

April 1997 Microdata File Description

Prepared: January 25, 2000

Revised/Updated: May 17, 2000 - ERS supplied logical record length, added information on noninterview households in DataFerrett, and updated information on S24 and S35 split panel tests. The questionnaire was separated from this Technical Documentation/User Notes file.

Technical Description

The file is in ASCII format and consists of 134,538 logical records. The length of each record is 1,121 characters. Each record represents one person in a surveyed household or one household that was eligible for the core labor force survey but could not be contacted or refused to participate. Noninterview households are included in the CD-ROM file, with their noninterview status indicated. Noninterview households are not included in the DataFerrett file. A subset of variables on each record contains data about the household of which the person is a part. These variables have the same value for all persons in the same interview household.

Contents of the Data File

The file includes data in three general categories:

(1) Monthly labor force survey data and recodes, collected by the Census Bureau for the Bureau of Labor Statistics. These variables are described briefly in the data dictionary. For concepts and definitions underlying these data, users should refer to the technical documentation for the CPS monthly labor force data available from the Bureau of Labor Statistics. Included are geographic, demographic, income, and employment data that may be of interest to those analyzing the Food Security Supplement.

(2) Food Security Supplement data, collected by the Census Bureau for the United States Department of Agriculture. These data consist of answers by household respondents to questions about household food expenditures, use of food assistance programs, and experiences and behaviors related to food security, food insecurity, and hunger. All of the Food Security Supplement data are household-level data except the supplement person weight.

(3) Food security and hunger scale and status indicators calculated from the Food Security Supplement data by the Economic Research Service of the United States Department of Agriculture. These indicate the screening status of the household, as well as continuous and categorical measures of food security status.

Contents of the Food Security Supplement Questionnaire

A facsimile of the Food Security Supplement questionnaire is available on the ERS website or on the public-use data file CD-ROM available from the Census Bureau. The major sections are as follows: (variable names are as in the data files; in the questionnaire, the same variable names lack the "HE" prefix):

(1) Food Spending (HES1A - HES8).

(2) Food Program Participation (HES9 - HES9GSP).

(3) Food Sufficiency, Food Security, and Ways of Avoiding or Ameliorating Food Deprivation (HES11A -

HES58). This section includes the 18 food security and hunger items that are used to calculate the household food security scale.

Changes from Previous Years' Food Security Supplements

The split ballot test of the two forms of the food sufficiency question (S11A and S11) was replaced with a split ballot test of alternate wording of the single-question, four-response-category food sufficiency question. Both forms were specifically referenced to the previous 12 months, unlike 1996, which was not referenced to any specific time period. Four rotations (1,4,5,7) received the same wording (except for the time reference) as in 1996. The other four rotations had the word "always" added to the first response option: "I/We always have enough to eat, and the kinds of food (I/we) want."

A split ballot test, separating the question about adults cutting the size of meals or skipping meals was conducted. Two rotations (4 and 8) received S24A, S25A, S26A, S27A (about skipping meals) as well as S24B, S25B, S26B, S27B (about cutting meals). The remaining six rotations received the standard 1995 and 1996 question series S24, S25, S26, S27 which combines the two behaviors in a single question. In the data file, responses to the "A" and "B" series for households are recorded separately as HES24A-HES27A and HES24B-HES27B and are combined in HES24-HES27. That is, if the corresponding response is affirmative for either cutting or skipping, the standard "cut or skip" is coded affirmative. This recoded variable is not quite equivalent to the standard variable, because the separate question about cutting the size of meals specifies "cut back on the amount you ate to the point you were hungry...", but they were considered close enough in meaning to be included in the household food security scales.

A second split ballot test of alternate wording of the question about being hungry was conducted. Two rotations (4 and 8) received alternate wording (S35A, S36A, S37A), "In the last 12 months...were you ever hungry because you couldn't afford enough food?" The remaining six rotations received the standard 1995 and 1996 wording (S35, S36, S37), "In the last 12 months...were you ever hungry but didn't eat because you couldn't afford enough food?" Unfortunately skip patterns were incorrectly specified in the CAPI, so the variables in the alternate rotations are not useable, and the S35A series was not used for scale creation.

Screening of households prior to the food security and hunger series was redesigned; see next section.

Screening of the Food Security Supplement

The Food Security Supplement includes several screens to reduce respondent burden and to avoid embarrassing respondents by asking them questions that are inappropriate given other information they have provided in the survey. The screener variables use information from the monthly labor force core data as well as from the Food Security Supplement. Households with income above 185 percent of the poverty threshold for that household (HRPOOR=2, estimated from HUFAMINC and HRNUMHOU) were skipped over the questions on participation in food assistance programs. Households with income above 185 percent of poverty who registered little or no indication of food stress on HES15, HES16, or HESS11/11A were skipped over the entire "Food Sufficiency, Food Security, and the Ways of Avoiding or Ameliorating Food Deprivation" section. As in 1996, and differing from 1995, even some households with income below 185 percent of poverty were skipped over the rest of the questionnaire if they registered no indications at all of food stress on HES15, HES16, or HESS11/11A. Unfortunately, the screener was not implemented as intended. The revised HES11 was substituted for HES11 and HES12, but the screener specifications were not completely revised to reflect this change. The screener as actually implemented is presented in the questionnaire.

Looking ahead, in 1998 the questionnaire will be reorganized and two "internal" screeners added in the main food security section (the questions which are used to calculate the household food security scale). These

different screening procedures bias estimated prevalences of food insecurity and hunger differently in each year. Adjustments must be made for these differences to compare prevalences of food security and hunger across years. This topic is further discussed below under the heading "Food Security Scales and Screener Variables."

Screeners also were applied based on whether the household included any children, so that households without children were not asked questions that refer specifically to children. This screener, as calculated at the time of the survey, classified as children all persons 17 or younger. However, for processing and analyzing the food security data, persons who are household reference persons or spouses of household reference persons (PERRP=1, 2, or 3) are not considered children even if they are age 17 or younger. The food security scale, status, and screener variables reflect this recoding; however the individual item responses are not recoded, and the user will need to recode these if they are to be analyzed or used to replicate scale scores.

Food Security Scales and Screener Variables

The main purpose of the Food Security Supplement is to provide information about food security, food insecurity, and hunger in the nation's households. Several variables are provided in the data file that identify the food security status of each household during the previous 12 months. All of these variables are based on responses to a set of 18 items in the Supplement that are indicators of food insecurity and hunger. HRFS12M3 is the raw score—a count of the number of items affirmed by the household respondent. Households that were screened out are assigned a score of -5 on this variable to remind users that they were not actually asked any of the 18 items. HRFS12M4 is the household food security scale score, a continuous score based on fitting the data to a single-parameter Rasch model using item calibrations calculated from the 1995 data. Computed values range from about 1 to 14. Scale scores for households that affirmed no items cannot be calculated within the Rasch model. These households are food secure, but the degree of their food security is not known and may vary widely from household to household. They are assigned scale scores of -6 to remind users that they require special handling in analyses which assume linearity of the scale scores. Households that were screened out are assigned a score of -5 on this variable. HRFS12M1 is a categorical variable based on the scale score, which classifies households in three categories: food secure, food insecure without hunger, and food insecure with hunger. HRFS12M2 is the same as HRFS12M1 except that the food insecure with hunger category is subdivided to level 1 and level 2 hunger. The level 2 hunger category corresponds operationally with the "Severe Hunger" category described in *Household Food Security in the United States in 1995: Summary Report of the Food Security Measurement Project* published by the Food and Nutrition Service and with the "Food Insecure with Hunger (Severe)" category described in *Guide to Measuring Household Food Security - 2000*, also published by the Food and Nutrition Service.

The food security variables described in the previous paragraph are based on the 18 food security indicator items as they were administered in the 1996 survey. A second set of food security scale and status indicators is provided that is adjusted for interyear differences in survey screening procedures. These "common-screen" variables are comparable to corresponding variables in the April 1997 and August 1998 data files. Corresponding variables for the 1995 data also are available from the Economic Research Service. Prevalence estimates based on these common-screen variables are comparable across these years. The common-screen-based food security variables are HRFS12C3 (raw score), HRFS12C4 (Rasch-based scale score), HRFS12C1 (three-category food security status indicator), and HRFS12C2 (4-category food security status indicator). The common-screen food security variables are needed because the screening procedures used in administering the Food Security Supplements varied somewhat from year to year. In all years, households that were screened out after a few initial questions are classified as food secure. However, comparisons across years of the item responses of households with identical responses to the preliminary screener variables show that some households that were screened out under more stringent screening rules would have been classified as food insecure (or, in a few cases, even as food insecure with hunger) if they had not been screened out. The screening procedures, therefore, bias prevalence estimates of food security

and hunger downward, and the extent of the bias varies across years. To compare prevalence rates across years, it is essential to adjust the data from each year so that it matches, as nearly as possible, a common set of screening procedures. That is, negative responses must be imputed to households that would have been screened out at the initial screener in any year. For surveys prior to 1998, negative responses also must be imputed to "downstream" variables for households that would have been screened out at either of the internal screens that were first implemented in 1998.

A screener status variable, HRFS12CS, is provided to indicate screening status under the 1995-1998 common screen. The variable indicates whether the household would have been administered all items, would have been screened out prior to the first of the 18 scale items, or would have been screened out by either of the two internal screens introduced in 1998.

Interview Households, Supplement Households, and Noninterview Households

Noninterview households—those that were eligible for the survey but could not be contacted or declined to complete the core labor force survey—are included in the file. Interview status is indicated by the variable HRHTYPE, which is positive for interviewed households and zero for noninterview households. (There is only one record for each noninterview household.) Some households that completed the core labor force survey did not complete the Food Security Supplement. Supplement interview status is indicated by the variable HRSUPINT, which has a value of 1 for households that completed the supplement, 2 for households that completed the core but not the supplement, and -1 for core noninterview households.

Constructing Household Characteristics from Person Records

To compute some household characteristics such as household size, presence of children, or presence of elderly, it is necessary to identify the records of all persons in the same household. Households are uniquely and completely identified by State of residence (GESTCEN), household identifier (HRHHID), and household serial suffix (HSERSUF). Sort records within households by PERRP if the household reference person record must be the first record in the household. To match to other months' CPS files, add the HRMIS variable to the household identification, adjusting one of the files for the difference in survey month.

Weights—Estimating Population Distributions of Person and Household Characteristics

The CPS is a complex probability sample, and interviewed households as well as persons in those households are assigned weights so that the full interviewed sample represents the total national noninstitutionalized population. Initial weights are assigned based on probability of selection into the sample, and weights are then adjusted iteratively to match population controls for selected demographic characteristics at State and national levels. There are two sets of household and person weights in this data file: (1) labor force survey weights and (2) Food Security Supplement weights.

The labor force survey weights, HWHHWGT for households and PWSSWGT for persons, are positive for persons in all interviewed households. These weights would be appropriate for analyzing whether households or persons who completed the supplement differed from those who declined to complete the supplement.

About 13 percent of households completed the core labor force survey, but declined to complete the Food Security Supplement. The supplement weights, HHSUPWGT for households and PWSUPWGT for persons,

are adjusted for supplement nonresponse so that the Supplement respondents represent the national noninstitutionalized population. These weights are appropriate for estimating household distributions of variables in the Food Security Supplement, including food security status.

Household weights are attached to all person records in the household. To estimate household frequency distributions, the sample must be limited to one record for each household. This is usually accomplished by limiting the sample to records of household reference persons (PERRP=1 or 2). Noninterview or nonsupplement households must be excluded from these analyses based on HRHTYPE or HRSUPINT.