
Appendix D - FDIC Technical Notes

FDIC Technical Notes

The data for this report were collected through a Federal Deposit Insurance Corporation (FDIC)-sponsored Unbanked/Underbanked Supplement to the Current Population Survey (CPS). The CPS is a monthly survey of about 54,000 interviewed households conducted by the U.S. Census Bureau for the Bureau of Labor Statistics (BLS). The survey is based on a scientific sample that “represents” the U.S. civilian, non-institutionalized population, aged 15 or older.

The CPS is the primary source of information on the labor force characteristics of the U.S. population, including employment, unemployment, and earnings statistics. The CPS results include a variety of demographic characteristics, such as age, sex, race, marital status, and educational attainment. Additional information about the CPS is available in the Census Bureau’s Technical Paper 66, Design and Methodology of the CPS, available at <http://www.census.gov/cps/>.

The CPS is a state-based design in that separate samples are selected from each state, so that states serve as the primary sampling strata. The sample sizes for each state are set so that specific precision requirements for estimating unemployment rates will be met.¹ The sample design ensures that most of the households in a given state have the same probability of being selected, though in general, these selection probabilities will vary across states. Because the CPS design is state-based, most of the estimates for the Unbanked/Underbanked supplement should be precise at the state level and for some sub-state areas (e.g., large metropolitan statistical areas (MSAs)).

Unbanked/Underbanked Supplement

The Unbanked/Underbanked Supplement was conducted for the first time in January 2009. The primary purpose of the supplement was to estimate the percentage of U.S. households that are “unbanked” and “underbanked” and to identify the reasons why households are unbanked or underbanked. The supplement survey instrument, attached as Appendix E, included approximately 30 questions designed to provide this information. The FDIC developed the survey instrument with the expertise of a national consulting firm, which specializes in public opinion research, as well as input from the Census Bureau’s Demographic Surveys Division and BLS. The survey instrument underwent four rounds of cognitive field pre-testing and

¹ The precision targets that are the basis for the sample design of the CPS are provided on pp.3–1 in Chapter 3 of the U.S. Census Bureau’s Technical Paper 66, available at <http://www.census.gov/prod/2006pubs/tp-66.pdf>.

was revised to address the feedback gathered from each round.²

Eligibility and Exclusions

All households that participated in the January 2009 CPS were eligible to participate in the Unbanked/Underbanked Supplement, but only those who specified whether someone in their household had a bank account (survey supplement Question 1) were considered supplement respondents. CPS household respondents who did not answer this question or answered “don’t know” were asked no further questions and were classified as nonrespondents for the supplement.

Demographic characteristics, such as race, age, education, and employment, associated with a respondent household for the supplement are those reported for the householder/reference person (i.e., a person who owns or rents the home). These demographic characteristics were used in preparing report estimates and tables.

A small proportion of supplement respondents (1.5 percent, or 1.8 million households) reported that they did not participate in their household finances, or they did not report their level of involvement with their household finances (supplement survey instrument Question 2). Although these households answered Question 1 on whether their household had a bank account, they were excluded from the remainder of the survey because of their lack of involvement in their household’s finances. Consequently, unless otherwise noted, these households were treated as missing/unknown observations in the preparation of tables reporting answers to supplement questions other than Question 1.

Coverage and Response Rates

The target universe for the CPS is all civilian non-institutionalized persons (aged 15 or older) residing in the 50 states and the District of Columbia. In order to reach this universe, a list (sampling frame) of about 110 million households was developed from the Master Address File used for the 2000 Census, plus three additional frame sources (group quarters, area canvassing, and building permits).

For the January 2009 CPS, a statistical sample of approximately 58,600 survey-eligible households was selected from

² The goal of each round was to determine respondents’ comprehension of each question, test the flow of the questions, find major recall difficulties, ascertain the sensitivity or inappropriateness of any questions, and gauge the operational feasibility of the supplement. No changes to the survey were recommended following the fourth round of testing.

the sampling frame. Of these, about 53,900 households participated in the CPS, resulting in a 92 percent response rate. There were about 4,700 nonrespondent households. Most of these nonrespondents either refused to participate (57 percent of nonrespondents) or were not home at the time of the interview visit or call (26 percent). The remaining 17 percent consisted of households where (a) the household respondent was temporarily absent, (b) the household could not be located, (c) language barriers prevented the interview, or (d) “other” reasons. Because of the availability of translators for many languages, only 0.5 percent of the nonrespondents (22 households) did not participate as a result of language barriers.

About 46,500 (86 percent) of the 53,900 households participating in the CPS also participated in the Unbanked/Underbanked Supplement.³ The supplement survey response rates vary by demographic groups, ranging from 81 percent to 88 percent.

Coverage ratios for the CPS are derived as a measure of the percentage of persons in the target universe (civilian non-institutionalized persons aged 15 or older in the United States) that are included in the sampling frame.⁴ The overall coverage ratio for the January 2009 CPS was 88 percent. The missing 12 percent consists of three groups: (1) persons residing in households that are not in the CPS sampling frame, (2) non-institutionalized persons not residing in households at the time the CPS was conducted, and (3) household residents that were not listed as household members for the CPS for various reasons. The coverage ratios varied across demographic groups. For example, the coverage ratio was 89 percent for whites, 80 percent for blacks, and 86 percent for Hispanics.

The weights calculated by the Census Bureau for the CPS and the Unbanked/Underbanked Supplement respondents were adjusted to account for both nonresponse and undercoverage. These weight adjustments help correct any biases in estimates because of nonresponse and undercoverage, so that results from the CPS are “representative” of the civilian, non-institutionalized U.S. population.⁵

³ Taking into account the nonresponse to basic CPS questions, the overall response rate for the Unbanked/Underbanked Supplement Survey was 79 percent.

⁴ The coverage ratio is the weighted number of persons in a demographic group (after weights are adjusted to account for household nonresponse) divided by an independent count of persons in that demographic group (obtained from the 2000 Census with updates based on the American Community Survey).

⁵ This adjustment is done by introducing three stages of ratio estimation that adjust weights to align with population control totals (independent population estimates for various demographic groups). The household weight is generally taken to be the weight of the householder/reference person.

Analysis of Supplement Survey Results

Using supplement survey results, households were classified as “unbanked” if they answered “no” to the question, “Do you or does anyone in your household currently have a checking or savings account?” Households answering “yes” to this question were classified as “underbanked” if they indicated that they had used at least one alternative financial service (non-bank money orders, non-bank check-cashing services, payday loans, rent-to-own services, or pawn shops) at least once or twice in the previous year, or that they had obtained a refund anticipation loan at least once in the previous five years.⁶

The estimated proportion of U.S. households that are unbanked was derived by dividing the sum of the weights of the household respondents that were identified as being unbanked by the sum of the weights of all household respondents. The same formula was used to estimate the proportion of U.S. households that are underbanked. For estimated proportions of unbanked or underbanked households for demographic subgroups, the same computational approach was used and applied to respondent households in the subgroup.

In addition to presenting estimated proportions, many of the tables in this report include estimated numbers of households (e.g., total households, unbanked households, or underbanked households). An estimated number of households for a given category (such as unbanked) is derived as the sum of the weights of the sample households in that category. For example, for the entire sample of about 46,500 households, the sum of the household weights is 118,574,000, which would be an estimate of all U.S. households as of January 2009. However, the Housing Vacancy Survey, another survey related to the CPS that uses household controls to produce household weights, provided an estimate of 110,552,000 as the number of households in January 2009. This difference (118,574,000 vs. 110,552,000) is due to the fact that household weights prepared by Census for the CPS and for this supplement survey are generally taken to be the reference person weights and are not adjusted to align with household controls. Household controls were not used to adjust household weights because the CPS is a person survey rather than a household survey; therefore, universe controls were used only in the preparation of person weights. As a result, the sum of household weights shown in our tables for a category tends to be somewhat higher than the actual household count for the category.

⁶ The different time frame for refund anticipation loans reflects the fact that these products are typically used only once a year, during tax preparation season.

There are a number of tables in this report for which unbanked percentages and other household statistics are computed for subgroups defined by a particular economic or demographic characteristic. The household classification of an economic or demographic variable that is defined at the person level rather than the household level (e.g., race, education, or employment status) is based on the economic or demographic classification of the household/reference person (i.e., a person who owns or rents the home).

The Census Bureau classifies households into different household types. For instance, a family household is a household that includes two or more people related by birth, marriage, or adoption and residing together, along with any unrelated people who may be residing there. Detailed definitions regarding household types can be found in the CPS Glossary available at <http://www.census.gov/apspd/techdoc/cps/mar97/glossary.html>.

Households are categorized into racial-ethnic classifications as follows: If the householder was identified as black, the household was classified as “Black” regardless of whether the householder was identified as Hispanic or any other race. If the householder was not identified as black and is identified as Hispanic, the household was classified as “Hispanic Non-Black.” If the householder is identified as white and not any other race and non-Hispanic, then the household was classified as “White.” All remaining households are classified as “Other.” However, in some national summary tables the “Other” category is further disaggregated into “Asian” if the householder is identified as Asian, “American Indian/Alaskan” if the householder is identified as American Indian/Alaskan and not Asian, and “Hawaiian/Pacific Islander” if the householder is identified as Hawaiian/Pacific Islander and not Asian or American Indian/Alaskan. In these tables “Other” consists of the few remaining households in which the householder cannot be classified into any of the preceding groups.

The counties included in some of the MSAs selected for the CPS do not correspond exactly to the counties included for these MSAs in the official definitions prepared by the Office of Management and Budget (OMB) for two basic reasons.

First, in redesigning the CPS in a timely manner to incorporate results from the 2000 Decennial Census, the Census Bureau had to project revised MSA definitions prior to the release of the official OMB definitions in 2003. Therefore, in some cases, the Census Bureau included one or two counties in an MSA for the CPS that were not subsequently included in the official definition of the MSA. In other cases, the Census Bureau excluded one or

two counties that were subsequently included in the official definitions of an MSA. In the latter case, the data for the MSA in the CPS (and in the unbanked/underbanked supplement) will not include any responses for one or two of the counties that are a part of the official definition of the MSA.⁷

Second, since the CPS is a state-based design, MSAs that include counties in more than one state are subdivided into their respective state components for sampling purposes. Therefore, for some multi-state MSAs, the counties belonging to one or two of the states were not selected for the CPS sample, even though the counties making up the other portion of the MSA were selected. The larger portions are usually included in the CPS since they would be selected with certainty for their state sample because of their size (i.e., those larger portions would be “self-representing”). Also, for some multi-state MSAs, the part of the MSA contained in a given state is selected for the CPS sample but cannot be identified as belonging to the MSA (for confidentiality reasons) because it contains fewer than 100,000 people. In such cases the respondents in that state usually would be identified as belonging to a metropolitan area, but the specific MSA would not be identified.

Statistical Precision of Estimates

Standard errors were calculated for certain Unbanked/Underbanked Supplement Report estimates to indicate the precision of these estimates. For example, the standard error can be used to compute a 95 percent confidence interval for a survey estimate (this is generally computed as the estimate plus or minus two times the standard error). If the survey estimate of interest is a difference between estimates for different groups, the estimated standard error can be used to determine whether the observed difference is “statistically significant.” Differences discussed in this report are significant at the 10 percent level of significance. That is, if there were no difference in the true universe values of the two sample estimates being compared, the probability of obtaining sample estimates having this observed difference or a larger difference would be no more than 10 percent, and could be considerably less.

The standard errors presented in the full report on the FDIC’s Unbanked/Underbanked Supplement were calculated based on the variation of a survey estimate across a set of 160 sample replicates provided by the Census Bureau. Details of the calculation of standard errors based

⁷ In the former case, data for any counties that were not subsequently included in the official definition of an MSA are coded as non-metropolitan.

on sample replicates (and on the CPS methodology in general) are available from the Census Bureau.⁸

⁸ For a detailed description of the methodology used to calculate standard errors using replicates see U.S Census Bureau Technical Paper No. 66, Chapter 14, available at <http://www.census.gov/prod/2006pubs/tp-66.pdf>.

