



## **Family Expenditure Survey**

**Technical report for the survey year:**

**April 1998-March 1999**

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## 1. Introduction

This report describes technical aspects of the sampling, fieldwork and processing of the 1998-9 Family Expenditure Survey (FES), as undertaken by Social Survey Division of ONS. The main sections of the report cover the sample design, fieldwork issues and response rates, a comparison of the characteristics of responding and non-responding households, response initiatives, coding and editing, and other initiatives carried out during the year related to the FES.

## 2. The Sample

The FES sample is designed to provide a representative sample of households in the United Kingdom.

### 2.1 The Northern Ireland sample

Sampling and fieldwork in Northern Ireland is carried out by the Central Survey Unit of the Northern Ireland Statistics and Research Agency (NISRA). A simple random sample of private addresses is drawn from the Valuation and Lands Agency List. Households in Northern Ireland are over-sampled so that separate analysis can be carried out, however these cases are downweighted when UK data are analysed.

### 2.2 The Great Britain sample

In GB a representative sample of the private household population is drawn excluding the Scottish offshore islands and the Isles of Scilly.

The sampling frame used is the 'small user' Postcode Address File (PAF) – the most complete list of addresses in GB. The PAF is constructed by the Post Office as a list of all delivery points (addresses) in the country and the 'small user' PAF is the file of delivery points which receive fewer than 50 items of mail each day on average. By using this file the majority of businesses and institutions are excluded from the set sample. ONS maintains its own copy of the PAF, which is updated with new addresses twice a year. Checks are made to each new version to maintain its integrity and some identifiable business addresses are removed to improve fieldwork and sampling efficiency.

The FES employs a two-stage sample design: primary sampling units (PSUs), which are postal sectors, are selected first followed by addresses within the selected PSUs. The set sample is 11,424 addresses.

The PSUs are drawn annually and 672 postal sectors are selected using PPS (probability proportional to size) from a list which is stratified using area-level data from the 1991 Census. The stratifiers used are:

- *region*

24 regions based on the Standard Statistical Regions (SSRs) are sub-divided to metropolitan and non-metropolitan areas. Greater London is divided into four segments - NW, NE, SE and SW; Wales into two sections; and Scotland into five sections.

- ***socio-economic group of head of household***

Each major stratum is divided into four bands according to the proportion of households whose head was in a professional or managerial occupation - SEG 1-5 or 13.

- ***and car ownership.***<sup>1</sup>

Within each band, PSUs are sorted in order of the proportion of households with no car.

From April 1998 most surveys carried out by SSD changed from using a regional stratifier based on SSRs to one based on Government Office Regions (GORs). There was some concern among FES clients on the effects of this change on the survey's estimates. (A modified version of GOR has been employed as the major stratifier for the 1999/2000 FES). Family Spending has presented FES results by GOR since 1996-7.

PSUs selected for the FES sample are allocated to calendar months in order to give a nationally representative sample in each quarter of the year. Within each PSU, a random sample of 17 addresses was made. The addresses in each PSU are generally allocated as a single quota of work for an interviewer.

The response unit on the FES is the household expenditure unit which is defined as:

- One person or a group of people who have the accommodation as their only or main residence  
***and (for a group)***  
share the living accommodation, that is, a living room or sitting room **AND** share meals together or have common housekeeping.

This definition, which is the pre-1981 Census definition of a household differs from the harmonised definition employed on most government surveys, which is:

- One person or a group of people who have the accommodation as their only or main residence  
***and (for a group)***  
share the living accommodation, that is, a living room or sitting room **OR** share meals together or have common housekeeping.

The vast majority of FES households meet the harmonised definition. A study by SSD estimated that the effect of introducing the new Census definition in 1981 (which was later made the harmonised definition) was to reduce the estimate of the number of households in England by 0.6%.<sup>2</sup>

### **2.2.1 Multi-household procedures**

For addresses containing more than one household, set procedures are followed in order to give each household one and only one chance of selection.

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<sup>1</sup> New stratifiers were introduced in 1996 following a recommendation from SSD that they would lead to measurable gains in precision on survey estimates of income and expenditure.  
Barton, J. Selecting stratifiers for the Family Expenditure Survey (FES). *Survey Methodology Bulletin*, No. 39. ONS (July 1996)

<sup>2</sup> Todd, J. and Griffiths, D. *Changing the definition of a household*. HMSO (1986)

Where there is more than one household or business receiving mail at an address the Post Office attaches an indicator (the Multi Occupancy Indicator or MOI) to show this. Methodological work undertaken by SSD has shown that the MOI is only a reliable indicator of the number of private households at addresses in Scotland.<sup>3</sup> So, in Scotland only, addresses with an MOI of three or more are given a chance of selection equal to the MOI. At these addresses interviewers use a selection grid to sample 1 in n households, where n is the value of the MOI.

All addresses in England and Wales, and those in Scotland with an MOI of two or less, have only one chance of selection into the FES sample. If these addresses contain more than one private household, interviewers are instructed to include all households up to a maximum of three at any address.

To limit the amount of variation in each interviewer's workload on the FES, a maximum of four extra households per quota is allowed.

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<sup>3</sup> Barton J. Multi-household procedures for social surveys. *Survey Methodology Bulletin*, No. 40. ONS (January 1997)

### 3. Fieldwork

#### 3.1 Overview

Respondents to the FES are asked to answer a lengthy interview covering information about the household, regular items of household expenditure and income details. This is followed by a two-week record of all items of expenditure. All adults within the household (expenditure unit) are required to co-operate with the interview and diary for the unit to count as responding. Children aged 7 to 15 years are also asked to keep a record of their personal expenditure but non-response to this element of the survey does not invalidate the household's response.

#### 3.2 Placing pattern

The FES provides estimates of annual expenditure and so requires that diary records are representative of the whole year. The sample design ensures a distribution of response between months but expenditure patterns may also vary at different times within the month. Interviewers are therefore instructed to aim for an even spread of interviews across the fieldwork month.

All addresses are called on before the end of the field period. For the majority of quotas, all FES interviews are conducted and diaries are started within the field period, which is the calendar month. Interviewers are allowed a one week extension period, overlapping with the next survey month, when an appointment cannot be obtained at an earlier date. Table 3.1 shows the distribution by week of the date of FES interviews in 1998-9.

**Table 3.1 FES 1998-9: Date at which the main interview was carried out**

Week of the month	Percentage of all interviews
	%
1 (1st - 7th)	23
2 (8th - 15th)	31
3 (16th - 23rd)	25
4 (24th - 30th/ 31st)	14
Extension week	7
<i>Base = 100%</i>	<i>6030</i>

#### 3.3 Public relations

It is important that members of the public have complete confidence in the survey and in the interviewer. In advance of the interviewer's first call at the sampled address, SSD send a letter to the occupants to inform them of the visit and content of the survey. The interviewer is able to provide more information when he/she calls and may leave a leaflet which gives further details of the survey, uses of the data and arrangements to ensure confidentiality.

### 3.4 Contacting the sample of addresses

The FES collects information about household expenditure only, so addresses which do not contain a private household are ineligible for inclusion. Most commercial premises or institutions are excluded from the set sample because it is drawn from the 'small users' PAF (See section 2.2). For those which remain, interviewers are instructed to call at all institutional addresses (e.g. hotels, guest houses, hostels, schools etc.) to establish whether there is a private household at the address.

An interviewer must make at least four separate calls, including two evening calls, on any eligible household which is difficult to contact. FES interviewers will continue to make additional calls at non-contacted addresses right up to the end of the field period.

### 3.5 The FES interview

The FES interview divides into two sections. The first part is known as the household questionnaire because the questions refer to the household as a whole. It covers household details, household bills and infrequent purchases, and is generally asked of the head of household (and spouse/ partner). The second part covers employment and income details for each adult in the household and is asked separately of each adult aged 16 and over.

After completing the interview, respondents keep a two-week diary of their expenditure, usually starting from the day of interview or the following day. If the start of the diaries is delayed by more than two days, the interviewer is asked to check that the information collected in the interview is still up to date, for example whether any household bills have been received since the original interview.

In 1998-9, a payment of £10 was made to each adult in responding households and £5 to each child who completed an expenditure diary. Payments are made after completion of all elements of the survey but they are mentioned at an early stage, both in the advance letter and in interviewer introductions.

### 3.6 Pattern of calls

The pattern of calls on the FES is:

- ***The Initial Call:*** to establish how many households live at the selected address and to explain the purpose of the survey. If the household is co-operative, the interviewer will try to make an appointment to see all adult members together for the interview.
- ***The Interview/ Placing Call*** The two sections of the interview are administered at this call, with all adults present. The interviewer also explains the expenditure diary and sets the start date for the diary, which should be within 2 days of the interview.
- ***Interim Checking Call(s).*** Interviewers make at least one checking call on the household but, in practice, may make further calls if these seem to be needed. The first checking call should be within 5 days of the start of record keeping. The interviewer checks that the informant is completing the diary and is giving sufficient detail for items to be coded. If necessary, further instructions and guidelines are given to the informant at this stage.

- **Final/ Collecting Call.** This is made as soon as possible after the end of the diary keeping period. The interviewer completes a thorough check on the diary information, probing for further detail where necessary and adding this to the paper diary, and collects information needed to send the incentive payments.

### 3.7 Interview length

As part of the administrative information collected on the FES, interviewers record the length of time spent on each call. Interviewers call on responding households a number of times: to get in contact with the respondents, to arrange an interview, to interview and place the diary, to carry out a checking call and the final collection call. In total interviewers spent an average of 143 minutes during 1998-99 on calls at each responding household. On occasions when some interviewing was carried out (which includes time explaining the survey and placing the diary) interviewers spent an average of 100 minutes. As one would expect, interviewers spent the most time on interviewing calls at larger households; they spent an average of 141 minutes at households where there was four or more adults

**Table 3.2 Average interview length by household size**

Number of adults in the household	Average interview length (minutes)
	1998-9
1	82
2	104
3	121
4 or more	141
All households	100

Table 3.3 shows the distribution of time spent on interviewing calls. At over a quarter (28%) of households interviewers spent more than two hours explaining, interviewing and placing the diary. At two-thirds (67%) of households, interviewers spent between one and two hours.

**Table 3.3 Distribution of length of interviewing calls**

Time in minutes spent on interviewing calls	1998-9
	%
Less than 60	5
60-89	32
90-119	35
120-149	19
150 or more	9
<i>Base=100%</i>	<i>6030</i>

## 4. Questionnaire

### 4.1 CAPI interviewing

Since April 1994, the FES interview has been conducted using Computer Assisted Personal Interviewing (CAPI). SSD uses Blaise, a software system developed by Statistics Netherlands, to program the FES program. For the 1998-9 survey a new generation of this program was used – Blaise III. The main reason for migrating to this program was that the previous version of Blaise was no longer supported by the developers. All SSD household surveys have moved over to this new version of Blaise and, like the FES, many of them introduced it in April 1998.

Blaise III introduced a number of advantages. The principal one for the FES was to allow the household and individual questionnaire to be contained within one instrument rather than two which was previously the case. This greatly improved the flow of the interview thereby aiding interviewer-respondent rapport. A number of other features of Blaise III were employed, for example screen layout, date functions and the greater number of checks that could be included in the instrument, which are likely to have contributed to improved data quality.

### 4.2 Difficult to obtain information

The FES does not accept refusals to monetary amounts of expenditure or income, other than refusals to amounts invested. A refusal at any other monetary question constitutes a refusal to the survey package as a whole and the interview is terminated at that point. Cases where the information is genuinely not known may arise and blanks in the data are allowable. However, interviewers are encouraged to collect the best estimate that the respondent is able to give and to record any relevant information using the note-pad facility within Blaise.

### 4.3 Documentary evidence

The FES collects detailed information about amounts of money - both for expenditure and income. In order to collect sufficiently detailed and accurate information, interviewers are instructed to ask informants to check figures and to consult relevant documentation.

At a small number of places within the questionnaire, interviewers record whether relevant documents were consulted (Table 4.1). The consultation rates recorded in 1998-9 were similar to those for the 1997-8 FES.

**Table 4.1 Percentage of respondents who consulted documents in 1997/8 and 1998/9**

Type	Percentage who consulted documents		
	1997-8	1998-9	1998 Base
Employees: consulted payslip	72%	71%	6088*
Receiving state retirement pension: consulted payment book or other document	45%	45%	2424*
All households: consulted Council Tax documents	55%	56%	6030

*\*Bases are for individuals*



### 4.3 Changes to the questionnaire in 1998-9

There were only minor changes to the content of the FES questionnaire in 1998-9 which included further changes to bring FES into line with the harmonisation of survey outputs.

#### Changes related to harmonisation

- Date fields were recorded as 4 digits in order to be Year 2000 compliant.
- Basic classificatory information about household members were collected in one household grid and person numbers of children were recorded in the order in which they were entered.
- Date of birth was recorded and age derived based on date of birth and date of interview.
- Relationship grid covers all members of the household, not just adults.
- Minor change to routing for the harmonised questions in the economic activity section, concerning availability for work.
- Adoption of harmonised questions for last paid job and definition of main job.

#### Household questionnaire

- Number of rooms in accommodation (similar to Survey of English Housing)
- Questions reintroduced on start date (month and year) of the period covered by a mortgage.
- New question asking for amount recorded in bills for sewerage charges in Scotland, as well as water charges.
- New question on connection to the internet.

#### Income questionnaire

- New Deal option added to list of schemes at ProgTyp and subsequent questions.
- Removal of questions on amounts invested.
- Nursery Vouchers questions dropped from the interview.

#### Expenditure code changes

##### *New codes:*

- 03.16.04 confectionery away from home (child)
- 03.16.05 ice cream away from home (child)
- 03.16.06 soft drinks away from home (child)
- 03.16.07 hot takeaway meals eaten at home (*from July 1998*)
- 03.16.08 cold takeaway meals eaten at home (*from July 1998*)
- 07.02.12 Repairs and insurance for electrical appliances
- 07.02.13 Repairs and insurance for gas appliances
- 11.02.11 Water travel season tickets
- 12.01.15 Purchase of digital TV decoders
- 11.02.11 Water travel season tickets
- 14.03.08 Pocket money to children
- 14.03.09 Money given to children for specific purposes
- 14.03.10 Cash gifts to children

A number of specific shops were added and others deleted.

*Deleted codes:*

07.02.10 Repairs to gas and electric materials

14.03.01 Pocket money to children (deleted)

#### 4.4 Harmonisation of questions

Over the last few years there has been an emphasis within government to ensure that key classificatory questions on surveys are asked in the same way in order that analysts can compare results across surveys. A GSS publication sets out the question wording, definitions and answer categories breaking them down into a primary and secondary set.<sup>4</sup> The FES harmonised most of its questions in 1996/7 (see Table 4.1). The one major area where the FES is not harmonised is the definition of a household and this is discussed in section 2.2.

**Table 4.1 Harmonised questions on the FES**

Topics	FES – harmonisation status
<i>Primary set</i>	
Household response unit	Not harmonised
Gender	A
Age last birthday (if <20y.o)	96/7
Date of birth	96/7
Marital status (legal)	96/7
Living arrangements	96/7
Who owns or rents accommodation	96/7
Head of household (HOH)	A
Relationship to head of household	96/7
Ethnic origin	96/7
Tenure	96/7
Economic activity (ILO)	96/7
Industry, occupation, socio-economic classifications	96/7
Full-time and part-time work	96/7
<i>Secondary set</i>	
Social security benefits	97/8
Consumer durables	96/7
Length of time since last paid work	96/7
Time in present job	96/7
Usual hours in main job	96/7
Accommodation type	96/7
Housing costs and benefits	96/7
Length of residence	96/7
Vehicle ownership / continuous use	96/7
Health	X

Key: A = harmonised pre 1996-97; year=harmonised for that 'year'  
x=topic not on survey

<sup>4</sup> *Harmonised Concepts and Questions for Government Social Surveys, GSS 1996*

## 5. Response

Response rates are often used as an indicator of a survey's quality and the representativeness of a sample. Response rate *per se* do not in themselves measure representativeness but are a proxy measure for the levels of likely bias. It is generally assumed that the lower the response rates the greater likelihood of bias in the results because certain types of households will be under represented in the sample.

This section looks at overall response rates, response rates for various sub-groups, characteristics and reasons why people do not respond, and comparisons of responding and non-responding households.

### 5.1 Overall response

The detailed breakdown of final outcome for all cases in the 1998-9 FES set sample is shown in Table 5.1. During 1998-9 harmonised response rules were introduced on the FES to bring it into line with other surveys. Respondents who were away all field period were previously recorded as being ineligible, however during 1998/9 they were recorded as non-contacts. Table 5.1 shows a breakdown of response using the new harmonised rules; adopting these rules accounted for a 0.7% drop in response.

**Table 5.1 FES 1998-99: Response summary (harmonised rules)**

Category	Number of cases	Percentage of set	Percentage of eligible
Set sample	11424		
Ineligible	1308	11.4%	
Extra households	202	2.0%	
<b>Total Eligible</b>	<b>10318</b>	<b>90.3%</b>	
Co-operating	6030		58.4% *
Refusals	3857		37.4%
<i>Refusals to HQ</i>	204		2.0%
<i>Refusals before interview</i>	3231		31.3%
<i>Incapable of taking part</i>	101		1.0%
<i>Refusal during interview</i>	48		0.5%
<i>Later refusal/rejected cases</i>	273		2.6%
Non-contacts	429		4.2%

\*Response would have been 59.1% using the previous rules

Of the 11,424 addresses in the set sample for Great Britain, 11.4% did not contain a private household and were classed as ineligible. This category includes empty, demolished or derelict addresses, non-residential addresses, and temporary accommodation.

Full co-operation was obtained from 6,030 of households, which represents 58.4% of the eligible sample. (If the old rules had been employed response rates would have been 59.1%) .A household was coded as fully co-operating if:

- all adults aged 16 and over co-operated with the interview;
- no monetary items in the questionnaires were refused;
- all adults kept a two-week record of their expenditure;
- the information given was complete and useable.

Just over 4% of the set sample of households were not contacted including those who were away the whole field period. This is an increase compared with previous years but includes those respondents (115 households) who would previously have been recorded as ineligible because they were away all field period.

There has been a increase in the proportion of the sample who refused to take part: 37.4% compared with 35.4% in 1997-8. Most refusals take place before any interviewing has started. A small proportion (2.0%) refused directly to HQ on receipt of the advance letter. Over a third of eligible cases (32.3%) refused after the interview had made contact either because all or some of the household members did not want to take part or a resident at the household was not capable. In addition 3.1% of eligible cases either refuse during the interview or some later point or do not fill in all elements of the correctly.

## 5.2 Trends in response

Table 5.2 compares the main outcome categories in the 1998-9 FES sample with the previous three years and Table 5.3 summarises rates since 1975. The number of ineligible addresses included in the set sample has continued to fall which is reflected in the increase in the total number of eligible households, from 10,150 in 1995-6 to 10,318 in 1998-9. The response rate in 1998-9 was disappointing, dropping to below 60% for the first time (58.4% calculated by new harmonised response rules and 59.1% under the former rules). Refusals to the survey have continued to increase and the change to response rules account for the increase in the non-contact rate.

**Table 5.2 Annual response rates 1995-6 to 1998-9**

	1995-6		1996-7		1997-8		1998-9*	
	No. of Hhlds	%	No. of Hhlds	%	No. of Hhlds	%	No. of Hhlds	%
Set sample	11424		11424		11424		11424	
Ineligibles	1461		1438		1430		1308	
Extra households	187		187		226		202	
<b>Total Eligible</b>	10150	100	10173	100	10220	100	10318	100
Refusals	3219	31.7	3591	35.3	3630	35.4	3857	37.4
Non- contacts	265	2.6	291	2.9	314	3.1	429	4.2
Co-operating	6666	65.7	6291	61.8	6286	61.5	6030	58.4*

\*New harmonised response rules accounts for a 0.7% drop in response

**Table 5.3 FES response rates 1975 to 1998-9**

Year	Response rate	Year	Response rate	Year	Response rate
1975	69.9	1983	67.3	1991	69.0
1976	70.0	1984	68.4	1992	71.8
1977	69.5	1985	67.9	1993	68.9
1978	67.9	1986	69.7	1994-5	66.4
1979	68.2	1987	71.8	1995-6	65.7
1980	67.0	1988	71.3	1996-7	61.8
1981	72.1	1989	72.5	1997-8	61.5
1982	71.8	1990	69.1	1998-9	58.4*

\*New harmonised response rules accounts for a 0.7% drop in response

### 5.3 Variation in response

Tables 5.4 and 5.5 show the variation in field response by quarter and standard region type over recent years. (Full details for 1998-9 are given in Appendix A.)

For the 1998-9 FES, response was highest in the second quarter of the survey year (59.4% in July to Sept) and was lowest in the third quarter (57.5% for October to December).

**Table 5.4**

As in previous years, response in 1998-9 was substantially lower in Greater London (49.3%) than in other regions. This was due both to high non-contact and refusal rates (6.8% and 43.9% respectively). The next lowest response rates were recorded in the East Midlands (56.4%) and the North West (57.0%); both of these regions had high refusal rates (39.6% and 39.5%) but did not have markedly high non-contact rates. The highest response rates were in the South West (65.5%) the North (64.5%), East Anglia (61.3%) and Scotland (60.8%).

Compared with 1997/8 response rates in 1998/9 fell most in Wales (10% points), the North (6% points) and the East Midlands (5% points). The response rates in the West Midlands marginally increased.

**Table 5.5**

**Table 5.4 FES Quarterly response: 1992 to 1998-9**

	Jan – March			April – June			July - Sept			Oct - Dec			Calendar year		
	Respond- ing sample	Eligible sample	Response Rate	Respond- ing sample	Eligible Sample	Response Rate	Respond- ing sample	Eligible sample	Response rate	Respond- ing sample	Eligible sample	Response rate	Respond- ing sample	Eligible sample	Response rate
1999*	1528	2605	58.7%												
1998*	1563	2567	60.9%	1493	2561	58.3%	1519	2556	59.4%	1490	2593	57.5%			
1997	1602	2526	63.4%	1634	2583	63.3%	1552	2516	61.7%	1537	2554	60.2%	6325	10179	62.1%
1996	1653	2514	65.8%	1595	2526	63.1%	1605	2577	62.3%	1516	2544	59.6%	6369	10161	62.7%
1995	1641	2543	64.5%	1690	2585	65.4%	1675	2541	65.9%	1648	2510	65.7%	6654	10179	65.4%
1994	1733	2498	69.4%	1774	2556	69.4%	1633	2515	64.9%	1682	2529	66.5%	6822	10098	67.6%
1993	1781	2489	71.6%	1700	2470	68.8%	1629	2438	66.8%	1737	2546	68.2%	6847	9943	68.9%
1992	1854	2553	72.6%	1832	2487	73.7%	1798	2506	71.7%	1790	2578	69.4%	7274	10124	71.8%

\* New harmonised response rules accounts for a 0.7% drop in the annual response rate. Because of the different rules a calendar year response rate is not presented.

Table 5.5 FES response rate by region: 1992 to 1998-9

	North			Yorks & Humber			North West			East Midlands			West Midlands		
	Respond- ing sample	Eligible sample	Response Rate	Respond- ing sample	Eligible sample	Response Rate	Respond- ing sample	Eligible sample	Response Rate	Respond- ing sample	Eligible Sample	Response rate	Respond- ing sample	Eligible sample	Response rate
1998-9*	363	563	64.5%	521	891	58.5%	650	1140	57.0%	431	764	56.4%	542	929	58.3%
1997-8	404	573	70.5%	551	876	62.9%	663	1127	58.8%	465	759	61.3%	527	909	58.0%
1996-7	390	559	69.8%	569	877	64.9%	704	1140	61.8%	486	733	66.3%	580	935	62.0%
1995-6	384	561	68.4%	596	889	67.0%	723	1114	64.9%	493	719	68.6%	626	938	66.7%
1994-5	408	573	71.2%	613	883	69.4%	765	1150	66.5%	491	727	67.5%	607	946	64.2%
1993	405	548	73.9%	671	917	73.2%	739	1114	66.3%	498	714	69.7%	617	880	70.1%
1992	457	594	76.9%	678	915	74.1%	803	1162	69.1%	517	720	71.8%	701	951	73.7%

	East Anglia			Greater London			South East			South West			Wales		
	Respond- ing sample	Set Sample	Response Rate	Respond- ing sample	Set Sample	Response rate	Respond- ing sample	Set sample	Response rate	Respond- ing sample	Set sample	Response rate	Respond- ing sample	Set sample	Response rate
1998-9*	241	393	61.3%	611	1240	49.3%	1200	2020	59.4%	595	909	65.5%	301	520	57.9%
1997-8	249	379	65.7%	657	1270	51.7%	1233	1993	61.9%	597	874	68.3%	350	518	67.6%
1996-7	237	379	62.5%	637	1249	51.0%	1203	1974	60.9%	596	886	67.3%	356	513	69.4%
1995-6	284	391	72.6%	699	1265	55.3%	1276	1954	65.3%	641	884	72.5%	339	501	67.7%
1994-5	273	372	73.4%	660	1240	53.2%	1331	1974	67.4%	606	824	73.5%	353	512	68.9%
1993	255	345	73.9%	733	1245	58.9%	1342	1954	68.7%	600	823	72.9%	344	487	70.6%
1992	270	360	75.0%	834	1270	65.7%	1393	1932	72.1%	615	831	74.0%	353	475	74.3%

	Scotland		
	Respond- ing sample	Set Sample	Response Rate
1998-9*	575	945	60.8%
1997-8	590	942	62.6%
1996-7	560	928	60.3%
1995-6	605	934	64.8%
1994-5	623	942	66.1%
1993	643	916	70.2%
1992	653	914	71.4%

\*New harmonised response rules accounts for a 0.7% drop in the annual response rate

## 5.4 Reasons for refusal

Interviewers on the FES routinely collect information about respondents who do not take part in the survey. People refuse to take part for a variety of reasons. Interviewers record up to three reasons why people refuse before or during the interview from a list of pre-coded answers (this makes up 85% of all refusals). The reasons are recorded at household level but will reflect the comments made by the individual (or individuals) with whom the interviewer has spoken. No reasons are coded for refusals made directly to HQ, as these households are not usually visited by an interviewer, nor for households which refuse or are rejected at a late stage.

Reasons why people refuse to take part appear relatively consistent across the last four years. The reason most often given is that taking part in the survey is an invasion of the household's privacy. About a fifth of households mentioned they "Couldn't be bothered" (21%) or "don't believe in surveys" (18%): non-specific reasons of this type are very difficult for interviewers to address.

**Table 5.6 FES Reasons for refusal: all reasons given**

	<i>Refusals before or during the interview</i>			
	1995-6	1996-7	1997-8	1998-9
	%	%	%	%
Invasion of privacy	27	27	28	28
Can't be bothered	23	23	21	21
Doesn't believe in surveys	17	17	19	18
Disliked survey of income	17	16	16	15
Too busy	14	14	14	15
Personal problems	10	11	10	10
Too old/ infirm	8	7	9	8
Too busy at present	5	6	6	7
Broken appointments	6	7	6	10
Put off by record keeping	7	6	5	5
Anti-government	8	6	4	4
Concerns about confidentiality	6	5	4	6
Not capable	3	2	3	1
Refusal to HQ	2	2	2	3
Bad experience with a previous survey	2	2	2	2
About to go away	2	2	2	2
Late contact - insufficient field time	2	1	2	2
Language difficulties	1	1	2	1
Other reason	9	11	11	14
No reason given	1	1	1	0
<i>Base</i>	<i>2,774</i>	<i>3,264</i>	<i>3,187</i>	<i>3,279</i>

Reasons relating directly to the content or requirements of the FES were cited less frequently: 15% of refusers mentioned that they did not want to give information about income, and 5% mentioned that they were put off by the idea of record keeping. These reasons might, of course, be in combination with other more general reasons.



Anti-government reaction has remained at the same levels as 1997-8 (4% compared with 8% in 1995-6), but there has been a growth in the number of broken appointments – that is households who agree to meet the interviewer, sometimes several times, and are not at home or willing to see the interviewer when he/she calls (10% in 1998-9 compared with 6% in 1997-8).

As there is a substantial amount of multi-coding of reasons for refusal, tabulation of the first reason listed may give a clearer idea of the most important reasons, although interviewers may not always be able to determine a main or primary reason for refusal. Table 5.7 shows that the ordering for main reasons was broadly similar to the order for all reasons: general doubts about survey research again appear at the top of the list and “can’t be bothered” is the third most common reason given

**Table 5.7 FES Reasons for refusal : first reason coded**

	<i>Refusals before or during the interview</i>		
	1996-7	1997-8	1998-9
	%	%	%
Doesn't believe in surveys	15	18	16
Invasion of privacy	17	17	16
Can't be bothered	15	13	12
Too busy	11	10	11
Personal problems	6	6	6
Disliked survey of income	5	6	5
Too old/ infirm	5	6	4
Broken appointments	4	4	6
Too busy at present	4	3	4
Put off by record keeping	2	2	2
Refusal to HQ	2	2	2
Anti-government	3	1	2
Concerns about confidentiality	2	1	2
Bad experience with a previous survey	1	1	1
Language difficulties	1	1	1
About to go away	1	1	1
Not capable	1	1	0
Late contact – insufficient time	1	1	1
Other reason	6	6	8
No reason given	1	1	0
<i>Base</i>	<i>3264</i>	<i>3187</i>	<i>3279</i>

## 5.5 Characteristics of non-responding households

Since April 1995, the FES has routinely collected information about non-responding households using a short non-response questionnaire (NRQ). The questions cover basic information about the number, age and sex of household members and other household information such as tenure and type of accommodation.

A full report on the quality of NRQ data and a comparison of the characteristics of responding and non-responding households was compiled for the 1995-6 FES.<sup>5</sup> The tables in this section provide an update of selected information in that report, including a comparison on some key variables for responding and non-responding households.

Interviewers were asked to collect information from respondents who refused to take part before or during the interview or at households where a resident was incapable (that is 88% of all refusers) and from all non-contacted households. Obtaining information from non-responding households is, by its very nature, difficult. Interviewers obtained information as a result of making some contact with a member of the household or from observation. However it was not always possible to collect details about the household. Consequently in analysing the NRQ data we need to be aware that the characteristics of the non-responding households we have collected information about may not be the same as those non-responding households where no information was available.

Interviewers obtained the majority of information about households who refused to take part directly from a household member; 62% of the NRQ data was obtained in this way and the remainder came mostly from the interviewers' observations or impressions. For households which were not contacted, the majority of the information was from the interviewers' observations or impressions (62%) and the remainder was from neighbours or other sources.

**Table 5.8 Main source of information for non-responding households**

*Refusals before or during the interview or incapable of taking part*

Main source of answers	FES 1995-6		FES 1997-8		FES 1998-9*	
	Refusal	Non-contact	Refusal	Non-contact	Refusal	Non-contact
	%	%	%	%	%	%
Member of household	57	..	52	..	62	..
Neighbour etc.	1	41	2	41	1	29
Interviewer's observation/ impression	42	49	45	59	36	62
<i>Base = 100%</i>	<i>2730</i>	<i>281</i>	<i>3122</i>	<i>314</i>	<i>3380</i>	<i>429</i>

\* During 1998/9 there was a change in instructions to interviewers which accounts for the different distributions

<sup>5</sup> Hansbro J and Foster K. Characteristics of non-response on the 1995/96 Family Expenditure Survey *Unpublished report to SED, June 1997.*

Hansbro J and Foster K. Collecting data on non-respondents to the Family Expenditure Survey. *Survey Methodology Bulletin, No. 41.* ONS (July 1997)

**Table 5. 9 Percentage of non-responding households for whom there were details available from the non-responding questionnaire (NRQ)**

	FES 1995-6		FES 1997-8		FES 1998-9	
	Refusal	Non-contact	Refusal	Non-contact	Refusal	Non-contact
	%	%	%	%	%	%
Percentage of non-responders to whom NRQ questions were directed*	85	100	86	100	88	100
<i>Base=100%</i>	<i>3219</i>	<i>281</i>	<i>3620</i>	<i>314</i>	<i>3857</i>	<i>429</i>
<b>Percentage of ALL non-responders for whom details on the NRQ were collected by type of characteristic</b>						
Number of adults	80	61	81	61	80	60
Number of children	75	58	77	58	73	50
Age (eight bands) of HoH	76	42	78	39	72	26
Age (three bands) of HoH+					77	38
Gender of HoH+					78	54
Economic status of HoH+					61	38
Accommodation type	80	100	86	100	88	100
Tenure	55	41	53	36	53	36
<i>Base=100%</i>	<i>3219</i>	<i>281</i>	<i>3620</i>	<i>314</i>	<i>3857</i>	<i>429</i>

\* From 1999/2000 NRQ data will be collected on some additional refusing categories  
+ This information was not included in earlier technical reports and is not easily available.

The amount of information available from non-responding households is remarkably consistent across the three years shown in Table 5.9.

The completeness of the information varies for different types of household characteristics. Not surprisingly, interviewers were able to obtain a high proportion of information about the non-responders' type of accommodation, because they were able to code this from observation, but less complete information was available for tenure (53% of refusing and 36% of non-contact households). Interviewers were also able to find out detailed information about the number of adults and children within non-responding households but, as would be expected, were less successful in recording details about households they were not able to contact.

Table 5.10 compares the composition of non-responding and responding households. Households who refused to take part in the FES had a very similar composition compared with responding households, whereas the profile of households who were non-contacted was different. Non-contact households were more likely to contain a single adult with no children compared with refusing and responding households (68% compared with 32% and 27% respectively).

**Table 5.10 Comparison of household type of responding and non-responding households**

Household type	FES 1998-9			Responding households
	Non-responding households		All Non-responders	
	Refusal	Non-contact		
	%	%	%	%
1 adult, no child	32	68	34	27
1 adult, with children	4	2	4	6
2 adults, no child	35	19	34	33
2 adults, with children	16	6	15	20
3 or more adults, no child	13	6	13	9
3 or more adults, with Children	-	-	-	5
<i>Base=100%</i>	<i>2695</i>	<i>213</i>	<i>2908</i>	<i>6030</i>

Table 5.11 shows that the household composition of non-responding households, has remained broadly similar over the last four years.

**Table 5.11 Household composition by type of non-responding household**

Household type	FES 1995-6		FES 1997-8		FES 1998-9	
	Refusal	Non-contact	Refusal	Non-contact	Refusal	Non-contact
	%	%	%	%	%	%
1 adult, no child	30	75	33	66	32	68
1 adult, with children	3	4	3	6	4	2
2 adults, no child	38	16	36	18	35	19
2 adults, with children	13	4	12	3	16	6
3 or more adults, no child	13	2	12	6	13	6
3 or more adults, with Children	3	-	3	1	-	-
<i>Base = 100%</i>	<i>2458</i>	<i>159</i>	<i>2829</i>	<i>174</i>	<i>2695</i>	<i>213</i>

Table 5.12 gives more details about the household composition (there are a number of differences compared with Table 5.10 because of the greater number of valid cases). Households who refused to take part in the FES had a similar number of adults as responding households, whilst non-contacted households had a much different profile. The majority of non-contacted households did not have children (92%); 77% of refusing and 69% of responding households did not include children.

**Table 5.12 Comparison of number of adults and children of responding and non-responding households**

	FES 1998-9			Responding households
	Non-responding households			
	Refusal	Non-contact	All Non-responders	
	%	%	%	%
<b>Number of adults</b>				
1	33	70	36	33
2	51	27	49	53
3	11	2	10	9
4 or more	5	1	5	4
<i>Base = 100%</i>	<i>3100</i>	<i>256</i>	<i>3356</i>	<i>6030</i>
<b>Number of children</b>				
0	77	92	78	69
1	9	3	8	13
2	8	2	7	13
3	2	0	2	4
4 or more	1	0	1	1
<i>Base = 100%</i>	<i>2815</i>	<i>215</i>	<i>3030</i>	<i>6030</i>

The NRQ aims to collect basic information about each adult in the household, starting with the person thought to be the head of household. For each adult, interviewers were asked to record actual age in ten-year bands or if that was not possible in three broad bands (the latter approach yielding information about a greater number of non-responding households).

**Table 5.13 Comparison of age (three age bands) and sex of HOH of responding and non-responding households**

	FES 1998-9			Responding households
	Non-responding households			
	Refusal	Non-contact	All Non-responders	
	%	%	%	%
16-29	10	22	11	12
30-59	54	52	54	56
60 or more	36	26	35	32
<i>Base=100%</i>	<i>2965</i>	<i>162</i>	<i>3127</i>	<i>6030</i>
Male HoH	73	68	72	75
Female HoH	27	32	28	25
<i>Base = 100%</i>	<i>3024</i>	<i>216</i>	<i>3240</i>	<i>6030</i>

Table 5.13 shows that responding and refusing households were similar in terms of the age and sex of the head of household whereas the non-contacts are likely to differ; non-contacted addresses were more likely than other households to have a head of household headed by someone aged 16-29.

Table 5.14 shows the more detailed age bands and also shows a similar distribution between the age of refusing and responding heads of households.

**Table 5.14 Comparison of age (three age bands) and sex of HOH of responding and non-responding households**

	FES 1998-9			Responding households
	Non-responding households			
	Refusal	Non-contact	All Non-responders	
	%	%	%	%
16-19	0	-	0	0
20-29	20	22	10	11
30-39	18	20	18	21
40-49	16	12	16	18
50-59	20	11	20	17
60-69	15	20	15	14
70-79	13	10	13	13
80 or over	8	8	8	5
<i>Base = 100%</i>	2773	112	2885	6030

**Table 5.15 Comparison of economic status of HOH of responding and non-responding households**

	FES 1998-9			Responding households
	Non-responding households			
	Refusal	Non-contact	All Non-responders	
	%	%	%	%
Employee (or DK if employee or self-employed)+	45	56	46	48
Self-employed	9	4	9	9
<b>Employed</b>	<b>54%</b>	<b>60%</b>	<b>55%</b>	<b>57%</b>
Unemployed	2	2	2	3
Other econ. Inactive (or DK if unemployed or econ. Inactive)+	35	26	35	39
<b>Not employed</b>	<b>45%</b>	<b>40%</b>	<b>45%</b>	<b>42%</b>
<i>Base=100%</i>	2344	162	3127	6030

+ Categories for non-responding households

Interviewers were asked to record the economic status of the head of household of non-responding households. If they were unable to provide the more detailed breakdowns they were asked to code if they were working or not working. The detailed breakdown in Table 5.15 shows that the economic status of heads of households who refused to take part in the FES was very similar to their counterparts in responding households. There was no significant difference in the economic status of the heads of household who could not be contacted compared with responding households

Table 5.16 shows there was no significant difference in the accommodation type of refusing and responding households with the distributions almost mirroring each other. Households that were not able to be contacted had a different profile; interviewers had most difficulty in contacting households people living in a purpose built flats (35% of non-contacts lived in a flat compared with 14% of responding households) and converted or shared accommodation (11% of non-contacts compared with 4% of responding households).

The type of tenure of refusing and responding households was also similar whilst non-contacted households were more likely to live in rented accommodation.

**Table 5.16 Comparison of accommodation and tenure type of responding and non-responding households**

	FES 1998-9			Responding households
	Non-responding households		All Non-responders	
	Refusal	Non-contact		
	%	%	%	%
<b>Type of accommodation</b>				
Detached house	21	14	22	21
Semi-detached house	31	14	29	32
Terraced house	28	26	28	27
Purpose-built flat or Maisonette	15	35	17	14
Converted/ shared accom.	3	11	4	4
Other	0	-	0	2
<i>Base = 100%</i>	<i>3382</i>	<i>417</i>	<i>3791</i>	<i>6030</i>
<b>Tenure</b>				
Owned	73	37	70	68
Rented - Local Authority	21	43	23	22
Privately rented	6	20	7	9
Squatting	..	..	..	2
<i>Base = 100%</i>	<i>2055</i>	<i>147</i>	<i>2202</i>	<i>6030</i>

Table 5.17 shows that there has been little change in the type of accommodation and tenure type of refusing and non-contacted addresses in 1998-9 compared with 1997-8 and 1995-6.

**Table 5.17 Housing tenure and accommodation type by type of non-responding household**

	FES 1995-6		FES 1997-8		FES 1998-9	
	Refusal	Non-contact	Refusal	Non-contact	Refusal	Non-contact
	%	%	%	%	%	%
<b>Type of accommodation</b>						
Detached house	21	7	23	11	21	14
Semi-detached house	31	16	31	17	31	14
Terraced house	29	26	27	20	28	26
Purpose-built flat or Maisonette	15	38	15	34	15	35
Converted/ shared accom.	4	13	4	18	3	11
Other	1	0	1	0	0	-
<i>Base = 100%</i>	<i>2730</i>	<i>281</i>	<i>3173</i>	<i>314</i>	<i>3382</i>	<i>409</i>
<b>Tenure</b>						
Owned	70	33	73	31	73	37
Rented - Local Authority	25	51	21	47	21	43
Privately rented	5	16	7	21	6	20
<i>Base = 100%</i>	<i>1773</i>	<i>115</i>	<i>1972</i>	<i>112</i>	<i>2055</i>	<i>147</i>

In summary, despite falling response rates in 1998-9, the profile for responding and refusing households (for which there was information available) were similar across a number of key characteristics. Non-contacted households had a different profile: they were more likely to be single young adults living in rented accommodation (although we have less complete information about non-contacted households). However non-contacted addresses make up only a small proportion of all non-responding households and, taken as a whole, non-responding households do not appear to be dissimilar, according to a number of basic characteristics, to those that responded.

## 5.6 Measures to counteract falling response rates

Within SSD there have been a large number of initiatives being taken forward to counteract falling response rates. Some of the initiatives have been survey specific others are of a more general nature. Some of the more general measures include:

- Increasing the size of the field force
- Investigation of the effect of the changing interview profile
- Interviewer attitudes
- Interviewer training and motivation
- Interviewer call patterns
  
- Advance letters
- Giving respondents information leaflets



- Response rules and placing patterns
- Interview length
- Redesign of documentation to make it user friendly
- Refusal conversion.

## 5.7 Specific measures on the FES

Apart from the constant on-going work with interviewers and respondents to keep up response rates a series of initiatives were carried out on the FES during 1998/9.

- **Telephone contact with non-responders**  
Identifying telephone numbers of non-responders (were obtained either direct from the respondent or the more laborious method of looking up in the electoral register and matching them with listed telephone entries); a telephone interviewer phoned to try and persuade those households, where a number was found, to take part. A face-to-face interviewer subsequently visited the household. This approach was carried out for three months and resulted in 23 additional interviews. It was decided that this multi-staged approach was cumbersome and not cost effective.
- **Postal contact with non-responders**  
It is only possible to obtain approximately 25% of telephone numbers by matching electoral register entries with telephone listings. For the households where a match could not be made, we wrote to them asking them to ring a freephone number so that we could persuade them to take part. As expected this did not result in many additional appointments.
- **Leaflet with advance letter**  
For two months we enclosed a leaflet with the advance letter giving some interesting information about the statistics ONS collects. Although there was no adverse reaction to the leaflet it did not improve response.
- **Attitude questions**  
Between January and March 1999 we included a series of attitude questions to help the interviewer sell the survey on the doorstep. Although this had been effective on some other surveys, it does not appear to have been helpful on the FES. Of course the FES has many additional demands on respondents compared with other surveys including keeping a two week diary by all adult household members. It was decided to discontinue asking these questions.
- **Postage stamps as an incentive**  
It is generally accepted that incentive payments work better by offering them in advance to all sampled addresses regardless of whether they subsequently take part in the survey. These incentives do not necessarily have to be large – it is the ‘psychological relationship’ that is introduced, either for the respondents to take part in the survey or to see the interviewers. From February 1999 we included a book of four first class stamps in with the advance letter.
- **Revamp of briefing for new FES interviewers**  
During 1998/9 we revamped the briefing of interviewers new to the FES. The new training includes a number of sessions on response issues including a skill based session on converting reluctant respondents, respondent motivation and what makes people take part in surveys. These briefings have been well received by interviewers.

## 6. Data Processing and Data Quality

### 6.1 Coding

Interviewers code standard items in the FES questionnaire, such as 3 digit SOC (Standard Occupational Classification) and SIC (Standard Industrial Classification). Social Class and Socio-Economic Group are automatically derived from the SOC and employment status codes.

Items of expenditure recorded in the FES diaries are coded and keyed into a Blaise instrument by office-based staff in Titchfield who use computer-assisted coding (CAC) to assign a 3-level (6 digit) expenditure code. The codes are hierarchical in structure, nesting within 14 major (first level) categories. Codes are usually assigned by typing in a brief description of the item which will bring up a display of matching items in the coding dictionary, with the corresponding codes. The coder then selects the best match. Hierarchical coding is used for take away meals and food eaten out of the home.

Coding of selected expenditure items on the questionnaires is carried out by office-based editors in London, again using computer-assisted coding. Items include loans, credit payments, standing orders/ direct debits and deductions from salary.

### 6.2 Checks on data quality

Checks on range and consistency of data items are programmed in Blaise and carried out either during the interview or as the diary information is keyed. During 1998/9 a number of additional checks were included in the Blaise instrument, building on the checks carried as part of the SED quality control procedures.

#### 6.2.1 Checks within the interview

Responses which appear unlikely or are inconsistent can be queried with the respondent during the interview and information re-entered.

Checks programmed into Blaise may be defined as *hard* or *soft* checks. Values which fail a hard check must be changed in order for the interviewer to proceed. Soft checks can be suppressed if the interviewer has checked that the information is correct, to the best of their or the respondent's knowledge. Interviewers are expected to enter a note (a function within Blaise) to explain the circumstances. Most interview checks are soft.

Checks generally fall into the categories of *range* and *consistency* checks. Range checks are triggered where an unlikely value is entered on a single variable and send up an appropriate warning message. Consistency checks compare the values on different variables, perhaps in different sections of the questionnaire.

On the FES there is also a distinction between checks triggered during the interview itself and those run later as *home checks*. These are possible on the FES because the interviewer makes a number of visits to the household and so can clarify information at a later stage. The home checks tend to be relatively complex, looking across a number of items, and so interviewers may need to spend time working out what needs to be checked or corrected and in explaining the household's circumstances in a note.

### **6.2.2 Checks on the diary**

Checks on range and consistency are also included in the Blaise instrument for the FES diary. At the coding/keying stage there are no cross-checks between interview and diary data: these are picked up in the edit. However, coders have access to selected items of questionnaire data which are printed out on a fact sheet for each household. These include information about household composition, type of school attended by children, economic activity status of adults etc.

Coders also check on the completeness of the data. In essence this means that each item of expenditure should be codable to one of the coding categories and that the cost of each individual item is recorded. In a small proportion of cases respondents may record the type of goods bought and a global amount spent, and coding supervisors will then impute values for each individual item listed.

Verification is carried out on 10% of diaries as a check on the accuracy of keying of amounts and other information transferred from the paper diary. The system is not explicitly set up as a check on coding accuracy but some informal checking is carried out, particularly of the work of less experienced coders. Recently a separate methodological study of coding accuracy was sponsored by SED and this showed a very high level of coder reliability.<sup>1</sup>

### **6.3 Editing**

After expenditure items have been coded and keyed, the complete data-set for each household is edited by staff in London. A variety of checks are carried out by editors (see below), all of which are concerned with the internal consistency of individual cases. Checks are run in the Blaise questionnaire instrument but editors may make amendments to data in the questionnaire or diary instruments.

The main edit functions are as follows.

- ***Imputing missing values***

Missing values may occur where respondents genuinely do not know the answer. Gaps may be filled in a variety of ways.

- i. By reference to tables based on external (non-FES) data and to fixed proportions/amounts which are published elsewhere, e.g. mortgage imputation tables based on interest rates and amount of the loan; imputation of unknown amounts of state benefits received, including splitting of combined payments, based on current information on benefit rates.
- ii. By reference to tables based on FES data from previous years. These show average amounts according to household income.
- iii. Using information collected elsewhere in the questionnaire or by reference back to interviewers who often have a very detailed memory of household circumstances.

- ***Specific checks programmed in Blaise***

These tend to be more complex consistency checks. All interviewer checks which have been suppressed will be triggered again in the edit and editors may be able to resolve them. For example, editors would be expected to reconcile gross pay with net pay and any deductions using information given in the interviewer note. Other checks highlight parts of the questionnaire where information may need to be checked against that in other sections

and amended or reorganised before data delivery. Examples include conversion of water and sewerage charges in Scottish Council Tax bills from annual to periodic payments, and adjustments to Income Support receipts to take account of payments made by the DSS towards household bills.

- ***Resolving other problems***

Editors deal with all notes and comments recorded by interviewers because of unusual circumstances or because they were uncertain about what action to take. If editors cannot resolve a problem from the notes given, they will refer to the supervisor for a decision, based on experience, precedence and/ or judgement.

Editors also check all occurrences of period codes 95 'One off/ lump sum' and 97 'None of these'. These may be valid codes in terms of collection of the data during the interview but are not acceptable in the final data-set.

- ***Abatement for business expenses***

- i. Generally any informant who is self-employed will be able to offset business expenditure against income tax. The types of expenditure covered and the proportions of expenditure claimed are recorded at questions 60.305 and 60.310 of the income schedule. As the FES is intended to cover personal expenditure only, the amounts recorded in the questionnaire and diary for these items of expenditure need to be abated. This is done manually by the editors who have access to the information on business expenses. Further details are given in the editing instructions.
- ii. Abatement is also carried out where employees receive business expenses. Vehicle expenses in the household schedule and in the diary are abated if the respondent receives a mileage/ fixed car allowance in his or her pay. Editors also use information on business refunds recorded at Qrefunds (household questions 64.05 cf.)

- ***Records of editing actions***

Abatement markers are included at relevant questions through the interview, for example telephone and electricity payments. Editors set the appropriate marker to the value 1 if the substantive item has been abated to allow for business expenditure.

Before completing each case, editors are asked to record whether values at 40 questions or groups of questions were imputed or amended. This gives a broad indication of the amount of imputation carried out but does not constitute a marker against specific variables: this would require a large number of additional variables in the Blaise instrument.

### **6.3 Data delivery**

Batches of data are delivered to SED weekly as edited cases become available. The deadline for delivery for each quarter is approximately 8 weeks after the end of the final month in the quarter. Within this timetable, the aim is to have delivered the vast majority of cases at least a week before the final deadline.

In 1998/9 a new version of the CAPI software was introduced (section 4.1). In converting the data from Blaise III into a format that was acceptable for SED systems there were a number of teething problems in ensuring the metadata was compatible and this led to some

delays. This was not a consequence of the conversion to Blaise III *per se*, but is rather a consequence of dealing with two computer systems which do not interface effectively and would have been a problem with any major change to the system.

As cases are delivered SED carry out a series of validation checks, mainly concerned with the structure of the data, which may lead to cases being referred back to SSD for amendment and resubmission. When the quarterly database is complete, SED carry out Quality Control checks, mainly to identify outliers and check consistency of the data. Again, queries are dealt with by SSD who make reference to any paper documents and interviewer notes for the cases in question. Where changes are agreed, the amended cases are resubmitted to SED.

## 7. Sampling errors

Each year SSD run sampling errors which are included in the annual publication Family Spending. Because of the requirement to move away from using our mainframe computer, the SSD customised package, Epsilon, was no longer available. Sampling errors for the 1998-9 survey were carried out using the STATA package.

## 8. Additional work in 1998/9

In 1998/9 a significant amount of work was carried out in relation to the proposed merger of the FES/NFS. Following the preliminary reports looking at the feasibility of the merger<sup>6</sup>, a small scale pilot was carried out during September 1998. The report<sup>8</sup> recommended that further work should go ahead into investigating a merger however it needed to address the problem of respondent burden.

Throughout the autumn and early winter a substantial amount of time was spent by staff in SSD and SED discussing a revised processing system and with colleagues from MAFF a merged survey. A development plan<sup>9</sup> outlining the proposed approach was approved by the joint steering group in January 1999. Development work carried out during 1998-9 included beginning to identify areas of the questionnaire that might be cut in order to reduce respondent burden and work on the revised processing and coding system.

In addition, in a response to a specification drawn up by SED and MAFF, SSD outlined our proposals for the EFS/FES as part of the FES Five year review.<sup>10</sup> The FES Five Year Review Board announced that the Social Survey Division's proposals should be adopted for the years 2001/2-2005/6.

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<sup>6</sup> First report of the Study Team on FES/NFS merger. Kate Foster and Reg Gatenby (October 1997)

<sup>7</sup> FES/NFS Feasibility Study. Stage 2a: Developing the survey package. Kate Foster and Reg Gatenby (February 1998)

<sup>8</sup> FES/NFS Feasibility study. Report on stage 2b: small-scale pilot of the survey package. Deborah Lader (October 1998)

<sup>9</sup> The Development of the Expenditure and Food Survey and a revised processing system for the FES/EFS: development proposals. Paul Hunter (January 1999).

<sup>10</sup> The Expenditure and Food Survey: proposals for carrying out the EFS (or FES) as part of the FES Five Year Review. Paul Hunter (March 1999)

**Appendix A. FES 1998-9: Detailed response rates for Great Britain**

**Table A1 Response by month**

	<b>April 1998</b>		<b>May 1998</b>		<b>June 1998</b>		<b>July 1998</b>	
	No. of Hhlds	%	No. of Hhlds	%	No. of Hhlds	%	No. of Hhlds	%
Set sample	952		952		952		952	
Ineligibles	107		121		121		108	
Extra households	14		19		11		15	
<b>Total Eligible</b>	<b>869</b>	<b>100</b>	<b>850</b>	<b>100</b>	<b>842</b>	<b>100</b>	<b>859</b>	<b>100</b>
Refusals	294	33.8	334	39.3	325	38.6	310	36.1
Non- contacts	50	5.8	31	3.3	37	4.4	47	5.5
Co-operating households	525	60.4	488	57.4	480	57.0	502	58.4
	<b>August 1998</b>		<b>September 1998</b>		<b>October 1998</b>		<b>November 1998</b>	
	No. of Hhlds	%	No. of Hhlds	%	No. of Hhlds	%	No. of Hhlds	%
Set sample	952		952		952		952	
Ineligibles	103		124		103		109	
Extra households	12		8		11		17	
<b>Total Eligible</b>	<b>861</b>	<b>100</b>	<b>836</b>	<b>100</b>	<b>860</b>	<b>100</b>	<b>860</b>	<b>100</b>
Refusals	313	36.4	305	36.5	340	39.5	334	38.8
Non- contacts	25	2.9	37	4.4	35	4.1	22	2.6
Co-operating households	523	60.7	494	59.1	485	56.4	504	58.6
	<b>December 1998</b>		<b>January 1999</b>		<b>February 1999</b>		<b>March 1999</b>	
	No. of Hhlds	%	No. of Hhlds	%	No. of Hhlds	%	No. of Hhlds	%
Set sample	952		952		952		952	
Ineligibles	105		122		92		85	
Extra households	27		7		21		19	
<b>Total Eligible</b>	<b>873</b>	<b>100</b>	<b>849</b>	<b>100</b>	<b>881</b>	<b>100</b>	<b>886</b>	<b>100</b>
Refusals	329	37.7	328	39.2	314	35.6	331	37.3
Non- contacts	43	4.9	36	4.3	39	4.4	28	3.2
Co-operating households	501	57.4	473	56.5	528	59.9	527	59.5

**Table A2 Response by calendar quarter**

	<b>April-June 1998</b>		<b>July-Sept 1998</b>		<b>Oct-Dec 1998</b>		<b>Jan-Mar 1999</b>	
	No. of Hhlds	%	No. of Hhlds	%	No. of Hhlds	%	No. of Hhlds	%
Set sample	2856		2856		2856		2856	
Ineligibles	349		335		317		299	
Extra households	54		35		54		47	
<b>Total Eligible</b>	<b>2561</b>	<b>100</b>	<b>2556</b>	<b>100</b>	<b>2593</b>	<b>100</b>	<b>2604</b>	<b>100</b>
Refusals	953	37.2	928	36.3	1003	38.6	973	35.9
Non- contacts	114	4.5	109	4.3	100	3.9	103	3.2
Co-operating households	1493	58.3	1514	59.4	1490	57.5	1528	60.9

**Table A3 Response by standard statistical region**

	<b>Northern</b>		<b>Yorks &amp; Humber</b>		<b>North West</b>		<b>East Midlands</b>	
	No. of Hhlds	%	No. of Hhlds	%	No. of Hhlds	%	No. of Hhlds	%
Set sample	629		1003		1275		833	
Ineligibles	72		117		138		77	
Extra households	6		5		3		8	
<b>Total Eligible</b>	<b>563</b>	<b>100</b>	<b>891</b>	<b>100</b>	<b>1149</b>	<b>100</b>	<b>764</b>	<b>100</b>
Refusals	182	32.3	337	37.8	451	39.6	302	39.5
Non- contacts	12	3.2	33	3.7	39	3.4	31	4.1
Co-operating households	363	64.5	521	58.5	650	57.0	431	56.4
	<b>West Midlands</b>		<b>East Anglia</b>		<b>Greater London</b>		<b>South East</b>	
	No. of Hhlds	%	No. of Hhlds	%	No. of Hhlds	%	No. of Hhlds	%
Set sample	1037		442		1394		2176	
Ineligibles	113		50		224		193	
Extra households	5		1		70		37	
<b>Total Eligible</b>	<b>929</b>	<b>100</b>	<b>393</b>	<b>100</b>	<b>1240</b>	<b>100</b>	<b>2020</b>	<b>100</b>
Refusals	339	36.5	132	33.6	545	43.9	737	36.5
Non- contacts	48	5.2	20	5.1	84	6.8	88	4.1
Co-operating households	542	58.3	241	61.3	611	49.3	1200	59.4
	<b>South West</b>		<b>Wales</b>		<b>Scotland</b>			
	No. of Hhlds	%	No. of Hhlds	%	No. of Hhlds	%		
Set sample	986		595		1054			
Ineligibles	107		79		130			
Extra households	30		4		21			
<b>Total Eligible</b>	<b>909</b>	<b>100</b>	<b>520</b>	<b>100</b>	<b>945</b>	<b>100</b>		
Refusals	295	32.4	200	38.5	337	35.7		
Non- contacts	19	2.1	19	3.6	33	3.5		
Co-operating households	595	65.5	301	57.9	575	60.8		