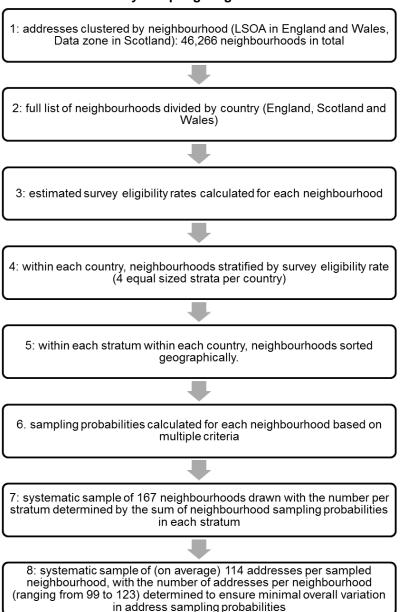
to test the effectiveness of three alternative financial incentives and to ensure the best incentive was used for the main stage. The response to the soft launch was lower than anticipated. Possibly this was due to the subject matter of the survey but a 'Christmas factor' may also have contributed. Due to delays in survey development we needed to run the soft launch at a time that is not generally optimal for surveying.

The response estimates were adjusted accordingly for the main stage. For this stage a sample was drawn based on an anticipated 6% response rate. In total, 11,930 addresses were sampled for the soft launch and 132,917 addresses were sampled for the main stage.

2.2 Face-to-face survey

The face-to-face survey was used to supplement the online survey. The only people eligible for this survey were those aged 70+ or aged 18-69 and not using the internet. For the face-to-face survey a clustered GB-wide address sample was drawn from the Postcode Address File (PAF). Northern Ireland was excluded from the face-to-face survey for budget reasons. The process implemented is shown in Figure 2.1, and explained below.

Figure 2.1: Face-to-face survey sampling stages



⁹ See Section 6.3.1.

The sample of addresses was *clustered* by neighbourhood (lower level super output areas in England and Wales, and data zones in Scotland) so that the assigned interviewer had relatively little travel to do between sampled addresses.

The database of neighbourhoods was *stratified*, which meant that every neighbourhood was allocated to a stratum and a random sample was drawn from within each one. This guarantees that any sample of neighbourhoods drawn will be balanced with respect to the strata. To do this, the database of neighbourhoods was divided by country (England, Wales and Scotland). Within each country separately the database of neighbourhoods was ranked by expected survey eligibility rate and then divided by quartile to form four strata. Within each of these 'eligibility strata', neighbourhoods were sorted by region and then by neighbourhood code. Sorting the addresses in this way means that *any* stratum-level systematic sample of neighbourhoods has maximum geographic dispersion. This tends to increase precision relative to unsorted sampling, as well as providing the 'geographical representativeness that most people expect from a sample.

Each neighbourhood was assigned a probability of being sampled that was a complex function of (i) the expected survey eligibility *rate* within the neighbourhood, (ii) the expected number of addresses in the neighbourhood containing at least one eligible individual, (iii) the expected rate at which these eligible addresses would be identified correctly as such by interviewers, and (iv) the expected balance of work between (a) classifying addresses with regard to eligibility, and (b) interviewing.

Components (i) and (ii) were derived from a combination of 2011 Census data about the age profile of each neighbourhood plus data from the 2015-16 ONS Crime Survey of England & Wales which provided estimates of the offline and online distribution of the population aged 18-69. The Crime Survey was also used to convert the individual level eligibility rate for each neighbourhood into an estimated *address* eligibility rate for each neighbourhood.

Components (iii) and (iv) are assumptions based on previous survey work by Kantar Public. For (iii) it was assumed that two thirds of eligible addresses would be classified correctly, and for (iv) it was assumed that classifying an address as eligible/ineligible is equal to 35% of the work of an interview. The objective at this stage was to ensure minimal variation in the amount of work that an interviewer would have to do in each sampled neighbourhood.

A sample of 167 neighbourhoods was drawn from the full database of 46,266. Within each sampled neighbourhood, a sample of addresses was drawn such that, across both sampling stages (the sampling of neighbourhoods and the sampling of addresses within neighbourhoods), there was only minimal variation in sampling probability. The complex neighbourhood sampling probability ensured that this was achieved while minimising the variation in workloads between neighbourhoods with very different eligibility rates. An average of 114 addresses was drawn in each sampled neighbourhood but this ranged from 99 to 123, with a smaller number of sampled addresses in high eligibility neighbourhoods and a larger number of sampled addresses in low eligibility neighbourhoods.

Interviewers screened all sampled addresses for the presence of individuals aged 70+ *or* individuals aged 18-69 who had not used the Internet in the preceding 12 months. Interviewers used their data collection devices to select for interview (at random) *one* eligible individual per identified eligible address.

2.3 Differences between the online and face-to-face surveys

In terms of sampling there were four key differences between the two surveys. These differences are their implications are summarised in Table 2.1.

Table 2.1 Sampling-related differences between the online and face-to-face surveys

Difference	Online	Face-to-face
Address sampling stages	One-stage random sample of addresses	Two-stage random sample: first of neighbourhoods (LSOAs in England and Wales, data zones in Scotland, then of addresses within each sampled neighbourhood
Stratification variables used in sample selection process	Ten equal-sized strata based on index of multiple deprivation; sample geographically representative within each of these	Neighbourhood samples stratified by country and then by estimated survey eligibility rate; sample geographically representative within each of these
Number of individuals invited per sampled address	Up to three adults aged 18 or over per sampled household	One adult (70 or over; or 18-69 and a non-Internet user); selected at random when multiple adults eligible for the survey ¹⁰
Coverage	UK addresses on the Postal Address File (PAF) (believed to cover >99% of all UK addresses)	GB addresses on the Postal Address File (PAF) (i.e. Northern Ireland excluded)

This meant it was possible for an eligible adult willing to take part not to be selected for the survey on a random basis and so not permitted to take part. This scenario did occur.

3. Questionnaire structure and unweighted base sizes

This chapter provides a brief introduction to the questionnaire structure and coverage. It also summarises base sizes for each section.

3.1 Overview of the structure of the questionnaire

The questionnaire had a relatively complex structure, consisting of:

- Core content asked of all respondents: demographics, attitudes, assets and debt, and product holdings
- Each respondent was asked a set of questions related to one of the areas in which they hold products; they were allocated to a product module from among those they were eligible to answer based on socalled module allocation rules¹¹
- Shorter question sets either asked of all eligible respondents, or asked of a sub-sample of those eligible

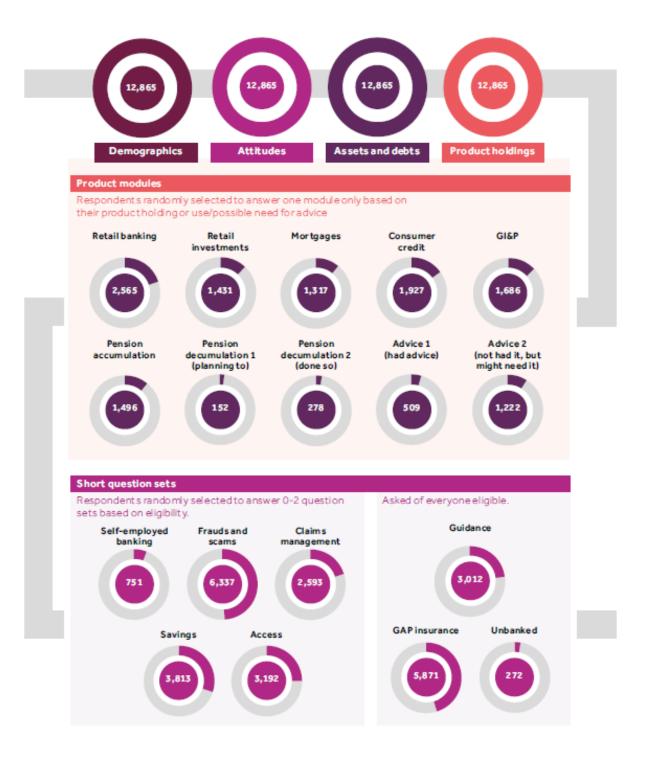
The structure of the questionnaire is summarised in Figure 3.1. The contents page to the questionnaire ¹² guides the reader to these sections and to the sub-sections within them.

The base sizes shown in the figure are unweighted base sizes, after data cleaning. In Section 3.2 we split these by the main three parts of the data collection: soft launch fieldwork (online), main stage fieldwork (online) and main stage fieldwork (face-to-face).

¹¹ These rules are explained in detail in Chapter 5. Please note that, although Figure 3.1 shows Mortgages as a single product module, technically First Charge and Second Charge mortgages were separate modules.

¹² The questionnaire is published on the FCA's website separately from this report.

Figure 3.1 Component parts of the Financial Lives Survey 2017



3.2 Base sizes for each part of the questionnaire

By combining the 11,970 completed web surveys, both soft launch and main stage, and 895 face-to-face surveys, the total number of interviews completed for the Financial Lives Survey 2017 was 12,865. Details of the total number of interviews by stage and by part of the questionnaire are outlined in Table 3.1.

Table 3.1 Number of completed interviews, by survey stage, for each part of the questionnaire

Survey stage	Total	Soft launch (online)	Main stage (online)	Main stage (face-to-face)
Demographics, attitudes, assets and debt, product holding	12,865	784	11,186	895
Product modules				
Retail Banking	2,565	130	2,132	303
Retail Investments	1,431	159	1,178	94
Mortgages (first charge)	1,268	89	1,160	19
Mortgages (second charge)	49	6	42	1
Consumer Credit	1,927	88	1,749	90
General Insurance & Protection	1,686	113	1,387	186
Pension Accumulation	1,496	45	1,403	48
Pension Decumulation 1 (planning to decumulate in next 2 years)	152	10	125	17
Pension Decumulation 2 (have decumulated in last 2 years)	278	16	234	28
Advice 1 ¹³ (received in last 12 months)	509	32	451	26
Advice 2 (not received in last 12 months but might need it)	1,222	83	1,057	82
No module ¹⁴	316	16	287	13
Shorter question sets				
Access	3,192	190	2,797	205
GAP Insurance	12,865 ¹⁵	784	11,297	895
Claims Management Companies	2,593	171	2,237	185
Self-employed Banking	751	38	694	19
Fraud and Scams	6,337	258	5,649	430
Unbanked	272	9	235	28

¹³ Advice refers to regulated financial advice related to investments, saving into a pension and/ or retirement planning.

¹⁴ Respondents were allocated to modules based on the products that they reported holding. In cases where no products were reported, no module was assigned. In a small number of cases a programming error meant that no module was assigned.

¹⁵ This question set was asked of all respondents, firstly to establish if they had purchased a vehicle in the last 5 years. In Fig 3.1 it is this number that is shown as answering the questions about GAP insurance.

Guidance	3,012	189	2,721	102
Savings	3,813	233	3,300	280

3.3 Differences in base sizes for some questions due to questionnaire changes during fieldwork

There were a number of changes made to the questionnaire following the soft launch to correct filtering issues identified through the data checking and to improve the quality of the information recorded (for example, additional checks were added to the questionnaire where appropriate). Due to the limited time available between the soft launch and main stage a small number of changes were implemented once the main stage fieldwork had begun.

The key changes are summarised in the table below.

Table 3.2 Changes made to the survey following the soft launch (between 13th December 2016 and 27th January 2017)

Variable	Change made
RB98	The base for this question was amended to include those with a current account and either a savings account or cash ISA with their current account provider.
B11	Due to changes in requirements for this area, the routing for this question had been subject to changes on a couple of occasions. The aim of B11 was to understand the amount respondents had in savings and investments combined. In addition to updates to the routing, a £0 code was added to question B1 (as Code 1) to cater for those that have zero in savings.
	Answer categories throughout the assets and debt section (also referred to as the balance sheet) were amended following the soft launch to better reflect the range of answers given by respondents.
RI_D20	The filter was updated at this question to include those who had used a guidance source in the last 12 months as well as also receiving regulated advice around investments. Previously, this question included all those who used a guidance source in the last 12 months.
D15b	A new question was added to those 55+ or disabled to measure accessibility to the post office, cash points and banks.
M80, M39a M47, M46, M88a and M79a	The filter was changed at these questions to no longer include those who were selected as 'don't know' at MDV2.
M77	There was an error with this filter which resulted in internal switchers (coded at MDV2) being incorrectly excluded from the question. This error was corrected.
MDV2	The definition of a 'Home mover' and subsequent routing was amended
CM4	The filter was updated to include all respondents in order to increase the base sizes for the follow up questions.
P_RB2check	Due to higher levels of savings accounts recorded than expected at the soft launch a new check question was included to establish whether those who mentioned they

	had both a current and saving account definitely had separate current and savings accounts.
P_RI1acheck	Due to higher levels of ISAs recorded than expected at the soft launch a new check question was included to establish whether those who mentioned they had both a cash ISA and stocks and shares ISA, definitely had both types of ISA.
P_Mcheck	A new check question was introduced to determine whether those who claimed they hold/are buying with the help of a mortgage 'personally' hold the mortgage.
Mortgages module	Eligibility for the mortgages module was changed so that that where respondents were unsure about the type of mortgage held this was assumed to be a first charge residential mortgage. This meant that these respondents could be included in selection for the mortgage module.
GI_P1	The filter was updated from including all respondents to include only those who selected a product that was not single-trip travel insurance.
GI_P1a	A new question was added for those who selected single-trip travel insurance to determine if it was held in the last 12 months.

Table 3.3 Changes made to the survey following the main stage launch (between 27th January and 31st January 2017)

Variable	Change made
CC1b	The time period for consumer credit products was changed from two to three years
CCRev1, CCRev2 & CCRev3	New questions were added around repayment habits for credit, store and catalogue credit cards.
CC_DV1	The filter was updated to reflect new questions CCRev1-3

In addition to these changes an error in the module selection algorithm was identified midway through fieldwork which was subsequently corrected. As a result of this a small number of respondents were recontacted to complete missing data. For more information on this, please see Section 5.1.2.

4. Questionnaire testing: cognitive testing, pilot interviews and soft launch

This chapter outlines the following elements to questionnaire testing:

- Cognitive testing
- Pilot interviews, including usability testing
- Online soft launch

Each different element of testing is described in more detail throughout this chapter. The timescales for the development of the survey and budget available limited the scope for questionnaire development and testing to a certain extent. However, overall, we consider the testing to have been reasonably comprehensive (not least due to the soft launch) and we were pleased to recommend that the main stage should go ahead.

4.1 Cognitive testing

Cognitive testing seeks to understand the thought processes a respondent uses in trying to answer a survey question. The aim is to see whether the respondent understands the question as a whole and all key words and phrases within it. It also identifies the sort of information the respondent needs to retrieve, in order to answer the question, and the decision processes the respondent uses in coming to an answer.

As such, cognitive testing is rarely used to test an entire questionnaire as this would require substantial investment in terms of both budget and time.

For the Financial Lives Survey the cognitive testing was designed largely to test comprehension of the critical product ownership section, including how the questions were ordered, to ensure that the survey captured accurately all financial products held and any regulated advice received.

Cognitive interviews were carried out face to face, using a paper questionnaire, with the researcher probing to establish what the respondent understood by specific questions/parts of questions and how they had composed their answers. Each researcher had a list of probes that were developed beforehand, although further probing based on what happened in that particular interview was also used.

Kantar Public conducted 25 cognitive interviews on the 27th and 28th June 2016. The interviews lasted 45-60 minutes and were conducted in London (10) and Birmingham (15).

For the cognitive testing in London respondents were pre-recruited to appointments by the dedicated qualitative recruitment team at Kantar Public. For the cognitive testing in Birmingham recruitment used on-street methods and was undertaken by experienced recruiters.

Quotas were set to ensure a broad spread of respondents in terms of age, gender and annual income. Respondents were given either £20 in cash or as a shopping voucher as a thank you for taking part.

Following the cognitive interviews a number of recommendations were made by Kantar Public and the questionnaire was amended in collaboration with the FCA.

4.2 Pilot and usability interviews

The main objective of the pilot stage was to test the questionnaire in full with respondents to ensure that the questionnaire flowed well, that respondents clearly understood the questions and to estimate the overall length of the survey.

Respondents were recruited, to ensure that a good number were interviewed for each module. The spread of the 63 pilot and usability interviews, by product module, is shown in Table 4.1.

Table 4.1 Number of pilot and usability interviews conducted by module

Module	No. of interviews
Retail Banking	14
Retail Investments	9
Mortgages (first and second charge)	8
Consumer Credit	10
General Insurance & Protection	5
Pensions Accumulation	3
Pensions Decumulation 1	0
Pensions Decumulation 2	3 (plus 1 conducted on paper)
Advice 1	5
Advice 2	4
No module	2
Total	63

For the face-to-face survey the pilot also offered the opportunity to test the contact procedures/ screener for establishing eligibility for interview.

The pilot interviews were conducted between the 27th October and 9th November. All interviews were administered using computer assisted interviewing. Within the 36 online pilot interviews, a small number of questions which had been added or amended since the cognitive testing stage were cognitively tested.

4.3 Face-to-face pilot

For the face-to-face pilot 20 interviews were conducted by members of the Kantar Public face-to-face interviewer team between the 27th October and 9th November. Prior to the start of fieldwork the interviewers were briefed about the survey over the telephone by senior researchers at Kantar Public.

The fieldwork procedures were designed to closely mirror the plan for the main stage of fieldwork with one notable exception in the sample approach. For the pilot survey a quota approach was adopted whereby interviewers were assigned to specific streets within an area and were able to interview eligible respondents at any address. This differed from the main stage where specific addresses were issued for the random probability sample design. A different approach was used for the pilot for practical reasons, primarily the ability to achieve more interviews within a shorter time period. Interviewers attempted to interview one adult at each address who met one of the following criteria:

- Aged 70 or over
- Aged 18-69 and not used the Internet in the last 12 months

All pilot respondents received a £20 incentive.

4.4 Online pilot

Respondents for the online pilot interviews were recruited by Kantar Public's specialist in-house recruitment team. As with the cognitive testing, quotas were set to ensure a broad spread of respondents in terms of age, gender and annual income.

Where respondents completed the survey at home (16 did so) they were telephoned for a 15 minute followup interview to discuss their feedback on the survey. These respondents received a £20 incentive.

Interviews completed on Kantar Public premises (20 in total) attracted a £30 incentive, except that £60 was offered to recruit harder-to-reach respondents to complete the modules on advice or pension decumulation.

In the observed interviews participants were assured of confidentiality, anonymity and were asked for their permission for the interviews to be audio recorded. This allowed the interviewer to listen without taking notes so that they could focus on the respondent and answer any queries as the interview was conducted.

4.5 Usability testing

Usability testing is a qualitative technique that explores, with a small sample of the target population, whether they are able to use the self-completion instrument to complete the survey.

Usability testing draws on the methods used in cognitive testing such as observation (this being central to understanding participants' strategies for completing the survey), thinking aloud and probing. Respondents are asked to complete the survey on the same type of device they would be most likely to use should they be invited to take part in the online survey. This might be a desktop computer, laptop or tablet. Due to the length of the survey and the complexity of some of the questions (which therefore required explanatory on-screen text) the survey invitation suggested that it would be easier for respondents to complete the survey using a computer, laptop or tablet, rather than a mobile phone. Therefore, mobile phones were not included in the usability testing. We have not recorded which devices were tested.

Ideally usability testing would take place following the pilot phase so that a near final version of the questionnaire is used for the testing. Due to time constraints the usability testing was run concurrently with the main pilot interviews. Overall seven usability tests were completed.

The usability testing provided the necessary confirmation that the survey worked very well on all the tested devices. Only some colour and text changes were made as a result of this testing.

4.6 Key recommendations following the pilot

Key recommendations were to do with survey length and questionnaire wording:

Length

The Financial Lives Survey was intended to take around 30 minutes for respondents to complete online.

The interview length for the face-to-face interviews would naturally be longer, as participants tend to discuss the questions as they complete the survey. In addition the survey included a number of lengthy descriptions that the interviewer was required to read to the respondent and this also results in a longer interview length.

The average interview length for online survey completed at home was 36 minutes (mean) and 34 minutes (median). ¹⁶

¹⁶ It should be noted that these averages are based on 15 valid interview lengths from the interviews completed at home by respondents (the in-office pilots were subject to additional discussion throughout the interview which invalidated any interview lengths recorded) and as such were subject to wide variation. The soft launch average interview lengths based on a greater number of interviews were longer: see Section 4.3.

To reduce the length, some questions were removed from parts of the questionnaire that reduced the interview length for everyone – such as the attitude questions. Some question removals were made to product modules; the most substantial change was that of splitting out the savings questions from the Retail Banking section to become the separate set of Savings questions.

The average length for the face-to-face pilot survey was 50 minutes (mean) and 52 minutes (median).

Questionnaire wording changes included:

- Amending the introduction to the survey to provide further reassurance about the bona fide nature of the survey and more detail about the overall purpose of the survey.
- Refining the wording of questions where complex terms or definitions were used.
- Amending the definitions for questions to establish the use of regulated financial advice.

4.7 Soft launch

The soft launch met the objectives set out for it at Section 1.6. After reviewing the soft launch data we concluded that the questionnaire had been programmed accurately, that only a small number of questionnaire changes were required ¹⁷ and that the interview length was acceptable.

In terms of interview length, this was higher than we had targeted following cuts after pilot testing: the online soft launch delivered the survey average lengths of 37 minutes (mean) and 32 minutes (median). That said, of the respondents who started the soft launch survey a high proportion (83%) completed it. As this is broadly in line with other online surveys lasting around 30 minutes on topics that are also typically less engaging, we concluded that the longer interview length was not having a significant impact on survey dropout and that no further questionnaire changes should be made. Any questionnaire changes at this stage could also have introduced programming errors for which we did not have time to check.

 $^{^{17}}$ For questionnaire changes see Section 3.3.

Allocation rules: product modules and filtered question sets

In order to manage interview length and to reduce individual respondent burden, the questionnaire included 11 product modules, as described in Figure 3.1. Each respondent was allocated to one module from among those for which they were eligible. The algorithm used to allocate a respondent to a module took into account the estimated qualification rate for each module within the UK adult population, in order to optimise the number of respondents answering each module. The product module allocation rules are described in Sections 5.1 to 5.3, showing how they were amended on the basis of the soft launch. They differ for the online and face-to-face surveys.

Similarly, in order to manage interview length, the questionnaire includes 5 sets of filtered questions, as shown in Figure 3.1. Section 5.4 describes the rules used to allocate respondents to these question sets and how the rules were amended after the soft launch. The rules were the same for the online main stage and face-to-face surveys.

Section 5.5 describes the rules used in product modules to select a product to be the subject of 'selected product' questions. These rules were needed where detailed questions could only be asked of one of the relevant products a respondent had, in order to keep the interview to a reasonable length. Therefore motor insurance might be selected, for example, when a respondent answering the General Insurance & Protection module had a number of different insurance products.

5.1 Product modules – overview of the algorithm

If a respondent was eligible for more than one module, ¹⁹ an allocation algorithm randomly allocated the respondent to one module. Each module had a different allocation probability. This allocation probability is *proportional to one divided by the estimated qualification rate*, but with any module-specific qualification rates below 10% 'trimmed' up to 10%.

A minimum 'qualification rate' of 10% for module allocation purposes was recommended to avoid assigning very low relative sampling probabilities (RSPs) for some modules (particularly affecting the high qualification modules such as Retail Banking and General Insurance & Protection), when a respondent was also eligible for a low qualification module. A very low allocation probability would be problematic because a very large design weight would need to be applied to the data if that module was selected. Without these design weights the sample for that module would be biased. However, the greater the *range* of design weights applied to data for a particular module, the lower the effective sample size for that module relative to its actual sample size. Setting a threshold of 10% for qualification rates balanced the need to maximise the effective sample size for low qualification modules with the need to have statistically efficient samples for other modules.

The impact of this qualification rate trimming was that the module allocation algorithm reweighting did not perfectly reflect the actual eligible qualification rates. Whilst for most modules this trimming had a negligible

¹⁸ Due to a mistake in implementing the algorithm 34 respondents completed two modules. An explanation for this is provided in Section 5.1.2. The number of respondents eligible for none of the product modules was 316,

¹⁹ Essentially, having one or more products of a certain type such as consumer credit.

impact on module weighted gross population eligibility estimates, the estimates for Retail Banking and General Insurance & Protection were a little more impacted. We were able to overcome the impact of this trimming by simply rescaling Retail Banking and General Insurance & Protection module weights back to reflect their weighted gross eligibility totals, and were thus able to provide consistent gross population estimates. The 'trimming' and subsequent rescaling for Retail Banking and General Insurance & Protection module weights had no impact on the estimated profiles of module respondents.²⁰

Within the algorithm each module was given an RSP (relative sampling probability) value equal to 1/estimated qualification rate with a maximum value of 10.²¹

The sampling probability for module *x* for respondent *i* is as follows:

$$\frac{RSP_{x}}{\sum RSP_{i}}$$

where ΣRSP_i is the sum of RSP values for respondent i.

To select the module for a given respondent, the sum of respondent RSP values for the modules was calculated, as the worked examples below show.

The qualification rate for each module was estimated prior to any fieldwork being conducted for the Financial Lives Survey using information from GfK's Financial Research Survey (all data based on 12 months ending May 2016, all 18+). ²² It should be noted that the FRS does not cover exactly the same products as the Financial Lives Survey; it was not able to provide estimates for some of the modules, and also only provided broad 'guestimates' for some of the modules with complex eligibility criteria. The initial estimated qualification rates for the product modules were reviewed and updated after the soft launch to enable more reliable estimates of eligibility to be applied, particularly for those modules where original estimates were missing or less reliable. The review was based on soft launch micro data, and, as explained in Section 5.1.2, involved simulation work to look at the impact of different RSPs and arrive at a balanced algorithm to better optimise the number of respondents answering each module.

Different estimated qualification rates were used for the face-to-face survey compared to the online survey since they cover different populations with different module qualification rates (for example, fewer in older age groups compared to the middle aged have a mortgage).

As the face-to-face survey did not have a soft launch fieldwork period, data was reviewed after the first c.100 interviews had been achieved, and the algorithm was then adjusted as necessary. Due to time considerations fieldwork was not paused on the face-to-face survey, whilst the review of RSPs was undertaken and as such interviews on the original RSPs continued to be conducted whilst the review and changes were implemented.

Worked examples.

If a respondent was interviewed and found to be eligible for "Retail Banking" and "Pension Decumulation 2" and only for these two modules:

- The sum of respondent RSP values for the major modules would be calculated as:
 1 (RSP for "Retail Banking") + 10 (RSP for "Pension Decumulation 2") = 11
- That respondent would then have a:

²⁰ Please see Section 7.9

²¹ One exception to this (for the Pensions Decumulation 1 module) is explained in Section 5.1.2.

²² We would like to thank GfK for making this information available for the FCA's Financial Lives Survey.

- 1/11 chance of being interviewed about "Retail Banking", calculated as: (RSP of "Retail banking"/sum of respondent RSP values)
- 10/11 chance of being interviewed for "Pension Decumulation 2, calculated as:
 (RSP of "Pension Decumulation 2"/sum of respondent RSP values)

If a respondent was interviewed and found to be eligible for "Retail Investments", "Consumer Credit", "General Insurance & Protection" and "Advice 2" and only for these four modules:

- The sum of respondent RSP values for the major modules would be calculated as:
 - 8.8 (RSP for "Retail Investments") +
 - 2.7 (RSP for "Consumer Credit") +
 - 1.3 (RSP for "General Insurance & Protection) +
 - 3.3 (RSP for "Advice 2" = 16.1
- That respondent would then have a:
 - o 54.7% (8.8/16.1) chance of being interviewed about "Retail Investments"
 - o 16.8% (2.7/16.1) chance of being interviewed about "Consumer Credit"
 - o 8.1% (1.3/16.1) chance of being interviewed about "General Insurance & Protection"
 - o 20.5% (3.3/16.1) chance of being interviewed about "Advice 2"

5.2 Simulations – revising the RSPs after the soft launch

The data from the soft launch were used to estimate the effective sample sizes (and unweighted sample sizes) of the modules at the end of the main stage for the online survey assuming the following two scenarios:

- 1. RSPs staying as they are
- 2. Using new RSPs calculated from the micro data, with the aim of maximising the effective sample size for the Pension Decumulation 1 module²³ and optimising the expected sample sizes for all other modules to ensure that there would be adequate effective sample sizes for all modules with proportionately larger sample sizes for the rarer modules and a reasonable capped maximum number for the more populous modules, and wherever possible equalising the effective sample sizes across all modules.

In other words, the RSPs agreed for the main stage of the online survey did not only take into account improvements to the qualification rates suggested by the soft launch data, but also employed simulations to estimate the likely impact on sample size (and effective sample sizes) of different RSP options so we could find a better overall RSP design that would improve the balance of the overall expected sample sizes. For details of the product module rules used for the face-to-face survey please see section 5.5.

Kantar Public produced a number of simulations, recommending and agreeing one of these with the FCA.

5.3 Errors in applying the algorithm

After the main stage of the survey had started, a number of errors were identified in the way in which the algorithm was activated. This happened in the period 6th to 19th February 2017.

²³ The soft launch data confirmed that the eligibility rate for the Pensions Decumulation 1 was very low and limited the total number of interviews that could be obtained with this group. It was therefore decided to increase the RSP for this module to 200. For weighting purposes at the analysis stage, however, this RSP was capped at 10.0.

A scripting error meant that the RSPs used at the beginning of the face-to-face fieldwork matched those which had been adjusted following soft launch, and were then being used for the online survey.

This set of RSPs assigned by mistake an RSP of zero to the Pension Decumulation 1 module. Hence, for the first few days of the face-to-face survey no eligible respondents were asked the Pension Decumulation 1 module, while the same was true for the online survey for that period. This affected 19 face-to-face interviews.

The same error affected the online survey when changes were made to the algorithm. A change to the face-to-face algorithm meant that the RSP value for the Pension Decumulation1 module was overwritten to zero in both the face-to-face and the online scripts. The impact of this meant that within a 2 week period in February 2017, 90 online interviews were completed where a respondent was eligible for this module, but the module was not selected.

To help overcome the problem of respondents eligible for the Pension Decumulation 1 module not being given a chance to be allocated to it, all affected respondents who had agreed to be recontacted (60) were asked to take part in a follow-up survey and those who agreed were additionally asked the Pension Decumulation 1 module of questions.

This meant that a small number of respondents (34) actually answered two modules – and within the weighting used at the analysis stage these people were given a design weight of 1 for their Pension Decumulation 1 module responses, so that their data could be merged into the main dataset with other 'single module' respondents for analysis purposes.

5.4 Product module rules - online survey

Table 5.1 shows for the online population the estimated qualification rates for each module and the RSPs – each as used at soft launch and for the main stage online survey. It also shows the achieved number of interviews for each module – unweighted.

The main changes made after the soft launch were:

- To lower the RSP for the Retail Investments module because the original estimate of eligibility for this module set at 11% was found to be a significant under-estimate of the likely actual eligibility found at soft launch to be 39.3%. If the RSP had remained at 8.8 then we would have achieved an excessive number of Retail Investment interviews and consequently fewer interviews in other modules. Lowering the RSP enabled us to better balance the overall sample sizes across all modules
- To increase the RSP for Pension Decumulation 1 from 10 to 200 in an attempt to boost the likely number of achieved interviews to a reasonable minimum size (an ideal target of around 150)
- To slightly adjust the RSPs for Consumer Credit (RSP raised to 3.9 from 2.7), Mortgages First Charge (reduced to 3.1 from 3.5), Pension Accumulation (raised to 3.38 from 2.3) and General Insurance & Protection (reduced to 1.0 from 1.3). These adjustments were implemented to provide better 'balanced' expected achieved sample sizes across all modules, i.e. increasing likely sample sizes in the more 'rare' modules whilst maintaining a random allocation across all modules so that all mixes of module eligibility were retained

Table 5.1 RSPs used for the online survey, and the impact in terms of interview numbers

	Module	Estimated 18-69 online population module qualification rate (used for soft launch) ²⁴	RSP (used for soft launch)	Estimated 18-69 online population module qualification rate (used for main stage) Unweighted (95% CI shown in brackets)	RSP (used for main stage)	Number of interviews (unweighted)
1	Retail Banking	99%	1.0	96.3% (94.7-97.9%)	1.0	2,262
2	Retail Investments	11%	8.8	39.3% (35.0-43.5%)	3.63	1,337
3	Mortgages – First Charge	28%	3.5	35.5% (31.4-39.7%)	3.1	1,249
4	Mortgages – Second Charge	2%	10.0	0.8% (0.0-1.5%)	10.0	48
5	Consumer Credit	37%	2.7	36.5% (32.4-40.7%)	3.90	1,837
6	General Insurance & Protection	77%	1.3	86.9% (84.0-98.8%)	1.0	1,500
7	Pension Accumulation	44%	2.3	39.1% (34.8-43.3%)	3.38	1,448
8	Pension Decumulation 1	Unknown ²⁵	10.0	1.6% (0.5-2.6%)	200.0	135
9	Pension Decumulation 2	2%	10.0	10.2% (7.5-12.8%)	10.0	250
10	Advice 1	Unknown	10.0	10.2% (7.5-12.8%)	10.0	483
11	Advice 2	Unknown	3.3	28.9% (25.0-32.8%)	3.65	1,140

²⁴ The online survey population was adults aged 18+. But, we expected over 70s to be under-represented by the online survey (hence the face-to-face survey) and as such population estimates were based on 18-69 year olds.

²⁵ The FRS does not assist in providing module eligibility rates for two Advice modules or for the Pension Decumulation 1 module, and no other source of information was available to us. It was expected that fewer than 10% of the population would qualify for Advice 1 and Pension Decumulation 1, and as such these modules were given an RSP of 10.0. The expected proportion eligible for Advice 2 was guesstimated to be greater than 10% and as such for the soft launch an RSP of 3.3 was used.

5.5 Product module rules - face-to-face survey

Table 5.2 shows for the face-to-face population the estimated qualification rates for each module and the RSPs – each as used at the start of the main stage and then modified after reviewing the data for the first c.100 interviews. It also shows the achieved number of interviews for each module – unweighted.

The only change made after the start of face-to-face fieldwork (beyond the correction due to the errors described above) was:

To lower the RSP for the Retail Investments module from 10.0 to 4.0, because the likely eligibility for the Retail Investment module based on early 'main stage' results was estimated to be 24.7% compared with the initial estimated eligibility of 8% (which was based on guesstimates from earlier studies which had different eligibility criteria). Changing the RSP from 10.0 to 4.0 reduced the expected number of achieved interviews to a more balanced level whilst allowing other less populous modules to increase their expected achieved sample sizes.

Table 5.2 RSPs used for the face-to-face survey, and the impact in terms of interview numbers

	Module	Estimated module qualification rate for 18-69 offline population and for those 70 and over ²⁶ (used at start of main stage)	RSP (used at start of main stage)	Estimated module qualification rate for 18-69 offline population and for those 70 and over (modified after the start of the main stage) Unweighted (95% CI shown in brackets)	RSP (modified after the start of the main stage)	Number of interviews (unweighted)
1	Retail Banking	97%	1.0	96.8% (94.1%- 99.6%)	1.0	303
2	Retail Investments	8%	10.0	24.7% (18%-31.4%)	4.0	94
3	Mortgages – First Charge	4%	10.0	6.3% (2.5%-10.1%)	10.0	19
4	Mortgages – Second Charge	0.3%	10.0	0% (no eligible cases from first c. 100 interviews)	10.0	1
5	Consumer Credit	8%	10.0	13.3% (8%-18.6%)	10.0	90

²⁶ The initial eligibility estimates for our face-to-face survey population were very much 'guesstimates' based largely on estimates of eligibility for UK adults aged 70 and over. Given the precise eligibility criteria used for our modules and the lack of detailed data for the 18-69 non-Internet user population we knew that our initial eligibility rates were likely to be just 'informed guess-work' so the study was designed to enable us to review and change RSPs once we had actual estimates based on early study data.

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6	General Insurance & Protection	75%	1.3	79.7% (73.5%-86%)	1.3	186
7	Pension Accumulation	5%	10.0	10.1% (5.4%-14.8%)	10.0	48
8	Pension Decumulation 1	Unknown	10.0	3.2% (0.4%-5.9%)	10.0	17
9	Pension Decumulation 2	10%	10.0	4.4% (1.2%-7.6%)	10.0	28
10	Advice 1	Unknown	10.0	6.3% (2.5%-10.1%)	10.0	26
11	Advice 2	Unknown	3.3	18.4% (12.3%-24.4%)	3.3	82

5.6 Filtered question sets – random allocation probabilities

As Figure 3.1 shows, the survey contains five sets of filtered questions asked of a subset of respondents. Only random samples of those eligible for these question sets were asked the questions, to help ensure that the interview length did not become too long.

The proportions used in selecting respondents for these questions sets are provided in Table 5.3, which highlights the differences in the proportions used during the soft launch for the online survey, and the main stage online and face-to-face surveys.

Table 5.3 Filtered question sets

Question Set	Population eligible to be asked the question set	Proportion used	
		Soft launch	Main stage online and face-to-face surveys
Self-employed Banking	Those defined as self- employed	1 in 2	3 in 4
Savings	All with savings in any account	3 in 10	3 in 10
Claims Management Companies (CMC)	All UK adults	1 in 5 ²⁷	1 in 5
Fraud and Scams	All UK adults	1 in 3	1 in 2
Access	All UK adults	1 in 4	1 in 4

Table 5.3 highlights two important aspects of the filtered question set random allocation probabilities:

- The 'proportion used' (not the 'proportion asked') for the selection process (see further information on this below in this section)
- The question 'sets' that formed 'groups' within which respondents could be asked a maximum of just one of the sets within that grouping of question sets. These groupings were changed between soft launch and main launch:
 - Three question sets (Self-employed Banking, Savings, CMC) were grouped together for the soft launch, and a maximum of one question set from these three sets would be answered by a respondent, if that respondent was in fact eligible for their randomly selected set. Additionally, respondents had a chance of being selected for the other two modules (Fraud and Scams, and Access).
 - o In the main stage the five question sets were split into two groups one group comprising Access and Self-employed Banking, with one set selected per respondent and if eligible an interview undertaken; the second group comprised Fraud and Scams, CMC and Savings, again with just one of this group selected for possible interview and, if the respondent was eligible for it, an interview undertaken

These two aspects combined to reduce the number of respondents asked the filtered question sets overall, and hence lowered the average interview length, while still producing sufficient responses for analysis for each question set.

The 'proportion used' warrants clearer explanation. Taking the soft launch as the example, for three question sets (Self-employed Banking, Saving and CMC) respondents were selected for one of these question sets regardless of their eligibility for them, with selection based on the allocation proportions, respectively, of 1 in 2, 3 in 10 and 1 in 5.

²⁷ CMC was a question set asked of a subset of respondents. To maximise the number of interviews achieved with those who had made a claim through a claims management company, a single question (CM3) was asked of all respondents (not of 1 in 5), with corresponding follow-up questions asked of all of those who had made a claim in the last 3 years.

Once selected for one of these question sets, a respondent was asked those questions if eligible for that question set. So, for example, while 1 in 4 of all respondents were asked the Access questions:

- 1 in 2 of all respondents were allocated to the Self-employed Banking questions but only the respondents who were allocated AND were self-employed were asked the question set; those not selfemployed were not asked the CMC or Savings questions (even if they had savings)
- 3 in 10 of all respondents were allocated to the Savings questions but only the respondents who were allocated AND had savings were asked the question set; those who did not have savings were not asked the CMC or Self-employed Banking questions (even if they were self-employed)
- 1 in 5 of all respondents were allocated to the CMC questions and all of these were asked the question set

For the main stage, it would be possible for a respondent to be selected for both the Self-employed Banking and the Savings questions, but to qualify for neither. A total of 191 respondents fell into this category and so completed neither filtered question set.

5.7 Product selection rules

Within each product module, questions were asked about the product area (e.g. consumer credit) in general. There were also specific questions in each module asked in relation to a single product selected according to different eligibility criteria from the (eligible) products held by individual respondents within the product group area.

Within some modules, a random selection was made, e.g. from products taken out during a certain time frame. If more than one product applied, the respondent was asked to answer for the most recent product taken out.

The product selection rules employed in each module are set out in Table 5.4.

Conducting this survey for the first time has revealed the difference in the numbers of respondents answering a module from the number answering 'selected product' questions. Most tellingly, 1,928 respondents answered the Consumer Credit module, but 1,168 answered no 'selected product' questions because they had no products that qualified them for the module that they had taken out in the stated time period for these questions. The product selection rules therefore exacerbated the smallness of sample sizes where questions were being asked about low incidence products.

Table 5.4 Product Selection rules per module

Module	Product selection rules
Retail Banking	Main day-to-day account (self-defined based on the following provided definition 'this is the account that is used for day-to-day payments and transactions')
Retail Investments	 Ascertain products held Ascertain products taken out in the last 2 years, without taking regulated advice
	 Random selection of a TYPE of product TAKEN OUT in last 2 years, without taking regulated advice
	Then if respondent has more than one product of that type, the product taken out most recently was selected

Consumer Credit	Ascertain products taken out in last 12 months (3 years for running-account credit; the time frame for this type of credit was amended during fieldwork from 2 to 3 years)		
	Random selection of a TYPE of product TAKEN OUT		
	In last 3 years (if running-account credit) and selected product is one on which behaviour is revolving (credit & store cards) or revolving or transactional (catalogue credit)		
	In last 12 months (otherwise)		
	If respondent has more than one product of that type taken out in the last 12 months/ 3 years, the product taken out most recently was selected		
General Insurance & Protection	Ascertain products held currently, or – in the case of single-trip travel insurance – taken out in the last 12 months		
	A product type is selected at random		
	If respondent has more than one product of that type, the product taken out most recently is selected		
Mortgages (first and second charge)	There was no selected product within either of the mortgages modules. However within the module a subset of questions were only asked if respondents had taken out or made a change to their mortgage in the last 3 years		
Pension Accumulation	There was no selected product within this module, the majority of questions referenced all eligible products. For a small sub set of questions where respondents had more than one pension the most recently started was asked about (with pensions where contributions are currently being made prioritised over those with no contributions currently being made)		
Pension Decumulation 1	1 There was no selection within this module, the majority of questions referenced all eligible products. For a small subset of questions where respondents had more than one pension they were planning to access, the pension planned to accessed first is asked about		
Pension Decumulation 2	All methods of decumulation were asked about within this module (annuity, income drawdown, UFPLS, cash lump sum, fully as cash, unsure how accessed). Within each decumulation method, if experienced more than once the most recent experience was asked about.		
Advice 1	Most recent regulated advice session about either investments or pension or both		
Advice 2	There was no selected product within this module		

5.8 Product selection within the savings filtered question set

In addition to the product selections with module, a further product selection was made for those answering the savings filtered question set. This is described in the table below.

Table 5.5 Product Selection rules for filtered question sets

Filtered question set	Product selection rules
Savings	Select a type at random from: savings account, NS&I bond, credit union savings account or cash ISA
	Exclude from selection a type that is used for day-to-day account, i.e. if respondent uses a savings account or credit union savings account for day-to-day account
	If respondent has more than one product of that type, the product taken out most recently is selected

6. Fieldwork

Fieldwork dates are included in Table 1.1, the timeline for the Financial Lives Survey 2017.

This chapter documents all aspects of the data collection process:

- For the online survey: recruitment, letters sent, response rates, testing different incentives and different combinations of letter text and envelope
- For the face-to-face survey: the quality of interviewer preparation, the use of a reassurance letter, and response rates
- For both surveys: quality control and data cleaning

Appendices A, B, C & D are copies of the letter used within the fieldwork, which include:

- the advance letter (A)
- first reminder (B)
- second reminder (C)
- reassurance letter (D) used in the face-to-face fieldwork

All figures in this chapter relate to the total number of achieved interviews delivered in the data by Kantar Public, before the subsequent removal by the FCA and Critical of 62 cases with inconsistencies in the information provided, relating to their pension products (further details in Section 6.3).

6.1 Online survey

Fieldwork for the online survey took place over two stages; the soft launch and the full launch. The soft launch was a small-scale launch of the survey that enabled the fieldwork procedures to be tested ahead of the full launch. Overall 11,930 addresses were selected for the soft launch and 107,899 for the full launch.

6.1.1 Online survey recruitment

All selected addresses were sent a letter that invited up to three adults (aged 18 or over) in the household to take part in the survey.

The letter provided information about how to access the survey online and respondents were directed to the survey website (www.FinancialLives.co.uk) to complete the survey. Three sets of unique log-in details were provided for each address. The letter also explained the purpose of the survey, how the address was selected, and stressed the importance of taking part. The letter provided an email address and telephone number for members of the team at Kantar Public in case the respondent wanted more information regarding the survey, as well as the FCA's Contact Centre telephone number. Respondents were also reassured that their personal information would only be used for research purposes with the following message:

"The information that we collect will be used only for research purposes. The answers you provide, and your name and address, will not be used for sales or direct marketing purposes. Your answers will be combined with those of others who take part in the survey, for reporting purposes. You will not receive any junk mail or marketing calls as a result of taking part."

Up to two reminder letters were sent to each selected address at equal intervals within fieldwork, as detailed in Table 6.1. Reminder letters were sent to addresses where: no interviews had been achieved, where interviews had been achieved but not equal to the number of adults in the household (as established in the survey), and where no requests for no further contact had been made.²⁸ The second reminder was only sent to half of the selected addresses to which a reminder might have been sent.

Table 6.1 Mailing dates for the online survey

Sample	Initial letter	1 st reminder letter	2 nd reminder letter
Soft launch	13 th December 2016	23 rd December 2016	6 th January 2017
Full launch	25 th January 2017	8 th February 2017	22 nd February 2017

6.1.2 Online survey response

This section explains how the overall response rate achieved for each stage of the online survey is calculated.

The calculation makes use of:

- A household response rate which is the percentage of households where at least one interview had been achieved.
- An individual response rate which takes into account the average number of adults within households.

To discuss these in more detail:

1) Household response rate – This is the percentage of households contacted as part of the survey in which at least one interview was completed. As the sample was selected in the same way as used on numerous face-to-face surveys conducted by Kantar Public, it can be assumed that 8-10% of addresses in the sample were not residential and were therefore ineligible to complete the survey. Thus, a total household sample (without deadwood)²⁹ is estimated as follows.

$$N = \frac{\text{Households with at least one response}}{\text{Total households sampled (minus 8\% of addresses assumed as deadwood)}}$$

2) **Individual response rate** – This is the estimated response rate amongst all adults that were eligible to complete the survey. In a web survey of this nature, no information is known about the reason for non-response in each individual household. As noted above we calculate the number of addresses selected for the survey (minus those assumed to be deadwood). Then using the average number of adults per household (1.8³⁰), we calculate the number of adults selected for the survey, as outlined below.

Total adults sampled = Total sample (without deadwood) X Total number of adults per household

The next step uses the total number of adults sampled to work out the individual response rate as follows:

$$N = \frac{Total\ adult\ responses}{Total\ adults\ sampled}$$

²⁸ A total of approximately 610 requests were made directly to Kantar Public's Contact Centre, to opt out of the survey. Most other queries made to the contact centre were around incentives, e.g. queries in accessing and ordering vouchers.

²⁹ Deadwood refers to addresses which are not eligible to complete the survey, such as second homes, vacant properties or business addresses. These addresses are not included in survey response rate calculations.

³⁰ The Labour Force Survey (July-September 2016): https://discover.ukdataservice.ac.uk/series/?sn=2000043.

Across the whole online survey a total of 12,026 interviews were achieved, with a household response of 8% and an individual response rate of 6%. Across the soft launch fieldwork a total of 787 interviews were achieved, with a household response of 5% and an individual response rate of 4%. For the full launch fieldwork a total of 11,239 interviews were achieved, with a household response of 8% and an individual response rate of 6%. The full breakdown of the fieldwork figures and response rate is available in Table 6.2.

Table 6.2 Online response by survey stage

	Total	Soft launch	Full launch
Total households sampled	119,829	11,930	107,899
Households with at least one response	8,585	587	7,998
Household response rate	7.16%	4.92%	7.41%
Deadwood	8%	8%	8%
Total sample (after deadwood)	110,243	10,976	99,267
Household response rate (accounting for deadwood)	7.79%	5.35%	8.06%
Total adults aged 18+ per household	1.8	1.8	1.8
Total adults sampled (total sample after deadwood x			
1.8)	198,437	19,756	178,681
Total adult responses	12,026	787	11,239
Total adult response rate	6.06%	3.98%	6.29%

6.1.3 Online survey respondent incentivisation

During the soft launch an incentive experiment was conducted to test the effectiveness of three different incentives:

- A £10 shopping e-voucher
- A £5 shopping e-voucher
- Entry into a prize draw, where respondents could win one of two top prizes of £1,000, one of 10 prizes of £250 or one of 10 prizes of £50.

The increased response rate for the main stage online survey, compared with the soft launch (as shown in Table 6.2), reflects the higher incentive of £10 that was offered to the full main stage sample rather than to only a third of the sample for the soft launch.

Table 6.3 shows the detailed response at soft launch broken down by incentive type.

Table 6.3 Soft launch response by incentive type

	Total	£10 incentive	£5 incentive	Prize draw
Total households sampled	11,930	3,977	3,977	3,976
Households with at least one response	587	278	182	127
Household response rate	4.92%	6.99%	4.58%	3.19%
Deadwood	8%	8%	8%	8%
Total sample (after deadwood)	10,976	3,659	3,659	3,658
Household response rate (accounting for deadwood)	5.35%	7.60%	4.97%	3.47%
Total adults aged 18+ per household	1.8	1.8	1.8	1.8
Total adults sampled	19,756	6,586	6,586	6,584
Total adult responses	787	415	231	141
Total adult response rate	3.98%	6.30%	3.51%	2.14%

6.1.4 Online survey testing of the letter and envelope

For the main stage of the online survey, two experiments were run to measure the effectiveness of:

- Printing the FCA logo on the envelope used for the survey invitation
- Changing the wording of the survey invitation letter to encourage a higher response

It was expected that the FCA logo printed on the envelope and the revised main stage letter would generate the most-effective result and so these were employed for the majority of addresses selected for the main stage.

The four experimental cells including the number and percentage of selected addresses within each are detailed in Table 6.4.

Table 6.4 Online main stage survey letter & envelope experiment

Group	Letter/Envelope type	n. of households who received it	% of households who received it
1	Revised main stage letter with FCA envelope	93,225	86.4%
2	Revised main stage letter with plain envelope	10,357	9.6%
3	Soft launch letter with FCA envelope	3,887	3.6%
4	Soft launch letter with plain envelope	430	0.4%
Total	•	107,899	100%

The experiment showed that printing the FCA logo on the envelope mailed to addresses had a positive impact on response, so this approach is recommended for future surveys. The revised wording for the

invitation letter adopted for the main stage survey appeared to have little impact on response: 6.09% for the revised main stage letter, compared with 6.27% for the soft launch letter (a difference that is not statistically significant).

The full breakdown of the number of letters sent and response rates is available in Table 6.5.

Table 6.5 Main stage online survey response by type of letter/ envelope

	Total	Main Letter/FCA logo on envelope	Main Letter/Plai n envelope	Soft Launch Letter/FCA logo on envelope	Soft Launch Letter/Plain envelope
Total households sampled	107,899	93,225	10,357	3,887	430
Households with at least one response	7,998	7,085	599	290	24
Household response rate	7.41%	7.60%	5.78%	7.46%	5.58%
Deadwood	8%	8%	8%	8%	8%
Total sample (after deadwood)	99,267	85,767	9,528	3,576	396
Household response rate (accounting for deadwood)	8.06%	8.26%	6.29%	8.11%	6.07%
Total adults aged 18+ per household	1.8	1.8	1.8	1.8	1.8
Total adults sampled	178,681	154,381	17,151	6,437	712
Total adult responses	11,239	9,924	857	426	32
Total adult response rate	6.29%	6.43%	5.00%	6.62%	4.49%

6.2 Face-to-face survey

Face-to-face fieldwork for the Financial Lives Survey was conducted between 27th January and 3rd April 2017, with all sample issued at the start of fieldwork. The face-to-face survey aimed to interview respondents who met one of the following criteria:

- Were aged 18-69 and had not used the internet within the last 12 months.
- Were aged 70 or over

All fieldwork was carried out by trained interviewers from Kantar's UK's field-force who carry out fieldwork on behalf of Kantar Public.

6.2.1 Respondent selection

At all selected addresses only one adult aged 18 and over, if eligible, could be interviewed. The eligibility criteria were:

- Aged 18-69 and not used the internet in the last 12 months
- Aged 70 and over

To identify if there was anyone eligible at each address a screening process was completed (see Appendix E for the screener questionnaire). To complete the screening, interviewers collected the following information:

- The number of adults at the address
- The age range of adults in the household
- The number of adults who have used the internet in the last 12 months
- The names of adult(s) within the household (where at least one adult was eligible)

This information was entered into the laptop and one adult was randomly selected by the computer. The selected respondent was then the only adult within the household who could complete the survey.

6.2.2 Fieldwork outcomes and response rates

Overall, a total of 901 interviews were achieved representing a 12% response rate among households where we know at least one adult was eligible to take part in the survey. As discussed above, the face-to-face survey interviewed those aged 70 or over, or aged 18-69 who had not used the internet in the last 12 months. The table below details the breakdown of interviews achieved within these groups.

Table 6.6 Face-to-face interview breakdown

	Number of interviews (n)	Percentage (%)
Those who were aged between 18-69 and had not used the internet in the last 12 months	215 ³¹	23.9
Those who were aged 70 or over and had used the internet in the last 12 months	382	42.4
Those who were aged 70 or over and had not used the internet in the last 12 months	304	33.7
Total	901	

Of the 18,844 addresses sampled:

- A total of 10,927 were classified as having no eligible respondents (post-screening).
- A total of 3,543 were estimated as eligible addresses.
- A total of 901 interviews were conducted, producing a response rate of 25%.

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³¹ 28 of these respondents recruited as not having used the internet changed their answers during the interview and were counted as internet users in the analysis. They should not have been allowed to complete the interview, and a mechanism to prevent this will need to be added to the second wave of the survey.

Table 6.7 - Outcomes for each issued address

	Number	Issued cases
	N	%
Total issued addresses	18,844	100
Total non-residential addresses	976	5.2
Not yet built/under construction	2	0.0
Demolished/derelict	24	0.1
Vacant/empty housing unit	506	2.7
Non-residential addresses (e.g. business)	156	0.8
Communal establishment/institution	61	0.3
Inaccessible	50	0.3
Occupied but not as main residence	81	0.4
Unable to locate address	61	0.3
Other	35	0.2
Known ineligible residential addresses (screening complete – no one eligible)	10,297	54.6
Total potential in-scope addresses	7,571	40.2
Potential in-scope addresses	7,571	100
Total unknown eligibility	5,024	66.4
Unknown whether residential due to refusal ALL information	180	2.4
Unknown whether address is residential due to non-contact	815	10.8
Unknown whether address is residential due to other reason	3	0.0
No contact with anyone at address	1,720	22.7
Contact made but not with a responsible resident	53	0.7
Refusal by phoning the office	163	2.2
Refused all further information	1,741	23.0
Refused screening information	349	4.6
Known eligible addresses	2,547	33.6
Eligibility rate (known eligible/(known eligible + known ineligible)	20%	
Estimated eligible residential addresses	3,543	100
Total refusals	898	25.3
Refusal by selected person	748	21.1
Proxy refusal (including refusal by parents)	138	3.9
Refusal during interview	12	0.3

Total non-contact	42	1.2
Total unproductive	706	19.9
Contact but no specific appointment	180	5.1
Broken appointment, no recontact	53	1.5
Ill at home during survey period	124	3.5
Away/in hospital throughout survey period	53	1.5
Physical or learning difficulty	160	4.5
Language difficulty	90	2.5
Other unproductive	46	1.3
Total Interviews	901	25.4

6.2.3 Maximising response

A number of procedures were used to maximise response rates among households selected for the survey.

Interviewers were required to make a minimum of three calls where necessary at each selected address at different times of the day. If no contact had been made at the address after these calls, interviewers continued to call at addresses where appropriate when they were working in the area. These calls needed to be made at various times, including on a weekday evening after 6pm or at the weekend, to maximise the chance of making contact with someone at the selected address.

Incentives of £10 shopping vouchers were provided in order to increase chances of co-operation by the respondents.

To further maximise response rate Kantar Public's field team held calls with regional teams and additional briefing calls with interviewers to share hints and tips. They also encouraged interviewers to continue making calls within their assignments where they have been unable to make contact at an address.

Mirroring the experience seen within the online fieldwork, response within the face-to-face survey was lower than initially expected, as such it was decided to increase the incentive offered to respondents during fieldwork from a £10 gift voucher to a £20 gift voucher.

6.2.4 Enquires from respondents

Respondents were shown a reassurance letter on the doorstep. This provided the contact details (telephone number and email address) for members of the team at Kantar Public; also a telephone number for the FCA contact centre was included.

6.2.5 Fieldwork procedures and documents

Contact procedures

Due to the screening required and the high proportion of addresses that were expected not to included eligible respondents it was not efficient to send an advance letter to selected addresses prior to the interviewer visiting the address. Copies of a reassurance letter were included in interviewer's packs to be given to respondents who had concerns and at the end of each interview. This letter explained the purpose of the survey, and how their address was selected. The letter explained that all information collected in the survey would be confidential and stressed the importance of taking part in the survey. It provided the contact details for the research team at Kantar Public if the household required any further information or had any queries. Alongside this the telephone number for the FCA contact centre was also included on the letter.

A copy of the reassurance letter is available in Appendix D.

Interviewer materials

In advance of fieldwork, interviewers received packs that contained all the materials needed for fieldwork.

This consisted of:

- Interviewer instructions providing a comprehensive guide to the survey
- Copies of the incentive gift card
- Show cards which contain the answer codes to longer or more sensitive questions
- Maps of the areas assigned to each interviewer, showing each individual address selected
- Social research leaflets which outline Kantar Publics confidentiality and data security procedures
- Calling cards for interviewers to leave their details

6.2.6 Video briefing

Any interviewer working on the survey watched a short video briefing prior to starting work on the survey. The briefing was presented by both a member of the Kantar Public research team and the FCA research team.

The purpose of the briefing was to cover the background to the survey, the content of the survey and the information necessary about how to reassure and encourage respondents to take part.

The video consisted of the following elements:

- Background to the survey: introduction to this new survey, including a brief overview of the survey methodology
- A few words from the FCA: introduction to the FCA, rationale behind the survey and key information needs and topics covered within the Financial Lives Survey.
- Fieldwork: introduction of all the fieldwork materials, including reassurance letters and materials for use within the survey such as showcards and the introduction of incentives.
- Questionnaire: introduction to the questionnaire, overview of the topics covered and the overall length of the questionnaire.
- Groups requiring special treatment: advice and guidance on handling certain queries and dealing with vulnerable groups.

6.3 Quality control procedures

6.3.1 Online survey

In any survey there is a risk that the survey is not completed honestly by the respondent. In an online survey offering an incentive there is a risk that surveys will be completed multiple times by the same person or that respondents will rush through the survey without correctly answering the questions in order to qualify for the incentive. We have sought to control for this scenario in two ways. We have also made an additional level of cleaning at the FCA's request.

The three types of quality control checks/ amendments made are:

Removal of 318 'speeders' from the online survey

- Once the survey was complete analysis was conducted on the interview lengths recorded to identify any interviews completed with such short interview lengths that they were highly unlikely to be real interviews. These short interviews were deleted from the data.
- o In cases where no product module was completed, any interviews with a time of less than four minutes were deleted. This represented 16% of completed surveys, where no module was allocated. We considered higher and lower thresholds but felt that a higher threshold (at five minutes) excluded far too many cases (32% of those with no module). While a 3 minute cut-off would have reduced the proportion of cases excluded to 6%, we strongly believed that given the number of questions the interview could not be validly completed within three minutes and a 3 minute cut-off was therefore too low.
- In cases where a module was completed any interviews with a completion time of less than 10 minutes were deleted. This resulted in 2% of cases where a module was completed being deleted.
 - We did not feel that more sophisticated analysis (e.g. looking at interview length by product module) was required.
 - Removal of 15 respondents from the online survey who did not sign up to the survey's 'honesty clause'
- At the end of the survey a question asked respondents to confirm that they had filled in the survey honestly: "The Financial Lives Survey is conducted on behalf of the Financial Conduct Authority. The quality of the data is very important, so please read the statement below and tick the box underneath to confirm you are ready to submit. I confirm that all of my answers were given honestly and represent my own personal views".
 - All respondents who did not agree at this question were removed from the online survey data.
- Removal of 56 respondents from the online survey (and also 6 from the face-to-face survey) because
 of considerable inconsistency in their answers about pensions
 - These removals were made at the request of the FCA, since these respondents claimed to have DC pensions from DB-only providers - a common misconception among pension scheme members

Our systems do not allow respondents who 'straightline' surveys to be automatically removed. These checks can be programmed but they were not implemented, as they did not form part of the specification for the data delivery for this survey. This could be respondents answering 'don't know' to each question or selecting the first option at each question, for example. No online respondents were contacted by telephone to verify they had completed the survey themselves. No tests were made to see if respondents within a single household were giving the same answers where these would be expected.

6.3.2 Face-to-face survey

As part of Kantar Public's standard field quality procedures, at least 10% of addresses where an interview was achieved were re-contacted, solely to verify that the interviewer had interviewed that respondent. Addresses for this 'back checking' process were selected on the basis of Kantar Public's standard field quality procedures, whereby all interviewers have their work checked at least twice a year. No recordings are made of these interviews.

Validation was carried out mainly by telephone. Where no telephone number was available a short postal questionnaire was sent to the address to collect the same information.

7. Weighting

For analysing these product-level data, the product weight has been generated by dividing the module weight by the conditional probability of being allocated to the selected product. Because each eligible product held by a respondent had the same probability of being selected, this is equivalent to multiplying the module weight by the number of products the respondent has purchased/ acquired within the module product group that *also* fulfil other eligibility criteria (e.g. that it was taken out in the last two years). However, the product weight component (i.e. the product weight divided by the module weight) was limited to a maximum of five to avoid excessive weights.

7.1 Motivation for weighting

Population inference is usually improved if the respondent data are weighted to compensate for observed bias against population benchmarks. This does not remove *all* bias as there is likely to be residual bias that is uncorrelated with the observed characteristics of the sample for which population benchmarks, or parameters, are available.

Weighting will usually reduce the *precision* of the inferences, even if it reduces bias, so it is theoretically sensible to only include benchmark variables that are correlated with important survey outcomes. However, weighting is a one-size-fits-all method of reducing bias so the set of benchmark variables needs to be comprehensive enough to cover *all* correlated survey outcomes. Given this general purpose – and the limited number of available benchmarks – a comprehensive weighting programme was carried out while respecting limitations related to sample size. The benchmark variables selected for weighting (and their population estimate sources) are detailed below in Section 7.4.

The variables selected were those that were likely to be correlated with important survey outcomes, and those for which we had 'reliable' survey and benchmark estimates. This did not include income because of the item non-response both in this survey and in the benchmark sources. However, income is correlated with age, gender, educational level and employment status, all of which are included in the weighting matrix.

The dataset includes several weights; the derivation of each one is described below.

7.2 Address sampling design weight (DesAddW1)

An address sampling design weight has been produced equal to one divided by the *joint* address sampling probability across the two surveys (ABOS and face-to-face survey). This is equal to:

$$\frac{1}{(p(ABOS) + p(F2F)) - (p(ABOS) * p(F2F))}$$

This weight should not be used for analysis but is included in the data file so that the construction of the analytic weights described below is transparent.

7.3 Individual sampling design weight (DesIndvW1)

An individual-level sampling design weight has been produced equal to:

$$\frac{1}{(p(ABOS)*(min(1,3/N_h))) + (p(F2F)*(1/N_{he})) - (product of first two terms)}$$

where N_h is the number of individuals aged 18+ resident in the household and N_{he} is the number of individuals in the household eligible for the face-to-face survey.

This compensates for the pre-set maximum of three respondents per household in the ABOS survey and the selection of just one respondent per household in the face-to-face survey. This weight should only be used to profile the sample, not for substantive analysis as this weight does not incorporate any adjustments to compensate for differential non-response.

All ABOS respondents aged 18-69 and who coded 1-9 or 'don't know' at question D16 have a value of zero for p(F2F). Note that code 9 at question D16 is 'less often than about once every six months' while code 10 is 'never'. Consequently, some 18-69 year old ABOS respondents coding 9 will have been eligible for the face-to-face interview survey. However, as we do not know which ones we use the approximation that p(F2F) is zero for all ABOS respondents aged 18-69 and coded 9 at question D16.

It is also necessary to note that N_{he} – the number of individuals in the household eligible for the face-to-face survey – is not known for ABOS households. Instead, N_{he} has been imputed using information about the number of adults in the respondent's household (N_h) plus any eligibility information (age and internet activity level) available from other responses from the same household. This has been combined with an analysis of UK Labour Force Survey data (July – September 2016, 32 weighted by the person-weight variable <PWT16>) which has been used to estimate the relative probability of each eligibility scenario, given the partial household data.

7.4 Individual calibration weight (IndvW1)

The sample (after applying the individual sampling design weight described above) has been calibrated so that it matches several population parameters drawn largely from the latest UK Labour Force Survey (July – September 2016, weighted by the person-weight variable <PWT16> and limited to those aged 18+). For internet usage crossed by age, the ONS Opinions and Lifestyle Survey (January – March 2015) was used instead, ³³ as it is more granular in this respect than the Labour Force Survey.

Weighting was carried out to ensure that the Financial Lives Survey findings would best reflect and represent the overall UK population of those aged 18+ and adjust for the impact of differential response rates within our study. A rule was applied such that each category of a population parameter must comprise at least 2% of the total population. This was done to ensure that weights were focused on systematic (i.e. those reflecting genuine variation in response probabilities) rather than random departures from the population profile. If the likely sample size for a population category is <200, then it is hard to distinguish systematic from random departures, hence the 2% lower bound. Some response categories were grouped together to keep within this constraint (e.g. for Internet usage by age 'less often' or 'never' responses were combined for those aged 40-49).

The individual calibration weight should be used for analysing all variables except those where an additional random method has been used to allocate individuals to a specific product module or a filtered question set. These analyses require different weights, as described below.

³² The Labour Force Survey (July-September 2016): https://discover.ukdataservice.ac.uk/series/?sn=2000043

³³ Opinion and Lifestyles Survey: https://discover.ukdataservice.ac.uk/series/?sn=2000043

Calibration was based on the iterative proportional fitting method but constraints were applied to limit the range of calibration factors applied to the responding sample to help reduce the overall impact on effective sample sizes in the final weighted data set. They were restricted to the range 0.25 to 4.00 times the median value via a trimming procedure designed to restrict the impact across all calibration variables.

Cases missing data for a calibration variable were allocated to a category with probability proportionate to the unweighted distribution among those providing data. More complex allocation plans are typically not required when less than 5% of data are missing, as here.

The actual population parameters used to create the individual calibration weights are detailed below at Table 7.1. In fact, we made use of all the demographic parameters for which both Labour Force Survey and Financial Lives Survey data are available and the variable structures compatible.

Under the iterative proportional fitting method, the survey sample was weighted by DesIndvW1 and its weighted totals compared with the LFS population totals for the first variable. An interim weight was then produced that forced the DesIndvW1-weighted survey sample to match the population totals for the first variable. This interim weight was then used to compare the survey sample totals with the population totals for the next variable and the same 'matching' process was carried out. Once this was completed for all variables, there was the expected minor mis-match with all population totals except the last variable. Consequently, the whole process was repeated, starting with the latest weight and updating the weights each time. After twenty full iterations, the survey totals matched the population totals with respect to all variables in the matrix below. This final weight was then trimmed (see above) to form IndvW1.

Table 7.1 Population parameters used to create IndvW1

Population parameter	Estimated LFS population total
Gender by age	
M 18-24	2,920,742
M 25-29	2,254,867
M 30-34	2,167,608
M 35-39	2,059,394
M 40-44	2,030,236
M 45-49	2,244,701
M 50-54	2,257,878
M 55-59	1,995,072
M 60-64	1,718,469
M 65-69	1,734,383
M 70+	3,526,329
F 18-24	2,817,006
F 25-29	2,234,940
F 30-34	2,202,762
F 35-39	2,095,568
F 40-44	2,081,214

F 45-49	2,323,536
F 50-54	2,339,348
F 55-59	2,056,528
F 60-64	1,795,352
F 65-69	1,845,153
F 70+	4,349,989
Total	51,051,075
Employment by age	
Working 18-24	3,682,543
Working 25-34	7,266,737
Working 35-44	6,879,293
Working 45-54	7,680,031
Working 55-64	4,797,738
Working 65+	1,236,760
Unemployed but economically active	1,540,258
Economically inactive 18-24	1,534,772
Economically inactive 25-34	1,248,422
Economically inactive 35-44	1,153,546
Economically inactive 45-54	1,240,674
Economically inactive 55-64	2,587,996
Economically inactive 65+	10,202,305
Total	51,051,075
Education by age	
Degree 18-24	1,046,067
Degree 25-34	3,592,792
Degree 35-44	3,230,668
Degree 45-54	2,599,802
Degree 55-69	2,332,022
Non-Degree 18-24	4,430,350
Non-Degree 25-34	4,769,997
Non-Degree 35-44	4,535,887
Non-Degree 45-54	5,788,574
Non-Degree 55-69	6,974,289
No qualifications 18-34	758,719

No qualifications 35-44	499,857
No qualifications 45-54	777,087
No qualifications 55-69	1,838,646
70+	7,876,318
Total	51,051,075
Tenure	
Owned outright	16,750,489
Owned with mortgage	17,111,209
Not owned (inc. part mortgage/part rent)	17,189,377
Total	51,051,075
Marital status	
Married/in a civil partnership	25,826,931
Separated/divorced	5,383,663
Widowed	3,429,104
Cohabitating (& no prior marriage/civil partnership)	5,088,797
No cohabitation (& no prior marriage/civil partnership)	11,322,580
Total	51,051,075
Ethnicity	
White	45,995,201
Mixed	514,332
Indian	1,271,750
Pakistani	733,482
Bangladeshi/Chinese/other Asian	1,224,004
Black	1,312,306
Total	51,051,075
Region	
North East	2,081,488
NI di Mi	
North West	5,593,848
North West Yorkshire and The Humber	
	5,593,848
Yorkshire and The Humber	5,593,848 4,211,001
Yorkshire and The Humber East Midlands	5,593,848 4,211,001 3,673,630
Yorkshire and The Humber East Midlands West Midlands	5,593,848 4,211,001 3,673,630 4,476,472

South West	4,350,856
Wales	2,444,617
Scotland	4,292,992
Northern Ireland	1,408,728
Total	51,051,075
Internet usage by age and gender	
Every day or most days / 18-39	17,521,636
Less often or never / 18-39	1,231,251
Every day or most days / 40-49	7,452,496
Less often or never / 40-49	1,227,191
Every day or most days / 50-64	8,899,863
Less often but not never / 50-64	2,183,815
Never / 50-64	1,078,969
Every day or most days / 65-69	2,271,568
Every day or most days / 70-74	1,380,970
Less often but not never / 65-74	1,396,870
Every day or most days / 75-79	815,178
Every day or most days / 80+	532,381
Less often but not never / 75+	1,021,994
Never / 65+ Male	1,571,681
Never / 65+ Female	2,465,212
Total	51,051,075

The overall impact of weighting by IndvW1 was to reduce the effective sample size of our overall study from 12,865 unweighted to a net effective sample size of 9,077 (a 'design effect' of 1.42). As noted above, the objective of weighting is to reduce biases that may follow from the sample design or from different response rates between subpopulations. However, there is a penalty to pay with respect to the precision of the survey estimates such that a sample of 12,865 weighted to be representative only has the statistical value of a 'perfect' random probability sample of 9,077 that does not require any weighting.

It is also important to note that overall net effective sample sizes are impacted by other design effects including those related to the sample stratification and clustering (by address in the ABOS survey and by neighbourhood in the face-to-face interview survey). These are variable-specific but the net effect will generally reduce the effective sample size from the 'base' of 9,077.

7.4.1 Question B1 weight (IndvW1_B1)

Question B1, used to collect information on respondents' level of savings, has a high missing data rate: 18% of respondents to B1 'preferred not to say' when asked for a response, and these respondents were atypical. To assist with analysis, a version of the individual calibration weight (IndvW1_B1) was produced just for

those providing an answer at B1 to ensure sample balance for this question.

7.5 Module weight (ModW1)

To analyse data from the product modules (ignoring for now any further product selection), a module weight has been calculated, equivalent to the individual calibration weight divided by the probability of being allocated to the selected module. This probability is dependent on eligibility for other modules and the probability differs between 'soft launch' cases and 'main stage' cases and between the ABOS and face-to-face interview surveys, and also reflects the temporary scripting errors noted in Section 5.1.2. Although a small population subset (those aged 70+ who use the Internet) may be sampled from either the ABOS or face-to-face interview survey, the module weight *only* takes account of the survey for which the respondent was sampled. This is a practical necessity, given the prior joint-sample calibration stage.

The size of the module weight component (i.e. the module weight divided by the individual calibration weight) was limited to a maximum of 10 to avoid excessive weight variance.

ModW1 was re-scaled so that its sum for respondents answering that module matched the sum of IndvW1 for those *eligible* for that module. This weight is included separately as ModW1_rescaled.

The design effect of the impact of the weighting process for the total overall sample size for each module (combining ABOS and face-to-face survey data) is shown in Table 7.2.

7.5.1 Pension Decumulation 1 module weight (ModDW1)

To overcome the impact of an algorithm scripting error during fieldwork, a small number of Pension Decumulation 1 eligible respondents who had not been given any chance of selection for that module were re-contacted to complete this module in addition to the original module they completed. As a result, 34 respondents completed the Pension Decumulation 1 module as well as another module.

The weight for analysing the Pension Decumulation 1 module (ModDW1) incorporates a missing data adjustment to compensate for systematic differences between the responding subset and the pool of eligible cases. The only observed significant difference between the two related to housing tenure.

Table 7.2 The design effects of weighting and associated number of interviews (base sample sizes (unweighted) and net effective sample sizes) for each module

	Module	Estimated module design effect of the weighting process	Number of interviews (unweighted)	Net effective sample size
1	Retail Banking	2.19	2,565	1,169
2	Retail Investment	1.55	1,431	923
3	Mortgages – First Charge	1.45	1,268	875
4	Mortgages – Second Charge	1.26	49	39
5	Consumer Credit	1.44	1,927	1,336
6	General Insurance & Protection	1.77	1,686	955
7	Pension Accumulation	1.40	1,496	1.065
8	Pension Decumulation 1	1.40	152	108

9	Pension Decumulation 2	1.52	278	183
10	Advice 1	1.49	509	342
11	Advice 2	1.52	1,222	804

7.6 Advice weight (AdvW1)

The advice weight is used for analysing the subset of common advice ('FAMR')³⁴ variables found in five modules: 'Advice 1 (any product group)', 'Retail Investments', 'Pension Accumulation', 'Pension Decumulation 1 and 'Pension Decumulation 2'. This weight is equal to the individual calibration weight divided by 1-((1-p(Advice 1))*(1-p(Retail Investments))*(1-p(Pension Accumulation))*(1-p(Pension Decumulation 2))), i.e. the inverse of the probability of selecting any one of the five modules. This weight is used for analysing these data, irrespective of any further filtering (e.g. to exclude respondents who answered questions about an advice session that was not their most recent).

As well as analysing 'advice' data in general, analysts are likely to want to analyse 'advice' data from a specific topic area ('retail investments', 'saving into a pension' or 'retirement planning'). Advice data for these topics may be found in any of the five modules shown below since an advice session may cover more than just the topic most relevant to that module (e.g. saving into a pension to Pension Accumulation). The advice weight can be used for these analyses too.

The five modules were:

- Advice 1: session will have covered advice on retail investments, saving into a pension and/ or retirement planning
- Retail Investments: session will have covered advice on retail investments, and it may also have covered advice on saving into a pension and/ or retirement planning
- Pension Accumulation: session will have covered advice on saving into a pension, and it may also have covered advice on retail investments and/ or retirement planning
- Pension Decumulation 1: session will have covered advice on retirement planning, and it may also have covered advice on saving into a pension and/ or retail investments
- Pension Decumulation 2: session will have covered advice on retirement planning, and it may also have covered advice on saving into a pension and/ or retail investments

Note there are four questions (D16e, D16f, F3, D23b) that are included in some but not all the 'advice' sections of each module. Technically, each of these should have their own weight but, for practical reasons, it was deemed acceptable to simply use the advice weight.

7.7 Product weight (ProdW1)

Within three modules ('Retail Investments', 'Consumer Credit' and 'General Insurance') a single product was randomly selected as the focus for the questionnaire.

For analysing these product-level data, the product weight has been generated by dividing the module weight by the conditional probability of being allocated to the selected product. Because each eligible product held by a respondent had the same probability of being selected, this is equivalent to multiplying the module weight by the number of products the respondent has purchased/ acquired within the module product group that *also* fulfil other eligibility criteria (e.g. that it was taken out in the last two years). However,

³⁴ FAMR is the Financial Advice Market Review.

the product weight component (i.e. the product weight divided by the module weight) was limited to a maximum of five to avoid excessive weights.

Within the other modules, product selection rules were as follows: 35

- Retail Banking no product selection
- Mortgages (First Charge) no product selection
- Mortgages (Second Charge) no product selection
- Pensions Accumulation active DC schemes are selected over dormant DC schemes, but the module is treated as if no product selection takes place
- Pensions Decumulation 1 no product selection
- Pensions Decumulation 2 no product selection

In all product modules, respondents are required to answer about the 'most recent' product of the selected product type. Because the selection criteria were not *random*, no further weighting can - or should - be applied to compensate for additional variation in selection probabilities.

Many products have small responding sample sizes and even smaller net effective sample sizes. FCA reporting rules require that no survey estimates based on fewer than 50 cases should be published and that survey estimates based on between 50 and 100 cases should be treated with caution. In table 7.3 below we report the actual and net effective sample sizes for every product where the net effective sample size is at least 50. Only ten products meet this criterion.

Table 7.3 The design effects of weighting and associated number of interviews (base sample sizes (unweighted) and net effective sample sizes) for each product (minimum $n_{eff} = 50$)

	Product	Estimated design effect of the weighting process	Number of interviews (unweighted)	Net effective sample size
1	Credit card	1.47	364	248
2	Motor insurance	2.40	370	154
3	Home insurance – contents and buildings combined	1.88	237	126
4	Personal loan	1.85	219	119
5	Stocks and shares ISA(s)	1.63	159	98
6	Catalogue credit	1.77	165	93
7	Shares/equities	1.61	136	84
8	Motor breakdown cover	1.81	151	83
9	Motor finance arranged with hire purchase or personal contract	1.88	145	77

³⁵ These notes are high-level and omit the finer detail of product selection rules. See Section 5.5 for further detail.

	purchase (PCP)			
10	Single trip travel insurance	2.74	188	69

When considering the product data available within the Financial Lives Survey it should be noted that while there may be demand not only for analysing the product-specific data but also aggregating across all products covered by the module (e.g. all of the 29 products in the General Insurance & Protection module), this latter analysis is not possible. The selected product is neither (necessarily) the most recently purchased product among those covered by the module, nor a random sample from among all those products covered by the module and fulfilling set other criteria. It is therefore hard to express what any aggregation of products represents so we recommend that any analysis which groups products should be avoided.

7.8 Filtered question set weights (FilSet...W1)

There are five filtered questions sets, with different random allocation criteria as described in Section 5.4.

As a reminder: note that allocation to a filtered question set was carried out *before* eligibility for that set was established and no reallocation was carried out for respondents allocated to a question set for which they were ineligible. This means that if a respondent was randomly allocated to a question set but not eligible for it then they would not have an opportunity to answer questions for other filtered sets that were included within the random allocation process. For example, if a respondent at soft launch was randomly assigned to the Self-employed Banking question set but they were not self-employed then they could answer neither the Claims Management Companies (CMC) nor Savings questions.

For analysis purposes, each filtered question set required its own weight equal to the individual calibration weight divided by the allocation probability of the selected filtered question set.

It should be noted that question CM3³⁶ and follow-up questions within the CMC module are asked of everybody, so that the correct weight to use when analysing these data is the individual calibration weight (IndvW1). Furthermore, a small number of these questions (CM5 to CM7) was asked about a single event, randomly selected from among eligible events. The weight CM5to7W1 accounts for this random selection.

The impact of the weighting process on sample size for each filtered question set (combining ABOS and face-to-face survey data) is shown in Table 7.4.

Table 7.4 The design effects of weighting and associated number of interviews (base sample sizes (unweighted) and net effective sample sizes) for each filtered question set

	Estimated Design Effect of the weighting process	No of interviews (unweighted)	Net Effective Sample size
Self-employed Banking	1.32	751	570
Savings	1.39	2,975	2,133
Claims Management Companies (CMC)	1.40	2,593	1,849
Fraud and Scams	1.42	6,337	4,463
Access	1.40	3,192	2,283

³⁶ CM3: "During the last 3 years, have you made a claim, successful or otherwise, for compensation for any of the following? This may have been through a claims management company, or not."

7.9 Product weight for Savings filtered question set (FilSetSvW1 (G/N) Savings)³⁷

Within the 'Savings' filtered question set there were also questions that focused on just a single randomly selected savings product. This meant that additional weights were needed within this section to analyse those questions that focused on the selected savings product.

7.10 Gross weighting

Two sets of weighting variables have been provided: grossing weights (G) and n-standardised weights (N). The grossing weights sum to the UK adult population and are used for estimating population totals as well as proportions and means.

The n-standardised weights sum to the overall sample size instead. The n-standardised weights carry more information about the reliability of the data, since they broadly reflect the actual sample size obtained and lead to less cluttered tables of proportions and means. However, n-standardised weights cannot be used to estimate gross population totals.

7.10.1 Rescaled gross weights (ModW1_G_rescaled and ProdW1_G_rescaled5)

All module weights and the five key product grossing weights³⁸ have been re-scaled so that the gross-weighted totals of the number allocated to that module – or to be asked about that product – match the gross-weighted totals based on the individual calibration weight IndvW1. Re-scaling only affects the estimation of population totals with characteristic x, not the estimation of proportions with characteristic x.

7.11 Weighting variables supplied in the data file

Each of the weights has the suffix _G or _N to identify grossing weights and n-standardised weights. The weight names and descriptions are summarised in Table 7.5, while Table 7.6 provides instructions on when they should be applied.

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³⁷ Also see Section 7.8 for an explanation of weighting for the Savings filtered question set.

³⁸ Rescaling was implemented for: motor insurance, combined (buildings &contents) home insurance, motor breakdown cover, catalogue credit, and shares & equities. However product reporting is not limited to these five products.

Table 7.5 Weight names

Weight name	Description
DesAddW1	Design weight (addresses)
DesIndvW1	Design weight (individuals)
IndvW1	Individual calibration weight
ModW1	Module weight (for all respondents randomly allocated to a particular module)
ModW1_G_rescaled	Module weight (as above but rescaled so sum of weights matches sum of IndvW1 weights among those eligible for the module)
ModDW1	Module weight (for all respondents who completed Pension Decumulation 1 ³⁹)
AdvW1	Advice weight
ProdW1	Product weight (for all respondents randomly allocated to a particular product within their allocated module)
ProdW1_G_rescaled5	Grossing product weight for five key products (as above but rescaled so sum of weights matches sum of ModW1_G_rescaled weights among those eligible for the product)
FilSetAcW1	Filtered question set weight (Access)
FilSetSEW1	Filtered question set weight (Self-employed Banking)
FilSetCMCW1	Filtered question set weight (CMC)
CM5to7W1	Weight for questions CM5 to CM7
FilSetSvW1	Filtered question set weight (Savings)
FilSetSvW1_[G/N]_Savings	Filtered question set weight (Savings, question items for selected savings product)
FilSetFrW1	Filtered question set weight (Fraud and scams)

³⁹ Note that some of these respondents will also have a module weight because they were selected for another module.

Table 7.6 Weights and their applications

	Population/ base	N-standardised weight name	Gross population weight name
Demographics & attitudes	All	IndvW1_N	IndvW1_G
Balance sheet (i.e. assets and debt) (except B1)	All	IndvW1_N	IndvW1_G
Balance sheet question B1	All	IndvW1_B1_N	IndvW1_B1_G
Advice incidence	All	IndvW1_N	IndvW1_G
Product ownership & module eligibility	All	IndvW1_N	IndvW1_G
Retail Banking module	All eligible for module	ModW1_N	ModW1_G_rescaled
Retail Investment module	All eligible for module	ModW1_N	ModW1_G_rescaled
Retail Investment selected product	All with qualifying selected product	ProdW1_N	ProdW1_G or ProdW1_G_rescaled5
Mortgages - 1C module	All eligible for module	ModW1_N	ModW1_G_rescaled
Mortgages - 2C module	All eligible for module	ModW1_N	ModW1_G_rescaled
Consumer Credit module	All eligible for module	ModW1_N	ModW1_G_rescaled
Consumer Credit selected product	All with qualifying selected product	ProdW1_N	ProdW1_G or ProdW1_G_rescaled5
GI&P module	All eligible for module	ModW1_N	ModW1_G_rescaled
GI&P selected product	All with qualifying selected product	ProdW1_N	ProdW1_G or ProdW1_G_rescaled5
Pension Accumulation module	All eligible for module	ModW1_N	ModW1_G_rescaled
Pension Decumulation 1 module	All eligible for module	ModDW1_N	ModDW1_G
Pension Decumulation 2 module	All eligible for module	ModW1_N	ModW1_G_rescaled

Advice 1 module ⁴⁰	All eligible for module	ModW1_N	ModW1_G_rescaled
Advice 2 module ⁴¹	All eligible for module	ModW1_N	ModW1_G_rescaled
Advice 1/Advice 2 common questions	All eligible for either module	ModW1_N	ModW1_G_rescaled
Access FQS (filtered question set)	All eligible for FQS	FilSetAcW1_N	FilSetAcW1_G
Self-employed Banking FQS	All eligible for FQS	FilSetSEW1_N	FilSetSEW1_G
Fraud and Scams FQS	All eligible for FQS	FilSetFrW1_N	FilSetFrW1_G
Claims Management Companies FQS (except question CM3)	All eligible for FQS	FilSetCMCW1_N	FilSetCMCW1_G
Claims Management Companies CM3	All	IndvW1_N	IndvW1_G
CM5-7	All	CM5to7W1_N	CM5to7W1_G
Savings FQS	All eligible for FQS	FilSetSvW1_N	FilSetSvW1_G
Savings selected product	All with qualifying selected product	FilSetSvW1_N_Savings	FilSetSvW1_G_Savings
Gap Insurance	All	IndvW1_N	IndvW1_G
Unbanked	All	IndvW1_N	IndvW1_G
Guidance 42	All	IndvW1_N	IndvW1_G
Advice combined questions	All who have had advice in the last 12 months and therefore eligible for FAMR questions (in whichever module they appear)	AdvW1_N	AdvW1_G
Guidance combined questions	All	IndvW1_N	IndvW1_G

⁴⁰ All analysis for the advice questions is based on the advice combined section so it is unlikely that these questions weighted by ModW1 will be needed.

⁴¹ As with advice, guidance questions are asked in more than one place and consequently we report guidance questions combined. If it is necessary to report the guidance questions asked within this module standalone, then ModW1 would be used.

⁴² Whilst IndvW1 has been indicated in the table, no weight can strictly apply here, as these questions were intended simply to catch any remaining respondents not asked the guidance questions in earlier modules. As with advice, we recommend guidance questions should only be reported as part of a combined set.

7.12 Confidence intervals and the impact of the Financial Lives Survey design effects

In several places in this section of the technical report, we report the 'design effects' and consequent 'net effective sample sizes' for modules within the Financial Lives Survey. The net effective sample size is equal to the actual sample size divided by the design effect *due to weighting*. The *total* design effect is slightly different since this represents the combined impact of a number of design components including weighting but also sample stratification and clustering (by household in the ABOS survey and by neighbourhood in the face-to-face interview survey). This total design effect is different for every variable in the survey so it is not practical to list the total design effects for every variable here.

Although the total design effect can be estimated with advanced statistical software, a reasonable rule of thumb is to multiply the quoted design effect due to weighting (printed in several tables) by 1.2 or – equivalently - divide the quoted net effective sample size by 1.2. From this, it is straightforward to work out the confidence interval for each survey estimate.

Table 7.7 shows the 95% confidence interval as a function of both the net effective sample size and the population variance of the statistic itself. For simplicity, we use proportions for illustration. Table 7.8 uses this data to calculate the width of the confidence interval for each cell.

Table 7.7: 95% confidence intervals as a function of the proportion estimate and the net effective sample size

		Net effective sample size						
Proportion estimate	50	100	200	500	1000	2500	5000	10000
0.5%/99.5%	0.1%-	0.2%-	0.3%-	0.4%-	0.1%-	0.2%-	0.3%-	0.4%-
	2.5%	1.9%	1.5%	1.1%	0.9%	0.8%	0.7%	0.6%
1%/99%	0.4%-	0.5%-	0.7%-	0.1%-	0.4%-	0.6%-	0.7%-	0.8%-
	3.8%	3.0%	2.4%	1.9%	1.6%	1.4%	1.3%	1.2%
2%/98%	1.0%-	1.5%-	0.1%-	0.8%-	1.1%-	1.5%-	1.6%-	1.7%-
	5.9%	4.7%	3.9%	3.2%	2.9%	2.5%	2.4%	2.3%
5%/95%	4.1%-	0.7%-	2.0%-	3.1%-	3.6%-	4.1%-	4.4%-	4.6%-
	11.0%	9.3%	8.0%	6.9%	6.4%	5.9%	5.6%	5.4%
10%/90%	1.7%-	4.1%-	5.8%-	7.4%-	8.1%-	8.8%-	9.2%-	9.4%-
	18.3%	15.9%	14.2%	12.6%	11.9%	11.2%	10.8%	10.6%
25%/75%	13.0%-	16.5%-	19.0%-	21.2%-	22.3%-	23.3%-	23.8%-	24.2%-
	37.0%	33.5%	31.0%	28.8%	27.7%	26.7%	26.2%	25.8%
50%	36.1%-	40.2%-	43.1%-	45.6%-	46.9%-	48.0%-	48.6%-	49.0%-
	63.9%	59.8%	56.9%	54.4%	53.1%	52.0%	51.4%	51.0%

Table 7.8: Width of 95% confidence intervals as a function of the proportion estimate and the net effective sample size

	Net effective sample size							
Proportion estimate	50	100	200	500	1000	2500	5000	10000
0.5%/99.5%	2.4%	1.7%	1.2%	0.7%	0.8%	0.6%	0.4%	0.2%
1%/99%	3.4%	2.5%	1.7%	1.8%	1.2%	0.8%	0.6%	0.4%
2%/98%	4.9%	3.2%	3.8%	2.4%	1.8%	1.0%	0.8%	0.6%
5%/95%	6.9%	8.6%	6.0%	3.8%	2.8%	1.8%	1.2%	0.8%
10%/90%	16.6%	11.8%	8.4%	5.2%	3.8%	2.4%	1.6%	1.2%
25%/75%	24.0%	17.0%	12.0%	7.6%	5.4%	3.4%	2.4%	1.6%
50%	27.8%	19.6%	13.8%	8.8%	6.2%	4.0%	2.8%	2.0%

Despite careful design, and calculation of the impact of this design on the precision of the results, some sub-groups will be represented by a relatively small number of interviews and as such the findings from these sub-groups are less reliable and need to be treated with some caution. They will give 'broad picture' estimates rather than precise estimates.

Strengths and limitations of the Financial Lives Survey 2017

The Financial Lives Survey was designed to provide both breadth and depth of understanding of consumer perceptions, behaviours and experience, as noted in Section 1.2. Within the limitations of random probability sample surveys based on mixed-mode data collection, we are confident that the survey broadly meets its stated objectives.

8.1 Strengths

- 1. Random probability sampling: the Financial Lives Survey was based on random probability sampling. Using appropriate weighting, results from the study can estimate the likely true population, within measurable confidence intervals. Due principally to the demands of cost and time, most studies of this size and scope tend to use non-probability samples and quota controls which lack the corresponding statistical rigour of random probability sampling.
- 2. **A large study size**: A random probability sample study of c.13,000 respondents is large and thus allows reliable population estimates to be provided for a significant number of sub-groups of interest. Even after allowing for the effects of weighting and sample design the study net effective (neff) sample size is c.9,000. ⁴³ This means that statistically the findings from our study are equivalent to those that would be obtained from a simple random sample study with a size of c.9,000.
- 3. **Efficient and mixed-mode interviewing programme**: Large survey samples can be conducted cost-effectively using online data collection. However, the views of those who cannot be reached online cannot be reliably represented by reweighting only online results.

The Financial Lives Survey mixed-mode approach used a (clustered) random sampling method to sample, identify and interview face-to-face a fairly significant number of those not online. This is important, given the increase in online services such as online banking, investment platforms and price comparison websites to compare and facilitate the purchase of financial products.

Furthermore, the face-to-face component also included interviews amongst adults aged 70 and over. While a proportion of this age group may be online, they tend to be less inclined to respond to online surveys.

A sample of size of approaching 900 face-to-face interviews can be considered reasonably large. Mixed-mode interviewing maximised the overall sample size, whilst ensuring adequate coverage of the total UK adult population of interest and keeping study costs lower in comparison to comprehensive face-to-face interviewing.

4. **Extensive topic coverage using a modular design**: Given the objectives of the Financial Lives Survey study were to provide breadth and depth of understanding of consumer perceptions, behaviours and experience of financial services and products, its scope was both ambitious and extensive. In order to maximise the value of the study, the questionnaire was necessarily both long

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⁴³ Net effective sample sizes were also calculated for each of the different study modules, filtered questionnaire sets and for selected products and were found to be acceptable in all cases.

and detailed. To ensure that respondents would be prepared to provide accurate and reliable responses the questionnaire was designed to take around 30 minutes for an average respondent to complete. To achieve this, the questionnaire was designed in a modular way and a randomised procedure was implemented to allocate individuals to a single appropriate product module. Similar random selection was used so individual respondents only covered a selection of topics from within the short question sets and to select specific products to cover within the product modules.

- 5. Comprehensive weighting: Whilst the Financial Lives Survey was based on a random probability sample, given the likely impact of differential response amongst respondents of different types, an extensive reweighting process was implemented based on demographics and online attributes. Individual weights were created for each individual respondent to enable them together to adequately reflect the UK adult population. Additional weighting was designed to compensate for the added sub-selection of modules within the questionnaire and for selected products within modules and elsewhere.
- 6. Study piloting: The Financial Lives Survey timetable was designed to allow time to test and improve the sample selection procedures, the questionnaire wording and the impact of selections within the questionnaire. Since at the start of the study we did not have accurate data to estimate likely penetration estimates for each of the different modules, the study fieldwork was phased so that after an initial stage we could review and optimise the random selection process. The initial stage (or soft launch) also included incentive testing designed to improve response rates.

8.2 Limitations

- 7. Sample frame coverage: The Financial Lives Survey is a study of UK adults and whilst all reasonable efforts have been made to ensure the frame is complete, studies of this type can never be 100% representative. Initially the sampling procedures were based on address selection from the Postal 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 very latest addresses. PAF also includes commercial addresses and in certain cases these commercial properties may include residential households. We believe that the overall study design has provided a high level of UK adult representativeness, but it is unlikely to be perfect across all different sub-groups. Omissions include any communal establishments such as: prisons, permanent residential care homes and student halls of residence.
- 8. Sampling methodology differences for online and face-to-face: Online sampling used stratification that differed slightly for each country within the UK (due to different data availability). Stratification used a measure of deprivation for all neighbourhoods. These neighbourhoods were then ranked and divided by decile and sorted by local authority and then by postcode. Selection was then systematic, resulting in a representative geographic spread.
 - Due largely to cost concerns, face-to-face sampling needed to be clustered and was thus less efficient when compared with the effectiveness of a simple random selection process used for the online survey. The face-to-face process was stratified by neighbourhood (and not pre-stratified by any deprivation measure) and a small number of neighbourhoods (167) selected so that interviewing could be clustered.
 - The impact of these sampling methodology differences means that whilst the sample design online is likely to be extremely efficient, the face-to-face clustering method is less efficient (when compared to a simple random sample design).
- 9. **Face-to-face coverage:** Face-to-face sampling excluded Northern Ireland. Whilst the GB face-to-face results have been reweighted to overall UK adult estimated profiles, the face-to-face survey is consequentially slightly less reliable than its online counterpart.

- 10. Weighting: Whilst overall study weighting was extensive and carefully developed, it was largely based on representing the demographic profiles of the UK adult population. Representation of the different behavioural and attitudinal groupings was not attempted since in practice we have no reliable source of benchmark information, nor knowledge of which attitudinal variables might be most important across the financial consumer market. Nevertheless, it is unlikely to have a significant impact on overall and sub-population findings, due to the comprehensive nature of the demographic weighting that was employed.
- 11. Selection of adults in households: Whilst the Financial Lives Survey covers UK adults (aged 18 and over), the sampling methodology was based on a random probability selection of households. In the online study a maximum of three adults per household were allowed to complete the survey. In households with more than three adults theoretically there should have been a procedure used for respondent selection; in practice, the lack of this is unlikely to have had any significant impact on study results. The face-to-face sample was designed to allow just a single eligible adult respondent per household, with a random selection process used to identify the potential individual.
 - Whilst the difference in approach needs to be noted as a possible limitation, in our view this is unlikely to have a significant adverse impact on study findings.
- 12. **Respondent knowledge and questionnaire testing:** The financial market is complex and designing a questionnaire and using appropriate terms that are understood by everyone is difficult.
 - In a self-completion study, in particular the individual respondent's understanding and knowledge may be constrained. Whilst responses may be given truthfully and honestly, they may be inaccurate and reflect misunderstandings.
 - Some testing was employed to avoid misunderstanding, but, as with all surveys, results to some of the more complex subjects covered in the questionnaire should be treated carefully.
 - The cognitive and user testing was not as comprehensive as we would have liked, and some sections were not tested. The usability testing was limited, and we kept no record of the types of device tested.
- 13. Small (effective) sample sizes: Due to their incidence in the marketplace as well as the need to keep the study cost-effective, certain subjects and products have small sample sizes. This means that results for some aspects may be based on particularly small sample sizes which, when taking into account the sample design and weighting necessary to provide overall representative population estimates, will give study estimates with large confidence intervals. As a result, some survey findings should be treated with caution and only used as indicative, rather than as firm market measures.
- 14. Limited ability to report for individual products or across sectors: Given the number of different products covered within many of the different modules, and the different within-module product selection criteria (often also based on 'most recently acquired product' within the selected module), there are only a limited number of individual products that have a (net effective) sample size that will provide any reasonable depth of analysis.
 - It is a weakness of the design that we allowed low incidence products to be selected for further exploration within product modules. We allowed this, while recommending that results for 'selected product' questions could be reported at total level, something we subsequently realised not to be meaningful. The survey will need to be re-designed for the next wave to avoid wasting interview time on products where unweighted sample sizes below 50 (often much below) cannot be reported on a quantitative basis. The survey's ability to compare results both by product and by sector will need to be reviewed.

- 15. Study coverage: The Financial Lives Survey was established to cover consumer perception of financial services and products; it was designed to cover UK adults (aged 18+), and results have been reported based on the UK adult population and for different sub-groups of that population. Results relate to individual consumers, and thus the study findings do not, in the most part, provide an overview of the complexities of household finances or joint decision-making processes. Additionally, the study does not cover the business market and hence it is possible that for some sub-groups, such as those self-employed or working from home, findings shown may not exclusively relate to the consumer market since some financial dealings will straddle consumer and business behaviour.
- 16. **Programming:** It is not unexpected that on a survey of this size, and in its first wave, that a number of programming errors will have been made.

Some of these are inconsequential for published findings (e.g. too many respondents were asked a question, and their results can be filtered out), but users of the published weighted data tables should be aware that the FCA in using the data may not yet have identified all such errors.

In some few cases the errors cannot be rectified, e.g. where too few respondents were asked questions – and this is the case, for instance, in the problem and complaints section of the consumer credit module.

Appendix A - Advance letter used during the online fieldwork





The Resident(s) Street name Town County/Country Postcode

00 Month 2017

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 when it comes to money and when using services like bank accounts, loans and insurance.

We are interested in your attitudes towards money and your experience of different services. By giving us your views 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.

It's easy to have your say, please go to **www.FinancialLives.co.uk** and log in using the reference number and password details provided below.

Person One		Person Two		Person Three	
Ref No:	123456	Ref No:	123456	Ref No:	123456
Password:	xxxxxx	Password:	xxxxxx	Password:	xxxxxx

Please complete the survey by 3rd February.

It will be easier for you to use a computer, laptop or tablet, rather than a mobile phone, to complete the survey.

Thank you in advance for your help.

Yours faithfully,

Joanna Hill

Director of Market Intelligence, Data & Analysis, FCA

This survey is being carried out on behalf of the FCA by Kantar Public, an independent social research organisation. If you would like to talk to someone about the survey, please contact Kantar Public via the email address below or by calling the information line between 9am-5pm Monday-Friday.

FinancialLives@kantarpublic.com Information Line: 0800 015 2476

You can also call the FCA's Contact Centre on 0800 111 6768. Please see overleaf for Frequently Asked Questions.



Why did we choose your address?

As it is not possible to ask everyone to take part in the survey, we select a sample of addresses to represent the entire country. Your address was selected at random from a list of residential addresses held by the Royal Mail.



Who is conducting the survey?

The Financial Conduct Authority (FCA) is the financial regulator for the UK and works to secure an appropriate degree of protection for consumers when buying financial products (for example, current accounts, savings accounts and home insurance). The survey is being conducted on behalf of the FCA by **Kantar Public**, an independent social research agency.



How will my information be used?

The Financial Lives survey aims to learn more about people's experiences with financial services (such as bank accounts, insurance and mortgages) and the firms that provide these. We will be using the results to understand better what works well for people and what does not work well, including any problems with accessing these services.



Is this survey confidential?

The information that we collect will be used only **for research purposes**. The answers you provide, and your name and address, will not be used for sales or direct marketing purposes. Your answers will be combined with those of others who take part in the survey, for reporting purposes. You will not receive any junk mail or marketing calls as a result of taking part.



Why are my views important?

We need people from all age groups and backgrounds to take part. Your views are important to us, so that we develop a representative picture of the communities that people live in. Your address is one of only a small number selected in your local area.



What do I need to do?

Up to three people aged 18 or over in your household should go to **www.Financial Lives.co.uk**, enter one of the reference numbers and associated passwords provided, and complete the questionnaire by the date shown overleaf. If more than one person in the household is completing the survey, please make sure each person uses different log-in details to access the survey.



How do I collect the voucher?

Once you have completed the survey, you will be directed to the Perks website where you can use the survey log-in details to sign in and choose from a range of different shopping vouchers.

Appendix B - First reminder used during the online fieldwork





The Resident(s) Street name Town County/Country Postcode

00 Month 2017

The Financial Lives Survey: Your views are important to us

Dear Sir/Madam,

We 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, loans and insurance.

It would help us greatly if all of those 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 services. By giving us your views 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.

It's easy to have your say, please go to www.FinancialLives.co.uk and log in using the reference number and password details provided below.

Person One		Person Two		Person Three	
Ref No:	123456	Ref No:	123456	Ref No:	123456
Password:	xxxxxx	Password:	xxxxxx	Password:	xxxxxx

Please complete the survey by 26th February.

It will be easier for you to use a computer, laptop or tablet, rather than a mobile phone, to complete the survey.

Thank you in advance for your help.

Yours faithfully,

Joanna Hill

Director of Market Intelligence, Data & Analysis, FCA

This survey is being carried out on behalf of the FCA by Kantar Public, an independent social research organisation. If you would like to talk to someone about the survey, please contact Kantar Public via the email address below or by calling the information line between 9am-5pm Monday-Friday.



Why did we choose your address?

As it is not possible to ask everyone to take part in the survey, we select a sample of addresses to represent the entire country. Your address was selected at random from a list of residential addresses held by the Royal Mail.



Who is conducting the survey?

The Financial Conduct Authority (FCA) is the financial regulator for the UK and works to secure an appropriate degree of protection for consumers when buying financial products (for example, current accounts, savings accounts and home insurance). The survey is being conducted on behalf of the FCA by **Kantar Public**, an independent social research agency.



How will my information be used?

The Financial Lives survey aims to learn more about people's experiences with financial services (such as bank accounts, insurance and mortgages) and the firms that provide these. We will be using the results to understand better what works well for people and what does not work well, including any problems with accessing these services.



Is this survey confidential?

The information that we collect will be used only **for research purposes**. The answers you provide, and your name and address, will not be used for sales or direct marketing purposes. Your answers will be combined with those of others who take part in the survey, for reporting purposes. You will not receive any junk mail or marketing calls as a result of taking part.



Why are my views important?

We need people from all age groups and backgrounds to take part. Your views are important to us, so that we develop a representative picture of the communities that people live in. Your address is one of only a small number selected in your local area.



What do I need to do?

Up to three people aged 18 or over in your household should go to **www.Financial Lives.co.uk**, enter one of the reference numbers and associated passwords provided, and complete the questionnaire by the date shown overleaf. If more than one person in the household is completing the survey, please make sure each person uses different log-in details to access the survey.



How do I collect the voucher?

Once you have completed the survey, you will be directed to the Perks website where you can use the survey log-in details to sign in and choose from a range of different shopping vouchers.

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Appendix C - Second reminder used during the online fieldwork

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The Resident(s) Street name Town County/Country Postcode

00 Month 20XX

The Financial Lives Survey

Dear Sir/Madam,

I recently invited up to three adults (aged over 18) in your household to take part in the Financial Lives Survey, which is being conducted on behalf of the Financial Conduct Authority (FCA), the UK's financial regulator. The aim of the survey is to learn more about consumers' use of and experiences with financial products, services and firms. We want to understand what works well for consumers and what does not work well, including any problems with accessing products and services.

In order to fully understand consumers use and experiences with financial products, we need as many people to take part in the survey as possible. I apologise for troubling you again, but it would help us greatly if those who haven't taken part in the survey yet would be willing to do so.

Each person who completes the survey will receive a £10 shopping voucher to thank them for their time.

The survey will ask you about your attitudes to money and managing your finances, and about the financial products and services you use, or you may not have been able to access.

To fill in the questionnaire online please go to www.FinancialLives.co.uk and log in using the reference number and password details provided below. Each set of log-in details can only be used once, so each participant will need to log in using a different reference number and password.

Person One		Person Two		Person Three	
Ref No:	123456	Ref No:	123456	Ref No:	123456
Password:	xxxxx	Password:	xxxxxx	Password:	xxxxxx

The closing date for the survey is 5th March 2017.

The survey can be completed in any location with internet access and on a desktop computer, laptop or tablet. It is best not to attempt to complete the survey on a mobile phone. Please be assured that this research is conducted in accordance with the Market Research Society Code of Conduct.

Thank you in advance for your help.

Yours faithfully.

Joanna Hill

Director of Market Intelligence, Data & Analysis, FCA

This survey is being carried out on behalf of the FCA by Kantar Public, an independent social research organisation. If you would like to talk to someone about the survey, please contact Kantar Public via the email address below or by calling the information line between 9am-5pm Monday-Friday.

Information Line: 0800 015 2476 FinancialLives@kantarpublic.com

You can also call the FCA's Contact Centre on 0800 111 6768. Please see overleaf for Frequently Asked Questions.



Why did we choose your address?

As it is not possible to ask everyone to take part in the survey, we select a sample of addresses to represent the entire country. Your address was selected at random from a list of residential addresses held by the Royal Mail.



Who is conducting the survey?

The Financial Conduct Authority (FCA) is the financial regulator for the UK and works to secure an appropriate degree of protection for consumers when buying financial products (for example current accounts, savings accounts and home insurance). The survey is being conducted on behalf of the FCA by **Kantar Public**, an independent social research agency.



How will my information be used?

The Financial Lives survey asks you about your financial products and the financial services you use. The aim of the survey is to measure and monitor trends in consumer engagement with financial services and products, through analysing attitudes, expectations and experiences. We are looking to gain a clearer picture of the market and actual or potential signs of risk for consumers. We will be using the results of the survey to help us create better regulation, including the ways in which we hold financial firms to account.



Is this survey confidential?

The information that we collect will be used only **for research purposes**. The answers you provide, and your name and address, will not be used for sales or direct marketing purposes. Your answers will be combined with those of others who take part in the survey, for reporting purposes. You will not receive any junk mail or marketing calls as a result of taking part.



Why are my views important?

We need people from all age groups and backgrounds to take part. Your views are important to us, so that we develop a representative picture of the communities that people live in. Your address is one of only a small number selected in your local area

.....



What do I need to do?

Up to three people aged 18 or over in your household should go to **www.Financial Lives.co.uk**, enter one of the reference numbers and associated passwords provided, and complete the questionnaire by the date shown overleaf. If more than one person in the household is completing the survey, please make sure each person uses different log-in details to access the survey.



How do I collect the voucher?

Once you have completed the survey you will be directed to the Perks website where you can use the survey login details to sign in and choose from a range of different shopping vouchers.

Appendix D - Reassurance letter used during the face-to-face fieldwork





Dear Sir/ Madam,

Your household has been selected to participate in the FCA's Financial Lives survey 2017.

The Financial Conduct Authority is the financial regulator for the UK and works to secure an appropriate degree of protection for consumers when buying and using financial products and services (for example, current accounts, savings accounts, home insurance and financial advice).

Financial Lives asks you about your financial products and the financial services you use. The aim of the survey is learn more about consumers' use of and experiences with financial products, services and firms. We want to understand what works well for consumers and what does not work well, including any problems with accessing products and services.

We will be using the results of the survey to improve the way we regulate firms and to measure whether customers are treated fairly when buying and using financial products and services.

We have commissioned **Kantar Public**, an independent social research company, to conduct the survey. Please be assured that this research is conducted in accordance with the Market Research Society's Code of Conduct.

The information collected will be used only for research purposes. The answers you provide, and your name and address, will not be used for sales or direct marketing purposes. Your answers will be combined with those of others who take part in the survey, for reporting purposes. You will not receive any junk mail or marketing calls as a result of taking part.

If you would like to know more about the survey, please contact Kantar Public on 0800 015 2476 between 9am and 5pm Monday to Friday, or email FinancialLives@kantarpublic.com. You can also call the FCA's Contact Centre on 0800 111 6768 if you wish to confirm Kantar Public's credentials.

As a thank you for your time, the person who completes the survey will receive a £10 gift card.

Thanks in advance.

Yours faithfully,

Joanna Hill

Director of Market Intelligence, Data & Analysis, FCA



Appendix E - Face-to-face interview screener

Face-to-Face Screening Questionnaire

This document outlines the screening process used in the face-to-face interviews.

The screening process was used to identify those eligible for the survey: those who were either aged 18-69 and had not used the internet in the last 12 months, or were 70 or over (whether or not they had used the Internet in the last 12 months). Where more than one eligible respondent is identified in the household, one respondent was selected at random to take part in the interview.

AGE [ASK ALL]

[IF ONLY ONE PERSON IN HOUSEHOLD] Can you please tell me in which of the following age groups you would fall?

[IF MORE THAN ONE PERSON IN HOUSEHOLD] Can you please tell me in which of the following age group people in this household fall?

[IF MORE THAN ONE PERSON IN THE HOUSEHOLD MULTICODE (EXCEPT FOR 7 AND 8)]

- 1. 18-29
- 2. 30-39
- 3.40-49
- 4. 50-59
- 5.60-69
- 6.70 +
- 7. Don't know
- 8. Prefer not to say [SCREEN OUT]

INTERN1 [ASK IF D4a=1 AND AGE NE 6 OR 8]

Have you used the Internet, at home or elsewhere, in the last 12 months?

Please include internet access from any device, including mobile only internet access.

- 1. Yes
- 2. No
- 3. Don't know
- 4. Prefer not to say

INTERN2 [ASK IF D4a> 1 AND AGE =1 or 2 or 3 or 4 or 5 or 7 or 8]

How many people in your household have used the internet at home or elsewhere in the last 12 months?

Please include internet access from any device, including mobile only internet access.

NUMERIC

RANGE 0...20

Don't know

Prefer not to say

SCREEN OUT

IF (D4a=1 AND AGE NE 6 OR 8 AND INTERN1=1) OR (D4a>1 AND AGE NE 6 OR 8 AND INTERN2=D4A) [ONE PERSON HOUSEHOLD UNDER 70 AND USE THE INTERNET, MORE THAN ONE PERSON HOUSEHOLD ALL UNDER 70 AND ALL USE THE INTERNET]

Thank you for your time today but unfortunately these are all the questions we have for you.

NAME

[ASK IF (D4a=1 AND AGE=6) OR (D4a=1 AND AGE NE 6 AND INTERN1=2) OR (D4a>1 AND AGE=6 AND AGE NE 1 or 2 or 3 or 4 or 5 or 7 or 8) OR (D4a>1 AND INTERN2 NE D4a]

1st ITERATION:

INTERVIEWER: ASK THIS OF THE RESPONDENT

Can I have your first name?

SUBSEQUENT ITERATIONS (IF REQUIRED):

Can I have the first name of person number x?

NAME2

[ASK IF D4a>1 AND (AGE=6 AND AGE = 1 or 2 or 3 or 4 or 5 or 7 or 8) AND (INTERN2 NE 0)

Please tell me which of the following are aged 70 or over?

LIST NAMES

Name	1. Aged 70 or over	2. Aged under 70

NAME3 [ASK IF D4a>1 AND (AGE NE 6 AND INTERN2 NE D4a) OR (AGE=6 AND AGE= 1 or 2 or 3 or 4 or 5 or 7 or 8 AND INTERN2 NE D4a)

Please tell me which of the following have not used the internet in the last 12 months

LIST NAMES [IF D4a>1 and AGE=6 AND AGE= 1 or 2 or 3 or 4 or 5 or 7 or 8,SHOW ONLY THOSE FOR WHOM NAME2=2]

Name	Used the internet in the last 12 months	Not used the internet in the last 12 months

WHO TO RANDOMLY SELECT ONE FROM:

ONE PERSON HOUSEHOLD:

- IF AGED 70+ NAME
 [IF D4a=1 AND AGE=6] SELECT NAME
- IF AGED UNDER 70 AND INTERN1=NO NAME
 [IF D4a=1 AND AGE NE 6 AND INTERN1=2] SELECT NAME

MORE THAN ONE PERSON HOUSEHOLD

- ALL ADULTS AGED 70+ NAME
 [IF D4a>1 AND AGE=6 AND AGE NE 1 or 2 or 3 or 4 or 5 or 7 or 8] SELECT NAME
- MIXED AGE HOUSEHOLD NAME2 (70 or over) OR NAME3 (no internet)
- [IF D4a>1 AND AGE=6 AND AGE= 1 or 2 or 3 or 4 or 5 or 7 or 8] SELECT NAME2=1 OR NAME3=2
- ALL UNDER 70 AND NONE USE THE INTERNET NAME (no internet)
 [IF D4a>1 AND AGE NE 6 AND INTERN2 =0] SELECT NAME
- ALL UNDER 70 AND SOME USE THE INTERNET NAME3 (no internet)
 [IF D4a>1 AND AGE NE 6 AND INTERN2 NE D4a] SELECT NAME3=2