



Department  
for Work &  
Pensions

# Family Resources Survey

United Kingdom, 2016/17

Background note and methodology

---

March 2018

# Contents

- Introduction..... 4
  - Editorial team:..... 4
  - Feedback..... 4
  - Acknowledgements ..... 4
  
- Points to note..... 5
  - Income and state support..... 5
  - Tenure ..... 5
  - Disability ..... 5
  - Care..... 6
  - Pensions..... 6
  - Savings and investments..... 6
  - Adjusting for inflation ..... 6
  
- Alternative data sources ..... 8
  - Income..... 8
  - Tenure ..... 8
  - Disability ..... 9
  - Care..... 9
  - Pensions..... 9
  
- FRS changes in 2016/17 ..... 10
  - Policy changes ..... 10
  - Questionnaire changes..... 11
  - Report changes ..... 12
  
- Methodology ..... 13
  - Population and sample selection ..... 13
    - The sampling frame in Great Britain ..... 13
    - The sample design in Great Britain ..... 13
    - The sampling frame in Northern Ireland ..... 14
    - The sample design in Northern Ireland..... 14
  - Data collection ..... 15
    - Data collection in Great Britain ..... 15
    - Data collection in Northern Ireland ..... 15

Family Resources Survey, 2016/17

- Length of interview ..... 15
- Multi-household procedures ..... 16
- Ineligible addresses ..... 16
- The FRS questionnaire ..... 16
  - Consultation of Documentation ..... 17
  - Response ..... 17
  - Non-response ..... 19
  - FRS non-response and Council Tax band ..... 19
  - Non-response form analysis ..... 19
- Validation, editing, conversion and imputation ..... 19
  - Stage one – the interview ..... 20
  - Stage two – post-interview checks ..... 20
  - Stage three – data conversion ..... 20
  - Stage four – state support validation ..... 20
  - Stage five – other pre-imputation cleaning ..... 21
  - Stage six – imputation ..... 22
  - Stage seven – derived variables ..... 24
  - Review of FRS processing to improve timeliness ..... 24
- Grossing ..... 24
- Reliability of estimates ..... 27
- Linking FRS data to administrative data ..... 29
- Glossary ..... 31
  - Household composition ..... 31
  - Personal characteristics ..... 33
  - State support ..... 36
  - Pension schemes ..... 38
  - Savings and investments ..... 39
  - All other definitions ..... 42

# Introduction

This note accompanies the main Family Resources Survey 2016/17 report which is available here:

<https://www.gov.uk/government/statistics/family-resources-survey-financial-year-201617>

The purpose of this note is to provide further contextual information to aid understanding of the statistics presented in the main report and detailed tables. It outlines points to note as well as strengths and limitations of the information presented in each section of the main report, alternative data sources, as well as changes to the survey this year compared to last year.

A detailed description of the FRS methodology, fieldwork operations, data processing and quality assurance is also presented.

## Editorial team:

Donncha Burke, Claire Cameron, Nusheen Khan, Emma Ringshaw, Thomas Sims,

## Feedback

If you have any comments or questions about any aspect of the FRS, or are interested in receiving information on consultations, planned changes, and advance notice of future releases, please contact:

Claire Cameron, Surveys Branch, Department for Work and Pensions, 2nd Floor, Caxton House, Tothill Street, London, SW1H 9NA

Email: [team.frs@dwp.gsi.gov.uk](mailto:team.frs@dwp.gsi.gov.uk)

Direct line: 020 7449 7332

## Acknowledgements

Thank you to all the respondents in households across the United Kingdom who agreed to be interviewed; to the interviewers at the Office for National Statistics, NatGen Social Research and the Northern Ireland Statistics and Research Agency, and colleagues in those organisations; to those who have contributed towards the Family Resources Survey 2016/17 report through providing quality assurance and feedback; and to our web support team.

# Points to note

This section presents contextual detail as well as strengths and limitations of the information presented in each section of the main FRS report.

## Income and state support

All **income** figures are presented gross of tax and national insurance.

Income has not been equivalised i.e. adjusted for household size and composition. For analyses where income data have been equivalised see the [Households Below Average Income publication](#).

The FRS has asked a detailed and consistent set of questions on **self-employment earnings** over a long period of time. In addition, FRS earnings measures are likely to underestimate the true monetary and other benefits of self-employment e.g. income in kind, flexibility in working patterns etc.

Relative to administrative records, the FRS under-reports **benefit receipt** – see **Methodology Table M.6**. Some respondents do not know or do not have the necessary information to answer specific questions about individual benefits which makes it difficult to collect accurate information – see [State Benefits on the Family Resources Survey \(WP115\)](#). However, one of the strengths of the FRS is that it collects many personal and family characteristics which are not available from administrative sources. This means that the FRS can be used to analyse income and benefit receipt in ways which are not possible from administrative sources alone.

In most cases benefit receipt is analysed at a benefit unit/family level because means-tested benefits are paid on behalf of the benefit unit.

## Tenure

As presented in the FRS, the “social rented sector” is a combination of the categories “Rented from Council” and “Rented from a Housing Association”. These categories are combined because some housing association tenants may misreport that they are council tenants. For instance, where their home used to be owned by the council and although ownership has now transferred to a housing association, the tenant may still think that their landlord is the council (local authority).

## Disability

From 2002/03, FRS statistics have been based on responses to questions about barriers across a number of areas of life. From 2012/13 disabled people have been identified as those who report any physical or mental health condition or illness that lasts or is expected to last 12 months or more, and which limits their ability to carry out day-to-day activities. This definition is consistent with the core definition of disability under the Equality Act 2010, and complies with harmonised standards for social surveys published.

## Care

FRS respondents are asked if anyone in the household receives care, or if anyone provides informal care to anyone living outside the household. Questions are then asked about those receiving help. There are then follow-up questions for each person named about who provides the help and the frequency of care. The follow-up questions are only asked for those receiving help at least once a week.

What counts as care is not prescriptively defined and, for example, could include activities such as going shopping for someone or helping with paperwork.

## Pensions

The FRS pension scheme participation reference tables present data for both 'all adults' and 'working-age adults'. Those over State Pension age are often excluded from analysis of pension participation in other publications, although they could continue to work and participate in pension schemes. The 'all adults' category allows data for this group to be represented and also provides continuity across all sections of the main FRS report.

Employer-sponsored pensions comprise any company or occupational pension scheme run by an employer including group personal pensions and group stakeholder pensions.

Individual personal pensions include individual stakeholder pensions and retirement annuity contracts as well as individual personal pensions.

## Savings and investments

The data relating to savings and investments should be treated with caution. A high proportion of respondents do not know the interest received on their assets and therefore around one in five cases are imputed. It is thought that there is some under-reporting of capital by respondents, in terms of both the actual values of the savings and the investment income.

The FRS does not capture information on non-liquid assets. Therefore property, physical wealth and pensions accruing are not included in estimates of savings and investments. It also does not capture detailed information on expenditure (except for housing costs) and debts. Therefore it is not possible to get an overview of how households are coping financially.

## Adjusting for inflation

Some figures in the main FRS report and the accompanying tables combine several years of income data. In these circumstances, uprating factors are used to adjust for inflation by bringing values from previous years into current price terms. Prior to the 2014/15 FRS report, the Retail Prices Index (RPI) was used to adjust for inflation.

The UK National Statistician advised in a statistical notice in May 2016 that the RPI should no longer be used to adjust for inflation in statistical publications. From the

## Family Resources Survey, 2016/17

2014/15 FRS, the Consumer Price Index (CPI) has been used to adjust for inflation. More information concerning this methodological change can be found here:

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/519332/dwp-family-household-income-stats-adjusting-for-inflation-statistical-notice.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/519332/dwp-family-household-income-stats-adjusting-for-inflation-statistical-notice.pdf)

# Alternative data sources

## Income

A Guide to Sources of Data on Earnings and Income

<https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkhours/methodologies/aquidetosourcesofdataonearningsandincome>

The Effects of Taxes and Benefits on Households

<https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomeandwealth/bulletins/theeffectsoftaxesandbenefitsonhouseholdincome/financialyearending2016>

Living Costs and Food Survey

<https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/expenditure/bulletins/familyspendingintheuk/financialyearending2017>

Wealth and Assets Survey

<https://www.ons.gov.uk/releases/wealthingreatbritainwave52014to2016>

Annual Survey of Hours and Earnings:

<https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkhours/bulletins/annualsurveyofhoursandearnings/2017provisionaland2016revisedresults>

Labour Force Survey:

<https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/uklabourmarket/january2018>

Benefits statistics on Stat-Xplore:

<https://stat-xplore.dwp.gov.uk/>

## Tenure

English Housing Survey

<https://www.gov.uk/government/collections/english-housing-survey>

Private Landlords Survey

<https://www.gov.uk/government/collections/private-landlords-survey>

Index of Private Housing Rental Prices

<https://www.ons.gov.uk/economy/inflationandpriceindices/bulletins/indexofprivatehousingrentalprices/previousReleases>

More information about housing statistics is available from:

Family Resources Survey, 2016/17

<https://www.gov.uk/government/collections/housing-research-summaries>

## **Disability**

Life Opportunities Survey:

<https://www.gov.uk/government/collections/life-opportunities-survey>

## **Care**

Department of Health Personal Social Services survey of adult carers in England:

<https://digital.nhs.uk/catalogue/PUB30045>

## **Pensions**

Occupational Pension Schemes Survey:

<http://www.ons.gov.uk/ons/rel/fi/occupational-pension-schemes-survey/index.html>

Employers' Pension Provision Survey:

<https://www.gov.uk/government/collections/employers-pension-provision-survey>

The Pensions Regulator – DC Trust: a presentation of scheme return data:

<http://www.thepensionsregulator.gov.uk/doc-library/dc-trust-a-presentation-of-scheme-return-data-2016.aspx>

HMRC Pensions Tables:

<https://www.gov.uk/government/collections/personal-pensions-statistics>

English Longitudinal Study of Aging:

<[https://www.ifs.org.uk/uploads/elsa/docs\\_w7/ELSA%20Wave%207%20report.pdf](https://www.ifs.org.uk/uploads/elsa/docs_w7/ELSA%20Wave%207%20report.pdf)>

Annual Survey of Hours and Earnings pension tables:

<https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/workplacepensions/bulletins/annualsurveyofhoursandearningspensiontables/previousReleases>

# FRS changes in 2016/17

## Policy changes

### Up-rating

From 2016/17 to 2019/20 certain working-age benefits were frozen at 2015/16 cash values.

In April 2016:

- The Basic State Pension was up-rated by 2.9 per cent in line with the triple lock.
- The Guarantee element of Pension Credit for singles and couples was increased by around 2.9 per cent.
- Working-age benefits such as Jobseeker's Allowance, Income Support, Universal Credit and Employment Support Allowance (work-related activity group) were frozen at 2015/16 cash values.
- Child benefit, along with some elements of tax credits, was frozen at 2015/16 cash values. Family and childcare elements of tax credit were frozen in cash terms.
- Disability benefits (Personal Independence Payment, Disability Living Allowance and Attendance Allowance) were frozen at 2015/16 cash values.
- Carer's Allowance was frozen at 2015/16 cash values.

### Housing Benefit

From April 2016, increases in most Local Housing Allowance (LHA) rates were frozen at 2015/16 cash values.

### Council Tax

In 2016/17, there was no Council Tax freeze grant. This was the offer from central government in 2015/16 of a grant to those authorities that set their basic amount of council tax either at or below the level for 2014/15.

The Ministry of Housing, Communities and Local Government [estimate](#) that the average Band D council tax set by local authorities in England in 2016/17 represented an increase of 3.1 per cent on 2015/16 levels. On a comparable basis to last year, the increase would be 1.6%, with the adult social care precept adding 1.5 percentage points.

### Personal Independence Payment

The roll-out of the final phase of PIP was brought forward from October to July 2015. In March 2016, there were just over 750,000 PIP claims in payment. This rose to just over 1.3 million PIP claims in payment by March 2017.

## **Income Tax**

In 2016/17, the income tax personal allowance increased by £400 to £11,000. The threshold for the 40 per cent higher rate of income tax increased to £43,000 from £42,385.

## **State Pension**

The State Pension age for women has been gradually increasing since April 2010. FRS data were collected throughout the financial year 2016/17, during which the State Pension age for women increased from 63 years and 0 months to 63 years and 9 months. The changes do not affect the State Pension age for men, currently 65 years.

## **Pension Participation**

Automatic enrolment has been implemented using a staged approach starting with the largest employers (250+ employees) in October 2012. Staging reached the small (5-49) and micro (1-4) employers who began to be subject to their duties from June 2015. As of February 2018, over one million employers have automatically enrolled over 9 million eligible workers into an automatic enrolment pension scheme.

## **National Living Wage**

In April 2016 the National Living Wage was introduced, set at £7.20 per hour for employees aged 25 and over. Employees under the age of 25 continued to receive the National Minimum Wage, which increased in October 2016 from £6.70 to £6.95 for those aged 21 and over.

## **Universal Credit**

Universal Credit is replacing income-based Jobseeker's Allowance, income-based Employment and Support Allowance, Income Support, Working Tax Credit, Child Tax Credit and Housing Benefit.

In April 2013 Universal Credit was introduced for claimants within certain geographic areas. It has been available across Great Britain for single people claiming income-based Jobseeker's Allowance since March 2016. Given the low caseload levels over 2016/17 and consequent small sample sizes, information on Universal Credit recipients have not been presented in this year's FRS publication.

## **Questionnaire changes**

For 2016/17 questions on childcare, education, health and social care financial support and affordability were added. A block of questions on Social and Cultural Wellbeing was removed. These changes were made as part of the FRS role in collecting information to meet UK requirements for EU-SILC.

Numerous other minor updates and changes to the questionnaire have been made to reflect changing categories, definitions etc. and in response to feedback on the operation of the questionnaire from interviewers.

## Report changes

The FRS report was redesigned in 2014/15 and this year's report follows a similar style and format, although without an additional ad hoc analysis section.

# Methodology

## Population and sample selection

The FRS sample is designed to be representative of private households in the United Kingdom.

### **The sampling frame in Great Britain**

The Great Britain FRS sample is drawn from the Royal Mail's small users Postcode Address File (PAF). The small users PAF is limited to addresses which receive, on average, fewer than 50 items of post per day and which are not flagged with Royal Mail's "organisation code". An updated version of this list is obtained twice a year.

By using only the small-user delivery points most large institutions and businesses are excluded from the sample. Small-user delivery points which are flagged as small business addresses are also excluded. However, some small businesses and other ineligible addresses remain on the sampling frame. If sampled, they are recorded as ineligible once the interviewer verifies that no private household lives there.

### **The sample design in Great Britain**

The Great Britain FRS uses a stratified clustered probability sample design. The survey samples 1,417 postcode sectors, from over 12,000 in Great Britain, with a probability of selection that is proportional to size. Each postcode sector is known as a Primary Sampling Unit (PSU).

The PSUs are stratified by 27 regions and also by three other variables, described below, derived from the 2011 Census of Population. Stratifying ensures that the proportions of the sample falling into each group reflect those of the population.

Within each region the postcode sectors are ranked and grouped into eight equal bands using the proportion of households where the household reference person (HRP) is in National Statistics Socio-Economic Classification (NS-SEC) 1 to 3. Within each of these eight bands, the PSUs are ranked by the proportion of economically active adults aged 16-74 and formed into two further bands, resulting in sixteen bands for each region. These are then ranked according to the proportion of economically active men aged 16-74 who are unemployed. This set of stratifiers is chosen to have maximum effectiveness on the accuracy of two key variables: household income and housing costs. The table below summarises the stratification variables.

Within each PSU a sample of addresses is selected. In 2016/17, 25 addresses were selected per PSU for April to January. For February to March, 28 addresses were selected per PSU. The total Great Britain set sample size in 2016/17 was 35,825 addresses. Each address had approximately a 1-in-754 chance of being included in the survey. For England and Wales each address had approximately a 1-in-807

chance of inclusion in the survey. In order to improve the quality of estimates for Scotland the PSUs in Scotland are over-sampled. Approximately twice the numbers of PSUs were sampled in Scotland than would be required under an equal-probability sample of the UK. Therefore, 5,913 addresses were selected in Scotland, with approximately a 1-in-483 chance of being included in the survey.

### **FRS sample stratification variables for Great Britain**

Regions	19 in England (inc. Metropolitan/non-Metropolitan split; 4 in London) 2 in Wales 6 in Scotland
The proportion of households where the HRP is in NS-SEC 1 to 3	8 equal bands
The proportion of economically active adults aged 16-74	2 equal bands
The proportion of economically active men aged 16-74 who are unemployed	Sorted within above bands

Each year, half of the PSUs are retained from the previous year's sample, but with new addresses chosen; for the other half of the sample, a fresh selection of PSUs is made (which in turn will be retained for the following year). This is to improve comparability between years.

### **The sampling frame in Northern Ireland**

The sampling frame employed on the Northern Ireland FRS is the POINTER address database. POINTER is the most comprehensive and authoritative address database in Northern Ireland, with approximately 727,000 address records available for selection. This list of domestic properties is maintained by Land and Property Services (LPS), with input from Local Councils, Royal Mail and Ordnance Survey of Northern Ireland (OSNI).

### **The sample design in Northern Ireland**

A systematic random sample of 3,840 addresses was selected for the 2016/17 Northern Ireland FRS from the POINTER address database. Addresses are sorted by district council and ward, so the sample is effectively stratified geographically. Each address had approximately a 1-in-189 chance of being selected for the survey.

## Data collection

### Data collection in Great Britain

A consortium consisting of the Office for National Statistics (ONS) and NatCen Social Research conducts fieldwork for the FRS in Great Britain on behalf of the Department for Work and Pensions (DWP).

Each month the PSUs are systematically divided between the two organisations and then assigned to the field staff.

Before interviewers visit the selected addresses, a letter is sent to the occupier explaining that they have been chosen for the survey and that an interviewer will call. The letter also explains that the survey relies on the voluntary co-operation of respondents and emphasises that information given in the interview will be treated in the strictest confidence and used only for research and statistical analysis purposes. As a token of appreciation and to encourage participation, a £10 Post Office voucher is included with the letter.

If contact is not made on the first attempt, the interviewer is required to make a minimum of six additional calls to an address. These calls have to be made at different times of the day and on different days of the week, including at least one weekend call. In 2016/17, FRS interviewers averaged over six calls per address before returning the address as a non-contact. Addresses returned as non-contacts or partial refusals can be re-issued to another interviewer where appropriate, in the hope that an interview at the non-responding household can still be achieved. Interviewing at re-issued addresses can be carried out at any point in the remaining survey year.

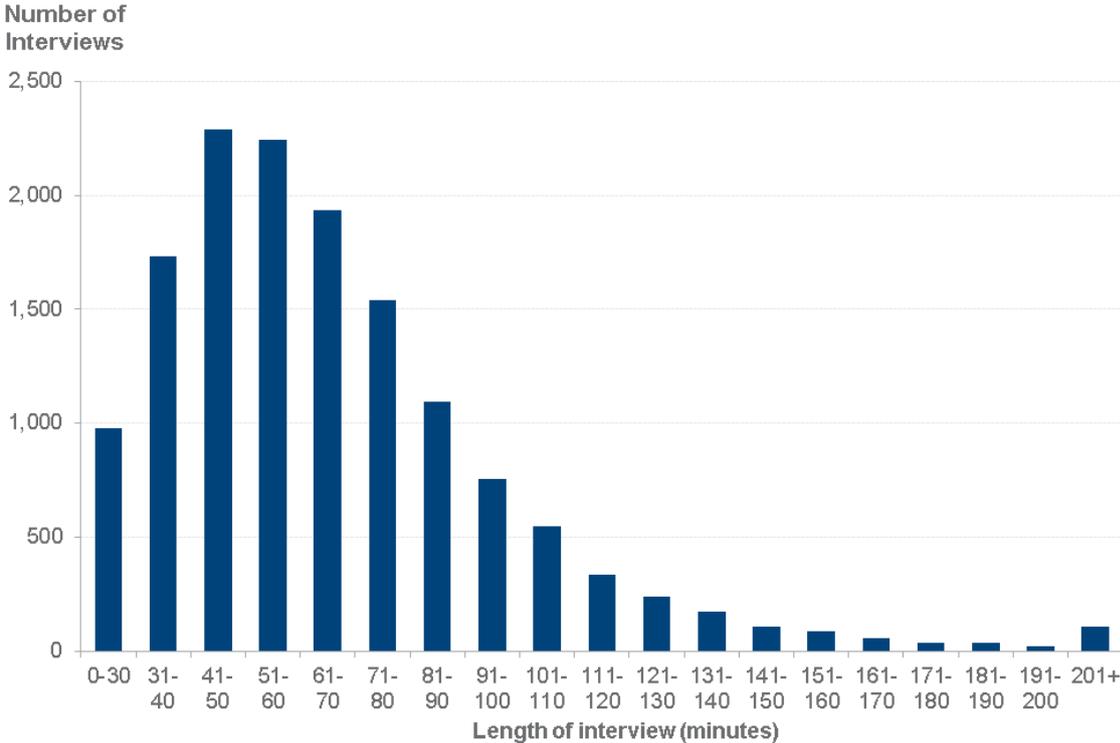
### Data collection in Northern Ireland

In Northern Ireland the sampling and fieldwork for the survey are carried out by the Central Survey Unit at the Northern Ireland Statistics and Research Agency. The responsibilities for programming the survey questionnaire, making annual modifications, initial data processing and data delivery are retained within ONS and NatCen.

### Length of interview

Interviews are conducted face-to-face. The length of each fully co-operating interview is recorded by the interviewer. In 2016/17 the median face-to-face interview length for Great Britain was 61 minutes but the time varies according to the size of household and its circumstances. The distribution of interview lengths in Great Britain is shown below, with full data in **Methodology Table M.7**. The timings exclude interviewer time spent preparing for and completing administration tasks after the face-to-face interview and are based on completed audit data from 14,317 fully productive ONS and NatCen interviews.

**Distribution of FRS interview lengths, Great Britain, 2016/17**



**Multi-household procedures**

If more than one household receives mail at an address a single household is interviewed.<sup>1</sup>

**Ineligible addresses**

Addresses containing no private households are classed as ineligible and excluded. The most common types of excluded addresses are non-residential or vacant addresses, and addresses that contain only communal establishments, such as hostels, hotels, and boarding houses.

**The FRS questionnaire**

FRS interviews are conducted using Computer Assisted Personal Interviewing (CAPI). The questionnaire is divided into three parts. The first part is the household schedule which is addressed to one person in the household (usually the household reference person, although other members are encouraged to be present) and mainly asks household level information, such as relationships of individuals to each other, tenure and housing costs. Next is the individual schedule which is addressed to each adult in turn and asks questions about employment, benefits and Tax Credits, pensions, investments, and other income. Information on children in the household is collected by proxy from a responsible adult. A final section asks the

<sup>1</sup> Multi households are not selected in Northern Ireland.

value of investments by type for respondents with savings between £1,500 and £20,000.

Interviewers new to the FRS are briefed on the questionnaire and an annual re-briefing is given to all interviewers on changes to the questionnaire. Those who have been working on the survey for some time also complete a written field report each year, describing their experiences with particular parts of the questionnaire and commenting on how changes are received in the field.

Prior to the start of fieldwork, DWP consults FRS users and draws up a list of possible questionnaire changes. Users are asked to identify individual questions or sections which were no longer of interest. The FRS questionnaire is lengthy and demanding and a key concern is, where possible, to reduce (or at least not increase) its length, so as not to overburden respondents or interviewers. As part of the process of agreeing annual changes, suggestions from contractors are also considered, as well as those arising from an evaluation of feedback from interviewers. Any changes to the questionnaire are checked for consistency with the harmonised standards for Government social surveys.

## **Consultation of Documentation**

Interviewers encourage respondents to consult documentation at all stages of the interview to ensure that the answers provided are as accurate as possible. For some items whether or not certain documents are consulted is recorded on the questionnaire. This assists FRS users in assessing the accuracy of the data.

- Thirty-three per cent of employees who answered questions on income from employment consulted their latest payslip.
- Twenty-five per cent of employees who answered questions on income from employment did not have a payslip to consult; 17 per cent of all employees could not consult a payslip because their payslips were only received electronically.
- Sixty-three per cent of all reported benefit and payable Tax Credit receipt involved consultation of documentation (a letter from the DWP or HM Revenue and Customs, or a bank statement).
- Forty-eight per cent of households in Great Britain consulted a Council Tax bill or statement in answering questions on their Council Tax payments.

## **Response**

In each eligible household, the aim is to interview all adults aged 16 and over, except those aged 16-19 who were classed as dependent children. A household is defined as fully co-operating when it meets this requirement and there are fewer than 13 'don't know' or 'refusal' answers to monetary amount questions in the benefit unit schedule (i.e. excluding the assets section of the questionnaire).

Proxy interviews are accepted when a household member is unavailable for interview. In 2016/17, for those households classed as fully co-operating, proxy responses were obtained for 22 per cent of adults.

It should be noted that all data shown in the main body of this publication refer only to fully co-operating households.

Households that are not fully co-operating are further classified as partially co-operating, refusals, or unable to make contact. To be classified as partially co-operating a full interview has to be obtained from the Household Reference Person's (HRP's) benefit unit.

**Methodology Table M.1** summarises the household response. The UK-wide sample chosen for 2016/17 consisted of 39,965 households. In total, 4,162 were then found to be ineligible because they were empty or did not contain any private households which left an effective sample of 35,803 households. In total 19,387 households UK-wide fully co-operated (54 per cent), 451 partially co-operated (1 per cent) and 13,263 refused to proceed with the interview (37 per cent). The interviewer was unable to make contact with 2,163 households (6 per cent).

Response rates are calculated as follows:

$$\frac{100 \times \text{Number of fully co-operating households}}{\text{Number of eligible households after adjustment}}$$

The overall response rate for the FRS in 2016/17 was 54 per cent.

When respondents refuse to participate in the FRS, interviewers record up to three reasons for refusal. The most common reasons for refusal in 2016/17 are shown below.

#### **Reasons for refusal to participate in the FRS, Great Britain, 2016/17**

Reason for refusal	Percentage of people who gave a response
Couldn't be bothered	25
Invasion of privacy	19
Genuinely too busy	17
Don't believe in surveys	17
Concerns about confidentiality	8
Disliked survey of income	7
<b>Total number who gave a response</b>	<b>7,773</b>

**Methodology Table M.2** shows response rates broken down by region. The North East had the highest response rate where 60 per cent of all households selected responded fully. London had the lowest response rate where only 46 per cent of the chosen households fully co-operated. The variations in response rates reflect those of other major surveys and the Census of Population i.e. response rates are generally lower in large city areas.

## **Non-response**

The lower the response rate to a survey, the greater the likelihood that those who responded are significantly unlike those who did not, and so the greater the risk of systematic bias in the survey results. Unless information is available about the nature and extent of such bias there are likely to be problems in generalising the sample results to the population.

For a United Kingdom survey of the size and complexity of the FRS, the total non-response rate in 2016/17 of 46 per cent is not considered unreasonable. However, any information that can be obtained about the non-respondents is useful both in terms of future attempts to improve the overall response rate and potentially in improving the weighting of the sample results. It is considered a priority for the FRS to obtain as much information as possible about non-respondents. The following sections outline some of the analyses that have been carried out in this area.

## **FRS non-response and Council Tax band**

Comparisons were made by country between 2016/17 Great Britain FRS data and administrative data on the number of households within each Council Tax band.

**Methodology Table M.3** shows that FRS percentages were similar to those obtained from examining administrative data.

## **Non-response form analysis**

Direct information about the non-responding households is valuable, although by definition difficult to obtain. However, some non-responding households who are not willing to take part in the full survey are willing to provide some basic information by completing a non-response form. Analysis of these forms is used to monitor characteristics of non-respondents and trends in non-response.

## **Validation, editing, conversion and imputation**

In addition to unit non-response, where a household does not participate, a problem inherent in all large surveys is item non-response. This occurs when a household agrees to give an interview, but either does not know the answer to certain questions or refuses to answer them. This does not prevent them being classified as fully co-operating households because there is enough known data to be of good use to the analyst (although see the first paragraph of the Response section above for information about non-response to monetary questions).

The fact that the FRS allows missing values in the data collection can create problems for users, so missing values are imputed where appropriate. The policy is that for variables that are components of key derived variables, such as total household income and housing costs, and areas key to the work of the Department for Work and Pensions, such as benefit receipt, there should be no missing information in the final data.

In addition to imputation, prior to publication FRS data are put through several stages of validation and editing. This ensures the final data presented to the public are as accurate as possible.

The stages in the validation, editing, conversion and imputation process are laid out below:

### **Stage one – the interview**

One of the benefits of interviewing using CAPI is that in-built checks can be made at the interview stage. This helps to check respondents' responses and also that interviewers do not make keying errors. There are checks to ensure that amounts are within a valid range and also cross-checks which make sure that an answer does not contradict a previous response. However, it is not possible to check all potential inconsistencies, as this would slow down the program to an unacceptable degree, and there are also capacity constraints on interviewer notes. Interviewers can override most checks if the answers are found to be accurate when confirmed with respondents.

### **Stage two – post-interview checks**

Once an interview has taken place, data are returned to ONS, NatCen, or NISRA. At this stage editing based on any notes made by interviewers takes place. Notes are made by the interviewer when a warning has been overridden, for example, where an amount is outside the specified range, but the respondent has documentation to prove it is correct. Office-based staff members make editing decisions based on these notes. Other edits that take place at this stage are checking amounts of fixed rate benefits and where possible, separating multiple benefit payments into their constituent parts, such as separating Disability Living Allowance into the Care and Mobility components.

### **Stage three – data conversion**

Before further validation, FRS data are converted from CAPI format into SAS readable tables. Using DWP specifications, SAS tables are created by ONS, with each table displaying information from different parts of the questionnaire. Both the DWP and ONS then carry out validation checks on key input and output variables to ensure that the data have converted correctly to the new format. Checks include ensuring that the number of adults and children recorded is correct, and that records are internally consistent.

### **Stage four – state support validation**

Information on benefits and Tax Credits received is one of the key areas of the FRS and it is very important that this section is thoroughly validated and cleaned.

It is not appropriate to use the imputation methods outlined in stages five and six (below) for benefits data so instead a separate procedure of validation and editing is used. The following types of validation were carried out for 2016/17 FRS data:

### **Missing values**

For cases where a respondent had answered 'yes' to whether they are in receipt of a particular benefit, but did not give the amount received, an imputation decision has been made depending on the benefit. For benefits such as Income Support, where the rate would vary greatly depending on the situation of the respondent, individual benefit assessments have been carried out. However, for benefits such as State Pension, where fewer rates apply, a more general method has been used.

### **Near-zero amounts**

Where benefit amounts are recorded as near-zero, the case is examined individually and an edit decision is made.

### **Multiple benefits**

Any combined benefit amounts (for example where State Pension is paid with Attendance Allowance) are edited by carrying out benefit entitlement assessments on individual cases, while preserving the reported total wherever possible.

### **Validation reports**

Computer programs are run to carry out a final check for benefit entitlement and to output any cases that look unreasonable. All cases detected as a result of this validation exercise are individually checked and edited where necessary.

## **Stage five – other pre-imputation cleaning**

In preparation for imputing missing values, data are made as clean as possible. This involves edits and checks of the following nature:

### **Weekly amounts**

In the FRS, monetary amounts are converted to a weekly equivalent. To calculate this, respondents are usually asked firstly the amount and then the length of time this covered. This is known as a period code. Period codes are used in conjunction with amount variables to derive weekly totals for all receipts and payments. Some variables, such as interest on savings accounts, refer to the amount paid in the last year. These are also converted to a weekly amount.

Sometimes the period code relates to a lump sum or a one-off payment. In these cases, the corresponding value does not automatically convert to a weekly amount. In order for the data to be consistent across the survey, edits are applied to convert most lump sums and one-off payments to weekly amounts. In the same way, where period codes were recorded as 'don't know' or 'refused', these are imputed so that the corresponding amount can be converted to a weekly value in the final dataset.

### **Near-zero amounts**

It is not possible for interviewers to enter zero amounts where it is inappropriate to do so. For example, in response to a question on receipt of benefit, a zero amount will result in a warning message being displayed. Some interviewers try to avoid this message by recording near-zero amounts. As a result, all near-zero values are

examined and a decision taken as to whether the value is genuine or whether the value should be treated as missing.

### **Outliers**

Statistical reports of the data are produced to show individual cases where an amount was greater than four standard deviations from the mean. For the seven largest values over this limit, the individual record is examined and where necessary (if a value looks unrealistic), the case is edited. The outliers remaining in the dataset are verified as being true values by examining other relevant data. Compared to earlier years, the number of this type of edit that now have to be carried out are small because of range checks that have been put into the CAPI questionnaire.

### **Credibility checks**

Checks are carried out for the internal consistency of certain variables. For example, one check ensures that payments to the mortgage from outside the household that are included in the mortgage payment are not greater than the mortgage payment itself. Such cases are examined and edited where necessary.

## **Stage six – imputation**

The responses to some questions are much more likely to have missing values than others. For example, it is very unlikely that a respondent will refuse to give or will not know their age or marital status, whereas it is much more likely that they will not be able to provide detailed information on the exact amounts of interest received from an investment.

Two areas where missing values are a problem are income from self-employment and income from investments. Data in the tables provided in this publication include imputed values. However, for some variables missing values remain, such as hours of care.

**Methodology Table M.4** illustrates the extent of missing values. In 2016/17 from around 14.5 million set values in the FRS dataset, less than 1 per cent were originally recorded as either 'don't know' or 'refused'. Out of 125,762 missing values, approximately 91 per cent were imputed.

A combination of imputation methods were used for the 2016/17 FRS data. The main ones are summarised below in the order in which they were used.

### **Closing down routes**

As with any questionnaire, a typical feature of the FRS is the gatekeeper question positioned at the top of a block of further questions, at which a particular response will open up the block. If the gatekeeper question is answered as 'don't know' or 'refused', the block is skipped. This results in a potential problem.

A missing gatekeeper variable could be imputed such that a further series of answers would be expected. However, these answers will not appear because a whole new route has been opened. For example, if the amount of rent is missing for a record and has since been imputed, any further questions about rent would not have been

asked. From the post-imputed dataset, it will appear that these questions should have been asked because a value is present for rent.

For this reason, routes where a gatekeeper question has been skipped should be closed down. In most cases, gatekeeper variables are of the 'yes/no' type. These would be imputed to 'no', assuming that if a respondent does not know whether an item is received or paid, then it is not.

### **Hotdecking**

This essentially looks at characteristics within a record containing the missing value to be imputed and matches it up to another record with similar characteristics for which the variable is not missing. It then takes the known variable and copies it to the missing case. For example, when imputing the Council Tax band of a household, the number of bedrooms, type of accommodation and region are used to search for a case with a similar record. This method ensures that imputed solutions are realistic, and gives a wide range of solutions maintaining variability in the data.

### **Algorithms**

These are used to impute missing values for certain variables, for example variables relating to mortgages and to Council Tax. The algorithms range from very simple calculations to more sophisticated models based on observed relationships within the data and individual characteristics, such as age and gender.

### **'Mop-up' imputation**

This is achieved by running a general validation report of all variables and looking at those cases where missing values are still present. At this stage, variables are looked at on a case-by-case basis to decide what to impute.

Credibility checks are re-run to identify any inconsistencies in the data caused by imputation, and edits are applied where necessary.

All imputations, by each of the methods above, are applied to the un-imputed dataset via a transaction database. This ensures that it is always possible to reproduce the original data.

### **Points to note with imputed data**

Although a great deal of time has been spent on imputing missing values, it should be remembered that they represent only a very small proportion (typically 1 per cent) of the dataset as a whole. However, the following points should be noted:

- as mentioned above, in certain situations, imputed values will be followed by 'skipped' values. It was decided in some cases that it was better to impute the top of a route only and not to impute large amounts of data. For a small proportion of imputations it is not possible to close down a route. These cases are followed by 'skipped' responses (where a value might otherwise be expected).
- imputation will have a greater effect on the distribution of original data for variables that have a higher proportion of non-response, as proportions of imputed data will be higher.

## Stage seven – derived variables

Derived variables (DVs) are customised variables in the FRS dataset; derived using information collected both in the survey and from a number of other sources. They are created at the data users' request, as the main purposes of the DVs are to make it easier for the users to carry out analysis and to ensure consistent definitions are used in all FRS analyses. For example, INDINC is a DV that sums all components of income to give an individual's total income - information on respondents' income from various sources is collected in the survey.

As new information is collected in the survey, the relevant DVs are updated if necessary.

## Review of FRS processing to improve timeliness

ONS and DWP jointly conducted a review of FRS processing during 2015/16 using Lean Six Sigma process improvement methodology. Lean Six Sigma provides a systematic framework for analysing process flows with a view to improving the quality of outputs and removing non-value-adding steps and waste. The review identified a number of improvements to existing FRS processes which have enabled DWP to bring forward the publication of the annual FRS publication by more than three months. The Lean Six Sigma systematic and iterative approach will be applied to the FRS over the next few years with a view to identifying further process efficiencies.

## Grossing

The 2016/17 FRS publication presents tabulations where the percentages refer to sample estimates grossed-up to apply to the whole population.

Grossing-up is the term given to the process of applying factors to sample data so that they yield estimates for the overall population. The simplest grossing system would be a single factor e.g. the number of households in the population divided by the number in the achieved sample. However, surveys are normally grossed by a more complex set of grossing factors that attempt to correct for differential non-response at the same time as they scale up sample estimates.

The system used to calculate grossing factors for the FRS divides the sample into different groups. The groups are designed to reflect differences in response rates among different types of households.<sup>2</sup> They have also been chosen with the aims of DWP analyses in mind. The population estimates for these groups, obtained from official data sources, provide control variables. The grossing factors are then calculated by a process which ensures the FRS produces population estimates that are as close as possible to the control variables.

A grossed FRS count of the number of owner-occupied households would thus tie in with the Ministry of Housing, Communities and Local Government official figure, whilst the grossed number of men aged 35-39 would be consistent with the ONS

---

<sup>2</sup> The FRS stratified sample structure is designed to minimise differential non-response in the achieved sample. Grossing is then designed to account for residual differential non-response.

## Family Resources Survey, 2016/17

estimate. Some adjustments are made to the original control total data sources so that definitions match those in the FRS, e.g. an adjustment is made to the demographic data to exclude people not resident in private households. It is also the case that some totals have to be adjusted to correspond to the FRS survey year.

A software package called CALMAR, provided by the French National Statistics Institute, is used to reconcile control variables at different levels and estimate their joint population. This software makes the final weighted sample distributions match the population distributions through a process known as calibration weighting. It should be noted that if a few cases are associated with very small or very large grossing factors, grossed estimates will have relatively wide confidence intervals.

A review of FRS grossing methodology was carried out on behalf of DWP by the ONS Methodological Advisory Service in 2013. In implementing the review recommendations, a number of relatively minor methodological improvements were made to the FRS grossing regime and the grossing calculations were updated to use 2011 Census data. A back-series of grossing factors calculated using the new methodology has been created for each FRS year back to 2002/03.

Further details on the impact of the change to using 2011 census data, details and impact of the methodological changes are published here:

<https://www.gov.uk/government/publications/family-resources-survey-grossing-methodology-review-and-2011-census-updates>

The ONS grossing review is published here:

<https://www.gov.uk/government/publications/initial-review-of-the-family-resources-survey-weighting-scheme>

In developing the grossing regime careful consideration has been given to the combination of control totals and the way age ranges, Council Tax bands and so on, have been grouped together. The aim has been to strike a balance so that the grossing system will provide, where possible, accurate estimates in different dimensions without significantly increasing variances.

There are some differences between the methods used to gross the Northern Ireland sample as compared with the Great Britain sample:

- Local taxes in Northern Ireland are collected through the rates system, so Council Tax Band as a control variable is not applicable.
- Northern Ireland housing data are based largely on small sample surveys. It is not desirable to introduce the variance of one survey into another by using it to compute control totals; therefore tenure type has not been used as a control variable.

Details of the control variables used in the grossing regimes for Great Britain and Northern Ireland are shown on the following pages.

**Grossing regime for Great Britain 2016/17**

Control variables used to generate grossing factors for private households		
Variable	Groupings	Source of data
Individuals (Age, sex and Region)	Male children: 0-9, 10-19 Male adults: 16-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-59, 60-64, 65-74, 75-79, 80+ Female children: 0-9, 10-19 Female adults: 16-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-59, 60-69, 70-74, 75-79, 80+ Each grouping is further broken down by region: North East, North West, Yorkshire & Humber, East Midlands, West Midlands, East, London, South East, South West, Scotland and Wales	Office for National Statistics (ONS)
Dependants aged 16-19 years old	England, Wales, Scotland	DWP estimates using data derived from ONS and HMRC
Benefit units (with children)	England and Wales (combined), Scotland	HMRC Child benefit data
Benefit units (with children)	Lone parents: Male, female	Labour Force Survey estimates
Households (Tenure type)	LA/HA renters, private renters, owner occupiers	Ministry of Housing, Communities and Local Government (MHCLG)
Households (Council Tax Band)	A and Not Valued Separately, B, C-D, E-H/I	Valuation Office, Scottish Government
Households (Region)	North East, North West, Yorkshire & Humber, East Midlands, West Midlands, East, London, South East, South West, Scotland and Wales	MHCLG

### Grossing regime for Northern Ireland, 2016/17

Control variables used to generate grossing factors for private households		
Variable	Groupings	Source of data
Individuals (Age/sex)	Male Children: 0-9, 10-19	Northern Ireland
	Male adults: 16-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-59, 60-64, 65-74, 75-79, 80+ Female children: 0-9, 10-19	Statistics and Research Agency (NISRA)
	Female adults: 16-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-59, 60-69, 70-74, 75-79, 80+	
Benefit units (with children)	Lone parents	Department for Social Development for Northern Ireland (DSDNI) estimates
Households		DSDNI estimates

The same CALMAR software used for the Great Britain grossing regime is used for Northern Ireland data to reconcile the control variables at different levels and estimate their joint population.

## Reliability of estimates

All survey estimates have a sampling error attached to them, calculated from the variability of the observations in the sample. From this, a margin of error (confidence interval) is estimated. It is this confidence interval, rather than the estimate itself, that is used to make statements about the likely 'true' value in the population; specifically, to state the probability that the true value will be found between the upper and lower limits of the confidence interval. In general, a confidence interval of the estimate plus or minus two standard errors is used to state, with 95 per cent confidence, that the true value falls within that interval. A small margin of error will result in a narrow interval, and hence a more precise estimate of where the true value lies.

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

The size of the actual standard error relative to the standard error calculated under the assumption of simple random sampling is represented by a design factor, which is calculated as the ratio of the two. Where the standard errors are the same, the design factor is one, implying that there is no loss of precision associated with the use of a clustered sample design. In most cases, the design factor will be greater than one, implying that the estimates based on the clustered sample are less precise than those for a simple random sample of the same size. Conversely a design factor of less than one implies the estimate is more precise than would be obtained from a simple random sample.

**Methodology Tables SE.1 to SE.9** provide standard errors, design factors and confidence intervals for a selection of variables from the 2016/17 FRS. An example of how to interpret figures in this table follows:

Example: Table SE.1: Standard errors for household composition

Table SE.1 shows that 71.6 per cent of households did not contain any children.

The standard error is estimated as 0.4 per cent. This is the final estimate after taking into account the design factor.

The design factor for this variable is 1.1. That is, the effect of using a clustered sample rather than a simple random sample is a loss in precision of 10 per cent on standard errors. Similarly, a design factor of 0.9 would have denoted a gain in precision of 10 per cent.

The 95 per cent confidence interval is between 70.8 and 72.4 per cent. That is, if sampling error is the sole source of error, in 95 out of 100 samples the percentage of households without children will lie within this range.

The sampling errors shown are likely to be slightly larger than the true sampling errors because the software used for the calculation does not take into account the improvement in precision due to post-stratification.

See the following paper for information on estimating variance and confidence intervals in special circumstances e.g. where the occurrences of a response in the sample are very small:

<https://www.gov.uk/government/publications/uncertainty-in-family-resources-survey-based-analysis>

In addition to sampling errors, consideration should also be given to non-sampling errors. Sampling errors arise through the process of random sampling and the influence of chance. Non-sampling errors arise from the introduction of some systematic bias in the sample as compared to the population it is supposed to represent. As well as response bias, such biases include inappropriate definition of the population, misleading questions, data input errors or data handling problems – or any other factor that might lead to the survey results systematically

misrepresenting the population. There is no simple control or measurement for such non-sampling errors, although the risk can be minimised through careful application of the appropriate survey techniques from the questionnaire and sample design stages through to analysis of results.

## Linking FRS data to administrative data

The FRS asks for informed consent from respondents to link their survey responses to administrative data held by DWP. In 2016/17 77 per cent of respondents agreed to have their survey responses linked to administrative data.

FRS data for these respondents are linked to DWP administrative data using matching routines using a combination of date of birth, initial of forename, full forename, surname, sex, postcode sector (i.e. the first half plus first digit of second half) and full postcode.

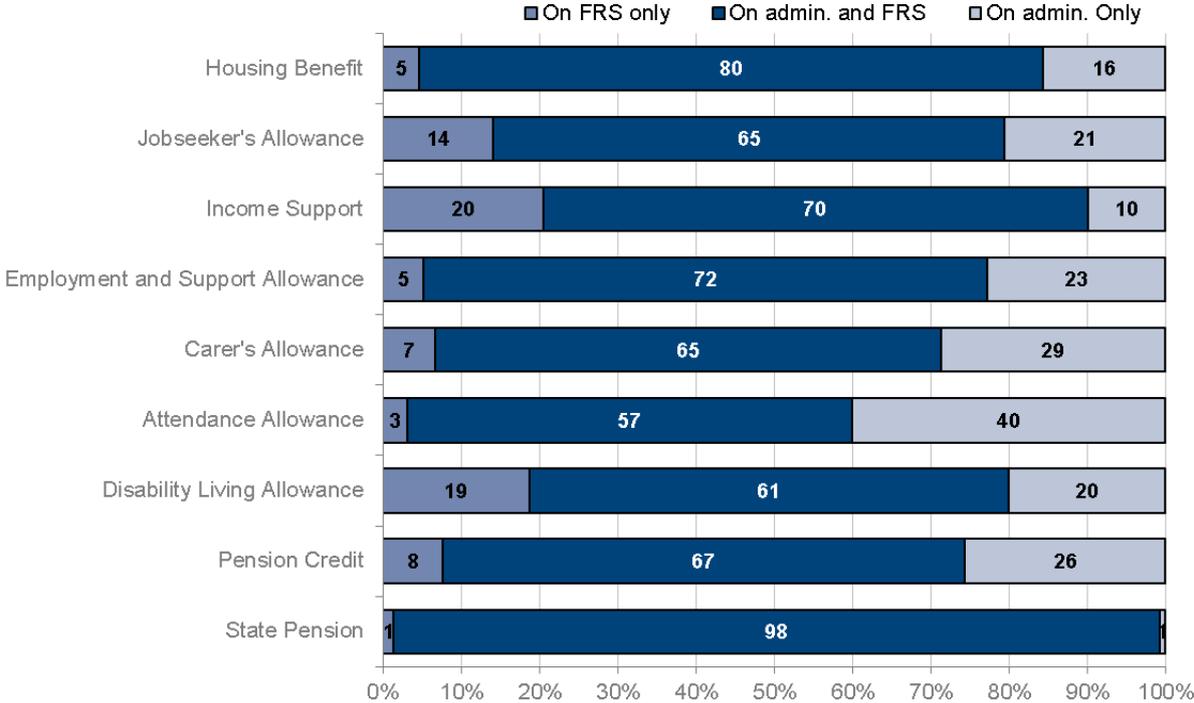
The successful match rate for linking consenting respondents to their administrative data was 78 per cent in 2016/17 meaning that overall we have matched 61 per cent of respondents to their administrative records.

Names and addresses of respondents are kept confidential and only made available to a small team of named staff at DWP who carry out the linking. Furthermore, linked data are anonymised and only used for research and statistical purposes.

**Methodology Table M.6** presents the grossed total recipients of different benefits as recorded in the FRS 2016/17 data, and the total caseloads receiving these benefits on administrative sources. For almost all benefits, the FRS volumes are below those seen in administrative data.

**Methodology Table M.8** and the figure below show the percentage of adults in receipt of DWP benefits for the 2016/17 survey year, according to FRS and administrative data. It can be seen that some benefits are better represented on the FRS than others. For example, 98 per cent of adults in receipt of State Pension are represented on both sources, while only 57 per cent of those in receipt of Attendance Allowance are.

**Percentage of adults shown in receipt of benefits from FRS and administrative data, 2016/17, United Kingdom<sup>1</sup>**



<sup>1</sup> Housing Benefit data is for Great Britain only.

Research has been published on the potential for bias in the characteristics of those that do and do not give consent to be linked to administrative data. This report is available here:

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/222871/WP110.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/222871/WP110.pdf)

# Glossary

Definitions below are split into separate categories:

- Household composition
- Personal characteristics
- State support
- Pension schemes
- Savings and investments
- All other definitions

Further details on these definitions, including full derivations of variables, are available on request from the DWP Family Resources Team (FRS) at [team.frs@dwp.gsi.gov.uk](mailto:team.frs@dwp.gsi.gov.uk).

## Household composition

### **Adult**

All those individuals who are aged 16 and over, unless defined as a dependent child (see **Child**); all adults in the household are interviewed as part of the FRS.

### **Benefit unit** or **Family**

A single adult or a married or cohabiting couple and any dependent children; since January 2006 same-sex partners (civil partners and cohabittees) have been included in the same benefit unit. Where a total value for a benefit unit is presented, such as total benefit unit income, this includes both income from adults and income from children. Below are various types of benefit unit:

- *Pensioner couple*: **Benefit units** headed by a couple where the **Head of the benefit unit** is over State Pension age. Note that this differs from definitions used in the **Households Below Average Income, Income Dynamics** and **Pensioners' Incomes Series** reports, which define a benefit unit as a pensioner couple if either adult is over State Pension age.
- *Pensioner couple, married or civil partnered*: Benefit units headed by a couple where the **Head of the benefit unit** is over State Pension age and the couple are either married or in a civil partnership.
- *Pensioner couple, cohabiting*: Benefit units headed by a couple where the **Head of the benefit unit** is over State Pension age and the couple are neither married nor in a civil partnership.
- *Single male pensioner*: Benefit units headed by a single male adult over State Pension age.
- *Single female pensioner*: Benefit units headed by a single female adult over State Pension age.

## Family Resources Survey, 2016/17

- *Couple with children*: Benefit units containing two adults, headed by a non-pensioner, with dependent children.
- *Couple with children, married or civil partnered*: Benefit units containing two adults, headed by a non-pensioner, with dependent children and the couple are either married or in a civil partnership.
- *Couple with children, cohabiting*: Benefit units containing two adults, headed by a non-pensioner, with dependent children and the couple are neither married nor in a civil partnership.
- *Couple without children*: Benefit units containing two adults, headed by a non-pensioner, with no dependent children.
- *Couple without children, married or civil partnered*: Benefit units containing two adults, headed by a non-pensioner, with no dependent children and the couple are either married or in a civil partnership.
- *Couple without children, cohabiting*: Benefit units containing two adults, headed by a non-pensioner, with no dependent children and the couple are neither married nor in a civil partnership.
- *Single with children*: Benefit units containing a single adult (male or female), headed by a non-pensioner, with dependent children.
- *Single male without children*: Benefit units containing a single male adult, headed by a non-pensioner, with no dependent children.
- *Single female without children*: Benefit units containing a single female adult, headed by a non-pensioner, with no dependent children.

### **Child**

A dependent child is defined as an individual aged under 16. A person will also be defined as a child if they are 16 to 19 years old and they are:

- Not married nor in a civil partnership nor living with a partner; and
- Living with parents/a responsible adult; and
- In full-time non-advanced education or in unwaged government training.

### **Head of benefit unit**

The Head of **benefit unit** is either the **Household Reference Person** if the Household Reference Person belongs to the benefit unit, or if not it is the first person from the benefit unit in the order that they were named in the interview.

### **Household**

One person living alone or a group of people (not necessarily related) living at the same address who share cooking facilities and share a living room or sitting room or dining area. A household will consist of one or more **benefit units**. Where a total value for a household is presented, such as total household income, this includes both income from adults and income from children.

### **Household Reference Person (HRP)**

The highest income householder.

- In a single adult household, the HRP is the sole householder (i.e. the person in whose name the accommodation is owned or rented).
- If there are two or more householders, the HRP is the householder with the highest personal income from all sources.
- If there are two or more householders who have the same income, the HRP is the eldest householder.

Before April 2001, the Household Reference Person (HRP) was known as the Head of Household. Where we refer to 'Head' in tables relating to households, this is the HRP. The **Head of benefit unit** will not necessarily be the HRP (see Head of benefit unit).

### **Individual**

An **adult** or **child**. Where "**People**" are presented, this is all individuals.

## **Personal characteristics**

### **Age**

Respondent's age at last birthday (at the time of the interview).

### **Disability**

The definition of disability used in this publication is consistent with the core definition of disability under the Equality Act 2010. A person is considered to have a disability if they have a long-standing illness, disability or impairment which causes substantial difficulty with day-to-day activities. However, some individuals classified as disabled and having rights under the Equality Act 2010 are not captured by this definition:

- People with a long-standing illness or disability who would experience substantial difficulties without medication or treatment.
- People who have been diagnosed with cancer, HIV infection or multiple sclerosis and who are not currently experiencing difficulties with their day to day activities.
- People with progressive conditions, where the effect of the impairment does not yet impede their lives.
- People who were disabled in the past and are no longer limited in their daily lives are still covered by the Act.

This definition of disability differs from that used for **Economic status**.

### **Economic status**

This classification is equivalent to the harmonised output category for economic status. It is based on respondents' answers to questions on current economic status. All definitions conform to the International Labour Organisation (ILO).

- *Employee - both full-time and part-time*: Based on self-assessment for the main job rather than number of hours worked; includes those doing unpaid work in a business that a relative owns.
- *Self-employed - both full-time and part-time*: Based on self-assessment for the main job rather than number of hours worked; includes those doing unpaid work in their own business.
- *Unemployed*: Adults who are under **State Pension age** and not working, but are available and have been actively seeking work in the last four weeks; includes those who were waiting to take up a job already obtained and will start in the next two weeks.
- *Economically inactive*: Individuals, who are out of work and not seeking or available to work, are classified in one of the following sub-categories:
  - *Retired*: individuals who are over State Pension age or say they are retired.
  - *Student*: individuals who have not completed their education.
  - *Looking after family/home*: working age individuals who are looking after their family and/or their home.
  - *Permanently sick or disabled*: working age individuals who have been sick, injured or disabled for longer than 28 weeks.
  - *Temporarily sick or disabled*: working age individuals who have been sick, injured or disabled for less than 28 weeks. Note that the sick or disabled definitions are different to that used for **Disability**, as they are based on different questions that are only asked of working age adults who are not working.
  - *Other inactive*: all respondents not already classified above.

### **Employment status**

This classification is equivalent to **Economic status** but includes those in employment only.

### **Ethnic group**

The ethnic group to which respondents consider that they belong. The FRS questions are in line with National Statistics' harmonisation guidance<sup>3</sup>. The categories are:

- White
- Irish Traveller
- Mixed/ Multiple ethnic groups
- Asian/ Asian British

---

<sup>3</sup> Harmonised categories are available via the ONS harmonisation website:  
<http://www.ons.gov.uk/ons/guide-method/harmonisation/primary-set-of-harmonised-concepts-and-questions/ethnic-group.pdf>

## Family Resources Survey, 2016/17

- Indian
- Pakistani
- Bangladeshi
- Chinese
- Any other Asian background
- Black/ African/ Caribbean/ Black British
- Other ethnic group

Sample sizes for 'Gypsy, Traveller or Irish Traveller' are small, so for Northern Ireland, 'Irish Traveller' is included in 'Other ethnic group'. For England, Wales and Scotland, 'Gypsy or Irish Traveller' is included in 'White'.

'Arab' has been included in 'Other ethnic group' due to small sample sizes

### ***Full-time education***

Individuals registered as full-time at an educational establishment. Students on sandwich courses are coded as students or as working according to their position at the time of interview.

### ***Informal carers***

Individuals who provide any regular service or help to someone, in or outside of their household who is sick, disabled or elderly; excludes those who only give this help as part of a formal job.

### ***Marital status***

De facto marital status:

- *Married / Civil partnership*: currently either married or in a civil partnership, and not separated from spouse (excludes temporary absences).
- *Cohabiting*: not married nor in a civil partnership, but living as a couple; includes same-sex couples.
- *Single*: is not currently cohabiting and has never been married nor in a civil partnership.
- *Widowed*: widowed and not currently cohabiting.
- *Separated*: married or in a civil partnership, but separated from spouse and is not currently cohabiting.
- *Divorced / Civil partnership dissolved*: marriage or civil partnership legally dissolved and is not currently cohabiting.

### ***State Pension age***

The State Pension age is 65 for men born before 6 April 1959. For women born on or before 5 April 1950, State Pension age is 60. From 6 April 2010, the State Pension age for women born on or after 6 April 1950 has been increasing gradually and will

reach 65 in November 2018. From December 2018, the State Pension age for both men and women will start to increase to reach 66 in October 2020.

Details of further planned changes to State Pension age can be seen at:

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/310231/spa-timetable.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/310231/spa-timetable.pdf).

For 2016/17 data, women are defined to be of State Pension age based on their date of birth and the date of interview. For further guidance on calculating State Pension eligibility age, see: <https://www.gov.uk/calculate-state-pension>.

### **Working**

All respondents with an employment status of full/part-time employed or full/part-time self-employed.

### **Working-age**

Adults (see **Adult** and **Child**) under **State Pension age**.

## **State support**

An individual is in receipt of state support if they receive either a **Benefit** or a payable **Tax Credit**.

### **Benefits**

The government pays money to individuals in order to support them financially under various circumstances. Most of these benefits are administered by DWP. The exceptions are *Housing Benefit* and *Council Tax Reduction*, which are administered by local authorities. **Tax Credits** are not treated as benefits, but both Tax Credits and benefits are included in the term *State Support*.

Benefits are often divided into *income-related benefits* and *non-income-related benefits*. Entitlement to income-related benefits is dependent on the recipient's income and savings. Entitlement to non-income-related benefits is dependent on the recipient's circumstances (level of disability, for example), but not on income and savings. A list of benefits divided into income-related and non-income-related is presented on the next page.

*Disability-related benefits* is the term used to describe all the benefits paid on the grounds of disability. These are Personal Independence Payment, Disability Living Allowance, Severe Disablement Allowance, Attendance Allowance, Armed Forces Compensation Scheme, Industrial Injuries Disablement Benefit and Northern Ireland Disability Rate Rebate.

Prior to 2008/09, Incapacity Benefit was included in this group. The number of people on Incapacity Benefits and Severe Disablement Allowance has been steadily decreasing over time, due to both being replaced by Employment Support Allowance from October 2008, and the sample sizes are now too small to be presented in this publication.

For more information about specific benefits see: <https://www.gov.uk/browse/benefits>

### **Pension Credit**

The qualifying age for Pension Credit has been increasing gradually to 66; in line with the increase in the State Pension age for women to 65 by November 2018 and the further increase to 66 for men and women by October 2020.

### **Tax Credits**

Working Tax Credits and Child Tax Credits are paid by HM Revenue & Customs.

For more information see: <https://www.gov.uk/browse/benefits/tax-credits>

### **Universal Credit**

Universal Credit is a single payment, administered by DWP, which will replace income-based Jobseeker's Allowance, income-based Employment and Support Allowance, Income Support, Working Tax Credit, Child Tax Credit and Housing Benefit. Universal Credit has been available in every Jobcentre across the country, for single people claiming income-based Jobseeker's Allowance, since May 2016. Universal Credit full service, for all claimant types, then began to rollout nationally.

<b>Income-related benefits</b>	<b>Non-income-related benefits</b>
Council Tax Reduction	Armed Forces Compensation Scheme
Employment and Support Allowance (income-related element)	Attendance Allowance
Extended Payments (Council Tax Reduction and Housing Benefit)	Carer's Allowance
Housing Benefit	Child Benefit
Income Support	Disability Living Allowance (both mobility and care components)
Jobseeker's Allowance (income-based element)	Employment and Support Allowance (contributory element)
Northern Ireland Other Rate Rebate	Guardian's Allowance
Northern Ireland Rate Rebate through energy efficient homes	Health in Pregnancy Grant
Northern Ireland Rate Relief	Incapacity Benefit
Pension Credit	Industrial Injuries Disablement Benefit
Rates Rebate	Jobseeker's Allowance (contributory element)
Social Fund – Community Care Grant	Maternity Allowance
Social Fund – Funeral Grant	Northern Ireland Disability Rate Rebate

Income-related benefits	Non-income-related benefits
Social Fund – Sure Start Maternity Grant	Northern Ireland Lone Pensioner Rate Rebate
Universal Credit	Personal Independence Payment (Daily Living and Mobility components)
	Severe Disablement Allowance
	State Pension
	Statutory Maternity/Paternity/Adoption Pay
	Statutory Sick Pay
	Widow's Pension/Bereavement Allowance
	Widow's/Bereavement Payment
	Widowed Mother's/Parent's Allowance
	Winter Fuel Payments

## Pension schemes

### *Automatic Enrolment*

Automatic enrolment requires all employers to enrol their eligible workers into a workplace pension scheme if they are not already in one. The staged timetable began in October 2012 for larger firms, with enrolment for all employers to be complete by 2018. In order to preserve individual responsibility for the decision to save, workers can opt out of the scheme. To be eligible for automatic enrolment, the jobholder must be at least 22 years old, under **State Pension age**, earn above the earnings trigger for automatic enrolment, and work or usually work in the UK. For more information see <https://www.gov.uk/workplace-pensions>

- *Employer-sponsored pension*: schemes that are set-up and run by the employer.
- *Group personal pension*: some employers who do not offer an occupational pension scheme may arrange for a pension provider to offer their employees a personal pension instead. The employer may have negotiated special terms with the provider which means that administration charges are lower than those for individual personal pensions. Although they are sometimes referred to as company pensions, they are not run by employers and should not be confused with occupational pensions, which have different tax, benefit and contribution rules.
- *Group stakeholder pension*: like Group Personal Pensions, an employer can make an arrangement with a pension provider and offer their employees a Group Stakeholder Pension (see *Stakeholder Pension*).
- *Occupational pension*: an occupational pension scheme is an arrangement an employer makes to give their employees a pension when they retire. Employees may become a member of an employer's pension scheme on a voluntary basis.

Until 6<sup>th</sup> April 2016 Defined Benefit occupational schemes could be contracted in to or out of the **State Second Pension**. The contracting out of Defined Contribution occupational pension schemes was abolished in 2012.

- *Personal pension*: a pension provided through a contract between an individual and the pension provider. The pension which is produced will be based upon the level of contributions, investment returns and annuity rates; a personal pension can be either employer provided (see *Group Personal Pension*) or privately purchased (see *Private pension*).
- *Private pension*: includes occupational pensions (also known as employer-sponsored pensions) and personal pensions (including stakeholder pensions). People can have several different private pensions at once. Previously people could only have one contracted-out pension, but this has now come to an end; the contracting out of Defined Benefit occupational schemes was abolished in April 2016 with the introduction of the New State Pensions. The contracting out of Defined Contribution pension schemes was abolished in 2012.
- *Stakeholder pension*: enable those without earnings, such as non-earning partners, carers, pensioners and students, to pay into a pension scheme. Almost anybody up to the age of 75 may take out a stakeholder pension and it is not necessary to make regular contributions. For more information, see: <https://www.gov.uk/personal-pensions-your-rights>.

## Savings and investments

### Savings

The total value of all liquid assets, including fixed term investments. Figures are taken from responses to questions on the value of assets or, in some cases, estimated from the interest on the savings. Note that banded savings do not include assets held by children in the benefit unit/household. The derivation of total savings used in the tables means that “no savings” includes cases where the respondent either said that they had no accounts/investments, refused to answer, didn’t know, or where some accounts/investments were recorded but none of them yielded any interest/dividends.

The FRS asks questions about all savings and investments products, including bank and building society accounts and stocks and shares. The products and groups of products used in this publication are:

- *Basic bank account*: This type of account is similar to a current account. Payments can be received from other sources and it can pay bills by direct debit, but unlike a current account there are no overdraft facilities. Withdrawals can be made from cash machines and, in some cases, over the counter of the bank or building society itself. See: <https://www.moneyadviceservice.org.uk/en/articles/basic-bank-accounts>.
- *Company share schemes/profit sharing*: Some companies provide extra rewards or bonuses to their employees depending on the profitability of the company. In

publicly traded companies, this often takes the form of shares in the company. All schemes of this general type are included under this heading.

- *Credit union*: A credit union is a financial co-operative similar in many respects to mainstream building societies. Its members both own and control the credit union, which is run solely for their benefit. All members of a specific credit union must share what is known as a “common bond” i.e. they must be connected in some way or another to the other members of that credit union. All the members pool their savings together into a single ‘pot’ from which loans can be made to members from that credit union. Members who have deposited money into the credit union receive an annual dividend while those to whom money is lent have to pay interest on the loan.
- *Current account*: This includes all current accounts, with both banks and building societies, which are used for day-to-day transactions; with a cheque book and/or bank card. Overdraft facilities may be offered, but interest payments will normally be small.
- *Endowment policy (not linked)*: An endowment policy taken out to repay a mortgage but no longer used to do so. This is where the mortgage has either been paid off or, more usually, converted to a different method of repayment. The respondent has decided to retain the endowment as an investment in its own right, even though it is no longer intended to repay the mortgage.
- *ISA*: An Individual Savings Account (ISA) is a tax free Government savings scheme
- *Investment trust*: See *Unit trusts*.
- *National savings bonds*: All types of National Savings investments in this category collected on the survey, except Easy Access and Investment accounts:
  - Fixed Rate Savings Bonds: replaced new issues of FIRST Option Bonds.
  - National Savings Certificates: fixed or index-linked to changes in the Retail Prices Index (RPI), for lump sum savings of £100 or more. Maximum earnings are obtained after five years and interest on investments is tax free.
  - National Savings Income Bonds: minimum purchase is £2,000 and a maximum holding of £250,000; interest is paid monthly gross of tax (although taxable).
  - Children's Bonus Bonds: can be bought for any child aged under 16 as a five year accumulating investment; interest is paid gross of tax.
- *NS&I savings accounts*: The National Savings & Investments (NS&I) Investment Account and Direct Saver.
- *Other bank/building society account*: Accounts belonging to adults recorded under categories "savings account, investment account/bond, any other account with bank building society, etc."

- *Post Office card account (POCA)*: This type of account can only be used to receive benefits, State Pensions and/or Tax Credit payments. No other payments, such as Housing Benefit, occupational pensions, or wages can be paid into it. Payments can only be collected over the counter at a Post Office and will not incur any charges or accrue interest on money contained therein. Due to the limited capability to receive payments, these accounts are included or excluded in tables as noted.
- *Premium bond*: Investments which do not earn interest, but are entered in a monthly draw for tax-free money prizes.
- *Stocks and shares*: This includes bonds, debentures and other securities which are usually bought and sold on the financial markets. Bonds issued by the UK or foreign governments and local authorities are also recorded here. A share is a single unit of ownership in a company. 'Stocks' is the general term for various types of security issued by companies to attract investment in the form of loans. Members of a shares club are included with those owning stocks and shares.
- *Unit trusts*: A collectively managed investment in the financial markets, where investors buy 'units' of a fund, which invests in shares, stocks, Gilts, etc. Dividends are paid net of tax, usually half-yearly. The data presented for Unit Trusts also includes Investment Trusts, since these two assets are collected together in the FRS.
- *Any other type of asset*: Due to small ownership, this amalgamated variable consists of the following three assets:
  - *Guaranteed Equity Bond (GEB)*: a one-off five-year investment, giving a return linked to a stock-market index, such as the Financial Times Stock Exchange (FTSE) index. At the end of the term it will pay back the amount invested plus a percentage of any increase in the index. Note that some GEBs may not pay back the full amount if the index falls below a certain level. There are usually minimum and maximum investments; typically £1,000 and £1,000,000.
  - *Gilts or Government Gilt-edged stock (including War Loan)*: these raise money for the UK Government by offering a secure investment, usually over a fixed period and with a fixed rate of interest, although some are index-linked. Interest is paid half-yearly. Gilts can be bought and sold on the stock market. At the end of the fixed term the holder is repaid the original purchase price. The value of the gilt is the current market price, which might be higher or lower than the original purchase price.
  - *Save As You Earn*: a three, five or seven year regular monthly savings scheme for employees. At the end of the term, the employee can either use the savings to buy the shares in their company or take the accumulated investment. For more information, see: <https://www.gov.uk/tax-employee-share-schemes/save-as-you-earn-saye>

The above products cover all types of savings. Some of them are grouped together in other ways in the tables:

- *Direct payment account*: A direct payment account is one that can accept electronic payment of benefits via the Banker's Automated Clearing System (BACS). The types of accounts included as such in this report are:
  - Current Account
  - National Savings and Investments Savings Accounts
  - Savings, investments etc.
  - Basic Account

Where noted, Post Office Card Accounts are also included in this group.

## All other definitions

### **Council Tax**

The tax is based on the property value of a dwelling (which is split into bands) and assumes two adults per household.

For more information see: <https://www.gov.uk/council-tax>

<https://www.gov.uk/government/statistics/council-tax-stock-of-properties-2017>

<http://www.gov.scot/Topics/Statistics/Browse/Local-Government-Finance/DatasetsCouncilTax/Dwellings05-09-2016>

### **Length of residency**

The length of time the **Household Reference Person** (only) has lived at the address. Other household members may have resided there for shorter or longer periods.

### **Main source of total weekly household income**

This is the source of income (see **Sources of income**) which is the largest proportion of weekly income for the household. Figures should be interpreted with caution. For example a household might have similar proportions of income from two or more sources, so a very small change in income would change the classification.

### **Region**

Regional classifications are based on the standard statistical geography of the former Government Office Regions: nine in England, and a single region for each of Wales, Scotland and Northern Ireland. Regions are built up of complete counties or unitary authorities. Tables also include statistics for the United Kingdom, Great Britain, England as a whole, and split London into Inner and Outer to aid comparison with other Family Resources Survey based publications. For more information on National Statistics geography, see: <http://www.ons.gov.uk/ons/guide-method/geography/ons-geography/index.html>.

### **Sources of income**

- *Wages and salaries*: for a respondent currently working as an employee, income from wages and salaries is equal to: gross pay before any deductions, less any

refunds of income tax, any motoring and mileage expenses, any refunds for items of household expenditure and any Statutory Sick Pay or Statutory Maternity Pay, plus bonuses received over the last 12 months (converted to a weekly amount) and any children's earnings from part-time jobs.

- **Self-employed income:** the total amount of income received from self-employment gross of tax and national insurance payments, based on profits where the individual considers themselves as running a business or on estimated earnings/drawings otherwise. Excludes any profit due to partners in the business. Any losses are deducted.
- **Investments:** Interest and dividends received on savings and investments. See **Savings and investments** for details of investments covered by the FRS.
- **Tax Credits:** Income from **Tax Credits**.
- **State Pension plus any IS/PC:** for any adults who are over **State Pension age**, any State Pension plus any Income Support or Pension Credit which is received; these benefits are shown together because of known problems with separating these amounts for pensioners.
- **Other pensions:** payments received from occupational, stakeholder and personal pension schemes; widow's employee pensions, trade union and friendly society pensions, annuity pensions, trusts and covenants.
- **Disability benefits:** payments received from any of the benefits payable due to disability – see **Benefits**.
- **Other benefits:** payments received from any of the other **Benefits**.
- **Other sources:** payments from all other sources including, for example, baby-sitting, allowances from absent spouses including child maintenance, organisations, royalties, odd jobs, sub-tenants, educational grants, alimony and Healthy Start Vouchers.

### **Tenure**

Types of renting or ownership.

- **Social renting:** includes all cases where the local authority is the landlord and all housing associations, including New Town Development Corporations and the Scottish Special Housing Association except where accommodation is part of a job.
- **Private renting:** all cases where the property is rented from a private landlord, including rent-free.
  - Rent-free accommodation is any accommodation provided free by an employer or by an organisation to a self-employed respondent, provided that the normal activities of the tenant are to further the cause of the organisation (e.g. Church of England clergy). Accommodation is not rent-free if anyone, apart from an employer or organisation, is paying a rent or mortgage on a property on behalf of the respondent.

## Family Resources Survey, 2016/17

- *Buying with a mortgage*: includes local authority and housing association part-own/part-rent, and co- and shared ownership arrangements.
- *Owned outright*: households who have paid off any mortgage or loan used to purchase the property. These households may have other loans secured on their property for which information is collected on the FRS. However, these payments are excluded from **housing costs**.

Prior to 2008/09, social renting was split into council and housing association groups. This division has been removed because it was found to be unreliable. Comparison with administrative data showed that a significant number of housing association tenants wrongly reported that they were council tenants. A split between furnished and unfurnished private renting was also removed in 2008/09.