

FAMILY RESOURCES SURVEY 1996/97:

SUMMARY OF EDITING AND IMPUTATION PROCEDURES CARRIED OUT BY DSS

For the 1996/97 data set, the following tasks were carried out by DSS.

1 Conversion of monetary amounts to weekly values

Many of the questions on the FRS ask for amounts received/paid and to what period they relate (eg benefit receipt, council tax payments). In these cases, amounts were converted to weekly equivalents using factors contained in the spreadsheet pd33a.xls. More information on which period code relates to which value is given in the Excel spreadsheet pd33.xls.

1.1 During the conversion process amounts were not converted where:

- 1.1.1 payments were one off or lump sum payments (period code 95)
- 1.1.2 "none of the above" (period code 97)
- 1.1.3 period code missing
- 1.1.4 payments were less than 1 week (period code 90)

1.2 However, for those items of income and expenditure which feed in to derived variables used by the DSS, missing, 90, 95 and 97 period code payments were scrutinised and edited to a weekly value. Remaining 90, 95 and 97 period codes will appear in analyses as outliers. Users will need to consider whether to edit or delete these cases. The easiest way to identify such variables is to consult minmaxan.xls and search on maximum values of 95 or 97. The link between period codes and monetary amounts is given in pd33.xls.

2 Validation, editing and imputation

Information about procedures carried out by DSS are contained in the file method.wp1 (DN: methodology chapter available in July 1997).

2 Anonymisation

- 2.1 OPCS/SCPR have their own procedures to ensure the confidentiality of respondents. Names and addresses are kept separately from the data and are not supplied to the DSS.
- 2.2 Additional steps have been taken by the DSS prior to release of the data outside the department. These are:
- 2.2.1 Local Authority Code has been removed.
- 2.2.2 Monetary amounts relating to council tax variables have been rounded to whole pounds. Variables affected are:

Variable	Description	Table
ctamt	last CT payment	househol
ctrebamt	amount of CT rebate	househol
ctredamt	amount of transitional reduction	househol
cwatamt	amount included in rent for CT water charge	househol
indinc	Derived Variable (DV) for adult income	adult
inrpinc	DV for adult RP/IS income	adult
indisben	DV for adult disability benefit income	adult
inirben	DV for adult income related benefit income	adult
innirben	DV for adult non-income related benefit income	adult
inothben	DV for adult other benefits	adult
buinc	DV for benefit unit income	benunit
burpinc	DV for benefit unit RP/IS income	benunit
budisben	DV for benefit unit disability benefit income	benunit
buirben	DV for benefit unit income related benefit income	benunit
bunirben	DV for BU non-income related benefit income	benunit
buothben	DV for BU other benefit income	benunit
hhinc	DV for household income	househol
hhrpinc	DV for HH RP/IS income	househol
hhdisben	DV for HH disability benefit income	househol
hhirben	DV for HH income related benefit income	househol
hhnirben	DV for HH non-income related benefit income	househol
hhothben	DV for HH other benefit income	househol
hbeninc	DV for HH benefit income	househol
cwatamtd	DV for council tax water charge	househol
burent	DV for BU rent	benunit
hhrent	DV for HH rent	househol
hscosthh	DV for HH housing costs	househol

- 2.3 However, assurances given to interviewees allow DSS to provide unanonymised data in very restricted circumstances. For more information, please contact Jo Semmence at the address given below.

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- 3 **For further information write to Jo Semmence at the same address or telephone 0171-962-8092**

Imputation of the 1996/97 Family Resources Survey

1. INTRODUCTION

As for 1995-96 (V32) a combination of methods were used in 1996-97 (V33) to impute values for missing data. Following the experience of 1995-96 considerably fewer variables were imputed using the neural network system. The sections below provide an outline of the imputation process as well as more detailed descriptions of each of the different methods used. This document, intended for user information, applies to the imputation of missing data in all the FRS tables except BENEFITS, for which a different approach is used.

2. METHODOLOGY

The process of imputation for 1996-97 was :

- a) Initial edits to data
 - ensure all amounts have been correctly converted to weekly amounts
 - “Gatekeeper” bulk edits to close down routes
 - other bulk edits
- b) Hot decking
- c) Algorithmic
- d) RSL system (neural imputation)
- e) Any further ‘mop-up’ imputations

In general the process was performed in the order as given above (with the aim of providing as complete a dataset as possible for the neural imputation stage).

3. VARIATION IN MISSING VALUES

Overall just over half of FRS variables had some missing values. Of these 65% were missing less than 1% of expected completed values. Table 1 attached lists the variables where 10% or more of expected completed values were missing, along with the method of imputation used for each.

4. SUMMARY

Table 2 attached provides an overall summary of imputation outlining the number of missing values initially and how many were imputed by each method. It also provides a comparison with previous years, where possible. Users will note a small fall in the total percentage of missing values. This is most likely due to more efficient closing down of routes in the questionnaire

where respondents are unlikely to know the answer to a particular question, for example type of council tax rebate, which is now only asked where a statement has been consulted.

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ASD3E
23rd February 1998
p:\frs\shared\frs33\impute\documentation\IMPSUM.DOC

Family Resources Survey

RELEASES 1994-95

RELEASE	CHANGES SINCE LAST RELEASE	RELEASE DATE
Frs9495o	Tidy up structure and content of hierarchical and flatfile datasets.	22/05/96
Frs9495p	Conversion errors amended	24/07/98
Frs9495q	Interim Grossing Factor Added (GROSSINT) Formatting problems corrected (DATYRAGO)	25/11/02
Frs9495r	New Grossing regime (GROSS3) introduced - See paper for more details	22/11/04
Frs9495s	Revised weights issued for the new Grossing regime (GROSS3).	27/01/05
Frs9495h	Revised weights issued for the new Grossing regime (GROSS3) to correct for overestimation of the Lone Parent population control.	09/02/05