August 1998 Microdata File Description

Prepared: May 17, 2000
Revised/Updated: August 12, 2002—Logical record length corrected from 1,134 to 1,100

Technical Description

The file is in ASCII format and consists of 135,216 logical records. The length of each record is 1,100 characters. Each record represents one person who was eligible for the core labor force survey. 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 for each record contains data about the household of which the person is a part. These variables have the same value for all people 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 and the food security status 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 of the Food Security Supplement are as follows:

(1) Food Spending and Program Participation (HES1 - HESP9).

(2) Food Sufficiency and Food Security (HESS1 - HESSH5A). This section includes the 18 food security and hunger items that are used to calculate the household food security scale.

(3) Ways of Avoiding or Ameliorating Food Deprivation - Coping Strategies (HESC1 - HESC4).

(4) Minimum Food Spending Needed (HES3).

Changes from September 1997 Food Security Supplement

The Food Security Supplement was substantially redesigned in 1998. The main series of questions was reordered to approximate the severity order of the items and renamed to reflect the new questionnaire structure. The reordering allowed insertion of two internal screens and a less stringent initial screen (described below).

Other changes include: (1) a single "usual" household food expenditure question which replaced the series of items on actual food spending; (2) two split ballot sets of experimental questions (described below); (3) a more complete set of "how often did this occur?" follow-up questions to the main food security and hunger series; and (4) addition of a final question which asks the respondent what would be the lowest amount the household could spend for food per week or per month and still provide a healthy, acceptable diet. Also, child-referenced questions in households with only one child were referenced to "your child." In previous years, these questions were referenced to the child by name.

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 which they have provided in the survey. Some of 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) who responded "no" to HES2 were skipped over the questions on participation in food assistance programs. Households with income above 185 percent of poverty who registered no indication of food stress on HES2, HESS1, or HESS1A were skipped over the rest of the "Food Sufficiency and Food Security" section and the "Ways of Avoiding or Ameliorating Food Deprivation" section. There are also two "internal" screeners in the main food security section (the questions that are used to calculate the household food security scale). This series of questions is divided into three blocks. After the first and second blocks, households that have registered no indication of food stress in the preceding block are skipped over the rest of the "Food Sufficiency and Food Security" section.

The screening rules which determine whether a household was asked the questions used to calculate the food security scale have varied somewhat during the first 4 years of fielding the Food Security Supplement. These different screening procedures biased 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 discussed further 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 which refer specifically to children. This screener, as calculated at the time of the survey, classified as children all persons age 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 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.

Experimental Questions

Two sets of experimental questions were asked of respondents in only one month-in-sample group.

(1) Households in HRMIS=4 were asked an experimental variant of the food sufficiency question, HESS1A, instead of HESS1.

(2) Households in HRMIS=8 were asked several food security questions referenced to the respondent or to a specific child, in place of corresponding questions in other month-in-sample groups that referred either to all adults or all children in the household. Adult items that are normally asked of "you or other adults in the household" in multiple-adult households were referenced only to the respondent. Selected items that are normally asked of "the children" in multiple-child households were asked of a specific focus child in these households. The selection of the focus child was randomized with respect to characteristics of interest based on which child's birthday was nearest to the date of interview. As a lead-in to the first such question, the respondent was advised, "The next questions ask about a particular child living in the household; that is (CHILD'S NAME)." In subsequent questions, the child's name was inserted as a referent. Because these questions refer to specific individuals, and not to the experience of all members of the household, it is not possible to calculate scale scores for these households that are precisely comparable with those of other households. For this reason, these households are assigned missing values on food security scale and status variables, and an adjusted set of weights is provided to account for their exclusion (see section on weighting below). The focus child in households in rotation 8 is identified by the variable PRSCHILD.

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 to 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. HRFS12M4 is the household food security scale score, a continuous score based on fitting the data to a single-parameter Rasch model. 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 that assume linearity of the scale scores. 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 with the severe hunger category described in *Household Food Security in the United States: Summary Report of the Food Security Measurement Project*, 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 1998 survey. A second set of food security scale and status indicators is provided that is adjusted for inter-year differences in survey screening procedures. These "common-screen" variables are comparable to corresponding variables in earlier years' data, and prevalence estimates based on them 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.

Two screener status variables are provided. HRFS12MS refers to screening status under the screen actually applied when the survey was administered (the "maximum-sample screen.") The variable indicates whether the household was screened out at the initial screen (before the first of the 18 indicator items), or was screened out after the first or second blocks of items, or was not screened out and was asked all items. Households screened out after the first block, but without having given a valid response to any of the items in the block, are coded as missing on HRFS12MS. Maximum-sample food security scale and status variables (HRFS12M1, HRFS12M2, HRFS12M3, HRFS12M4) for these households also are coded as missing.

HRFS12CS refers to screening status under the 1995-98 common screen. Categories are the same as for the maximum-sample screen variable, and households that would have been screened out with no valid responses to any of the indicator items under the common screen are coded as missing. Common-screen food security scale and status variables (HRFS12C1, HRFS12C2, HRFS12C3, HRFS12C4) for these households are coded as missing.

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). (In the 1998 file, households are uniquely and completely identified by HRHHID alone, but this is not true in all years.) 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 three sets of household and person weights in this data file: (1) labor force survey weights, (2) Food Security Supplement weights, and (3) food security status 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 10 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, except for food security status or analyses including the food security status variables.

The food security status of households in rotation 8 with more than one adult or more than one child cannot be determined in ways comparable with those of other households because of the experimental, individually referenced, questions administered to those households (described above). Adjusted weights, HHFSWGT and PWFSWGT, are provided for estimating food security and hunger prevalences and for analyses that include the food security scales or food security status variables. For households with one adult and not more than one child, these food security status weights are identical to their supplement weight counterparts. For households with more than one adult or more than one child, the food security status weights are zero in rotation 8 and adjusted by a factor of approximately 8/7 for households in rotations 1-7, so as to represent the same total population and number of households as the core weights and supplement weights do. This is a ratio adjustment, however, not an iterative adjustment to match controls for subpopulations or State populations.

Household weights are attached to all person records in the household. To estimate household 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 households and persons have negative weights (-1), and these also must be excluded from analyses.